

# Transcriptomic Profiling Reveals the Underlying Mechanism of Interferon-Epsilon (IFN- $\epsilon$ ) and Interferon-Gamma (IFN- $\gamma$ ) Combination in Cervical Cancer

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## ABSTRACT

Cervical cancer remains a global health challenge, with its treatment necessitating novel therapeutic strategies. This study delves into the synergistic effects of interferons IFN- $\epsilon$  and IFN- $\gamma$  on cervical cancer using high-throughput sequencing technology, specifically targeting the HaLa S3 cell line. Our cell viability assays demonstrate that the combination of IFN- $\epsilon$  and IFN- $\gamma$  exerts a substantial inhibitory effect on these cells. Transcriptomic analysis revealed a total of 6,265 differentially expressed genes (DEGs) were identified in cells treated by IFN- $\epsilon$  and IFN- $\gamma$ , including 3,363 significantly up-regulated DEGs and 2,902 significantly down-regulated DEGs. Gene Ontology (GO) analysis and Kyoto Encyclopedia of Genes and Genomes (KEGG) pathway enrichment analyses suggest that the up-regulated DEGs mainly enriched in immune response, inflammatory response, and signaling receptor binding activities, while down-regulated DEGs are mainly associated with the mitotic cell cycle, DNA replication, and cancer metabolism pathways. These results suggest that the antitumor properties of IFN- $\epsilon$  and IFN- $\gamma$  combination are conferred through both an up-regulation of immune and inflammatory responses and a negative regulation of cell cycle and cancer metabolism. It can be achieved through direct modulation of cancer cells or indirectly through components of the immune system. This study provides new insights into the complex molecular interactions and signaling pathways regulated by a combination of type I and II interferons, which contribute to the development of advanced immunotherapeutic strategies in the fight against cervical cancer.

**Keywords:** Cervical Cancer; Interferon-Epsilon; Interferon-Gamma; Combination Drug; Anti-Cancer

**Abbreviations:** DEGs: Differentially Expressed Genes; GO: Gene Ontology; KEGG: Kyoto Encyclopedia of Genes and Genomes; HPV: Human Papillomavirus; WHO: World Health Organization; DMEM: Dulbecco Modified Eagle Medium; CC: Cellular Component; BP: Biological Process; TME: Tumor Microenvironment

## Introduction

Cervical cancer, primarily induced by persistent Human Papillomavirus (HPV) infection, is a critical public health concern and one of the most prevalent malignancies affecting women aged 15 to 44. The global burden of this disease is stark, with over 604,000 new cases and 340,000 deaths reported in 2020 (WHO [1]). The urgency of addressing cervical cancer is underscored by World Health Organization (WHO) projections, which estimate that with proper treatment for 90% of the cases, around 62 million deaths could be averted over the next century (Canfell, et al. [2]). However, the existing therapeutic interventions, particularly for early-stage cervical cancer, which include surgery and chemotherapy, either alone or in tandem, have been reported to achieve cure rates of only 50% to 60% (Hill [3]). Such statistics not only highlight the acute need for improved treatment options but also underscore the complexities associated with managing this disease. Patients with recurrent or metastatic cervical tumors face a grim prognosis, with few treatment alternatives at their disposal. These existing treatments are frequently associated with severe side effects and a poor quality of life, as reflected in the literature (Ferrall, et al. [4]). Consequently, the exploration and development of new pharmacological agents capable of reducing mortality and morbidity associated with cervical cancer are imperative. Interferons (IFNs), a family of glycoproteins, have long been recognized for their antiviral and immunomodulatory properties and have found widespread use in cancer therapy (Cheon [5,6]).

They play a pivotal role in the innate immune system's response to cancerous cells. Notably, Interferon epsilon (IFN- $\epsilon$ ) has demonstrated significant anti-cancer effects by promoting apoptosis and inhibiting the proliferation of cancer cells in earlier studies (Cao, et al. [7,8]). It also exhibits dynamic blood concentration changes at different stages of HPV infection and cervical cancer development (Li [9,10]). Furthermore, IFN- $\epsilon$ 's ability to curtail tumor growth by impeding angiogenesis has been documented (Ishida, et al. [11]). Interferon-gamma (IFN- $\gamma$ ), another cytokine, has exhibited anti-cancer effects with its antiproliferative, antiangiogenic, and proapoptotic properties, and has been considered for the treatment of various cancers, including melanoma and colon cancer (Mojic [12,13]). Despite the promising potential of both IFN- $\epsilon$  and IFN- $\gamma$  as therapeutic agents against cancer, the literature reveals a conspicuous gap in the collective understanding of their combined effects and mechanisms when deployed against malignancy. This deficit in knowledge necessitates a thorough investigation into the synergistic effects of IFN- $\epsilon$  and IFN- $\gamma$ , especially considering the complex and multifactorial nature of cervical cancer progression. In this study, we utilized the HeLa S3 cell line, a robust *in vitro* model for cervical cancer, to evaluate the efficacy of this cytokine combination.

In addition to assessing the direct anti-cancer effects, such as reduced cell viability, we sought to unravel the molecular underpinnings of these effects using high-throughput sequencing technology.

We anticipated that this approach would reveal a complex network of gene expression changes, providing insights into the immune-mediated anti-cancer mechanisms of IFN- $\epsilon$  and IFN- $\gamma$ . Our study contributes vital insights into the complex molecular interactions and signaling pathways that a combination of type I and II interferons can regulate, highlighting the potential of IFN- $\epsilon$  and IFN- $\gamma$  as a combinatory therapeutic approach through their ability to modulate the immune response while concurrently targeting cancer cell viability. Such insights advance our understanding of cervical cancer's molecular landscape and provide a foundation for novel immunotherapeutic strategies that could transform patient outcomes. As a steppingstone, our research encourages further investigations into combinatory cytokine therapies to improve cervical cancer prognosis.

## Materials and Methods

### Cell Culture and Drug Preparation

HeLa S3 cells were grown in Dulbecco Modified Eagle Medium (DMEM) complete medium (Cytiva HyClone™, USA) consisting of 10% fetal bovine serum (FBS, Gibco™) and 1X penicillin-streptomycin (Cytiva HyClone™, USA). A 37 °C incubator containing 5% CO<sub>2</sub> atmosphere was used for cell culture. Cells were harvested for subsequent experiments once they reached 90% confluence. The recombinant human IFN- $\epsilon$  (9667-ME-025/CF, R&D System, USA) and IFN- $\gamma$  (285-IF-100/CF, R&D System, USA) were purchased from the Bio-Techne company (Bio-Techne, USA), and IFN- $\epsilon$  was dissolved to 250 µg/ml stock in sterile ultrapure water, and IFN- $\gamma$  was dissolved to 200 µg/ml stock in sterile ultrapure water according to manufacturer's specification.

### Cell Viability Assay

Based on the earlier study (Choo[28]), the effective concentration of IFN- $\epsilon$  for HeLa S3 cancer cells is close to 800ng/ml, and the optimizing concentration of IFN- $\gamma$  is 20ng/ml. HeLa S3 cells were seeded on 96-well plates with a density of  $2 \times 10^3$  cells per well and incubated at 37°C incubators containing 5% CO<sub>2</sub>, after 24h, cells were treated with 800ng/ml IFN- $\epsilon$  alone, 20ng/ml IFN- $\gamma$  alone, and a combination of 800ng/ml IFN- $\epsilon$  and 20ng/ml IFN- $\gamma$  for 24h, 48h, 72h, and 96h. The microplate analyzer and Wst-1 Cell Proliferation and Cytotoxicity Assay Kit (Beyotime, China) were used to detect the cell viability and find the optimizing drug treatment time. Cell status and morphology were inspected under the inverted fluorescence microscope (Nikon, Japan).

### RNA Extraction and Integrity Analysis

HeLa S3 cells were cultured in 60 mm cell culture dishes at a density of  $2 \times 10^4$  cells/ml for 24h. After removing the old medium, cells were washed twice with PBS (Cytiva HyClone™, USA), and 3 ml of fresh complete medium was precisely added to each dish. Cells were treated with 800 ng/ml of IFN- $\epsilon$  and 20 ng/ml of IFN- $\gamma$  for 72 hours, with the same volume of sterile water added to the control group.

RNA of each sample was isolated from cells using TRIzol reagent (Invitrogen, CA) following the manufacturer's protocol. The concentration and purity of the total RNA of each sample were inspected on a spectrophotometer (NanoDrop 2000, Thermo Fisher Scientific Inc.), and total RNA integrity was evaluated using the Agilent 2200 Bioanalyzer (Agilent Technologies, USA).

### Library Construction and Transcriptome Sequencing

RNA library preparation and sequencing were performed using Illumina sequencing technology. The NEBNext Poly(A) mRNA Magnetic Isolation Module was utilized to isolate poly(A) mRNA and generate mRNA fragments. The synthesis of first-strand cDNA was performed using the ProtoScript II reverse transcriptase, first-strand synthesis reaction buffer, and random primers. The second-strand cDNA was generated using Enzyme mix. The purified double-stranded cDNA fragments were repaired at both ends, followed by dA-tailing and adaptor ligation. Size selection of Adaptor-ligated DNA was then performed using DNA Clean Beads. PCR amplification was carried out for each sample using P5 and P7 primers and PCR products were validated using a Qsep100 (Bioptic, Taiwan, China), and quantified by Qubit3.0 Fluorometer (Invitrogen, Carlsbad, CA, USA). The libraries were loaded on an Illumina Novaseq 6000 instrument and sequenced using a 2×150 paired-end configuration according to the manufacturer's instructions (Illumina, San Diego, CA, USA). Image analysis and base calling were performed using Bcl2fastq (v2.17.1.14).

### Quality Control and Alignment

All raw sequences generated by RNA sequencing were obtained in fastq format. Adapters, low-quality bases (Q<20), or N-containing bases were removed by Cutadapt (V1.9.1). The clean reads were aligned with the human reference genome (GRCh38 download from Ensembl) using Hisat2 (V2.0.1).

### Differential Gene Expression Analysis

The gene expression levels of each sample were estimated by Fragments Per Kilobase of transcript per Million mapped reads (FPKM) using Htseq software (V0.6.1). To identify differentially expressed genes (DEGs), the DESeq2 Bioconductor package (V1.26.0) was used for the comparison between controls and treated samples. FDR-adjusted P-value ≤ 0.05 and |log<sub>2</sub>(fold change)| ≥ 1 was set as the cut-off criteria for detecting up-regulated and down-regulated genes.

### Gene Ontology (GO) and KEGG Pathway Enrichment Analysis

Web-based Gene Set Analysis Toolkit (<https://www.webgestalt.org/>) was utilized to perform GO and pathway enrichment analysis. The DEGs identified were mapped to corresponding GO terms categorized with respect to cellular component (CC), molecular function (MF), and biological process (BP). Kyoto Encyclopedia of Genes and Genomes (KEGG) pathway enrichment analyses were carried out for both the up-regulated and down-regulated genes to identify the significantly enriched pathways. A False Discovery Rate (FDR) <0.05 was considered significant.

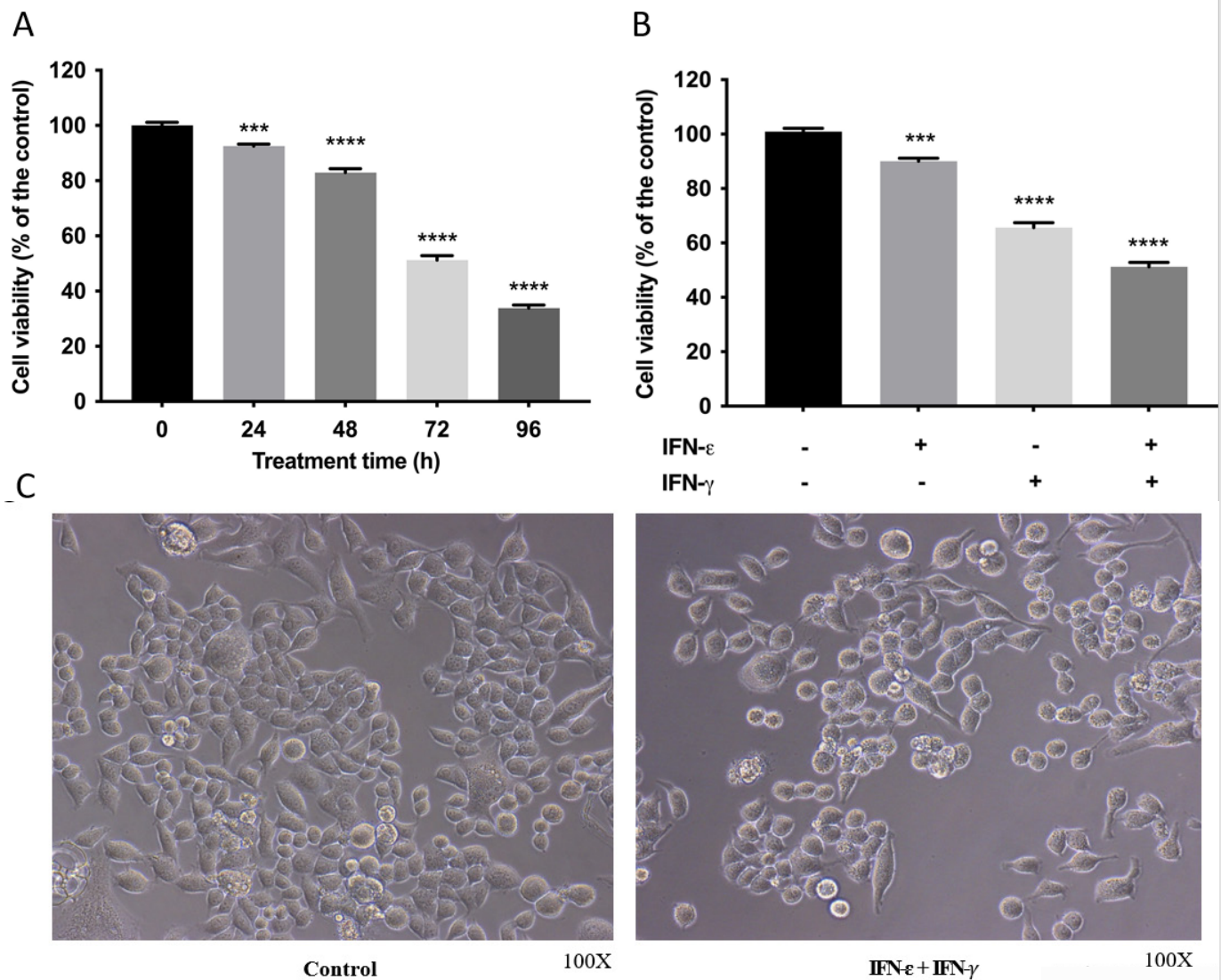
### Data Statistics

All results were expressed as Mean± SEM in the graphs. For each assay, there were more than three independent biological replicates. We used an unpaired t-test to analyze whether there was a significant difference between the control group and the treatment group. When the P-value of the unpaired t-test is smaller than 0.05, the result is considered statistically significant. GraphPad Prism (version 9.0) (GraphPad Software, San Diego, California USA, [www.graphpad.com](http://www.graphpad.com)) was used in statistical analysis.

## Results

### The Combined IFN-ε and IFN-γ Exhibit Anticancer Activity in HeLa S3 cells

To evaluate the optimal treatment duration using combination drugs (IFN-ε and IFN-γ), we performed a cell viability assay. Figure 1A presents the results of this time optimization. After 24 hours of treatment, we observed an inhibitory rate of approximately 10%. This rate increased to about 20% at 48 hours and approximately 50% at 72 hours. Notably, after 96 hours, cell viability dropped to below 40%. Given these findings and experimental considerations, we selected the 72-hour treatment duration for subsequent experiments. Furthermore, as illustrated in Figure 1B, the combination of IFN-ε and IFN-γ exhibited a greater inhibitory effect than either IFN-ε or IFN-γ alone after 72 hours. This underscores the potency of the combined treatment in reducing the viability of HeLa S3 cells. Morphological observations highlighted distinct changes in cell morphology and cell count between the control and treated groups (Figure 1C). These findings collectively indicate that the combination of IFN-ε and IFN-γ enhances the suppression of HeLa S3 cells and induces notable morphological alterations compared to solo treatments.



**Figure 1:** Cell viability assays.

A. IFN- $\epsilon$  and IFN- $\gamma$  inhibit cancer cell proliferation in a time-dependent manner, the viabilities of HeLa S3 cells at different treatment times were measured by WST-1 assay.

B. Comparison of cell viability after treating with IFN- $\epsilon$ , IFN- $\gamma$ , and the combination of IFN- $\epsilon$  and IFN- $\gamma$  for 72 hours, the data of combination group is from the data at 72h treatment time.

C. Cell morphological changes between control (without) and treatment (with 800ng/ml of IFN- $\epsilon$  and 20ng/ml IFN- $\gamma$ ) groups for 72-hour treatment time. Treatment drug concentration: IFN- $\epsilon$ : 800ng/ml, IFN- $\gamma$ : 20ng/ml. (\*\*\*:  $P < 0.005$ , \*\*\*\*:  $P < 0.001$ ).

## Quality Control of RNA Samples

To further explore the underlying mechanism of IFN- $\epsilon$  and IFN- $\gamma$  on human cervical cancer, we performed transcriptome sequencing by comparing the control (untreated) with the IFN- $\epsilon$  and IFN- $\gamma$  treated samples (treatment). Four biological replicates were used for each group. After sequencing, a total number of 291,585,252 and

288,560,724 raw reads of 150 bp were generated from the controls (C1, C2, C3, C4) and IFN-treatment groups (EG1, EG2, EG3, EG4), respectively (Supplementary Table 1). After being trimmed for adapters and low-quality bases, 290,709,262 and 287,835,478 clean reads were obtained from the control and treatment groups. The total bases of the clean data were about 85 GB, and all groups had a Q30 percentage over 90% (Table 1).



**Supplementary Table 1:** Summary of the raw reads.

Sample	Reads	Bases	Q20 (%)	Q30 (%)	GC (%)	N(ppm)
C1	77,663,996	11,649,599,400	97	91	50.79	21.3
C2	71,891,144	10,783,671,600	97	91	51.6	22.51
C3	65,536,744	9,830,511,600	97	91	51.39	22.51
C4	76,493,368	11,474,005,200	97	92	51.24	21.53
EG1	76,308,022	11,446,203,300	97	91	51.68	22.18
EG2	77,744,180	11,661,627,000	96	91	52.3	22.39
EG3	66,521,264	9,978,189,600	97	91	50.11	22.19
EG4	67,987,258	10,198,088,700	97	92	50.47	19.51

**Table 1:** Summary of the clean reads after filtering.

Sample	Reads	Bases	Q20 (%)	Q30 (%)	GC (%)	N(ppm)
C1	77,438,024	11,461,355,640	97	92	50.83	6.22
C2	71,676,378	10,599,849,344	97	92	51.65	6.76
C3	65,339,228	9,667,118,200	97	92	51.43	6.71
C4	76,255,632	11,278,100,333	97	92	51.30	6.44
EG1	76,102,940	11,281,232,741	97	92	51.73	6.61
EG2	77,543,528	11,506,553,623	97	91	52.35	6.62
EG3	66,374,028	9,851,495,158	97	91	50.15	6.51
EG4	67,814,982	10,062,065,255	97	93	50.52	5.98

Note: C: control groups, EG: groups treated with IFN- $\epsilon$  and IFN- $\gamma$ .

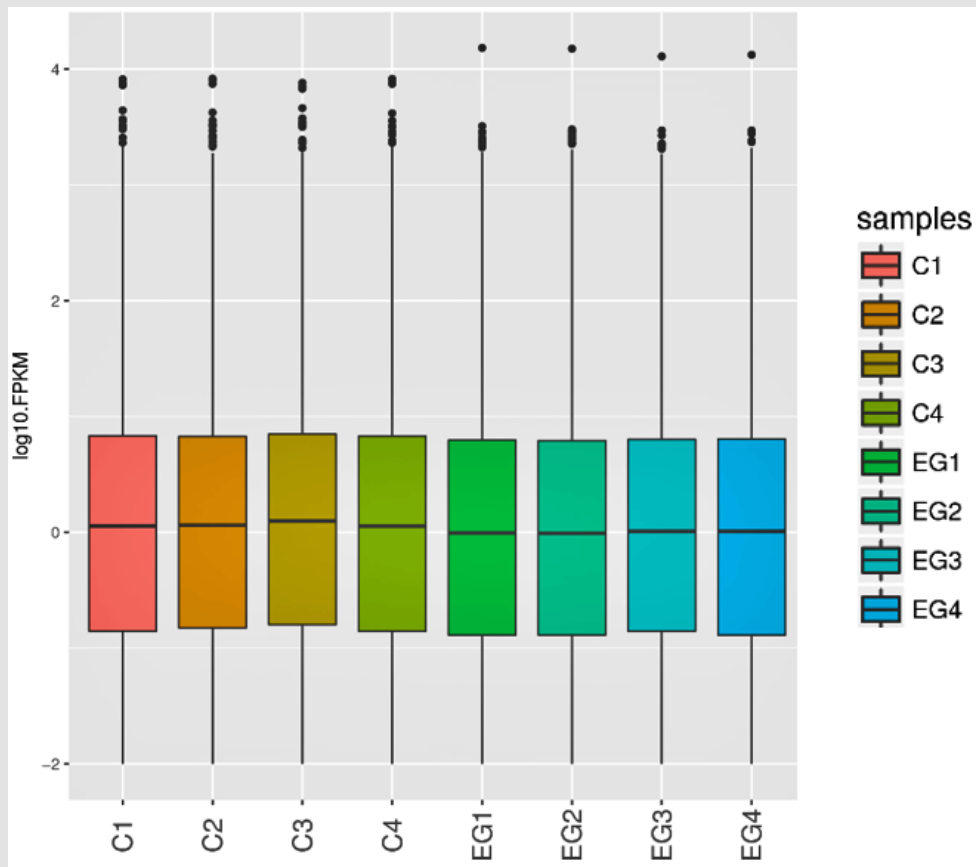
## Transcriptome Analysis

As shown in Table 2, the overall mapping ratio of the clean read's ranges from 88% to 92%. For each sample, at least 81% of the reads were uniquely mapped to the GRCh38 human reference genome. The above results show a satisfactory level of quality in the read align-

ment. Additionally, the expression profiles of all genes in the eight samples were normalized by the FPKM method and visualized using a boxplot (Figure 2). After normalization, the expression distributions of all samples were at a similar level, indicating that the normalization is successfully and the samples are suitable for comparisons.

**Table 2:** Mapping statistics of the clean reads to the reference genome.

Samples	Total Reads	Total Mapped	Multiple Mapped	Uniquely Mapped
C1	77,438,024	70,208,260 (91%)	6,007,087 (8%)	64,201,173 (83%)
C2	71,676,378	65,011,081 (91%)	5,605,223 (8%)	59,405,858 (83%)
C3	65,339,228	59,047,627 (90%)	5,203,563 (8%)	53,844,064 (82%)
C4	76,255,632	70,317,207 (92%)	5,875,381 (8%)	64,441,826 (85%)
EG1	76,102,940	67,788,035 (89%)	5,200,308 (7%)	62,587,727 (82%)
EG2	77,543,528	68,269,941 (88%)	5,283,436 (6%)	62,986,505 (81%)
EG3	66,374,028	60,473,818 (91%)	4,083,130 (6%)	56,390,688 (85%)
EG4	67,814,982	62,508,350 (92%)	4,161,511 (6%)	58,346,839 (86%)



**Figure 2:** Box plot of the normalized data. From top to bottom, the five regions of the box plot represent: maximum, upper quartile, median, lower quartile, and minimum.

### Differential Gene Expression Analysis

Compared with the control group, a total of 6,265 differential expressed genes (DEGs) were identified in cervical cancer cells treated with a combination of IFN-ε and IFN-γ, among which 3,363 (53.7%) genes were up-regulated, and 2,902 (46.3%) genes were down-reg-

ulated (Figure 3). Detailed information on the top 10 up-regulated and down-regulated genes based on fold change is shown in Table 3 below. For the full list of DEGs, please refer to the supplementary information (Supplementary Tables 2 & 3).

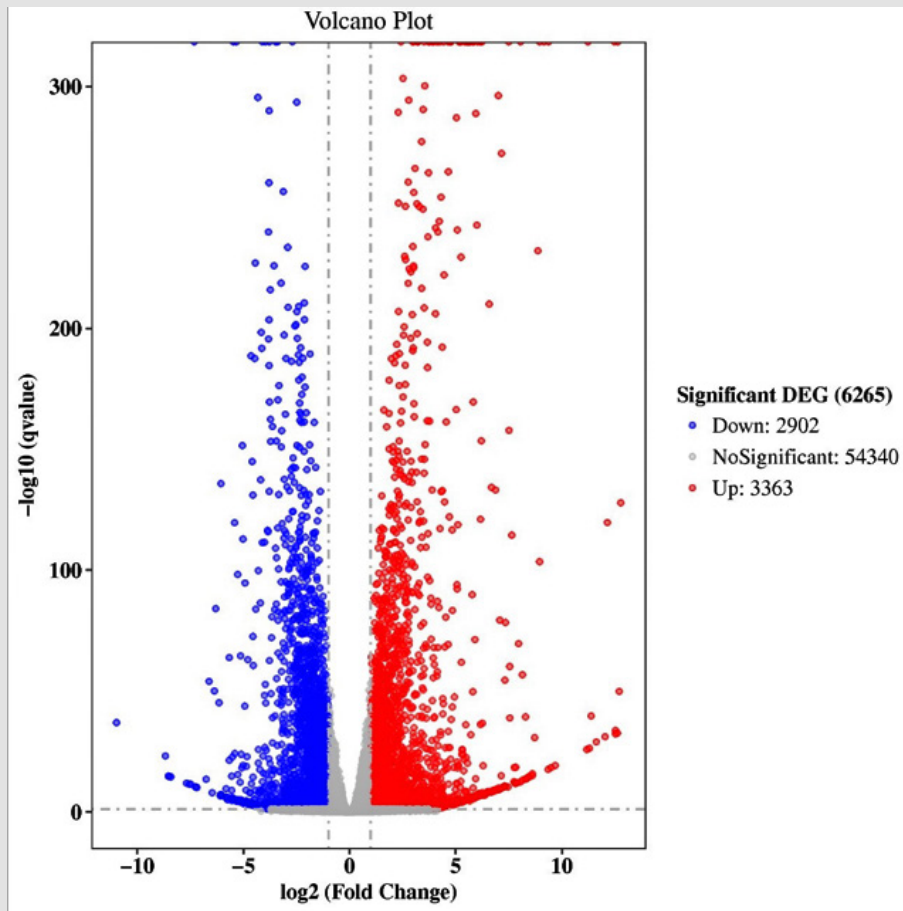


Figure 3: Volcano plot of the DEGs.

Table 3: The top 10 up-regulated and down-regulated DEGs.

Regulation	Gene Symbol	log <sub>2</sub> (Fold Change)	P-adj
Up	HLA-DRA	12.7	1.24E-128
	GBP1P1	12.7	1.23E-50
	GBP5	12.6	0
	HLA-DRB1	12.6	2.17E-33
	LGALS17A	12.5	1.81E-34
	HLA-DQA1	12.5	4.54E-33
	CD74	12.4	0
	GBP4	12.1	1.86E-120
	ITK	12.0	6.36E-32
	SERPING1	11.6	9.17E-30

Down	CA9	-10.9	9.69E-38
	METTL7A	-8.6	6.16E-24
	AGR2	-8.5	1.31E-15
	MAPK4	-8.4	1.79E-15
	KLRK1	-8.4	2.56E-15
	DERL3	-7.6	1.07E-12
	NCAM2	-7.5	2.47E-12
	COL1A2	-7.4	2.52E-12
	CGA	-7.3	0
CYP4Z1	-7.2	3.92E-11	

Supplementary Table 2: List of the up-regulated DEGs.

Gene ID	Gene Symbol	log2 (FoldChange)	p-adj	Description
ENSG00000204287	HLA-DRA	12.8	1.24E-128	major histocompatibility complex 2C class II 2C DR alpha
ENSG00000225492	GBP1P1	12.7	1.23E-50	guanylate binding protein 1 pseudogene 1
ENSG00000154451	GBP5	12.6	0	guanylate binding protein 5
ENSG00000196126	HLA-DRB1	12.6	2.17E-33	major histocompatibility complex 2C class II 2C DR beta 1
ENSG00000226025	LGALS17A	12.5	1.81E-34	galectin 14 pseudogene
ENSG00000196735	HLA-DQA1	12.5	4.54E-33	major histocompatibility complex 2C class II 2C DQ alpha 1
ENSG00000019582	CD74	12.5	0	CD74 molecule
ENSG00000162654	GBP4	12.1	1.86E-120	guanylate binding protein 4
ENSG00000113263	ITK	12	6.36E-32	IL2 inducible T cell kinase
ENSG00000149131	SERPING1	11.6	9.17E-30	serpin family G member 1
ENSG00000231389	HLA-DPA1	11.4	1.70E-40	major histocompatibility complex 2C class II 2C DP alpha 1
ENSG00000223865	HLA-DPB1	11.3	4.00E-27	major histocompatibility complex 2C class II 2C DP beta 1
ENSG00000131203	IDO1	11.2	0	indoleamine 2 2C3-dioxygenase 1
ENSG00000100336	APOL4	11.2	1.29E-26	apolipoprotein L4
ENSG00000071575	TRIB2	9.7	5.45E-20	tribbles pseudokinase 2
ENSG00000182901	RGS7	9.5	3.98E-19	regulator of G protein signaling 7
ENSG00000117228	GBP1	9.4	0	guanylate binding protein 1
ENSG00000253838	-	9.4	2.03E-18	novel transcript
ENSG00000123610	TNFAIP6	9.2	0	TNF alpha induced protein 6
ENSG00000138755	CXCL9	9	2.82E-104	C-X-C motif chemokine ligand 9
ENSG00000179583	CIITA	8.9	0	class II major histocompatibility complex transactivator
ENSG00000132274	TRIM22	8.9	7.53E-233	tripartite motif containing 22
ENSG00000243742	RPLP0P2	8.7	1.52E-31	ribosomal protein lateral stalk subunit P0 pseudogene 2
ENSG00000048052	HDAC9	8.6	1.32E-16	histone deacetylase 9
ENSG00000237568	-	8.6	9.22E-16	novel transcript
ENSG00000268088	-	8.5	1.58E-15	lectin 2C galactoside-binding 2C soluble 2C 14 (LGALS14) pseudogene
ENSG00000179344	HLA-DQB1	8.4	5.30E-15	major histocompatibility complex 2C class II 2C DQ beta 1
ENSG00000262488	-	8.3	1.02E-14	Rho GTPase activating protein 21 (ARHGAP21) pseudogene
ENSG00000198326	TMEM239	8.3	1.99E-14	transmembrane protein 239
ENSG00000132530	XAF1	8.3	4.22E-40	XIAP associated factor 1
ENSG00000007171	NOS2	8.2	5.80E-14	nitric oxide synthase 2
ENSG00000204642	HLA-F	8.1	1.55E-57	major histocompatibility complex 2C class I 2C F



ENSG00000162892	IL24	8.1	0	interleukin 24
ENSG00000177294	FBXO39	8	2.97E-13	F-box protein 39
ENSG00000242574	HLA-DMB	8	2.22E-70	major histocompatibility complex 2C class II 2C DM beta
ENSG00000213886	UBD	7.9	7.09E-13	ubiquitin D
ENSG00000287335	-	7.8	1.12E-12	novel transcript
ENSG00000153495	TEX29	7.8	2.96E-19	testis expressed 29
ENSG00000278910	BANCR	7.8	1.36E-12	BRAF-activated non-protein coding RNA
ENSG00000204252	HLA-DOA	7.8	6.08E-13	major histocompatibility complex 2C class II 2C DO alpha
ENSG00000093134	VNN3	7.8	3.65E-19	vanin 3
ENSG00000154589	LY96	7.7	2.49E-13	lymphocyte antigen 96
ENSG00000110446	SLC15A3	7.6	3.01E-115	solute carrier family 15 member 3
ENSG00000120217	CD274	7.5	1.14E-39	CD274 molecule
ENSG00000146374	RSPO3	7.5	6.20E-61	R-spondin 3
ENSG00000163568	AIM2	7.5	1.40E-158	absent in melanoma 2
ENSG00000163131	CTSS	7.5	0	cathepsin S
ENSG00000254287	-	7.5	3.60E-11	novel transcript
ENSG00000183671	GPR1	7.3	4.02E-79	G protein-coupled receptor 1
ENSG00000146678	IGFBP1	7.3	2.29E-11	insulin like growth factor binding protein 1
ENSG00000273272	-	7.3	2.44E-11	novel transcript
ENSG00000090539	CHRD	7.3	2.81E-55	chordin
ENSG00000168334	XIRP1	7.3	2.86E-11	xin actin binding repeat containing 1
ENSG00000213512	GBP7	7.3	2.59E-11	guanylate binding protein 7
ENSG00000255860	-	7.3	1.82E-11	folate receptor 3 (gamma) (FOLR3) pseudogene
ENSG00000188257	PLA2G2A	7.2	6.56E-11	phospholipase A2 group IIA
ENSG00000146859	TMEM140	7.2	4.06E-273	transmembrane protein 140
ENSG00000284734	-	7.1	1.19E-10	novel transcript 2C antisense to GBP4
ENSG00000136514	RTP4	7.1	9.22E-16	receptor transporter protein 4
ENSG00000078401	EDN1	7.1	4.06E-80	endothelin 1
ENSG00000237220	-	7.1	2.46E-10	novel transcript
ENSG00000153923	CLCA3P	7	2.61E-10	chloride channel accessory 3 2C pseudogene
ENSG00000147614	ATP6V0D2	7	2.86E-10	ATPase H <sup>+</sup> transporting V0 subunit d2
ENSG00000124194	GDAP1L1	7	6.16E-10	ganglioside induced differentiation associated protein 1 like 1
ENSG00000173762	CD7	7	5.49E-297	CD7 molecule
ENSG00000146950	SHROOM2	7	1.32E-10	shroom family member 2
ENSG00000112299	VNN1	6.9	6.72E-10	vanin 1
ENSG00000141434	MEP1B	6.9	5.33E-10	meprin A subunit beta
ENSG00000204103	MAFB	6.9	6.54E-134	MAF bZIP transcription factor B
ENSG00000104921	FCER2	6.8	1.09E-09	Fc fragment of IgE receptor II
ENSG00000088882	CPXM1	6.8	2.04E-09	carboxypeptidase X 2C M14 family member 1
ENSG00000140379	BCL2A1	6.8	1.01E-09	BCL2 related protein A1
ENSG00000168062	BATF2	6.7	5.38E-135	basic leucine zipper ATF-like transcription factor 2
ENSG00000099998	GGT5	6.7	5.18E-09	gamma-glutamyltransferase 5
ENSG00000165309	ARMC3	6.6	7.29E-09	armadillo repeat containing 3
ENSG00000079385	CEACAM1	6.6	8.23E-211	CEA cell adhesion molecule 1
ENSG00000163631	ALB	6.5	3.63E-09	albumin
ENSG00000004939	SLC4A1	6.5	3.63E-09	solute carrier family 4 member 1 (Diego blood group)

ENSG00000071073	MGAT4A	6.5	5.37E-09	alpha-1 2C3-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase A
ENSG00000286215	-	6.5	1.12E-08	vimentin 2 2C pseudogene
ENSG00000151789	ZNF385D	6.4	2.12E-08	zinc finger protein 385D
ENSG00000273972	-	6.4	3.03E-08	novel transcript
ENSG00000228707	-	6.4	1.17E-07	novel transcript
ENSG00000042832	TG	6.3	4.68E-08	thyroglobulin
ENSG00000231574	LINC02015	6.3	6.60E-20	long intergenic non-protein coding RNA 2015
ENSG00000116183	PAPPA2	6.3	1.76E-37	pappalysin 2
ENSG00000186417	GLDN	6.2	8.14E-09	gliomedin
ENSG00000125538	IL1B	6.2	0	interleukin 1 beta
ENSG00000183347	GBP6	6.2	1.01E-07	guanylate binding protein family member 6
ENSG00000089041	P2RX7	6.2	6.07E-08	purinergic receptor P2X 7
ENSG00000128284	APOL3	6.2	2.91E-154	apolipoprotein L3
ENSG00000256660	CLEC12B	6.2	6.90E-08	C-type lectin domain family 12 member B
ENSG00000130182	ZSCAN10	6.2	3.21E-08	zinc finger and SCAN domain containing 10
ENSG00000176136	MC5R	6.2	1.29E-07	melanocortin 5 receptor
ENSG00000272941	-	6.2	7.84E-122	novel transcript 2C antisense to C7orf49
ENSG00000287839	-	6.2	5.67E-37	novel transcript
ENSG00000130487	KLHDC7B	6.2	0	kelch domain containing 7B
ENSG00000121552	CSTA	6.1	7.38E-08	cystatin A
ENSG00000078018	MAP2	6.1	2.08E-08	microtubule associated protein 2
ENSG00000087494	PTHLH	6.1	1.49E-07	parathyroid hormone like hormone
ENSG00000253417	LINC02159	6.1	1.30E-07	long intergenic non-protein coding RNA 2159
ENSG00000237975	FLG-AS1	6.1	1.25E-07	FLG antisense RNA 1
ENSG00000175267	VWA3A	6.1	2.67E-07	von Willebrand factor A domain containing 3A
ENSG00000116254	CHD5	6	3.15E-08	chromodomain helicase DNA binding protein 5
ENSG00000125347	IRF1	6	0	interferon regulatory factor 1
ENSG00000237988	OR2I1P	6	3.06E-07	olfactory receptor family 2 subfamily I member 1 pseudogene
ENSG00000167984	NLRC3	6	9.80E-08	NLR family CARD domain containing 3
ENSG00000025708	TYMP	6	1.94E-243	thymidine phosphorylase
ENSG00000261117	-	6	5.66E-07	novel transcript
ENSG00000169245	CXCL10	5.9	1.36E-289	C-X-C motif chemokine ligand 10
ENSG00000090534	THPO	5.9	1.58E-14	thrombopoietin
ENSG00000163735	CXCL5	5.9	8.79E-07	C-X-C motif chemokine ligand 5
ENSG00000229647	MYOSLID	5.9	6.51E-07	myocardin-induced smooth muscle lncRNA 2C inducer of differentiation
ENSG00000135248	FAM71F1	5.9	9.56E-07	family with sequence similarity 71 member F1
ENSG00000084674	APOB	5.9	1.95E-07	apolipoprotein B
ENSG00000244122	UGT1A7	5.9	4.63E-72	UDP glucuronosyltransferase family 1 member A7
ENSG00000163554	SPTA1	5.9	1.05E-06	spectrin alpha 2C erythrocytic 1
ENSG00000101198	NKAIN4	5.9	7.32E-07	sodium/potassium transporting ATPase interacting 4
ENSG00000162645	GBP2	5.8	0	guanylate binding protein 2
ENSG00000164509	IL31RA	5.8	5.32E-07	interleukin 31 receptor A
ENSG00000250535	STK19B	5.8	3.08E-07	serine/threonine kinase 19B (pseudogene)
ENSG00000283511	-	5.8	2.52E-170	novel pseudogene

ENSG00000236024	PRRX2-AS1	5.8	1.05E-10	PRRX2 antisense RNA 1
ENSG00000120341	SEC16B	5.8	3.22E-06	SEC16 homolog B 2C endoplasmic reticulum export factor
ENSG00000144712	CAND2	5.8	1.61E-50	cullin associated and neddylation dissociated 2 (putative)
ENSG00000143546	S100A8	5.8	0	S100 calcium binding protein A8
ENSG00000217442	SYCE3	5.8	3.83E-07	synaptonemal complex central element protein 3
ENSG00000105371	ICAM4	5.8	1.22E-90	intercellular adhesion molecule 4 (Landsteiner-Wiener blood group)
ENSG00000157214	STEAP2	5.7	1.62E-06	STEAP2 metalloredutase
ENSG00000125735	TNFSF14	5.7	1.01E-32	TNF superfamily member 14
ENSG00000258713	C20orf141	5.7	1.47E-06	chromosome 20 open reading frame 141
ENSG00000287796	-	5.7	2.80E-06	novel transcript
ENSG00000184371	CSF1	5.7	0	colony stimulating factor 1
ENSG00000105967	TFEC	5.7	1.05E-06	transcription factor EC
ENSG00000236754	-	5.7	2.15E-05	novel transcript
ENSG00000279484	KLHL30-AS1	5.7	3.43E-07	KLHL30 antisense RNA 1
ENSG00000279118	-	5.6	8.93E-07	tec
ENSG00000182326	C1S	5.6	0	complement C1s
ENSG00000115008	IL1A	5.6	0	interleukin 1 alpha
ENSG00000204614	TRIM40	5.6	3.60E-06	tripartite motif containing 40
ENSG00000285269	-	5.6	4.91E-06	novel transcript 2C SLC35D2-HSD17B3 readthrough
ENSG00000171509	RXFP1	5.6	1.22E-05	relaxin family peptide receptor 1
ENSG00000139597	N4BP2L1	5.6	6.02E-06	NEDD4 binding protein 2 like 1
ENSG00000176490	DIRAS1	5.6	6.13E-21	DIRAS family GTPase 1
ENSG00000187134	AKR1C1	5.6	0	aldo-keto reductase family 1 member C1
ENSG00000140105	WARS1	5.5	0	tryptophanyl-tRNA synthetase 1
ENSG00000081051	AFP	5.5	2.86E-09	alpha fetoprotein
ENSG00000196220	SRGAP3	5.5	2.92E-23	SLIT-ROBO Rho GTPase activating protein 3
ENSG00000171532	NEUROD2	5.5	2.68E-06	neuronal differentiation 2
ENSG00000205015	LINC02138	5.5	7.11E-06	long intergenic non-protein coding RNA 2138
ENSG00000108342	CSF3	5.5	7.65E-37	colony stimulating factor 3
ENSG00000102524	TNFSF13B	5.5	2.68E-09	TNF superfamily member 13b
ENSG00000241635	UGT1A1	5.5	3.16E-06	UDP glucuronosyltransferase family 1 member A1
ENSG00000176046	NUPR1	5.4	0	nuclear protein 1 2C transcriptional regulator
ENSG00000197540	GZMM	5.4	3.93E-09	granzyme M
ENSG00000102970	CCL17	5.4	1.91E-05	C-C motif chemokine ligand 17
ENSG00000242113	RN7SL124P	5.4	2.69E-05	RNA 2C 7SL 2C cytoplasmic 124 2C pseudogene
ENSG00000143119	CD53	5.4	1.51E-22	CD53 molecule
ENSG00000279164	-	5.4	1.24E-05	TEC
ENSG00000187672	ERC2	5.4	2.35E-05	ELKS/RAB6-interacting/CAST family member 2
ENSG00000260910	LINC00565	5.4	8.27E-18	long intergenic non-protein coding RNA 565
ENSG00000185198	PRSS57	5.3	1.28E-24	serine protease 57
ENSG00000279296	PRAL	5.3	2.72E-05	p53 regulation associated lncRNA
ENSG00000197588	KLKP1	5.3	1.77E-05	kallikrein pseudogene 1
ENSG00000155265	GOLGA7B	5.3	1.37E-26	golgin A7 family member B
ENSG00000100968	NFATC4	5.3	9.21E-05	nuclear factor of activated T cells 4

ENSG00000145321	GC	5.3	2.54E-05	GC vitamin D binding protein
ENSG00000235385	LINC02154	5.3	1.76E-26	long intergenic non-protein coding RNA 2154
ENSG00000225790	-	5.3	2.74E-05	novel transcript
ENSG00000185338	SOCS1	5.3	1.40E-24	suppressor of cytokine signaling 1
ENSG00000158683	PKD1L1	5.3	8.74E-06	polycystin 1 like 1 2C transient receptor potential channel interacting
ENSG00000151632	AKR1C2	5.3	1.07E-62	aldo-keto reductase family 1 member C2
ENSG00000204257	HLA-DMA	5.2	3.32E-230	major histocompatibility complex 2C class II 2C DM alpha
ENSG00000096996	IL12RB1	5.2	1.70E-13	interleukin 12 receptor subunit beta 1
ENSG00000111335	OAS2	5.2	0	2'-5'-oligoadenylate synthetase 2
ENSG00000183760	ACP7	5.2	3.87E-05	acid phosphatase 7 2C tartrate resistant (putative)
ENSG00000254154	CRY-ZL2P-SEC16B	5.2	6.68E-05	CRYZL2P-SEC16B readthrough
ENSG00000235899	LINC01564	5.2	2.97E-05	long intergenic non-protein coding RNA 1564
ENSG00000119514	GALNT12	5.2	6.04E-11	polypeptide N-acetylgalactosaminyltransferase 12
ENSG00000115963	RND3	5.2	0	Rho family GTPase 3
ENSG00000144488	ESPNL	5.2	3.14E-06	espin like
ENSG00000138613	APH1B	5.2	1.71E-05	aph-1 homolog B 2C gamma-secretase subunit
ENSG00000158869	FCER1G	5.2	6.19E-05	Fc fragment of IgE receptor Ig
ENSG00000146674	IGFBP3	5.2	0	insulin like growth factor binding protein 3
ENSG00000129048	ACKR4	5.1	5.50E-06	atypical chemokine receptor 4
ENSG00000278959	-	5.1	3.51E-05	tec
ENSG00000234424	-	5.1	6.24E-20	kinesin family member 27 (KIF27) pseudogene
ENSG00000077420	APBB1IP	5.1	4.25E-20	amyloid beta precursor protein binding family B member 1 interacting protein
ENSG00000073146	MOV10L1	5.1	0.0001429	Mov10 like RISC complex RNA helicase 1
ENSG00000260105	AOC4P	5.1	9.58E-05	amine oxidase copper containing 4 2C pseudogene
ENSG00000255221	CARD17	5.1	1.47E-119	caspase recruitment domain family member 17
ENSG00000008056	SYN1	5.1	7.61E-06	synapsin I
ENSG00000131142	CCL25	5.1	5.98E-06	C-C motif chemokine ligand 25
ENSG00000140839	CLEC18B	5.1	6.05E-06	C-type lectin domain family 18 member B
ENSG00000110203	FOLR3	5.1	5.87E-19	folate receptor gamma
ENSG00000137959	IFI44L	5.1	1.93E-241	interferon induced protein 44 like
ENSG00000260366	-	5.1	5.10E-08	novel transcript 2C overlapping NUCB1
ENSG00000163359	COL6A3	5.1	5.07E-93	collagen type VI alpha 3 chain
ENSG00000267414	SETBP1-DT	5.1	7.26E-06	SETBP1 divergent transcript
ENSG00000261644	CYLD-AS1	5.1	1.78E-21	CYLD antisense RNA 1
ENSG00000224048	LINC02612	5.1	0.0001433	long intergenic non-protein coding RNA 2612
ENSG00000264067	-	5.1	8.33E-05	novel transcript 2C antisense to MYH13
ENSG00000131471	AOC3	5.1	9.79E-95	amine oxidase copper containing 3
ENSG00000095932	SMIM24	5.1	2.46E-05	small integral membrane protein 24
ENSG00000185345	PRKN	5.1	0.0002102	parkin RBR E3 ubiquitin protein ligase
ENSG00000268754	LINC01081	5.1	1.08E-12	long intergenic non-protein coding RNA 1081
ENSG00000113946	CLDN16	5.1	8.89E-05	claudin 16
ENSG00000229400	CNIH3-AS1	5.1	9.88E-05	CNIH3 antisense RNA 1
ENSG00000168309	FAM107A	5.1	9.72E-05	family with sequence similarity 107 member A
ENSG00000117226	GBP3	5	7.18E-288	guanylate binding protein 3

ENSG0000067798	NAV3	5	1.94E-12	neuron navigator 3
ENSG00000165949	IFI27	5	3.65E-167	interferon alpha inducible protein 27
ENSG00000140279	DUOX2	5	4.83E-05	dual oxidase 2
ENSG00000163121	NEURL3	5	2.81E-05	neuralized E3 ubiquitin protein ligase 3
ENSG00000187550	SBK2	5	3.58E-05	SH3 domain binding kinase family member 2
ENSG00000281920	-	5	0.0001321	novel transcript
ENSG00000189157	FAM47E	5	0.000119	family with sequence similarity 47 member E
ENSG00000088881	EBF4	5	0.0002483	EBF family member 4
ENSG00000228719	-	5	0.0001774	novel transcript
ENSG00000204929	-	5	4.65E-10	novel transcript
ENSG00000091482	SMPX	5	0.0005971	small muscle protein X-linked
ENSG00000232677	LINC00665	5	1.18E-05	long intergenic non-protein coding RNA 665
ENSG00000287089	-	5	1.27E-05	novel transcript 2C antisense to MLN
ENSG00000163501	IHH	4.9	0.0001109	Indian hedgehog signaling molecule
ENSG00000118160	SLC8A2	4.9	1.77E-07	solute carrier family 8 member A2
ENSG00000103316	CRYM	4.9	4.39E-05	crystallin mu
ENSG00000130300	PLVAP	4.9	2.55E-05	plasmalemma vesicle associated protein
ENSG00000132837	DMGDH	4.9	2.42E-48	dimethylglycine dehydrogenase
ENSG00000205420	KRT6A	4.9	8.39E-05	keratin 6A
ENSG00000162998	FRZB	4.9	0.0003262	frizzled related protein
ENSG00000253832	-	4.9	0.0001634	novel transcript
ENSG00000278791	-	4.9	0.0002394	-
ENSG00000216588	IGSF23	4.9	0.0001986	immunoglobulin superfamily member 23
ENSG00000198848	CES1	4.9	0.0002407	carboxylesterase 1
ENSG00000256262	USP30-AS1	4.9	3.73E-19	USP30 antisense RNA 1
ENSG00000229391	HLA-DRB6	4.9	0.000458	major histocompatibility complex 2C class II 2C DR beta 6 (pseudogene)
ENSG00000100298	APOBEC3H	4.9	0.0007933	apolipoprotein B mRNA editing enzyme catalytic subunit 3H
ENSG00000175352	NRIP3	4.9	0.0004036	nuclear receptor interacting protein 3
ENSG00000269460	-	4.9	0.0004228	novel transcript
ENSG00000235505	CASP4LP	4.9	0.0011377	caspase 4 like 2C pseudogene
ENSG00000233975	LINC02574	4.9	0.0001007	long intergenic non-protein coding RNA 2574
ENSG00000265737	-	4.9	0.0004076	novel transcript 2C antisense to ANKRD30B
ENSG00000185862	EVI2B	4.8	4.18E-84	ecotropic viral integration site 2B
ENSG00000231977	-	4.8	4.87E-07	novel transcript
ENSG00000275329	-	4.8	3.37E-44	novel transcript
ENSG00000143816	WNT9A	4.8	2.06E-117	Wnt family member 9A
ENSG00000249279	LINC02057	4.8	3.09E-05	long intergenic non-protein coding RNA 2057
ENSG00000091513	TF	4.8	2.50E-05	transferrin
ENSG00000272940	-	4.8	9.28E-05	novel transcript
ENSG00000112782	CLIC5	4.8	4.99E-39	chloride intracellular channel 5
ENSG00000141574	SECTM1	4.8	0	secreted and transmembrane 1
ENSG00000204866	IGFL2	4.8	0.0004812	IGF like family member 2
ENSG00000122852	SFTPA1	4.8	0.0006781	surfactant protein A1
ENSG00000253215	-	4.8	0.0007202	novel transcript
ENSG00000142319	SLC6A3	4.8	3.32E-05	solute carrier family 6 member 3
ENSG00000258666	-	4.8	1.30E-22	novel transcript 2C antisense to WARS



ENSG00000140519	RHCG	4.8	5.92E-05	Rh family C glycoprotein
ENSG00000244242	IFITM10	4.7	0	interferon induced transmembrane protein 10
ENSG00000171368	TPPP	4.7	2.14E-27	tubulin polymerization promoting protein
ENSG00000241544	LINC02029	4.7	0.0008594	long intergenic non-protein coding RNA 2029
ENSG00000273388	-	4.7	0.0011289	novel transcript 2C antisense to MYH13
ENSG00000101890	GUCY2F	4.7	0.0008626	guanylate cyclase 2F 2C retinal
ENSG00000279311	-	4.7	0.0006235	TEC
ENSG00000088386	SLC15A1	4.7	0.0006848	solute carrier family 15 member 1
ENSG00000259617	-	4.7	0.0006332	novel transcript 2C antisense to INO80
ENSG00000229656	ITGB1-DT	4.7	7.86E-123	ITGB1 divergent transcript
ENSG00000092054	MYH7	4.7	0.0013289	myosin heavy chain 7
ENSG00000116785	CFHR3	4.7	4.98E-05	complement factor H related 3
ENSG00000112499	SLC22A2	4.7	0.0001576	solute carrier family 22 member 2
ENSG00000285108	-	4.7	0.0002031	novel transcript
ENSG00000172818	OVOL1	4.7	2.61E-12	ovo like transcriptional repressor 1
ENSG00000263033	-	4.7	1.12E-06	novel transcript
ENSG00000104808	DHDH	4.7	1.90E-27	dihydrodiol dehydrogenase
ENSG00000116701	NCF2	4.7	1.63E-265	neutrophil cytosolic factor 2
ENSG00000197646	PDCD1LG2	4.7	4.19E-34	programmed cell death 1 ligand 2
ENSG00000221963	APOL6	4.6	0	apolipoprotein L6
ENSG00000244731	C4A	4.6	4.59E-70	complement C4A (Rodgers blood group)
ENSG00000233671	CENPNP1	4.6	0.0036505	CENPN pseudogene 1
ENSG00000136695	IL36RN	4.6	0.0008151	interleukin 36 receptor antagonist
ENSG00000280276	-	4.6	0.0008611	novel transcript
ENSG00000171115	GIMAP8	4.6	0.001025	GTPase 2C IMAP family member 8
ENSG00000232680	-	4.6	0.0009054	novel transcript
ENSG00000118322	ATP10B	4.6	0.0013197	ATPase phospholipid transporting 10B (putative)
ENSG00000183160	TMEM119	4.6	0.0002341	transmembrane protein 119
ENSG00000261512	-	4.6	0.0002195	novel transcript
ENSG00000230753	ZNF341-AS1	4.6	8.03E-19	ZNF341 antisense RNA 1
ENSG00000137875	BCL2L10	4.6	0.0002991	BCL2 like 10
ENSG00000280422	-	4.6	0.0002821	TEC
ENSG00000231324	-	4.6	0.0004499	novel transcript
ENSG00000157873	TNFRSF14	4.6	3.18E-21	TNF receptor superfamily member 14
ENSG00000131480	AOC2	4.6	4.48E-162	amine oxidase copper containing 2
ENSG00000274184	-	4.5	0.0021489	novel transcript 2C antisense to ZSCAN30
ENSG00000188676	IDO2	4.5	2.21E-06	indoleamine 2 2C3-dioxygenase 2
ENSG00000260284	TPSP2	4.5	0.0024735	tryptase pseudogene 2
ENSG00000224251	-	4.5	0.0017599	novel transcript 2C antisense to AKR1C2
ENSG00000288695	-	4.5	0.0012379	novel protein 2C SRD5A3-RP11-177J6.1 readthrough
ENSG00000171487	NLRP5	4.5	0.0036793	NLR family pyrin domain containing 5
ENSG00000260314	MRC1	4.5	0.0022001	mannose receptor C-type 1
ENSG00000197893	NRAP	4.5	0.0039977	nebulin related anchoring protein
ENSG00000231852	CYP21A2	4.5	2.62E-81	cytochrome P450 family 21 subfamily A member 2
ENSG00000172901	LVRN	4.5	2.86E-20	laeverin
ENSG00000154262	ABCA6	4.5	0.0013215	ATP binding cassette subfamily A member 6

ENSG00000124103	FAM209A	4.5	0.0001085	family with sequence similarity 209 member A
ENSG00000169047	IRS1	4.5	2.36E-27	insulin receptor substrate 1
ENSG00000285744	-	4.5	2.51E-18	novel transcript
ENSG00000160870	CYP3A7	4.5	5.21E-69	cytochrome P450 family 3 subfamily A member 7
ENSG00000232453	LINC02777	4.5	5.63E-06	long intergenic non-protein coding RNA 2777
ENSG00000021488	SLC7A9	4.5	0.0001409	solute carrier family 7 member 9
ENSG00000233030	-	4.5	6.48E-06	novel transcript 2C antisense to FCGR1A
ENSG00000164379	FOXQ1	4.5	5.51E-129	forkhead box Q1
ENSG00000205426	KRT81	4.4	0.0008732	keratin 81
ENSG00000138061	CYP1B1	4.4	7.82E-223	cytochrome P450 family 1 subfamily B member 1
ENSG00000086991	NOX4	4.4	0.0029111	NADPH oxidase 4
ENSG00000166448	TMEM130	4.4	0.0028777	transmembrane protein 130
ENSG00000109758	HGFAC	4.4	0.0025563	HGF activator
ENSG00000243225	-	4.4	0.0025663	ribosomal protein 2C large 2C P1 (RPLP1) pseudogene
ENSG00000230444	TFAMP1	4.4	0.0025926	transcription factor A 2C mitochondrial pseudogene 1
ENSG00000205300	-	4.4	0.0027983	novel transcript
ENSG00000250490	LINC02145	4.4	0.0090013	long intergenic non-protein coding RNA 2145
ENSG00000158955	WNT9B	4.4	0.0029619	Wnt family member 9B
ENSG00000232692	-	4.4	0.0017526	novel transcript
ENSG00000006659	LGALS14	4.4	0.0053254	galectin 14
ENSG00000187595	ZNF385C	4.4	0.002811	zinc finger protein 385C
ENSG00000225647	-	4.4	0.002811	novel transcript
ENSG00000144285	SCN1A	4.4	0.0020993	sodium voltage-gated channel alpha subunit 1
ENSG00000131668	BARX1	4.4	0.0036194	BARX homeobox 1
ENSG00000180210	F2	4.4	0.0041389	coagulation factor II 2C thrombin
ENSG00000119917	IFIT3	4.4	0	interferon induced protein with tetratricopeptide repeats 3
ENSG00000100346	CACNA1I	4.4	9.99E-08	calcium voltage-gated channel subunit alpha1 I
ENSG00000287733	-	4.4	1.51E-45	novel transcript
ENSG00000180549	FUT7	4.4	0.0001647	fucosyltransferase 7
ENSG00000283525	-	4.4	1.79E-17	phospholipase A2 inhibitor and LY6/PLAUR domain containing (PINLYP) pseudogene
ENSG00000188338	SLC38A3	4.4	0.0006912	solute carrier family 38 member 3
ENSG00000180353	HCLS1	4.4	0.0006308	hematopoietic cell-specific Lyn substrate 1
ENSG00000074181	NOTCH3	4.4	2.59E-41	notch receptor 3
ENSG00000286153	-	4.4	1.20E-47	novel transcript 2C antisense to RUNX1
ENSG00000148468	FAM171A1	4.4	0.0006331	family with sequence similarity 171 member A1
ENSG00000164949	GEM	4.4	1.10E-05	GTP binding protein overexpressed in skeletal muscle
ENSG00000125998	FAM83C	4.4	9.41E-11	family with sequence similarity 83 member C
ENSG00000120337	TNFSF18	4.4	0.0008621	TNF superfamily member 18
ENSG00000167011	NAT16	4.4	0.0002211	N-acetyltransferase 16 (putative)
ENSG00000264672	SEPTIN4-AS1	4.4	0.0002555	SEPTIN4 antisense RNA 1
ENSG00000137757	CASP5	4.4	0.0002486	caspase 5
ENSG00000225864	-	4.4	0.000358	HLA complex group 4 pseudogene 11
ENSG00000008517	IL32	4.4	1.19E-133	interleukin 32
ENSG00000187475	H1-6	4.4	1.79E-07	H1.6 linker histone 2C cluster member
ENSG00000137033	IL33	4.4	5.65E-193	interleukin 33

ENSG00000073711	PPP2R3A	4.4	7.53E-09	protein phosphatase 2 regulatory subunit B'alpha
ENSG00000131386	GALNT15	4.4	1.86E-12	polypeptide N-acetylgalactosaminyltransferase 15
ENSG00000186517	ARHGAP30	4.4	0.0133894	Rho GTPase activating protein 30
ENSG00000237352	LINC01358	4.3	4.23E-07	long intergenic non-protein coding RNA 1358
ENSG00000258602	LINC01629	4.3	1.24E-10	long intergenic non-protein coding RNA 1629
ENSG00000225511	LINC00475	4.3	1.50E-05	long intergenic non-protein coding RNA 475
ENSG00000287617	-	4.3	0.0040885	novel transcript
ENSG00000136237	RAPGEF5	4.3	0.006472	Rap guanine nucleotide exchange factor 5
ENSG00000180787	ZFP3	4.3	0.0002529	ZFP3 zinc finger protein
ENSG00000238164	TNFRSF14-AS1	4.3	0.0041152	TNFRSF14 antisense RNA 1
ENSG00000216901	ZNF603P	4.3	0.0038191	zinc finger protein 603 2C pseudogene
ENSG00000232031	-	4.3	0.009504	novel transcript
ENSG00000109667	SLC2A9	4.3	0.0031393	solute carrier family 2 member 9
ENSG00000091106	NLRC4	4.3	0.004871	NLR family CARD domain containing 4
ENSG00000168070	MAJIN	4.3	0.0120656	membrane anchored junction protein
ENSG00000162946	DISC1	4.3	0.0018613	DISC1 scaffold protein
ENSG00000197536	IRF1-AS1	4.3	3.34E-133	IRF1 antisense RNA 1
ENSG00000134762	DSC3	4.3	1.02E-05	desmocollin 3
ENSG00000204592	HLA-E	4.3	5.35E-255	major histocompatibility complex 2C class I 2C E
ENSG00000146592	CREB5	4.3	5.00E-10	cAMP responsive element binding protein 5
ENSG00000226380	-	4.3	1.02E-14	novel transcript
ENSG00000057704	TMCC3	4.3	1.31E-32	transmembrane and coiled-coil domain family 3
ENSG00000288018	-	4.3	1.51E-11	novel transcript
ENSG00000008735	MAPK8IP2	4.3	6.74E-34	mitogen-activated protein kinase 8 interacting protein 2
ENSG00000144481	TRPM8	4.3	0.0011114	transient receptor potential cation channel subfamily M member 8
ENSG00000167077	MEI1	4.3	0.0009609	meiotic double-stranded break formation protein 1
ENSG00000279908	-	4.3	0.0010038	tec
ENSG00000172243	CLEC7A	4.3	0.0011799	C-type lectin domain containing 7A
ENSG00000065320	NTN1	4.3	0.0011117	netrin 1
ENSG00000287097	-	4.3	0.0020409	novel transcript
ENSG00000224389	C4B	4.3	6.12E-118	complement C4B (Chido blood group)
ENSG00000091129	NRCAM	4.3	0.0003516	neuronal cell adhesion molecule
ENSG00000281100	-	4.3	4.61E-07	TEC
ENSG00000069667	RORA	4.3	4.05E-06	RAR related orphan receptor A
ENSG00000135355	GJA10	4.2	9.37E-22	gap junction protein alpha 10
ENSG00000159403	C1R	4.2	0	complement C1r
ENSG00000235005	-	4.2	0.0072285	novel transcript
ENSG00000145934	TENM2	4.2	0.0153107	teneurin transmembrane protein 2
ENSG00000205267	DGAT2L7P	4.2	0.00583	diacylglycerol O-acyltransferase 2 like 7 2C pseudogene
ENSG00000260976	LINC01633	4.2	0.0062639	long intergenic non-protein coding RNA 1633
ENSG00000246363	LINC02458	4.2	0.0154224	long intergenic non-protein coding RNA 2458
ENSG00000284633	-	4.2	0.0051816	novel transcript 2C antisense to PDGFB
ENSG00000006210	CX3CL1	4.2	0.0119643	C-X3-C motif chemokine ligand 1
ENSG00000123612	ACVR1C	4.2	0.0164679	activin A receptor type 1C
ENSG00000119714	GPR68	4.2	0.0127689	G protein-coupled receptor 68

ENSG00000260186	LINC02137	4.2	0.0086583	long intergenic non-protein coding RNA 2137
ENSG00000184560	SPEM2	4.2	0.0068311	SPEM family member 2
ENSG00000103710	RASL12	4.2	0.0068535	RAS like family 12
ENSG00000118503	TNFAIP3	4.2	5.20E-245	TNF alpha induced protein 3
ENSG00000261204	-	4.2	3.23E-09	novel transcript
ENSG00000161270	NPHS1	4.2	4.68E-05	NPHS1 adhesion molecule 2C nephrin
ENSG00000262576	PCDHGA4	4.2	0.0020658	protocadherin gamma subfamily A 2C 4
ENSG00000170091	NSG2	4.2	0.0016976	neuronal vesicle trafficking associated 2
ENSG00000169715	MT1E	4.2	2.63E-85	metallothionein 1E
ENSG00000136928	GABBR2	4.2	0.0014054	gamma-aminobutyric acid type B receptor subunit 2
ENSG00000249937	LINC02223	4.2	0.0017593	long intergenic non-protein coding RNA 2223
ENSG00000152689	RASGRP3	4.2	0.0005634	RAS guanyl releasing protein 3
ENSG00000126500	FLRT1	4.2	3.75E-28	fibronectin leucine rich transmembrane protein 1
ENSG00000174502	SLC26A9	4.2	9.18E-69	solute carrier family 26 member 9
ENSG00000090339	ICAM1	4.2	1.36E-240	intercellular adhesion molecule 1
ENSG00000161544	CYGB	4.1	6.83E-88	cytoglobin
ENSG00000005249	PRKAR2B	4.1	1.30E-06	protein kinase cAMP-dependent type II regulatory subunit beta
ENSG00000272666	KLHDC7B-DT	4.1	4.33E-15	KLHDC7B divergent transcript
ENSG00000134955	SLC37A2	4.1	8.98E-59	solute carrier family 37 member 2
ENSG00000262151	-	4.1	0.0119598	novel transcript 2C antisense to CIITA
ENSG00000100342	APOL1	4.1	0	apolipoprotein L1
ENSG00000276718	-	4.1	0.0089478	novel transcript 2C antisense to VAMP1
ENSG00000251364	-	4.1	0.0211151	novel transcript 2C antisense to OLFML1
ENSG00000197291	RAMP2-AS1	4.1	0.0076736	RAMP2 antisense RNA 1
ENSG00000081148	IMPG2	4.1	0.0090663	interphotoreceptor matrix proteoglycan 2
ENSG00000081853	PCDHGA2	4.1	0.0086715	protocadherin gamma subfamily A 2C 2
ENSG00000144668	ITGA9	4.1	0.0212076	integrin subunit alpha 9
ENSG00000286313	-	4.1	0.0096156	novel transcript 2C antisense to PDE7B
ENSG00000274758	-	4.1	0.007728	novel transcript 2C antisense to SGSM2
ENSG00000174827	PDZK1	4.1	0.0102565	PDZ domain containing 1
ENSG00000234283	LINC01731	4.1	0.0087299	long intergenic non-protein coding RNA 1731
ENSG00000182272	B4GALNT4	4.1	0.0171529	beta-1 2C4-N-acetyl-galactosaminyltransferase 4
ENSG00000274985	PTCHD3P1	4.1	0.0156526	patched domain containing 3 pseudogene 1
ENSG00000167851	CD300A	4.1	0.0175793	CD300a molecule
ENSG00000198502	HLA-DRB5	4.1	0.0097743	major histocompatibility complex 2C class II 2C DR beta 5
ENSG00000091137	SLC26A4	4.1	4.97E-57	solute carrier family 26 member 4
ENSG00000165626	BEND7	4.1	8.55E-15	BEN domain containing 7
ENSG00000041982	TNC	4.1	5.09E-24	tenascin C
ENSG00000182162	P2RY8	4.1	0.0125311	P2Y receptor family member 8
ENSG00000224789	-	4.1	0.0179484	novel transcript
ENSG00000261087	ZNNT1	4.1	4.20E-17	ZNF706 neighboring transcript 1
ENSG00000261618	LINC02605	4.1	7.26E-05	long intergenic non-protein coding RNA 2605
ENSG00000270075	-	4.1	0.0007273	novel transcript 2C antisense to ITPRIP
ENSG00000169402	RSPH10B2	4.1	0.0007516	radial spoke head 10 homolog B2
ENSG00000280387	-	4.1	0.0007465	TEC

ENSG00000167483	NIBAN3	4.1	8.10E-21	niban apoptosis regulator 3
ENSG00000235672	-	4.1	0.0008451	RAN binding protein 1 (RANBP1) pseudogene
ENSG00000162461	SLC25A34	4.1	1.07E-30	solute carrier family 25 member 34
ENSG00000224892	RPS4XP16	4.1	3.62E-14	ribosomal protein S4X pseudogene 16
ENSG00000243650	RN7SL834P	4.1	0.0120606	RNA 2C 7SL 2C cytoplasmic 834 2C pseudogene
ENSG00000251576	LINC01267	4.1	4.29E-05	long intergenic non-protein coding RNA 1267
ENSG00000286952	-	4.1	5.19E-11	novel transcript 2C antisense to DNAH12
ENSG00000138615	CILP	4.1	0.0047516	cartilage intermediate layer protein
ENSG00000233902	-	4.1	0.0042592	HLA complex group 4 (HCG4) pseudogene
ENSG00000154316	TDH	4.1	0.0036774	L-threonine dehydrogenase (pseudogene)
ENSG00000130513	GDF15	4.1	2.73E-242	growth differentiation factor 15
ENSG00000276289	KCNE1B	4	0.0001243	potassium voltage-gated channel subfamily E regulatory subunit 1B
ENSG00000230825	-	4	8.12E-10	novel transcript
ENSG00000286435	-	4	0.0009592	novel transcript
ENSG00000168394	TAP1	4	8.42E-207	transporter 1 2C ATP binding cassette subfamily B member
ENSG00000177409	SAMD9L	4	2.32E-19	sterile alpha motif domain containing 9 like
ENSG00000197847	SLC22A20P	4	3.08E-23	solute carrier family 22 member 20 2C pseudogene
ENSG00000155926	SLA	4	2.35E-09	Src like adaptor
ENSG00000270792	-	4	0.001102	novel transcript 2C antisense to JAG1
ENSG00000134539	KLRD1	4	0.0311378	killer cell lectin like receptor D1
ENSG00000050730	TNIP3	4	0.0295352	TNFAIP3 interacting protein 3
ENSG00000115468	EFHD1	4	0.0161836	EF-hand domain family member D1
ENSG00000182511	FES	4	4.00E-40	FES proto-oncogene 2C tyrosine kinase
ENSG00000286008	-	4	0.0230415	novel transcript
ENSG00000147647	DPYS	4	0.0133146	dihydropyrimidinase
ENSG00000215899	-	4	0.0180318	eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) pseudogene
ENSG00000287937	-	4	0.0013036	novel transcript
ENSG00000153060	TEKT5	4	0.0181192	tektin 5
ENSG00000279044	-	4	0.0300831	TEC
ENSG00000104941	RSPH6A	4	0.0013357	radial spoke head 6 homolog A
ENSG00000100739	BDKRB1	4	1.00E-61	bradykinin receptor B1
ENSG00000135960	EDAR	4	0.0143982	ectodysplasin A receptor
ENSG00000166432	ZMAT1	4	0.0175399	zinc finger matrin-type 1
ENSG00000130518	IQCN	4	1.84E-12	IQ motif containing N
ENSG00000260911	-	4	5.96E-06	novel transcript
ENSG00000167494	NOS2P2	4	0.0237734	nitric oxide synthase 2 pseudogene 2
ENSG00000279727	LINC02033	4	0.0238173	long intergenic non-protein coding RNA 2033
ENSG00000286570	-	4	0.0035274	novel transcript
ENSG00000144476	ACKR3	4	0.0033448	atypical chemokine receptor 3
ENSG00000184303	DRD5P1	4	0.0326058	dopamine receptor D5 pseudogene 1
ENSG00000233539	-	4	0.0266009	novel transcript
ENSG00000267607	-	4	1.29E-39	novel transcript 2C antisense to ICAM4 and ICAM1
ENSG00000256043	CTSO	4	8.84E-69	cathepsin O
ENSG00000185880	TRIM69	4	0	tripartite motif containing 69



ENSG00000121380	BCL2L14	4	5.48E-06	BCL2 like 14
ENSG00000147606	SLC26A7	4	0.0021189	solute carrier family 26 member 7
ENSG00000288022	-	4	0.0014004	novel transcript
ENSG00000255958	GABARA- PL1-AS1	3.9	0.0014049	GABARAPL1 antisense RNA 1
ENSG00000221866	PLXNA4	3.9	0.0014096	plexin A4
ENSG00000152217	SETBP1	3.9	2.64E-56	SET binding protein 1
ENSG00000155962	CLIC2	3.9	1.79E-64	chloride intracellular channel 2
ENSG00000204338	CYP21A1P	3.9	7.96E-23	cytochrome P450 family 21 subfamily A member 1 2C pseudogene
ENSG00000092067	CEBPE	3.9	2.20E-14	CCAAT enhancer binding protein epsilon
ENSG00000230387	-	3.9	3.39E-26	novel transcript
ENSG00000269145	MAST3-AS1	3.9	0.0098156	MAST3 antisense RNA 1
ENSG00000162772	ATF3	3.9	0	activating transcription factor 3
ENSG00000183111	ARHGEF37	3.9	7.88E-47	Rho guanine nucleotide exchange factor 37
ENSG00000267388	-	3.9	0.0045751	novel transcript
ENSG00000248693	LINC02100	3.9	3.50E-13	long intergenic non-protein coding RNA 2100
ENSG00000188175	HEPACAM2	3.9	0.0062653	HEPACAM family member 2
ENSG00000078114	NEBL	3.9	0.0001152	nebullette
ENSG00000135048	CEMIP2	3.9	6.54E-134	cell migration inducing hyaluronidase 2
ENSG00000276851	-	3.9	2.31E-30	novel transcript
ENSG00000224259	LINC01133	3.9	0.0002546	long intergenic non-protein coding RNA 1133
ENSG00000182264	IZUMO1	3.9	9.11E-11	izumo sperm-egg fusion 1
ENSG00000167772	ANGPTL4	3.9	7.16E-09	angiopoietin like 4
ENSG00000261857	MIA	3.9	0.0357387	MIA SH3 domain containing
ENSG00000205086	C2orf91	3.9	0.0255578	chromosome 2 putative open reading frame 91
ENSG00000224613	-	3.9	0.0280613	novel transcript
ENSG00000278925	-	3.9	0.0281454	novel transcript
ENSG00000255663	-	3.9	0.0216511	novel transcript 2C RBM7-REXO2 readthrough
ENSG00000255693	LINC02389	3.9	0.0216511	long intergenic non-protein coding RNA 2389
ENSG00000269188	-	3.9	0.0258215	lectin 2C galactoside-binding 2C soluble 2C 13 (LGALS13) pseudogene
ENSG00000164972	C9orf24	3.9	0.0217274	chromosome 9 open reading frame 24
ENSG00000254739	-	3.9	0.0235244	novel transcript
ENSG00000173578	XCR1	3.9	0.0217827	X-C motif chemokine receptor 1
ENSG00000240710	-	3.9	0.0259917	novel transcript
ENSG00000255447	-	3.9	0.0260237	novel transcript
ENSG00000213549	-	3.9	0.0218166	GrpE-like 1 2C mitochondrial (E. coli) (GRPEL1) pseudogene
ENSG00000234717	TMEM212-AS1	3.9	0.0218166	TMEM212 antisense RNA 1
ENSG00000180509	KCNE1	3.9	0.0024814	potassium voltage-gated channel subfamily E regulatory subunit 1
ENSG00000101638	ST8SIA5	3.9	1.63E-10	ST8 alpha-N-acetyl-neuraminide alpha-2 2C8-sialyltransferase 5
ENSG00000203411	Metazoa_SRP	3.9	0.0254898	Metazoan signal recognition particle RNA
ENSG00000151655	ITIH2	3.9	0.0255365	inter-alpha-trypsin inhibitor heavy chain 2
ENSG00000133574	GIMAP4	3.9	0.0220614	GTPase 2C IMAP family member 4
ENSG00000216621	-	3.9	0.042458	pseudogene similar to small nuclear RNA activating complex 2C polypeptide 1 2C 43kD SNAPC1

ENSG00000198580	-	3.8	0.0288269	zinc finger protein pseudogene
ENSG00000173258	ZNF483	3.8	0.0403265	zinc finger protein 483
ENSG00000238057	ZEB2-AS1	3.8	0.0427317	ZEB2 antisense RNA 1
ENSG00000164749	HNF4G	3.8	0.0019462	hepatocyte nuclear factor 4 gamma
ENSG00000152229	PSTPIP2	3.8	3.29E-72	proline-serine-threonine phosphatase interacting protein 2
ENSG00000286900	-	3.8	0.0291803	novel transcript
ENSG00000187193	MT1X	3.8	1.11E-86	metallothionein 1X
ENSG00000241081	RPL22P2	3.8	7.61E-08	ribosomal protein L22 pseudogene 2
ENSG00000156587	UBE2L6	3.8	1.87E-19	ubiquitin conjugating enzyme E2 L6
ENSG00000171658	NMRAL2P	3.8	3.20E-89	NmrA like redox sensor 2 2C pseudogene
ENSG00000039600	SOX30	3.8	2.23E-05	SRY-box transcription factor 30
ENSG00000198756	COLGALT2	3.8	7.94E-07	collagen beta(1-O)galactosyltransferase 2
ENSG00000122641	INHBA	3.8	1.01E-14	inhibin subunit beta A
ENSG00000163746	PLSCR2	3.8	0.0165943	phospholipid scramblase 2
ENSG00000226496	LINC00323	3.8	0.0064391	long intergenic non-protein coding RNA 323
ENSG00000168925	CTRB1	3.8	0.0135943	chymotrypsinogen B1
ENSG00000165092	ALDH1A1	3.8	1.60E-05	aldehyde dehydrogenase 1 family member A1
ENSG00000270757	HSPE1-MOB4	3.8	0.0070202	HSPE1-MOB4 readthrough
ENSG00000139626	ITGB7	3.8	1.82E-26	integrin subunit beta 7
ENSG00000270923	TAS2R6P	3.8	0.003479	taste 2 receptor member 6 pseudogene
ENSG00000184060	ADAP2	3.8	1.25E-15	ArfGAP with dual PH domains 2
ENSG00000244414	CFHR1	3.8	0.0030559	complement factor H related 1
ENSG00000286389	-	3.8	0.0028013	novel transcript
ENSG00000162849	KIF26B	3.8	0.0002145	kinesin family member 26B
ENSG00000113248	PCDHB15	3.8	0.0003545	protocadherin beta 15
ENSG00000213212	NCLP1	3.8	2.65E-07	nucleolin pseudogene 1
ENSG00000123977	DAW1	3.8	7.56E-09	dynein assembly factor with WD repeats 1
ENSG00000173391	OLR1	3.8	0	oxidized low density lipoprotein receptor 1
ENSG00000137266	SLC22A23	3.8	1.95E-96	solute carrier family 22 member 23
ENSG00000073150	PANX2	3.8	2.20E-162	pannexin 2
ENSG00000269855	RNF225	3.7	3.62E-05	ring finger protein 225
ENSG00000224481	-	3.7	4.52E-05	novel transcript
ENSG00000112053	SLC26A8	3.7	1.51E-07	solute carrier family 26 member 8
ENSG00000286677	-	3.7	1.60E-05	novel transcript
ENSG00000172296	SPTLC3	3.7	0.0034288	serine palmitoyltransferase long chain base subunit 3
ENSG00000227292	-	3.7	0.0033074	novel transcript
ENSG00000179044	EXOC3L1	3.7	1.09E-09	exocyst complex component 3 like 1
ENSG00000224034	LINC02561	3.7	0.0004534	long intergenic non-protein coding RNA 2561
ENSG00000188981	MSANTD1	3.7	0.0002906	Myb/SANT DNA binding domain containing 1
ENSG00000237927	-	3.7	0.0034924	novel transcript
ENSG00000180573	H2AC6	3.7	0	H2A clustered histone 6
ENSG00000285755	-	3.7	0.0116831	Novel transcript
ENSG00000226055	PAICSP1	3.7	0.0124952	phosphoribosylaminoimidazole carboxylase 2C phosphoribosylaminoimidazole succinocarboxamide synthetase pseudogene 1
ENSG00000288640	-	3.7	2.72E-05	novel protein

ENSG00000176907	TCIM	3.7	4.33E-265	transcriptional and immune response regulator
ENSG00000005844	ITGAL	3.7	0.008379	integrin subunit alpha L
ENSG00000144369	FAM171B	3.7	0.008379	family with sequence similarity 171 member B
ENSG00000227471	AKR1B15	3.7	4.57E-11	aldo-keto reductase family 1 member B15
ENSG00000275708	MIR3648-1	3.7	0.0085301	microRNA 3648-1
ENSG00000286089	-	3.7	0.0085347	novel transcript
ENSG00000229525	-	3.7	0.0091113	novel transcript 2C antisense to DNPEP
ENSG00000251920	RNA5SP216	3.7	0.008622	RNA 2C 5S ribosomal pseudogene 216
ENSG00000234380	LINC01426	3.7	3.51E-05	long intergenic non-protein coding RNA 1426
ENSG00000258082	-	3.7	0.0114948	novel transcript
ENSG00000157680	DGKI	3.7	0.01974	diacylglycerol kinase iota
ENSG00000258590	NBEAP1	3.7	0.0346951	neurobeachin pseudogene 1
ENSG00000172543	CTSW	3.7	0.0405209	cathepsin W
ENSG00000160111	CPAMD8	3.7	2.60E-21	C3 and PZP like alpha-2-macroglobulin domain containing 8
ENSG00000283518	LINC02775	3.7	0.0380195	long intergenic non-protein coding RNA 2775
ENSG00000250982	GAPDHP35	3.7	0.0333352	glyceraldehyde 3 phosphate dehydrogenase pseudogene 35
ENSG00000262769	-	3.7	2.38E-06	novel transcript 2C antisense to SLC47A1
ENSG00000196361	ELAVL3	3.7	3.84E-06	ELAV like RNA binding protein 3
ENSG00000233725	NRAD1	3.7	0.0336332	non-coding RNA in the aldehyde dehydrogenase 1A pathway
ENSG00000240350	SOCAR	3.7	0.0306214	serous ovarian cancer associated RNA
ENSG00000248243	LINC02014	3.7	0.0384517	long intergenic non-protein coding RNA 2014
ENSG00000284638	-	3.7	0.033778	novel protein
ENSG00000188242	PP7080	3.7	0.0387864	uncharacterized LOC25845
ENSG00000215270	TOMM40P2	3.7	0.0387864	TOMM40 pseudogene 2
ENSG00000240065	PSMB9	3.7	7.14E-116	proteasome 20S subunit beta 9
ENSG00000231616	-	3.7	0.0417041	novel transcript 2C antisense to KIF27
ENSG00000158113	LRRC43	3.7	0.0417272	leucine rich repeat containing 43
ENSG00000008441	NFIX	3.7	1.31E-238	nuclear factor I X
ENSG00000148735	PLEKHS1	3.7	0.008859	pleckstrin homology domain containing S1
ENSG00000262165	C17orf114	3.7	0.0004715	chromosome 17 open reading frame 114
ENSG00000267783	-	3.7	0.0039914	novel transcript 2C antisense to ASF1B
ENSG00000253958	CLDN23	3.7	7.25E-98	claudin 23
ENSG00000236039	LINC02889	3.7	0.000524	long intergenic non-protein coding RNA 2889
ENSG00000136244	IL6	3.7	1.61E-184	interleukin 6
ENSG00000132832	-	3.7	0.0004598	novel transcript
ENSG00000122420	PTGFR	3.7	3.60E-05	prostaglandin F receptor
ENSG00000128271	ADORA2A	3.7	5.97E-05	adenosine A2a receptor
ENSG00000204936	CD177	3.7	7.46E-27	CD177 molecule
ENSG00000152778	IFIT5	3.7	4.81E-195	interferon induced protein with tetratricopeptide repeats 5
ENSG00000137496	IL18BP	3.7	1.66E-162	interleukin 18 binding protein
ENSG00000174808	BTC	3.7	3.15E-43	betacellulin
ENSG00000138378	STAT4	3.7	3.63E-05	signal transducer and activator of transcription 4
ENSG00000240063	-	3.6	0.0004421	novel transcript
ENSG00000262721	-	3.6	0.0007392	novel transcript
ENSG00000283064	-	3.6	7.91E-10	novel transcript 2C antisense to HIST1H2BD

ENSG00000237575	PYY2	3.6	4.13E-23	peptide YY 2 (pseudogene)
ENSG00000168959	GRM5	3.6	0.0004948	glutamate metabotropic receptor 5
ENSG00000285373	LINC02478	3.6	0.0217203	long intergenic non-protein coding RNA 2478
ENSG00000242258	LINC00996	3.6	0.0075814	long intergenic non-protein coding RNA 996
ENSG00000227945	PTPRK-AS1	3.6	0.0167116	PTPRK antisense RNA 1
ENSG00000259803	SLC22A31	3.6	0.0166253	solute carrier family 22 member 31
ENSG0000050438	SLC4A8	3.6	0.0148518	solute carrier family 4 member 8
ENSG00000245311	ARNTL2-AS1	3.6	0.0226531	ARNTL2 antisense RNA 1
ENSG00000155961	RAB39B	3.6	0.0150122	RAB39B 2C member RAS oncogene family
ENSG00000279853	-	3.6	0.024686	tec
ENSG00000142224	IL19	3.6	0.0181289	interleukin 19
ENSG00000225513	-	3.6	0.014809	ribosomal protein L29 (RPL29) pseudogene
ENSG00000279320	-	3.6	0.0001151	TEC
ENSG00000164841	TMEM74	3.6	0.0126127	transmembrane protein 74
ENSG00000184414	IRS3P	3.6	0.0133006	insulin receptor substrate 3 2C pseudogene
ENSG00000281039	-	3.6	0.0163056	novel protein
ENSG00000167858	TEKT1	3.6	0.0129091	tektin 1
ENSG00000224846	NQO2-AS1	3.6	6.85E-69	NQO2 antisense RNA 1
ENSG00000135407	AVIL	3.6	1.59E-39	advillin
ENSG00000165606	DRGX	3.6	0.0002947	dorsal root ganglia homeobox
ENSG00000082074	FYB1	3.6	0.0022441	FYN binding protein 1
ENSG00000227038	GTF2IP7	3.6	1.28E-06	general transcription factor Ili pseudogene 7
ENSG00000157152	SYN2	3.6	2.06E-16	synapsin II
ENSG00000253910	PCDHGB2	3.6	9.78E-08	protocadherin gamma subfamily B 2C 2
ENSG00000144671	SLC22A14	3.6	0.0004982	solute carrier family 22 member 14
ENSG00000102057	KCND1	3.6	2.85E-110	potassium voltage-gated channel subfamily D member 1
ENSG00000273189	-	3.6	0.0142256	novel transcript
ENSG00000146477	SLC22A3	3.6	4.57E-70	solute carrier family 22 member 3
ENSG00000171798	KNDC1	3.6	3.85E-27	kinase non-catalytic C-lobe domain containing 1
ENSG00000237596	-	3.6	2.43E-09	novel transcript
ENSG00000180316	PNPLA1	3.6	1.09E-152	patatin like phospholipase domain containing 1
ENSG00000185527	PDE6G	3.6	1.35E-09	phosphodiesterase 6G
ENSG00000164344	KLKB1	3.6	0.0013495	kallikrein B1
ENSG00000113212	PCDHB7	3.6	0.0059576	protocadherin beta 7
ENSG00000121075	TBX4	3.6	0.0056456	T-box transcription factor 4
ENSG00000273113	-	3.6	0.006471	novel transcript
ENSG00000198939	ZFP2	3.5	0.006494	ZFP2 zinc finger protein
ENSG00000116514	RNF19B	3.5	4.86E-301	ring finger protein 19B
ENSG00000127129	EDN2	3.5	0.0008173	endothelin 2
ENSG00000257341	-	3.5	0.0497246	novel protein
ENSG00000125148	MT2A	3.5	1.22E-146	metallothionein 2A
ENSG00000136960	ENPP2	3.5	0.0378161	ectonucleotide pyrophosphatase/phosphodiesterase 2
ENSG00000279066	HEXD-IT1	3.5	0.0316327	HEXD intronic transcript 1
ENSG00000229272	-	3.5	0.0315687	novel transcript
ENSG00000163606	CD200R1	3.5	0.0195451	CD200 receptor 1
ENSG00000113396	SLC27A6	3.5	0.0186685	solute carrier family 27 member 6

ENSG00000232328	-	3.5	0.0213764	novel transcript
ENSG00000067082	KLF6	3.5	3.25E-209	Kruppel like factor 6
ENSG00000131634	TMEM204	3.5	0.0215015	transmembrane protein 204
ENSG00000230262	LINC02603	3.5	0.0010264	long intergenic non-protein coding RNA 2603
ENSG00000231966	LINC02818	3.5	3.94E-10	long intergenic non-protein coding RNA 2818
ENSG00000285486	-	3.5	0.017954	novel transcript
ENSG00000147257	GPC3	3.5	0.0197494	glypican 3
ENSG00000124731	TREM1	3.5	0.0201125	triggering receptor expressed on myeloid cells 1
ENSG00000252618	RNA5SP441	3.5	0.0309751	RNA 2C 5S ribosomal pseudogene 441
ENSG00000249026	CTNNA1P1	3.5	0.0200065	catenin alpha 1 pseudogene 1
ENSG00000258791	LINC00520	3.5	7.18E-141	long intergenic non-protein coding RNA 520
ENSG00000217159	LARP1P1	3.5	0.0258562	LARP1 pseudogene 1
ENSG00000274611	TBC1D3	3.5	0.0168007	TBC1 domain family member 3
ENSG00000253276	CCDC71L	3.5	0	coiled-coil domain containing 71 like
ENSG00000253802	SIRLNT	3.5	4.46E-60	SIRT1 regulating lncRNA tumor promoter
ENSG00000115935	WIPF1	3.5	3.16E-08	WAS/WASL interacting protein family member 1
ENSG00000260740	-	3.5	2.23E-16	novel transcript 2C antisense to SLC5A2
ENSG00000101203	COL20A1	3.5	2.18E-09	collagen type XX alpha 1 chain
ENSG00000147003	CLTRN	3.5	1.27E-11	collectrin 2C amino acid transport regulator
ENSG00000139364	TMEM132B	3.5	0.0002776	transmembrane protein 132B
ENSG00000170965	PLAC1	3.5	1.41E-68	placenta enriched 1
ENSG00000176723	ZNF843	3.5	3.65E-08	zinc finger protein 843
ENSG00000096968	JAK2	3.5	6.55E-79	Janus kinase 2
ENSG00000283828	-	3.5	2.28E-05	novel transcript 2C antisense to F10
ENSG00000236710	-	3.5	1.31E-12	proteasome (prosome 2C macropain) subunit 2C alpha type 2C 1 (PSMA1) pseudogene
ENSG00000126709	IFI6	3.5	4.63E-121	interferon alpha inducible protein 6
ENSG00000101017	CD40	3.5	0.0073989	CD40 molecule
ENSG00000270020	-	3.5	2.18E-32	novel transcript
ENSG00000079308	TNS1	3.5	2.97E-57	tensin 1
ENSG00000163053	SLC16A14	3.5	2.33E-29	solute carrier family 16 member 14
ENSG00000103313	MEFV	3.5	3.09E-51	MEFV innate immunity regulator 2C pyrin
ENSG00000163840	DTX3L	3.5	2.87E-291	deltex E3 ubiquitin ligase 3L
ENSG00000249328	-	3.5	4.98E-15	novel transcript
ENSG00000135835	KIAA1614	3.5	2.12E-09	KIAA1614
ENSG00000277399	GPR179	3.5	3.32E-07	G protein-coupled receptor 179
ENSG00000135604	STX11	3.5	4.74E-250	syntaxin 11
ENSG00000260088	DDX59-AS1	3.5	6.05E-06	DDX59 antisense RNA 1
ENSG00000145675	PIK3R1	3.5	0.0001884	phosphoinositide-3-kinase regulatory subunit 1
ENSG00000214814	FER1L6	3.5	2.76E-08	fer-1 like family member 6
ENSG00000160185	UBASH3A	3.4	2.50E-06	ubiquitin associated and SH3 domain containing A
ENSG00000177989	ODF3B	3.4	3.79E-44	outer dense fiber of sperm tails 3B
ENSG00000139946	PELLI2	3.4	4.75E-52	pellino E3 ubiquitin protein ligase family member 2
ENSG00000162733	DDR2	3.4	8.65E-40	discoidin domain receptor tyrosine kinase 2
ENSG00000286507	-	3.4	0.0147801	novel transcript
ENSG00000065534	MYLK	3.4	1.00E-12	myosin light chain kinase
ENSG00000223774	-	3.4	0.0013106	novel transcript



ENSG00000233266	HMGB1P31	3.4	0.0012803	high mobility group box 1 pseudogene 31
ENSG00000230587	LINC02580	3.4	0.0121024	long intergenic non-protein coding RNA 2580
ENSG00000184497	TMEM255B	3.4	6.59E-10	transmembrane protein 255B
ENSG00000251230	MIR3945HG	3.4	0.0130286	MIR3945 host gene
ENSG00000262155	LINC02175	3.4	0.016691	long intergenic non-protein coding RNA 2175
ENSG00000272674	PCDHB16	3.4	0.0431143	protocadherin beta 16
ENSG00000169248	CXCL11	3.4	2.10E-114	C-X-C motif chemokine ligand 11
ENSG00000246090	-	3.4	7.63E-09	novel transcript 2C antisense to ADH4 2C ADH6 26 ADH1A
ENSG00000248713	C4orf54	3.4	0.0288641	chromosome 4 open reading frame 54
ENSG00000273133	-	3.4	0.0243815	novel transcript 2C antisense to CC2D2A
ENSG00000112139	MDGA1	3.4	1.64E-40	MAM domain containing glycosylphosphatidylinositol anchor 1
ENSG00000163431	LMOD1	3.4	0.0263353	leiomodoin 1
ENSG00000175544	CABP4	3.4	0.0283703	calcium binding protein 4
ENSG00000177606	JUN	3.4	2.76E-217	Jun proto-oncogene 2C AP-1 transcription factor subunit
ENSG00000138496	PARP9	3.4	5.65E-278	poly(ADP-ribose) polymerase family member 9
ENSG00000100024	UPB1	3.4	0.027597	beta-ureidopropionase 1
ENSG00000215267	AKR1C7P	3.4	5.88E-05	aldo-keto reductase family 1 member C7 2C pseudogene
ENSG00000158406	H4C8	3.4	1.08E-146	H4 clustered histone 8
ENSG00000271344	-	3.4	2.36E-07	novel transcript
ENSG00000183486	MX2	3.4	5.47E-16	MX dynamin like GTPase 2
ENSG00000248746	ACTN3	3.4	0.0019475	actinin alpha 3
ENSG00000111644	ACRBP	3.4	3.34E-09	acrosin binding protein
ENSG00000000938	FGR	3.4	2.02E-33	FGR proto-oncogene 2C Src family tyrosine kinase
ENSG00000267938	EIF1P6	3.4	9.86E-06	eukaryotic translation initiation factor 1 pseudogene 6
ENSG00000166924	NYAP1	3.4	8.62E-07	neuronal tyrosine phosphorylated phosphoinositide-3-kinase adaptor 1
ENSG00000172927	MYEOV	3.4	2.88E-63	myeloma overexpressed
ENSG00000175356	SCUBE2	3.4	2.09E-08	signal peptide 2C CUB domain and EGF like domain containing 2
ENSG00000285106	-	3.4	2.85E-18	novel transcript
ENSG00000125775	SDCBP2	3.4	7.07E-57	syndecan binding protein 2
ENSG00000111254	AKAP3	3.4	1.82E-16	A-kinase anchoring protein 3
ENSG00000139192	TAPBPL	3.4	1.05E-77	TAP binding protein like
ENSG00000054392	HHAT	3.4	1.67E-08	hedghog acyltransferase
ENSG00000142583	SLC2A5	3.3	0.0126429	solute carrier family 2 member 5
ENSG00000099866	MADCAM1	3.3	5.52E-06	mucosal vascular addressin cell adhesion molecule 1
ENSG00000238122	-	3.3	0.012185	novel transcript
ENSG00000272682	-	3.3	0.0131333	novel transcript
ENSG00000068079	IFI35	3.3	4.10E-110	interferon induced protein 35
ENSG00000185056	C5orf47	3.3	0.0135607	chromosome 5 open reading frame 47
ENSG00000231187	-	3.3	0.0190328	novel transcript
ENSG00000263531	-	3.3	0.0120044	novel transcript 2C antisense ATAD5
ENSG00000204446	LINC02872	3.3	0.0121656	long intergenic non-protein coding RNA 2872
ENSG00000273007	-	3.3	0.0004612	novel transcript 2C antisense to FGF2
ENSG00000145685	LHFPL2	3.3	5.80E-125	LHFPL tetraspan subfamily member 2
ENSG00000267462	-	3.3	0.0144375	novel transcript

ENSG00000266980	-	3.3	2.80E-11	novel transcript 2C antisense to UNK
ENSG00000250284	-	3.3	1.12E-28	novel transcript
ENSG00000146666	LINC00525	3.3	9.10E-31	long intergenic non-protein coding RNA 525
ENSG00000230882	-	3.3	8.01E-23	hypothetical protein LOC285908 (LOC285908) pseudogene
ENSG00000081041	CXCL2	3.3	4.25E-121	C-X-C motif chemokine ligand 2
ENSG00000171860	C3AR1	3.3	2.35E-11	complement C3a receptor 1
ENSG00000267786	-	3.3	0.0020757	novel transcript
ENSG00000173535	TNFRSF10C	3.3	8.12E-09	TNF receptor superfamily member 10c
ENSG00000242021	-	3.3	1.38E-05	novel transcript
ENSG00000070731	ST6GALNAC2	3.3	9.47E-15	ST6 N-acetylgalactosaminide alpha-2 2C6-sialyltransferase 2
ENSG00000115415	STAT1	3.3	4.38E-251	signal transducer and activator of transcription 1
ENSG00000158874	APOA2	3.3	5.51E-05	apolipoprotein A2
ENSG00000134321	RSAD2	3.3	2.44E-90	radical S-adenosyl methionine domain containing 2
ENSG00000138131	LOXL4	3.3	2.80E-15	lysyl oxidase like 4
ENSG00000175592	FOSL1	3.3	2.26E-95	FOS like 1 2C AP-1 transcription factor subunit
ENSG00000285647	-	3.3	0.0399836	novel transcript
ENSG00000238258	-	3.3	3.94E-10	novel transcript 2C antisense to NRP1
ENSG00000213394	RPSAP46	3.3	0.0189069	ribosomal protein SA pseudogene 46
ENSG00000167207	NOD2	3.3	0.0398221	nucleotide binding oligomerization domain containing 2
ENSG00000228013	IL6R-AS1	3.3	0.0377151	IL6R antisense RNA 1
ENSG00000114771	AADAC	3.3	0.0409543	arylacetamide deacetylase
ENSG00000087074	PPP1R15A	3.3	2.30E-120	protein phosphatase 1 regulatory subunit 15A
ENSG00000251191	LINC00589	3.3	0.0178	long intergenic non-protein coding RNA 589
ENSG00000272128	-	3.3	0.0360403	novel transcript
ENSG00000248993	-	3.3	0.0164037	novel protein
ENSG00000287809	-	3.3	0.034817	novel transcript
ENSG00000168671	UGT3A2	3.3	0.0452985	UDP glycosyltransferase family 3 member A2
ENSG00000156049	GNA14	3.3	0.0388508	G protein subunit alpha 14
ENSG00000256271	CACNA1C-AS2	3.3	0.0189429	CACNA1C antisense RNA 2
ENSG00000072952	IRAG1	3.3	0.021731	inositol 1 2C4 2C5-triphosphate receptor associated 1
ENSG00000198795	ZNF521	3.3	0.0389641	zinc finger protein 521
ENSG00000228288	PCAT6	3.3	0.0359565	prostate cancer associated transcript 6
ENSG00000130433	CACNG6	3.3	5.19E-30	calcium voltage-gated channel auxiliary subunit gamma 6
ENSG00000272558	-	3.3	0.0405693	novel transcript 2C antisense to TRIM38
ENSG00000260458	KCNJ18	3.3	0.0448063	potassium inwardly rectifying channel subfamily J member 18
ENSG00000250091	DNAH10OS	3.3	2.44E-25	dynein axonemal heavy chain 10 opposite strand
ENSG00000258926	-	3.3	1.85E-06	novel transcript 2C antisense to PRKCH
ENSG00000280405	-	3.3	0.0204185	novel transcript
ENSG00000268193	-	3.3	2.61E-08	novel transcript
ENSG00000173193	PARP14	3.3	1.13E-65	poly(ADP-ribose) polymerase family member 14
ENSG00000253846	PCDHGA10	3.2	1.43E-19	protocadherin gamma subfamily A 2C 10
ENSG00000202111	VTRNA1-2	3.2	0.0001102	vault RNA 1-2
ENSG00000226979	LTA	3.2	0.0039333	lymphotoxin alpha
ENSG00000269404	SPIB	3.2	1.47E-07	Spi-B transcription factor
ENSG00000106560	GIMAP2	3.2	2.64E-40	GTPase 2C IMAP family member 2
ENSG00000235609	-	3.2	1.43E-17	novel transcript

ENSG00000254750	CASP1P2	3.2	4.06E-10	caspase 1 pseudogene 2
ENSG00000272482	-	3.2	1.11E-08	novel transcript
ENSG00000268041	ERFL	3.2	8.48E-08	ETS repressor factor like
ENSG00000138944	SHISAL1	3.2	4.66E-91	shisa like 1
ENSG00000272755	-	3.2	0.0045429	novel transcript
ENSG00000186007	LEMD1	3.2	0.0005463	LEM domain containing 1
ENSG00000110436	SLC1A2	3.2	0.0060837	solute carrier family 1 member 2
ENSG0000059804	SLC2A3	3.2	0	solute carrier family 2 member 3
ENSG00000108830	RND2	3.2	7.10E-08	Rho family GTPase 2
ENSG00000278709	NKILA	3.2	0.0035504	NF-kappaB interacting lncRNA
ENSG00000147485	PXDNL	3.2	0.0041237	peroxidasin like
ENSG00000214212	C19orf38	3.2	2.13E-25	chromosome 19 open reading frame 38
ENSG00000253315	LINC01932	3.2	0.0034898	long intergenic non-protein coding RNA 1932
ENSG00000139318	DUSP6	3.2	0	dual specificity phosphatase 6
ENSG00000136826	KLF4	3.2	0	Kruppel like factor 4
ENSG00000179954	SSC5D	3.2	2.05E-19	scavenger receptor cysteine rich family member with 5 domains
ENSG00000154153	RETREG1	3.2	6.92E-94	reticulophagy regulator 1
ENSG00000107731	UNC5B	3.2	1.42E-198	unc-5 netrin receptor B
ENSG00000128482	RNF112	3.2	3.11E-09	ring finger protein 112
ENSG00000165029	ABCA1	3.2	1.07E-62	ATP binding cassette subfamily A member 1
ENSG00000199024	MIR103A2	3.2	0.0191591	microRNA 103a-2
ENSG00000258673	LINC01397	3.2	0.0079392	long intergenic non-protein coding RNA 1397
ENSG00000168016	TRANK1	3.2	4.70E-129	tetratricopeptide repeat and ankyrin repeat containing 1
ENSG00000136383	ALPK3	3.2	5.42E-23	alpha kinase 3
ENSG00000223829	-	3.2	1.18E-18	novel transcript
ENSG00000130234	ACE2	3.2	0.0195505	angiotensin I converting enzyme 2
ENSG00000279901	-	3.2	0.0208588	tec
ENSG00000087589	CASS4	3.2	0.0233082	Cas scaffold protein family member 4
ENSG00000267056	-	3.2	1.19E-07	inositol polyphosphate multikinase (IPMK) pseudogene
ENSG00000242479	-	3.2	0.0209267	eukaryotic translation initiation factor 2-alpha kinase 1 (EIF2AK1) pseudogene
ENSG00000167578	RAB4B	3.2	1.06E-09	RAB4B 2C member RAS oncogene family
ENSG00000241527	CA15P1	3.2	0.0014966	CA15 pseudogene 1
ENSG00000214514	KRT42P	3.2	0.0215445	keratin 42 pseudogene
ENSG00000287001	-	3.2	0.0242588	novel transcript
ENSG00000278341	-	3.2	2.24E-19	novel transcript 2C antisense to CTU2
ENSG00000286966	-	3.2	2.87E-252	novel transcript
ENSG00000254718	-	3.2	0.0009003	novel transcript 2C antisense to PPM1A
ENSG00000267120	-	3.2	0.004747	novel transcript
ENSG00000116663	FBXO6	3.2	2.13E-49	F-box protein 6
ENSG00000160396	HIPK4	3.2	0.0077076	homeodomain interacting protein kinase 4
ENSG00000166592	RRAD	3.2	1.19E-09	RRAD 2C Ras related glycolysis inhibitor and calcium channel regulator
ENSG00000283352	-	3.1	0.0039291	novel transcript
ENSG00000256128	LINC00944	3.1	9.35E-16	long intergenic non-protein coding RNA 944
ENSG00000166833	NAV2	3.1	3.06E-141	neuron navigator 2

ENSG00000186150	UBL4B	3.1	0.0042311	ubiquitin like 4B
ENSG00000153294	ADGRF4	3.1	2.11E-14	adhesion G protein-coupled receptor F4
ENSG00000033122	LRRC7	3.1	0.0012395	leucine rich repeat containing 7
ENSG00000123700	KCNJ2	3.1	6.22E-15	potassium inwardly rectifying channel subfamily J member 2
ENSG00000166396	SERPINB7	3.1	0.000413	serpin family B member 7
ENSG00000257894	-	3.1	0.0016786	novel transcript
ENSG00000159588	CCDC17	3.1	5.44E-15	coiled-coil domain containing 17
ENSG00000284934	-	3.1	6.12E-07	novel protein
ENSG00000178623	GPR35	3.1	2.44E-08	G protein-coupled receptor 35
ENSG00000234390	USP27X-DT	3.1	0.0113739	USP27X divergent transcript
ENSG00000121594	CD80	3.1	0.0002405	CD80 molecule
ENSG00000287054	-	3.1	0.0268409	novel transcript 2C antisense to ZCCHC10
ENSG00000143217	NECTIN4	3.1	2.12E-05	nectin cell adhesion molecule 4
ENSG00000177993	ZNRF3-AS1	3.1	0.0292533	ZNRF3 antisense RNA 1
ENSG00000009724	MASP2	3.1	6.49E-25	mannan binding lectin serine peptidase 2
ENSG00000231407	GORAB-AS1	3.1	0.0093659	GORAB antisense RNA 1
ENSG00000128422	KRT17	3.1	3.47E-29	keratin 17
ENSG00000175985	PLEKHD1	3.1	0.0258453	pleckstrin homology and coiled-coil domain containing D1
ENSG00000275812	-	3.1	0.0072215	novel transcript 2C antisense to SRMS
ENSG00000257335	MGAM	3.1	0.0311922	maltase-glucoamylase
ENSG00000280047	-	3.1	1.02E-15	TEC
ENSG00000163814	CDCP1	3.1	7.11E-267	CUB domain containing protein 1
ENSG00000249641	HOXC13-AS	3.1	1.38E-49	HOXC13 antisense RNA
ENSG00000121858	TNFSF10	3.1	1.71E-84	TNF superfamily member 10
ENSG00000146233	CYP39A1	3.1	1.14E-22	cytochrome P450 family 39 subfamily A member 1
ENSG00000107593	PKD2L1	3.1	3.20E-08	polycystin 2 like 1 2C transient receptor potential cation channel
ENSG00000281809	LINC01394	3.1	0.0355676	long intergenic non-protein coding RNA 1394
ENSG00000129646	QRICH2	3.1	3.21E-102	glutamine rich 2
ENSG00000234840	LINC01239	3.1	1.32E-08	long intergenic non-protein coding RNA 1239
ENSG00000234880	LINC00163	3.1	6.08E-49	long intergenic non-protein coding RNA 163
ENSG00000163016	ALMS1P1	3.1	1.72E-08	ALMS1 pseudogene 1
ENSG00000268307	LINC02560	3.1	0.0076096	long intergenic non-protein coding RNA 2560
ENSG00000286369	-	3	0.001468	novel transcript
ENSG00000106366	SERPINE1	3	3.35E-164	serpin family E member 1
ENSG00000254995	STX16-NPEPL1	3	0.0005651	STX16-NPEPL1 readthrough (NMD candidate)
ENSG00000135740	SLC9A5	3	1.29E-35	solute carrier family 9 member A5
ENSG00000227082	LINC02798	3	0.0087123	long intergenic non-protein coding RNA 2798
ENSG00000134363	FST	3	1.31E-169	follicle-stimulating hormone receptor 1
ENSG00000280053	-	3	0.0037683	TEC
ENSG00000270426	-	3	7.72E-08	novel transcript 2C sense intronic to IRF2
ENSG00000135047	CTSL	3	0	cathepsin L
ENSG00000133048	CHI3L1	3	0.0004587	chitinase 3 like 1
ENSG00000170581	STAT2	3	6.06E-257	signal transducer and activator of transcription 2
ENSG00000123496	IL13RA2	3	0.0001157	interleukin 13 receptor subunit alpha 2
ENSG00000164309	CMYA5	3	5.28E-09	cardiomyopathy associated 5

ENSG00000244198	ARHGEF35-AS1	3	8.55E-32	ARHGEF35 antisense RNA 1
ENSG00000246627	CACNA1C-AS1	3	0.0436882	CACNA1C antisense RNA 1
ENSG00000285219	HULC	3	1.06E-12	hepatocellular carcinoma up-regulated long non-coding RNA
ENSG00000112096	SOD2	3	9.19E-226	superoxide dismutase 2
ENSG00000139112	GABARAPL1	3	1.48E-226	GABA type A receptor associated protein like 1
ENSG00000166825	ANPEP	3	0.0036937	alanyl aminopeptidase 2C membrane
ENSG00000142405	NLRP12	3	0.0101539	NLR family pyrin domain containing 12
ENSG00000226674	TEX41	3	0.0415601	testis expressed 41
ENSG00000279619	-	3	0.0402247	novel transcript
ENSG00000187944	C2orf66	3	0.0001528	chromosome 2 open reading frame 66
ENSG00000081277	PKP1	3	0.0445165	plakophilin 1
ENSG00000174844	DNAH12	3	0.0013811	dynein axonemal heavy chain 12
ENSG00000284966	-	3	1.51E-05	novel transcript 2C antisense to EFNB2
ENSG00000134339	SAA2	3	2.65E-09	serum amyloid A2
ENSG00000158373	H2BC5	3	1.08E-192	H2B clustered histone 5
ENSG00000228612	HK2P1	3	0.0367199	hexokinase 2 pseudogene 1
ENSG00000248898	-	3	1.82E-33	novel transcript
ENSG00000160161	CILP2	3	1.04E-28	cartilage intermediate layer protein 2
ENSG00000127366	TAS2R5	3	7.27E-06	taste 2 receptor member 5
ENSG00000276980	-	3	6.78E-09	novel transcript 2C sense intronic C3
ENSG00000166278	C2	3	3.63E-59	complement C2
ENSG00000188599	NPIPP1	3	6.39E-30	nuclear pore complex interacting protein pseudogene 1
ENSG00000173221	GLRX	3	1.40E-234	glutaredoxin
ENSG00000254859	-	3	9.64E-19	novel transcript
ENSG00000197208	SLC22A4	3	1.65E-191	solute carrier family 22 member 4
ENSG00000198736	MSRB1	3	1.93E-91	methionine sulfoxide reductase B1
ENSG00000131711	MAP1B	3	0.0089376	microtubule associated protein 1B
ENSG00000237548	TLL11-IT1	3	0.0113559	TLL11 intronic transcript 1
ENSG00000143387	CTSK	3	3.40E-44	cathepsin K
ENSG00000265972	TXNIP	3	0	thioredoxin interacting protein
ENSG00000288602	C8orf44-SGK3	3	0.0001346	C8orf44-SGK3 readthrough
ENSG00000277501	-	3	0.0001368	novel transcript 2C antisense DDX52
ENSG00000224312	MCCD1P2	3	0.0144567	mitochondrial coiled-coil domain 1 pseudogene 2
ENSG00000207563	MIR23B	3	0.0117656	microRNA 23b
ENSG00000286230	-	3	1.28E-16	novel transcript
ENSG00000261342	-	3	9.91E-44	novel transcript
ENSG00000175197	DDIT3	3	2.01E-206	DNA damage inducible transcript 3
ENSG00000074276	CDHR2	3	7.68E-07	cadherin related family member 2
ENSG00000125848	FLRT3	3	3.68E-12	fibronectin leucine rich transmembrane protein 3
ENSG00000263934	SNORD3A	2.9	5.88E-13	small nucleolar RNA 2C C/D box 3A
ENSG00000270181	BIVM-ERCC5	2.9	0.0003167	BIVM-ERCC5 readthrough
ENSG00000250303	LINC02762	2.9	8.71E-21	long intergenic non-protein coding RNA 2762
ENSG00000250644	-	2.9	5.17E-137	novel protein
ENSG00000107796	ACTA2	2.9	7.67E-92	actin alpha 2C smooth muscle
ENSG00000110852	CLEC2B	2.9	5.62E-104	C-type lectin domain family 2 member B
ENSG00000101977	MCF2	2.9	0.0236491	MCF.2 cell line derived transforming sequence



ENSG00000224269	-	2.9	0.0202346	novel transcript
ENSG00000160539	PLPP7	2.9	0.0004995	phospholipid phosphatase 7 (inactive)
ENSG00000283199	C13orf46	2.9	2.50E-25	chromosome 13 open reading frame 46
ENSG00000149582	TMEM25	2.9	2.85E-06	transmembrane protein 25
ENSG00000181381	DDX60L	2.9	3.02E-24	DEXD/H-box 60 like
ENSG00000003137	CYP26B1	2.9	2.11E-141	cytochrome P450 family 26 subfamily B member 1
ENSG00000166257	SCN3B	2.9	1.85E-06	sodium voltage-gated channel beta subunit 3
ENSG00000095370	SH2D3C	2.9	1.80E-22	SH2 domain containing 3C
ENSG00000232139	LINC00867	2.9	0.0114637	long intergenic non-protein coding RNA 867
ENSG00000130589	HELZ2	2.9	5.80E-103	helicase with zinc finger 2
ENSG00000237499	WAKMAR2	2.9	3.53E-05	wound and keratinocyte migration associated lncRNA 2
ENSG00000100628	ASB2	2.9	0.0171207	ankyrin repeat and SOCS box containing 2
ENSG00000117245	KIF17	2.9	0.0124392	kinesin family member 17
ENSG00000158023	CFAP251	2.9	8.15E-17	cilia and flagella associated protein 251
ENSG00000075884	ARHGAP15	2.9	0.0484015	Rho GTPase activating protein 15
ENSG00000080854	IGSF9B	2.9	0.0083931	immunoglobulin superfamily member 9B
ENSG00000221947	XKR9	2.9	0.0118925	XK related 9
ENSG00000254180	-	2.9	0.0114637	novel transcript
ENSG00000234745	HLA-B	2.9	9.60E-127	major histocompatibility complex 2C class I 2C B
ENSG00000072609	CHFR	2.9	0.0037036	checkpoint with forkhead and ring finger domains
ENSG00000170006	TMEM154	2.9	4.97E-12	transmembrane protein 154
ENSG00000253394	LINC00534	2.9	0.0032015	long intergenic non-protein coding RNA 534
ENSG00000141458	NPC1	2.9	8.10E-146	NPC intracellular cholesterol transporter 1
ENSG00000103196	CRISPLD2	2.9	4.11E-63	cysteine rich secretory protein LCCL domain containing 2
ENSG00000168685	IL7R	2.9	5.64E-40	interleukin 7 receptor
ENSG00000198535	C2CD4A	2.9	0.0006615	C2 calcium dependent domain containing 4A
ENSG00000161681	SHANK1	2.9	0.0142547	SH3 and multiple ankyrin repeat domains 1
ENSG00000137767	SQOR	2.9	1.03E-196	sulfide quinone oxidoreductase
ENSG00000141682	PMAIP1	2.9	4.23E-224	phorbol-12-myristate-13-acetate-induced protein 1
ENSG00000229808	-	2.9	2.89E-10	proteasome (prosome 2C macropain) activator subunit 3 (PA28 gamma 3B Ki) pseudogene
ENSG00000099250	NRP1	2.9	4.67E-113	neuropilin 1
ENSG00000188199	NUTM2B	2.9	0.000212	NUT family member 2B
ENSG00000268400	-	2.9	0.0005942	novel transcript
ENSG00000232973	CYP1B1-AS1	2.9	7.99E-06	CYP1B1 antisense RNA 1
ENSG00000244479	OR2A1-AS1	2.9	1.07E-09	OR2A1 antisense RNA 1
ENSG00000225857	LINC02816	2.9	0.0110579	long intergenic non-protein coding RNA 2816
ENSG00000236778	INTS6-AS1	2.9	2.01E-23	INTS6 antisense RNA 1
ENSG00000272114	-	2.9	4.02E-17	novel transcript 2C antisense to VEGFA
ENSG00000271581	-	2.9	1.17E-43	HLA complex group 4 (HCG4) pseudogene
ENSG00000197181	PIWIL2	2.9	3.23E-05	piwi like RNA-mediated gene silencing 2
ENSG00000287721	-	2.9	2.30E-21	novel transcript
ENSG00000272459	FAM193B-DT	2.9	0.0171237	FAM193B divergent transcript
ENSG00000270504	-	2.9	1.00E-08	novel transcript 2C antisense to PXDC1
ENSG00000143226	FCGR2A	2.8	3.03E-17	Fc fragment of IgG receptor IIa

ENSG00000163221	S100A12	2.8	7.57E-10	S100 calcium binding protein A12
ENSG00000168350	DEGS2	2.8	5.26E-09	delta 4-desaturase 2C sphingolipid 2
ENSG00000235531	MSC-AS1	2.8	0.0009775	MSC antisense RNA 1
ENSG00000064886	CHI3L2	2.8	0.0193556	chitinase 3 like 2
ENSG00000235121	-	2.8	0.0301174	novel transcript
ENSG00000147697	GSDMC	2.8	3.03E-10	gasdermin C
ENSG00000168140	VASN	2.8	4.20E-54	vasorin
ENSG00000118990	GLRXP3	2.8	0.0005768	glutaredoxin pseudogene 3
ENSG00000182463	TSHZ2	2.8	7.41E-08	teashirt zinc finger homeobox 2
ENSG00000120669	SOHLH2	2.8	0.0164313	spermatogenesis and oogenesis specific basic helix-loop-helix 2
ENSG00000225978	HAR1A	2.8	0.0001564	highly accelerated region 1A
ENSG00000199366	Y_RNA	2.8	0.0015459	Y RNA
ENSG00000099617	EFNA2	2.8	1.51E-10	ephrin A2
ENSG00000267328	-	2.8	0.0001314	novel transcript
ENSG00000176658	MYO1D	2.8	0.001447	myosin ID
ENSG00000140961	OSGIN1	2.8	9.74E-59	oxidative stress induced growth inhibitor 1
ENSG00000227218	-	2.8	1.74E-05	novel transcript
ENSG00000125954	CHURC1-FNTB	2.8	0.0027343	CHURC1-FNTB readthrough
ENSG00000145040	UCN2	2.8	1.19E-18	urocortin 2
ENSG00000107187	LHX3	2.8	0.0174673	LIM homeobox 3
ENSG00000057657	PRDM1	2.8	1.38E-139	PR/SET domain 1
ENSG00000101384	JAG1	2.8	2.57E-225	jagged canonical Notch ligand 1
ENSG00000285761	-	2.8	3.80E-20	novel transcript
ENSG00000231104	-	2.8	0.0069743	novel transcript 2C antisense to RAB11FIP2
ENSG00000116678	LEPR	2.8	2.63E-58	leptin receptor
ENSG00000168679	SLC16A4	2.8	1.92E-07	solute carrier family 16 member 4
ENSG00000132109	TRIM21	2.8	5.50E-70	tripartite motif containing 21
ENSG00000277013	-	2.8	0.0006368	novel transcript
ENSG00000114019	AMOTL2	2.8	1.17E-71	angiomin like 2
ENSG00000088726	TMEM40	2.8	4.20E-19	transmembrane protein 40
ENSG00000280401	-	2.8	0.0008347	TEC
ENSG00000049769	PPP1R3F	2.8	2.49E-58	protein phosphatase 1 regulatory subunit 3F
ENSG00000255487	-	2.8	0.0471801	novel transcript
ENSG00000174307	PHLDA3	2.8	1.04E-81	pleckstrin homology like domain family A member 3
ENSG00000185291	IL3RA	2.8	3.29E-24	interleukin 3 receptor subunit alpha
ENSG00000287918	-	2.8	0.0059151	novel transcript 2C antisense to VMA21
ENSG00000026950	BTN3A1	2.8	4.18E-295	butyrophilin subfamily 3 member A1
ENSG00000167371	PRRT2	2.8	0.0076812	proline rich transmembrane protein 2
ENSG00000250474	WBP1LP2	2.8	2.24E-61	WBP1L pseudogene 2
ENSG00000274818	-	2.8	1.15E-19	novel transcript
ENSG00000138356	AOX1	2.8	2.30E-137	aldehyde oxidase 1
ENSG00000249624	-	2.8	4.12E-08	novel protein
ENSG00000223923	TNS1-AS1	2.8	0.0002042	TNS1 antisense RNA 1
ENSG00000189001	SBSN	2.8	0.0001857	suprabasin

ENSG00000169896	ITGAM	2.8	0.0002651	integrin subunit alpha M
ENSG00000255150	EID3	2.8	1.27E-22	EP300 interacting inhibitor of differentiation 3
ENSG00000004838	ZMYND10	2.8	3.60E-11	zinc finger MYND-type containing 10
ENSG000000041353	RAB27B	2.8	6.37E-27	RAB27B 2C member RAS oncogene family
ENSG00000179846	NKPD1	2.8	1.33E-06	NTPase KAP family P-loop domain containing 1
ENSG00000226580	RPL39P40	2.8	7.56E-13	ribosomal protein L39 pseudogene 40
ENSG00000233765	CDRT15P12	2.8	0.0001372	CDRT15 pseudogene 12
ENSG00000000971	CFH	2.8	5.10E-79	complement factor H
ENSG00000148841	ITPRIP	2.8	2.20E-219	inositol 1 2C4 2C5-trisphosphate receptor interacting protein
ENSG00000130066	SAT1	2.8	3.02E-261	spermidine/spermine N1-acetyltransferase 1
ENSG00000116017	ARID3A	2.8	1.64E-121	AT-rich interaction domain 3A
ENSG00000183762	KREMEN1	2.8	5.94E-46	kringle containing transmembrane protein 1
ENSG00000257225	-	2.8	0.0232913	novel transcript 2C antisense to PRICKLE1
ENSG00000205220	PSMB10	2.8	4.29E-76	proteasome 20S subunit beta 10
ENSG00000183696	UPP1	2.7	2.10E-92	uridine phosphorylase 1
ENSG00000265702	-	2.7	1.08E-07	novel transcript 2C antisense to MARCH10
ENSG00000166359	WDR88	2.7	0.0009579	WD repeat domain 88
ENSG00000249992	TMEM158	2.7	1.78E-97	transmembrane protein 158
ENSG00000179698	WDR97	2.7	1.74E-08	WD repeat domain 97
ENSG00000288531	-	2.7	0.02546	novel transcript
ENSG00000274020	LINC01138	2.7	2.55E-91	long intergenic non-protein coding RNA 1138
ENSG00000260083	MIR762HG	2.7	6.13E-92	MIR762 host gene
ENSG00000154040	CABYR	2.7	0.0056416	calcium binding tyrosine phosphorylation regulated
ENSG00000138100	TRIM54	2.7	6.36E-07	tripartite motif containing 54
ENSG00000272989	LINC02012	2.7	0.0235755	long intergenic non-protein coding RNA 2012
ENSG00000163734	CXCL3	2.7	1.88E-83	C-X-C motif chemokine ligand 3
ENSG00000116574	RHOU	2.7	7.87E-54	ras homolog family member U
ENSG00000100918	REC8	2.7	2.30E-24	REC8 meiotic recombination protein
ENSG00000187260	WDR86	2.7	2.06E-05	WD repeat domain 86
ENSG00000260941	LINC00622	2.7	0.0032864	long intergenic non-protein coding RNA 622
ENSG00000102466	FGF14	2.7	0.0001468	fibroblast growth factor 14
ENSG00000277639	-	2.7	7.80E-12	novel protein
ENSG00000272899	ATP6V1FNB	2.7	1.49E-38	ATP6V1F neighbor
ENSG00000234709	UPF3AP3	2.7	0.0361484	UPF3A pseudogene 3
ENSG00000261253	-	2.7	8.08E-05	novel transcript 2C antisense to ANKRD11
ENSG00000156273	BACH1	2.7	8.17E-67	BTB domain and CNC homolog 1
ENSG00000287855	-	2.7	0.0123466	novel transcript 2C antisense to LMF1
ENSG00000170385	SLC30A1	2.7	6.66E-150	solute carrier family 30 member 1
ENSG00000233452	STXBP5-AS1	2.7	4.34E-05	STXBP5 antisense RNA 1
ENSG00000123094	RASSF8	2.7	1.40E-17	Ras association domain family member 8
ENSG00000154319	FAM167A	2.7	1.04E-54	family with sequence similarity 167 member A
ENSG00000110876	SELPLG	2.7	2.18E-82	selectin P ligand
ENSG00000257594	GALNT4	2.7	4.29E-05	polypeptide N-acetylgalactosaminyltransferase 4
ENSG00000234518	PTGES3P1	2.7	1.87E-87	prostaglandin E synthase 3 pseudogene 1
ENSG00000280054	-	2.7	0.0004596	TEC

ENSG00000137434	C6orf52	2.7	2.15E-09	chromosome 6 open reading frame 52
ENSG00000169220	RGS14	2.7	1.85E-45	regulator of G protein signaling 14
ENSG00000271784	TP53RK-DT	2.7	5.11E-11	TP53RK divergent transcript
ENSG00000163220	S100A9	2.7	2.22E-128	S100 calcium binding protein A9
ENSG00000120068	HOXB8	2.7	0.0111045	homeobox B8
ENSG00000277050	-	2.7	0.0031897	novel transcript 2C antisense to FRMD6
ENSG00000273345	-	2.7	0.0281906	novel transcript
ENSG00000168646	AXIN2	2.7	0.0042253	axin 2
ENSG00000171617	ENC1	2.7	5.09E-103	ectodermal-neural cortex 1
ENSG00000257732	-	2.7	1.83E-67	novel transcript 2C antisense to TXNRD1
ENSG00000232774	-	2.7	9.06E-95	novel transcript
ENSG00000109743	BST1	2.7	7.91E-09	bone marrow stromal cell antigen 1
ENSG00000104447	TRPS1	2.7	2.77E-09	transcriptional repressor GATA binding 1
ENSG00000287925	-	2.7	0.0090102	novel transcript 2C antisense to CIQL3
ENSG00000161298	ZNF382	2.7	6.60E-07	zinc finger protein 382
ENSG00000274259	SYNGAP1-AS1	2.7	1.12E-05	SYNGAP1 antisense RNA 1
ENSG00000286975	-	2.7	0.0034928	novel transcript
ENSG00000112599	GUCA1B	2.7	2.83E-12	guanylate cyclase activator 1B
ENSG00000244459	-	2.7	0.0014998	novel transcript
ENSG00000139269	INHBE	2.7	1.60E-51	inhibin subunit beta E
ENSG00000163565	IFI16	2.7	1.86E-74	interferon gamma inducible protein 16
ENSG00000261915	-	2.7	0.0109329	novel protein
ENSG00000264175	MIR3189	2.7	1.86E-14	microRNA 3189
ENSG00000232871	SEC1P	2.7	0.0004558	secretory blood group 1 2C pseudogene
ENSG00000196814	MVB12B	2.7	6.61E-53	multivesicular body subunit 12B
ENSG00000131379	C3orf20	2.7	9.73E-05	chromosome 3 open reading frame 20
ENSG00000165868	HSPA12A	2.7	2.03E-08	heat shock protein family A (Hsp70) member 12A
ENSG00000236054	SYN3-AS1	2.7	0.0143371	SYN3 antisense RNA 1
ENSG00000164308	ERAP2	2.6	3.79E-46	endoplasmic reticulum aminopeptidase 2
ENSG00000143512	HHIPL2	2.6	1.08E-06	HHIP like 2
ENSG00000137101	CD72	2.6	0.0013593	CD72 molecule
ENSG00000181781	ODF3L2	2.6	0.0018047	outer dense fiber of sperm tails 3 like 2
ENSG00000250251	PKD1P6	2.6	1.34E-105	polycystin 1 2C transient receptor potential channel interacting pseudogene 6
ENSG00000126262	FFAR2	2.6	2.89E-06	free fatty acid receptor 2
ENSG00000188313	PLSCR1	2.6	3.86E-229	phospholipid scramblase 1
ENSG00000242267	SKINT1L	2.6	5.19E-06	Skint1 like (pseudogene)
ENSG00000250131	-	2.6	0.0013343	novel transcript
ENSG00000137975	CLCA2	2.6	1.17E-34	chloride channel accessory 2
ENSG00000214940	NIIPA8	2.6	5.02E-08	nuclear pore complex interacting protein family member A8
ENSG00000237094	-	2.6	0.0143398	pseudogene similar to part of septin 14 SEPT14
ENSG00000178726	THBD	2.6	1.34E-06	thrombomodulin
ENSG00000171867	PRNP	2.6	3.22E-251	prion protein
ENSG00000091409	ITGA6	2.6	1.83E-89	integrin subunit alpha 6
ENSG00000089127	OAS1	2.6	1.54E-177	2'-5'-oligoadenylate synthetase 1
ENSG00000135114	OASL	2.6	2.06E-87	2'-5'-oligoadenylate synthetase like

ENSG00000243024	-	2.6	2.53E-05	ribosomal protein S11 pseudogene 6
ENSG00000135124	P2RX4	2.6	6.08E-78	purinergic receptor P2X 4
ENSG00000125845	BMP2	2.6	1.63E-185	bone morphogenetic protein 2
ENSG00000010219	DYRK4	2.6	3.58E-64	dual specificity tyrosine phosphorylation regulated kinase 4
ENSG00000267278	MAP3K14-AS1	2.6	2.58E-89	MAP3K14 antisense RNA 1
ENSG00000240219	-	2.6	0.0178453	novel transcript
ENSG00000101222	SPEF1	2.6	1.54E-09	sperm flagellar 1
ENSG00000153714	LURAP1L	2.6	2.55E-127	leucine rich adaptor protein 1 like
ENSG00000260755	-	2.6	0.0072973	novel transcript
ENSG00000139053	PDE6H	2.6	0.041399	phosphodiesterase 6H
ENSG00000138823	MTTP	2.6	0.0116316	microsomal triglyceride transfer protein
ENSG00000166923	GREM1	2.6	0.0327292	gremlin 1 2C DAN family BMP antagonist
ENSG00000180422	LINC00304	2.6	8.73E-24	long intergenic non-protein coding RNA 304
ENSG00000250410	-	2.6	0.004757	novel transcript
ENSG00000254295	-	2.6	1.24E-07	novel transcript
ENSG00000166763	STRCP1	2.6	0.0204388	stereocilin pseudogene 1
ENSG00000023892	DEF6	2.6	2.76E-06	DEF6 guanine nucleotide exchange factor
ENSG00000270617	URGCP-MRPS24	2.6	0.0213746	URGCP-MRPS24 readthrough
ENSG00000128335	APOL2	2.6	1.62E-230	apolipoprotein L2
ENSG00000019549	SNAI2	2.6	1.26E-15	snail family transcriptional repressor 2
ENSG00000107201	DDX58	2.6	7.12E-18	DExD/H-box helicase 58
ENSG00000167074	TEF	2.6	2.02E-67	TEF transcription factor 2C PAR bZIP family member
ENSG00000259940	-	2.6	8.18E-23	novel transcript 2C antisense to JMJD5
ENSG00000251136	-	2.6	8.80E-41	novel transcript
ENSG00000197249	SERPINA1	2.6	1.60E-05	serpin family A member 1
ENSG00000124602	UNC5CL	2.6	0.0002198	unc-5 family C-terminal like
ENSG00000267248	-	2.6	3.43E-66	novel transcript
ENSG00000208037	MIR320A	2.6	0.0460494	microRNA 320a
ENSG00000154240	CEP112	2.6	1.60E-10	centrosomal protein 112
ENSG00000223804	-	2.6	1.06E-09	Poly [ADP-ribose] polymerase 8 (PARP8) pseudogene
ENSG00000115009	CCL20	2.6	2.92E-07	C-C motif chemokine ligand 20
ENSG00000171124	FUT3	2.6	0.0179167	fucosyltransferase 3 (Lewis blood group)
ENSG00000248223	-	2.6	0.0006323	novel transcript
ENSG00000259005	-	2.6	0.0454801	novel transcript
ENSG00000129667	RHBDF2	2.6	1.57E-138	rhomboid 5 homolog 2
ENSG00000136931	NR5A1	2.6	0.0032733	nuclear receptor subfamily 5 group A member 1
ENSG00000235523	-	2.6	1.61E-09	novel transcript
ENSG00000171116	HSFX1	2.6	0.004377	heat shock transcription factor family 2C X-linked 1
ENSG00000103888	CEMIP	2.6	1.83E-51	cell migration inducing hyaluronidase 1
ENSG00000228960	OR2A9P	2.6	1.19E-10	olfactory receptor family 2 subfamily A member 9 pseudogene
ENSG00000140853	NLRC5	2.6	2.31E-201	NLR family CARD domain containing 5
ENSG00000179023	KLHDC7A	2.6	0.00496	kelch domain containing 7A
ENSG00000121104	FAM117A	2.6	1.85E-11	family with sequence similarity 117 member A
ENSG00000229474	PATL2	2.6	1.68E-15	PAT1 homolog 2



ENSG00000184602	SNN	2.6	2.04E-94	stannin
ENSG00000244119	PDCL3P4	2.6	0.0431823	PDCL3 pseudogene 4
ENSG00000211448	DIO2	2.6	1.84E-18	iodothyronine deiodinase 2
ENSG00000164849	GPR146	2.6	1.07E-05	G protein-coupled receptor 146
ENSG00000120322	PCDHB8	2.6	0.0277029	protocadherin beta 8
ENSG00000173262	SLC2A14	2.6	0.0121027	solute carrier family 2 member 14
ENSG00000274949	-	2.6	0.000109	novel transcript
ENSG00000132563	REEP2	2.5	0.0150208	receptor accessory protein 2
ENSG00000287236	-	2.5	3.41E-11	novel transcript 2C antisense to ANKRD54
ENSG00000227827	PKD1P2	2.5	0.0012387	polycystin 1 2C transient receptor potential channel interacting pseudogene 2
ENSG00000213471	TLL13P	2.5	0.0143936	tubulin tyrosine ligase like 13 2C pseudogene
ENSG00000151917	BEND6	2.5	6.87E-23	BEN domain containing 6
ENSG00000250519	-	2.5	2.15E-26	novel transcript
ENSG00000213928	IRF9	2.5	7.61E-50	interferon regulatory factor 9
ENSG00000111432	FZD10	2.5	6.14E-198	frizzled class receptor 10
ENSG00000273674	-	2.5	0.0006084	novel transcript
ENSG00000130203	APOE	2.5	6.87E-23	apolipoprotein E
ENSG00000105668	UPK1A	2.5	0.0011709	uroplakin 1A
ENSG00000167874	TMEM88	2.5	0.0002101	transmembrane protein 88
ENSG00000136114	THSD1	2.5	2.97E-24	thrombospondin type 1 domain containing 1
ENSG00000229644	NAMPTP1	2.5	3.67E-97	nicotinamide phosphoribosyltransferase pseudogene 1
ENSG00000196562	SULF2	2.5	0.007645	sulfatase 2
ENSG00000171931	FBXW10	2.5	0.006301	F-box and WD repeat domain containing 10
ENSG00000166126	AMN	2.5	0.0018333	amnion associated transmembrane protein
ENSG00000261578	-	2.5	5.66E-99	novel transcript 2C overlapping to TSKU
ENSG00000166128	RAB8B	2.5	7.57E-92	RAB8B 2C member RAS oncogene family
ENSG00000185070	FLRT2	2.5	1.18E-24	fibronectin leucine rich transmembrane protein 2
ENSG00000125787	GNRH2	2.5	0.0003571	gonadotropin releasing hormone 2
ENSG00000165685	TMEM52B	2.5	4.79E-107	transmembrane protein 52B
ENSG00000106479	ZNF862	2.5	6.84E-52	zinc finger protein 862
ENSG00000070614	NDST1	2.5	1.76E-145	N-deacetylase and N-sulfotransferase 1
ENSG00000250208	FZD10-AS1	2.5	2.11E-172	FZD10 antisense divergent transcript
ENSG00000173334	TRIB1	2.5	4.27E-304	tribbles pseudokinase 1
ENSG00000174680	GRIK1-AS1	2.5	0.0077163	GRIK1 antisense RNA 1
ENSG00000137877	SPTBN5	2.5	1.02E-05	spectrin beta 2C non-erythrocytic 5
ENSG00000119782	FKBP1B	2.5	0.0410073	FKBP prolyl isomerase 1B
ENSG00000237264	FTH1P11	2.5	6.43E-12	ferritin heavy chain 1 pseudogene 11
ENSG00000162944	RFTN2	2.5	0.0491087	raftlin family member 2
ENSG00000286031	-	2.5	0.0326554	novel transcript 2C antisense to PPP1R3F
ENSG00000224462	C4BPAP1	2.5	2.05E-09	C4BPA pseudogene 1
ENSG00000259884	NR4A1AS	2.5	0.0030828	NR4A1 antisense RNA
ENSG00000159399	HK2	2.5	1.34E-139	hexokinase 2
ENSG00000123329	ARHGAP9	2.5	0.0028745	Rho GTPase activating protein 9
ENSG00000251493	FOXD1	2.5	2.08E-49	forkhead box D1

ENSG00000011347	SYT7	2.5	4.93E-76	synaptotagmin 7
ENSG00000138685	FGF2	2.5	7.81E-20	fibroblast growth factor 2
ENSG00000188672	RHCE	2.5	4.11E-06	Rh blood group CcEe antigens
ENSG00000144824	PHLDB2	2.5	6.56E-70	pleckstrin homology like domain family B member 2
ENSG00000230943	LINC02541	2.5	0.0482596	long intergenic non-protein coding RNA 2541
ENSG00000284644	-	2.5	0.0001008	novel transcript 2C antisense to OR2A1 and ARHGEF5
ENSG00000127578	WFIKKN1	2.5	2.07E-25	WAP 2C follistatin/kazal 2C immunoglobulin 2C kunitz and netrin domain containing 1
ENSG00000185507	IRF7	2.5	3.46E-21	interferon regulatory factor 7
ENSG00000149948	HMGA2	2.5	2.07E-75	high mobility group AT-hook 2
ENSG00000104804	TULP2	2.5	8.76E-05	TUB like protein 2
ENSG00000261587	TMEM249	2.5	3.28E-05	transmembrane protein 249
ENSG00000257529	RPL36A-HN-RNP2	2.5	0.0218627	RPL36A-HNRNP2 readthrough
ENSG00000006459	KDM7A	2.5	1.83E-16	lysine demethylase 7A
ENSG00000100439	ABHD4	2.5	1.26E-69	abhydrolase domain containing 4 2C N-acyl phospholipase B
ENSG00000185634	SHC4	2.5	2.57E-14	SHC adaptor protein 4
ENSG00000154175	ABI3BP	2.5	2.15E-06	ABI family member 3 binding protein
ENSG00000129990	SYT5	2.5	0.0001072	synaptotagmin 5
ENSG00000275294	LINC02340	2.5	0.0097756	long intergenic non-protein coding RNA 2340
ENSG00000267666	-	2.5	8.99E-05	novel transcript
ENSG00000236242	MYO16-AS1	2.5	2.03E-27	MYO16 antisense RNA 1
ENSG00000104081	BMF	2.5	7.16E-15	Bcl2 modifying factor
ENSG00000181085	MAPK15	2.5	0.0015312	mitogen-activated protein kinase 15
ENSG00000233930	KRTAP5-AS1	2.5	2.02E-19	KRTAP5-1/KRTAP5-2 antisense RNA 1
ENSG00000234807	LINC01135	2.5	6.86E-22	long intergenic non-protein coding RNA 1135
ENSG00000185955	C7orf61	2.5	1.85E-12	chromosome 7 open reading frame 61
ENSG00000151611	MMAA	2.5	2.26E-39	metabolism of cobalamin associated A
ENSG00000258733	LINC02328	2.5	1.02E-14	long intergenic non-protein coding RNA 2328
ENSG00000188897	-	2.5	8.35E-07	novel lipoprotein amino terminal region containing protein
ENSG00000287926	-	2.5	0.0005964	novel transcript
ENSG00000126583	PRKCG	2.5	4.32E-10	protein kinase C gamma
ENSG00000227210	-	2.5	9.04E-07	novel transcript
ENSG00000123096	SSPN	2.5	0.0059808	sarcospan
ENSG00000244693	CTAGE8	2.5	0.0149917	CTAGE family member 8
ENSG00000272582	-	2.5	0.0010259	novel transcript 2C antisense to C22orf23
ENSG00000007062	PROM1	2.5	2.30E-05	prominin 1
ENSG00000244675	-	2.5	1.31E-05	novel transcript 2C sense overlapping to ATP13A3
ENSG00000119986	AVPI1	2.5	1.26E-70	arginine vasopressin induced 1
ENSG00000138166	DUSP5	2.5	6.65E-108	dual specificity phosphatase 5
ENSG00000259238	-	2.5	1.44E-05	novel transcript 2C antisense to BNIP2
ENSG00000144596	GRIP2	2.5	8.08E-16	glutamate receptor interacting protein 2
ENSG00000186994	KANK3	2.4	9.68E-10	KN motif and ankyrin repeat domains 3
ENSG00000124466	LYPD3	2.4	4.03E-118	LY6/PLAUR domain containing 3
ENSG00000185088	RPS27L	2.4	1.81E-166	ribosomal protein S27 like

ENSG00000185404	SP140L	2.4	3.13E-101	SP140 nuclear body protein like
ENSG00000285588	-	2.4	0.0003902	novel transcript 2C antisense to PCDH9
ENSG00000121577	POPDC2	2.4	3.04E-05	popeye domain containing 2
ENSG00000273464	-	2.4	1.90E-05	novel transcript 2C antisense to GRIK1
ENSG00000105835	NAMPT	2.4	1.47E-72	nicotinamide phosphoribosyltransferase
ENSG00000154736	ADAMTS5	2.4	5.36E-32	ADAM metalloproteinase with thrombospondin type 1 motif 5
ENSG00000146021	KLHL3	2.4	2.50E-20	kelch like family member 3
ENSG00000269439	PGLS-DT	2.4	9.79E-62	PGLS divergent transcript
ENSG00000075223	SEMA3C	2.4	7.96E-28	semaphorin 3C
ENSG00000133321	PLAAT4	2.4	4.55E-23	phospholipase A and acyltransferase 4
ENSG00000235092	ID2-AS1	2.4	3.09E-09	ID2 antisense RNA 1
ENSG00000124762	CDKN1A	2.4	7.96E-72	cyclin dependent kinase inhibitor 1A
ENSG00000260729	-	2.4	0.0204873	novel protein
ENSG00000205853	RFPL3S	2.4	0.0001659	RFPL3 antisense
ENSG00000152926	ZNF117	2.4	0.0212848	zinc finger protein 117
ENSG00000207864	MIR27B	2.4	0.0205201	microRNA 27b
ENSG00000285752	CDC42-AS1	2.4	0.0002171	CDC42 antisense RNA 1
ENSG00000169554	ZEB2	2.4	9.98E-50	zinc finger E-box binding homeobox 2
ENSG00000227766	-	2.4	1.39E-33	HLA complex group 4 pseudogene 5
ENSG00000174951	FUT1	2.4	4.52E-39	fucosyltransferase 1 (H blood group)
ENSG00000251537	-	2.4	0.0352465	novel tripartite motif-containing 16 (TRIM16) and CMT1A duplicated region transcript 1 (CDRT1) protein
ENSG00000259370	-	2.4	0.0057061	novel transcript 2C antisense to TLN2
ENSG00000243244	STON1	2.4	1.54E-05	stonin 1
ENSG00000217275	-	2.4	0.0007835	ribosomal protein S10 (RPS10) pseudogene
ENSG00000204267	TAP2	2.4	0	transporter 2 2C ATP binding cassette subfamily B member
ENSG00000143322	ABL2	2.4	1.60E-57	ABL proto-oncogene 2 2C non-receptor tyrosine kinase
ENSG00000288704	-	2.4	0.0113774	novel transcript 2C antisense to MIDN
ENSG00000153132	CLGN	2.4	9.74E-45	calmegin
ENSG00000262497	FAM187B2P	2.4	6.93E-05	family with sequence similarity 187 member B2 2C pseudogene
ENSG00000204525	HLA-C	2.4	2.33E-75	major histocompatibility complex 2C class I 2C C
ENSG00000287287	-	2.4	0.0264908	novel transcript 2C antisense to RUSC2
ENSG00000267009	-	2.4	2.85E-12	novel transcript
ENSG00000233785	-	2.4	5.41E-11	novel transcript
ENSG00000198431	TXNRD1	2.4	2.56E-140	thioredoxin reductase 1
ENSG00000163898	LIPH	2.4	1.21E-161	lipase H
ENSG00000269720	CCDC194	2.4	1.49E-06	coiled-coil domain containing 194
ENSG00000187950	OVCH1	2.4	0.0012792	ovochymase 1
ENSG00000204248	COL11A2	2.4	1.40E-26	collagen type XI alpha 2 chain
ENSG00000187608	ISG15	2.4	9.36E-17	ISG15 ubiquitin like modifier
ENSG00000166750	SLFN5	2.4	7.51E-44	schlafen family member 5
ENSG00000235217	TSPY26P	2.4	1.01E-17	testis specific protein Y-linked 26 2C pseudogene
ENSG00000144802	NFKBIZ	2.4	7.62E-42	NFKB inhibitor zeta
ENSG00000243649	CFB	2.4	4.33E-111	complement factor B

ENSG00000143248	RGS5	2.4	4.49E-33	regulator of G protein signaling 5
ENSG00000146221	TCTE1	2.4	8.72E-10	t-complex-associated-testis-expressed 1
ENSG00000228360	-	2.4	1.73E-07	ribosomal protein L37a (RPL37A) pseudogene
ENSG00000114757	PEX5L	2.4	0.0285485	peroxisomal biogenesis factor 5 like
ENSG00000135919	SERPINE2	2.4	2.53E-119	serpin family E member 2
ENSG00000273174	-	2.4	5.36E-13	novel transcript 2C antisense to RAB43
ENSG00000249628	LINC00942	2.4	0.0174085	long intergenic non-protein coding RNA 942
ENSG00000259256	LINC01895	2.4	4.64E-21	long intergenic non-protein coding RNA 1895
ENSG00000233473	RAD1P2	2.4	0.0291704	RAD1 pseudogene 2
ENSG00000169621	APLF	2.4	2.29E-05	aprataxin and PNKP like factor
ENSG00000143515	ATP8B2	2.4	8.92E-09	ATPase phospholipid transporting 8B2
ENSG00000235652	FBXO30-DT	2.4	1.06E-09	FBXO30 divergent transcript
ENSG00000102804	TSC22D1	2.4	4.73E-142	TSC22 domain family member 1
ENSG00000171403	KRT9	2.4	2.00E-10	keratin 9
ENSG00000260898	ADPGK-AS1	2.4	0.0007898	ADPGK antisense RNA 1
ENSG00000185482	STAC3	2.4	5.17E-15	SH3 and cysteine rich domain 3
ENSG00000249700	SRD5A3-AS1	2.4	0.0001399	SRD5A3 antisense RNA 1
ENSG00000237489	C10orf143	2.4	9.53E-07	chromosome 10 open reading frame 143
ENSG00000180596	H2BC4	2.4	2.32E-52	H2B clustered histone 4
ENSG00000128165	ADM2	2.4	1.14E-65	adrenomedullin 2
ENSG00000101236	RNF24	2.4	9.00E-105	ring finger protein 24
ENSG00000254910	-	2.4	0.0003757	novel transcript
ENSG00000141338	ABCA8	2.4	0.0163437	ATP binding cassette subfamily A member 8
ENSG00000106927	AMBP	2.4	0.0368448	alpha-1-microglobulin/bikunin precursor
ENSG00000198948	MFAP3L	2.4	2.15E-36	microfibril associated protein 3 like
ENSG00000114251	WNT5A	2.4	4.37E-94	Wnt family member 5A
ENSG00000205085	FAM71F2	2.4	1.86E-05	family with sequence similarity 71 member F2
ENSG00000188042	ARL4C	2.4	0.0106352	ADP ribosylation factor like GTPase 4C
ENSG00000254413	CHKB-CPT1B	2.4	8.22E-16	CHKB-CPT1B readthrough (NMD candidate)
ENSG00000135924	DNAJB2	2.4	3.56E-56	DnaJ heat shock protein family (Hsp40) member B2
ENSG00000151773	CCDC122	2.4	4.55E-13	coiled-coil domain containing 122
ENSG00000002549	LAP3	2.3	2.67E-190	leucine aminopeptidase 3
ENSG00000069493	CLEC2D	2.3	3.13E-12	C-type lectin domain family 2 member D
ENSG00000274265	-	2.3	2.27E-33	novel transcript
ENSG00000111886	GABRR2	2.3	2.60E-19	gamma-aminobutyric acid type A receptor subunit rho2
ENSG00000103257	SLC7A5	2.3	1.38E-59	solute carrier family 7 member 5
ENSG00000124225	PMEPA1	2.3	1.78E-53	prostate transmembrane protein 2C androgen induced 1
ENSG00000266978	-	2.3	3.60E-18	novel transcript 2C antisense to MRPL4 and ICAM1
ENSG00000227398	KIF9-AS1	2.3	2.07E-48	KIF9 antisense RNA 1
ENSG00000196639	HRH1	2.3	7.18E-132	histamine receptor H1
ENSG00000175003	SLC22A1	2.3	2.58E-05	solute carrier family 22 member 1
ENSG00000135046	ANXA1	2.3	1.61E-99	annexin A1
ENSG00000168003	SLC3A2	2.3	6.73E-51	solute carrier family 3 member 2
ENSG00000260231	KDM7A-DT	2.3	4.09E-40	KDM7A divergent transcript
ENSG00000139289	PHLDA1	2.3	3.78E-104	pleckstrin homology like domain family A member 1

ENSG00000105270	CLIP3	2.3	2.32E-07	CAP-Gly domain containing linker protein 3
ENSG00000155090	KLF10	2.3	3.68E-154	Kruppel like factor 10
ENSG00000168994	PXDC1	2.3	6.33E-38	PX domain containing 1
ENSG00000188687	SLC4A5	2.3	0.0002611	solute carrier family 4 member 5
ENSG00000115844	DLX2	2.3	1.06E-07	distal-less homeobox 2
ENSG00000070540	WIPI1	2.3	1.55E-104	WD repeat domain 2C phosphoinositide interacting 1
ENSG00000111331	OAS3	2.3	4.30E-177	2'-5'-oligoadenylate synthetase 3
ENSG00000259066	-	2.3	0.0201094	novel protein
ENSG00000263167	-	2.3	0.0476621	novel transcript 2C antisense to AATK
ENSG00000288717	-	2.3	1.40E-05	novel transcript
ENSG00000233621	LINC01137	2.3	3.50E-66	long intergenic non-protein coding RNA 1137
ENSG00000165917	RAPSN	2.3	0.0002806	receptor associated protein of the synapse
ENSG00000134668	SPOCD1	2.3	8.75E-11	SPOC domain containing 1
ENSG00000266094	RASSF5	2.3	5.87E-128	Ras association domain family member 5
ENSG00000273492	APP-DT	2.3	0.0231044	APP divergent transcript
ENSG00000110092	CCND1	2.3	6.77E-148	cyclin D1
ENSG00000226900	-	2.3	0.0029886	novel transcript
ENSG00000267390	KDSR-DT	2.3	1.26E-08	KDSR divergent transcript
ENSG00000232187	FTH1P7	2.3	9.34E-33	ferritin heavy chain 1 pseudogene 7
ENSG00000288234	-	2.3	0.0226217	novel transcript 2C antisense to NRARP
ENSG00000134802	SLC43A3	2.3	4.66E-07	solute carrier family 43 member 3
ENSG00000234969	AARSD1P1	2.3	0.0017683	AARSD1 pseudogene 1
ENSG00000162888	Clorf147	2.3	2.40E-05	chromosome 1 open reading frame 147
ENSG00000224273	-	2.3	0.007103	pseudogene similar to part of RAB guanine nucleotide exchange factor (GEF) 1 RABGEF1
ENSG00000150630	VEGFC	2.3	2.39E-102	vascular endothelial growth factor C
ENSG00000179141	MTUS2-AS1	2.3	1.51E-07	MTUS2 antisense RNA 1
ENSG00000262223	-	2.3	0.0348384	novel transcript
ENSG00000114423	CBLB	2.3	1.15E-130	Cbl proto-oncogene B
ENSG00000219507	FTH1P8	2.3	9.36E-31	ferritin heavy chain 1 pseudogene 8
ENSG00000145681	HAPLN1	2.3	0.0092614	hyaluronan and proteoglycan link protein 1
ENSG00000080561	MID2	2.3	5.04E-10	midline 2
ENSG00000166510	CCDC68	2.3	4.89E-36	coiled-coil domain containing 68
ENSG00000083799	CYLD	2.3	8.97E-78	CYLD lysine 63 deubiquitinase
ENSG00000104312	RIPK2	2.3	9.86E-208	receptor interacting serine/threonine kinase 2
ENSG00000204758	-	2.3	1.32E-21	novel transcript 2C antisense to RPL26L1
ENSG00000115267	IFIH1	2.3	1.33E-71	interferon induced with helicase C domain 1
ENSG00000010295	IFFO1	2.3	0.0291092	intermediate filament family orphan 1
ENSG00000206503	HLA-A	2.3	1.80E-68	major histocompatibility complex 2C class I 2C A
ENSG00000177426	TGIF1	2.3	1.48E-252	TGFB induced factor homeobox 1
ENSG00000050344	NFE2L3	2.3	9.72E-05	nuclear factor 2C erythroid 2 like 3
ENSG00000099875	MKNK2	2.3	2.75E-75	MAPK interacting serine/threonine kinase 2
ENSG00000267681	-	2.3	0.0004836	high mobility group nucleosome binding domain 1 (HMGN1) pseudogene
ENSG00000179630	LACC1	2.3	3.03E-30	laccase domain containing 1
ENSG00000257453	-	2.3	1.26E-19	novel transcript 2C antisense to PHLDA1



ENSG00000168329	CX3CR1	2.3	0.0050269	C-X3-C motif chemokine receptor 1
ENSG00000186470	BTN3A2	2.3	4.27E-290	butyrophilin subfamily 3 member A2
ENSG00000162840	MT2P1	2.3	0.0003142	metallothionein 2 pseudogene 1
ENSG00000088340	FER1L4	2.3	1.63E-14	fer-1 like family member 4 (pseudogene)
ENSG00000163395	IGFN1	2.3	0.0002641	immunoglobulin like and fibronectin type III domain containing 1
ENSG00000154721	JAM2	2.3	0.0065068	junctional adhesion molecule 2
ENSG00000214140	PRCD	2.3	3.88E-12	photoreceptor disc component
ENSG00000164733	CTSB	2.3	6.54E-150	cathepsin B
ENSG00000287616	-	2.3	0.020548	novel transcript
ENSG00000178607	ERN1	2.3	2.22E-93	endoplasmic reticulum to nucleus signaling 1
ENSG00000133101	CCNA1	2.3	0.0033482	cyclin A1
ENSG00000203772	SPRN	2.3	0.0087274	shadow of prion protein
ENSG00000159216	RUNX1	2.3	3.04E-70	RUNX family transcription factor 1
ENSG00000136280	CCM2	2.3	1.71E-61	CCM2 scaffold protein
ENSG00000287188	-	2.3	0.0477546	novel transcript 2C antisense to ANXA10
ENSG00000170390	DCLK2	2.3	1.53E-75	doublecortin like kinase 2
ENSG00000134470	IL15RA	2.3	1.84E-71	interleukin 15 receptor subunit alpha
ENSG00000181652	ATG9B	2.3	0.0022885	autophagy related 9B
ENSG00000213714	FAM209B	2.3	0.0413084	family with sequence similarity 209 member B
ENSG00000170909	OSCAR	2.3	2.85E-09	osteoclast associated Ig-like receptor
ENSG00000105855	ITGB8	2.3	2.26E-11	integrin subunit beta 8
ENSG00000204261	PSMB8-AS1	2.3	2.12E-47	PSMB8 antisense RNA 1 (head to head)
ENSG00000251532	-	2.3	4.23E-07	novel transcript
ENSG00000061455	PRDM6	2.3	5.51E-08	PR/SET domain 6
ENSG00000138642	HERC6	2.3	4.11E-107	HECT and RLD domain containing E3 ubiquitin protein ligase family member 6
ENSG00000237505	PKN2-AS1	2.3	0.0021141	PKN2 antisense RNA 1
ENSG00000105976	MET	2.3	3.73E-64	MET proto-oncogene 2C receptor tyrosine kinase
ENSG00000182704	TSKU	2.3	1.63E-67	tsukushi 2C small leucine rich proteoglycan
ENSG00000147894	C9orf72	2.3	2.25E-45	C9orf72-SMCR8 complex subunit
ENSG00000226864	ATE1-AS1	2.3	1.88E-06	ATE1 antisense RNA 1
ENSG00000205090	TMEM240	2.3	1.15E-05	transmembrane protein 240
ENSG00000105492	SIGLEC6	2.3	0.0363558	sialic acid binding Ig like lectin 6
ENSG00000288710	-	2.3	0.0393202	novel protein
ENSG00000164674	SYTL3	2.3	1.13E-30	synaptotagmin like 3
ENSG00000170122	FOXD4	2.3	1.89E-08	forkhead box D4
ENSG00000166780	BMERB1	2.3	1.78E-46	bMERB domain containing 1
ENSG00000123240	OPTN	2.3	2.12E-133	optineurin
ENSG00000167996	FTH1	2.3	2.48E-90	ferritin heavy chain 1
ENSG00000256312	-	2.3	8.54E-05	novel transcript
ENSG00000072182	ASIC4	2.3	0.0033798	acid sensing ion channel subunit family member 4
ENSG00000165959	CLMN	2.2	2.19E-36	calmin
ENSG00000229021	-	2.2	0.0093464	novel transcript
ENSG00000178342	KCNG2	2.2	0.0171351	potassium voltage-gated channel modifier subfamily G member 2
ENSG00000049249	TNFRSF9	2.2	7.21E-28	TNF receptor superfamily member 9

ENSG00000254333	NDST1-AS1	2.2	0.00147	NDST1 antisense RNA 1
ENSG00000008710	PKD1	2.2	3.04E-72	polycystin 1 2C transient receptor potential channel interacting
ENSG00000197653	DNAH10	2.2	0.0016919	dynein axonemal heavy chain 10
ENSG00000269318	-	2.2	3.17E-06	novel transcript 2C antisense to MPND
ENSG00000105696	TMEM59L	2.2	0.0029607	transmembrane protein 59 like
ENSG00000119681	LTBP2	2.2	8.28E-18	latent transforming growth factor beta binding protein 2
ENSG00000259867	-	2.2	0.0005202	novel transcript 2C antisense DYNLRB2
ENSG00000278570	NR2E3	2.2	0.0057648	nuclear receptor subfamily 2 group E member 3
ENSG00000115602	IL1RL1	2.2	9.02E-07	interleukin 1 receptor like 1
ENSG00000234754	LINC02817	2.2	4.22E-06	long intergenic non-protein coding RNA 2817
ENSG00000214562	NUTM2D	2.2	6.92E-18	NUT family member 2D
ENSG00000075790	BCAP29	2.2	1.00E-62	B cell receptor associated protein 29
ENSG00000106299	WASL	2.2	5.62E-122	WASP like actin nucleation promoting factor
ENSG00000164463	CREBRF	2.2	1.55E-29	CREB3 regulatory factor
ENSG00000221955	SLC12A8	2.2	4.96E-13	solute carrier family 12 member 8
ENSG00000255046	-	2.2	3.16E-08	novel transcript
ENSG00000160183	TMPRSS3	2.2	7.47E-102	transmembrane serine protease 3
ENSG00000166250	CLMP	2.2	1.84E-74	CXADR like membrane protein
ENSG00000277715	-	2.2	3.32E-09	novel transcript 2C antisense to CKAP4
ENSG00000286861	-	2.2	0.0033341	novel transcript 2C antisense to ARG2
ENSG00000278202	-	2.2	0.0334796	novel transcript
ENSG00000263293	EFCAB13-DT	2.2	0.0286669	EFCAB13 divergent transcript
ENSG00000244945	RUFY1-AS1	2.2	0.0241983	RUFY1 antisense RNA 1
ENSG00000106853	PTGR1	2.2	3.76E-194	prostaglandin reductase 1
ENSG00000199036	MIR219A1	2.2	0.0004894	microRNA 219a-1
ENSG00000080031	PTPRH	2.2	3.68E-84	protein tyrosine phosphatase receptor type H
ENSG00000258744	-	2.2	8.13E-29	novel transcript 2C antisense to CMA1
ENSG00000151790	TDO2	2.2	3.97E-09	tryptophan 2 2C3-dioxygenase
ENSG00000177363	LRRN4CL	2.2	0.0002756	LRRN4 C-terminal like
ENSG00000264655	PPIAP54	2.2	0.007103	peptidylprolyl isomerase A pseudogene 54
ENSG00000253704	-	2.2	5.49E-05	novel transcript
ENSG00000027697	IFNGR1	2.2	1.63E-142	interferon gamma receptor 1
ENSG00000096070	BRPF3	2.2	3.22E-146	bromodomain and PHD finger containing 3
ENSG00000122432	SPATA1	2.2	2.62E-10	spermatogenesis associated 1
ENSG00000105642	KCNN1	2.2	2.74E-10	potassium calcium-activated channel subfamily N member 1
ENSG00000246548	LINC02288	2.2	0.0176724	long intergenic non-protein coding RNA 2288
ENSG00000119801	YPEL5	2.2	8.13E-125	yippee like 5
ENSG00000184939	ZFP90	2.2	1.06E-29	ZFP90 zinc finger protein
ENSG00000007314	SCN4A	2.2	8.19E-12	sodium voltage-gated channel alpha subunit 4
ENSG00000130783	CCDC62	2.2	5.48E-09	coiled-coil domain containing 62
ENSG00000158186	MRAS	2.2	3.03E-116	muscle RAS oncogene homolog
ENSG00000278997	-	2.2	5.51E-05	TEC
ENSG00000139970	RTN1	2.2	0.0173899	reticulon 1
ENSG00000257176	-	2.2	0.0363596	novel transcript 2C antisense to FAR2

ENSG00000047457	CP	2.2	1.25E-05	ceruloplasmin
ENSG00000183615	FAM167B	2.2	3.05E-34	family with sequence similarity 167 member B
ENSG00000126562	WNK4	2.2	1.57E-60	WNK lysine deficient protein kinase 4
ENSG00000182179	UBA7	2.2	5.87E-24	ubiquitin like modifier activating enzyme 7
ENSG00000173991	TCAP	2.2	7.28E-17	titin-cap
ENSG00000270580	PKD1P6-NPIPP1	2.2	1.32E-23	PKD1P6-NPIPP1 readthrough
ENSG00000128965	CHAC1	2.2	1.15E-48	ChaC glutathione specific gamma-glutamylcyclotransferase 1
ENSG00000157227	MMP14	2.2	3.89E-11	matrix metalloproteinase 14
ENSG00000260190	-	2.2	8.70E-09	novel transcript 2C overlapping FBXW5
ENSG00000205559	CHKB-DT	2.2	7.99E-32	CHKB divergent transcript
ENSG00000139899	CBLN3	2.2	1.07E-09	cerebellin 3 precursor
ENSG00000134376	CRB1	2.2	0.0062688	crumbs cell polarity complex component 1
ENSG00000124201	ZNFX1	2.2	2.15E-189	zinc finger NFX1-type containing 1
ENSG00000185296	-	2.2	0.0287968	aurora kinase A interacting protein 1 (AURKAIP1) pseudogene
ENSG00000058063	ATP11B	2.2	2.42E-37	ATPase phospholipid transporting 11B (putative)
ENSG00000273419	-	2.2	3.36E-06	novel transcript 2C antisense to ZNF862
ENSG00000111912	NCOA7	2.2	6.53E-93	nuclear receptor coactivator 7
ENSG00000175906	ARL4D	2.2	9.35E-48	ADP ribosylation factor like GTPase 4D
ENSG00000248554	C5orf34-AS1	2.2	0.0004649	C5orf34 antisense RNA 1
ENSG00000185022	MAFF	2.2	3.22E-47	MAF bZIP transcription factor F
ENSG00000169918	OTUD7A	2.2	0.0024794	OTU deubiquitinase 7A
ENSG00000163659	TIPARP	2.2	2.31E-112	TCDD inducible poly(ADP-ribose) polymerase
ENSG00000285906	-	2.2	1.36E-66	Novel transcript 2C antisense to HRH1
ENSG00000230295	GTF2IP23	2.2	0.0022047	general transcription factor Iii pseudogene 23
ENSG00000114315	HES1	2.2	3.91E-62	hes family bHLH transcription factor 1
ENSG00000167995	BEST1	2.2	7.50E-42	bestrophin 1
ENSG00000106823	ECM2	2.2	6.42E-16	extracellular matrix protein 2
ENSG00000274678	-	2.2	0.0390066	novel transcript
ENSG00000227630	LINC01132	2.2	1.80E-08	long intergenic non-protein coding RNA 1132
ENSG00000157703	SVOPL	2.2	2.42E-09	SVOP like
ENSG00000230521	-	2.2	0.001635	HLA complex group 4 pseudogene 7
ENSG00000109927	TECTA	2.2	0.0007662	tectorin alpha
ENSG00000112769	LAMA4	2.2	0.000862	laminin subunit alpha 4
ENSG00000142408	CACNG8	2.2	0.0035936	calcium voltage-gated channel auxiliary subunit gamma 8
ENSG00000285602	-	2.1	0.0019853	novel protein
ENSG00000254815	LMNTD2-AS1	2.1	1.49E-05	LMNTD2 antisense RNA 1
ENSG00000215464	-	2.1	0.0090587	40S ribosomal protein S10 (RPS10) pseudogene
ENSG00000165091	TMC1	2.1	0.0125995	transmembrane channel like 1
ENSG00000185650	ZFP36L1	2.1	7.63E-107	ZFP36 ring finger protein like 1
ENSG00000178026	LRRRC75B	2.1	0.0113843	leucine rich repeat containing 75B
ENSG00000145431	PDGFC	2.1	0.0326451	platelet derived growth factor C
ENSG00000114861	FOXP1	2.1	3.37E-44	forkhead box P1
ENSG00000130766	SESN2	2.1	1.63E-81	sestrin 2
ENSG00000128918	ALDH1A2	2.1	1.69E-42	aldehyde dehydrogenase 1 family member A2

ENSG00000247934	-	2.1	6.69E-10	novel transcript 2C antisense to CCDC91
ENSG00000062524	LTK	2.1	0.0029156	leukocyte receptor tyrosine kinase
ENSG00000095739	BAMBI	2.1	1.09E-14	BMP and activin membrane bound inhibitor
ENSG00000143507	DUSP10	2.1	2.85E-72	dual specificity phosphatase 10
ENSG00000279668	-	2.1	0.0043504	novel transcript
ENSG00000118518	RNF146	2.1	6.61E-70	ring finger protein 146
ENSG00000184226	PCDH9	2.1	0.0012074	protocadherin 9
ENSG00000172216	CEBPB	2.1	6.37E-64	CCAAT enhancer binding protein beta
ENSG00000120875	DUSP4	2.1	1.86E-81	dual specificity phosphatase 4
ENSG00000255181	CCDC166	2.1	0.000891	coiled-coil domain containing 166
ENSG00000198855	FICD	2.1	1.43E-73	FIC domain protein adenylyltransferase
ENSG00000246560	UBE2D3-AS1	2.1	2.06E-15	UBE2D3 antisense RNA 1
ENSG00000163815	CLEC3B	2.1	0.0054594	C-type lectin domain family 3 member B
ENSG00000258469	CHMP4BP1	2.1	1.94E-05	charged multivesicular body protein 4B pseudogene 1
ENSG00000274290	H2BC6	2.1	1.90E-19	H2B clustered histone 6
ENSG00000244219	TMEM225B	2.1	0.0235717	transmembrane protein 225B
ENSG00000172780	RAB43	2.1	8.76E-32	RAB43 2C member RAS oncogene family
ENSG00000274902	-	2.1	0.0017666	novel transcript
ENSG00000227496	-	2.1	0.0007013	novel transcript
ENSG00000023909	GCLM	2.1	3.23E-139	glutamate-cysteine ligase modifier subunit
ENSG00000123595	RAB9A	2.1	1.97E-186	RAB9A 2C member RAS oncogene family
ENSG00000139890	REM2	2.1	4.52E-09	RRAD and GEM like GTPase 2
ENSG00000135111	TBX3	2.1	4.78E-104	T-box transcription factor 3
ENSG00000105523	FAM83E	2.1	0.0002241	family with sequence similarity 83 member E
ENSG00000276141	WHAMMP3	2.1	1.39E-09	WAS protein homolog associated with actin 2C golgi membranes and microtubules pseudogene 3
ENSG00000171903	CYP4F11	2.1	1.61E-21	cytochrome P450 family 4 subfamily F member 11
ENSG00000188906	LRRK2	2.1	1.14E-08	leucine rich repeat kinase 2
ENSG00000228857	-	2.1	0.0498534	novel transcript
ENSG00000177888	ZBTB41	2.1	2.88E-07	zinc finger and BTB domain containing 41
ENSG00000183171	-	2.1	0.0051019	nucleolar protein 11 2C pseudogene
ENSG00000132639	SNAP25	2.1	7.98E-17	synaptosome associated protein 25
ENSG00000228570	NUTM2E	2.1	1.82E-13	NUT family member 2E
ENSG00000073331	ALPK1	2.1	6.26E-64	alpha kinase 1
ENSG00000279193	-	2.1	0.0121108	novel transcript
ENSG00000188641	DPYD	2.1	1.74E-89	dihydropyrimidine dehydrogenase
ENSG00000146094	DOK3	2.1	1.08E-64	docking protein 3
ENSG00000135678	CPM	2.1	5.56E-124	carboxypeptidase M
ENSG00000158470	B4GALT5	2.1	3.75E-112	beta-1 2C4-galactosyltransferase 5
ENSG00000164171	ITGA2	2.1	1.79E-30	integrin subunit alpha 2
ENSG00000265658	MIR3690	2.1	0.0266338	microRNA 3690
ENSG00000197599	CCDC154	2.1	0.0035015	coiled-coil domain containing 154
ENSG00000287238	-	2.1	1.51E-30	novel transcript
ENSG00000225932	CTAGE4	2.1	1.48E-05	CTAGE family member 4
ENSG00000101782	RIOK3	2.1	3.19E-145	RIO kinase 3
ENSG00000237101	-	2.1	0.0130473	novel transcript

ENSG00000176428	VPS37D	2.1	0.007639	VPS37D subunit of ESCRT-I
ENSG00000070669	ASNS	2.1	2.25E-60	asparagine synthetase (glutamine-hydrolyzing)
ENSG00000114349	GNAT1	2.1	0.0002366	G protein subunit alpha transducin 1
ENSG00000137628	DDX60	2.1	2.14E-08	DExD/H-box helicase 60
ENSG00000173531	MST1	2.1	2.22E-07	macrophage stimulating 1
ENSG00000067066	SP100	2.1	4.89E-66	SP100 nuclear antigen
ENSG00000250326	-	2.1	0.0228069	novel transcript
ENSG00000184492	FOXD4L1	2.1	0.0001811	forkhead box D4 like 1
ENSG00000167693	NXN	2.1	6.77E-15	nucleoredoxin
ENSG00000113916	BCL6	2.1	1.81E-50	BCL6 transcription repressor
ENSG00000164619	BMPER	2.1	4.78E-05	BMP binding endothelial regulator
ENSG00000275479	-	2.1	0.0022852	novel transcript
ENSG00000131781	FMO5	2.1	0.0189597	flavin containing dimethylaniline monooxygenase 5
ENSG00000179820	MYADM	2.1	4.55E-117	myeloid associated differentiation marker
ENSG00000258101	-	2.1	9.19E-08	novel transcript 2C antisense to TUBA1C
ENSG00000251201	TMED7-TICAM2	2.1	5.11E-27	TMED7-TICAM2 readthrough
ENSG00000117586	TNFSF4	2.1	7.49E-25	TNF superfamily member 4
ENSG00000274370	-	2.1	1.63E-08	novel transcript
ENSG00000273003	ARL2-SNX15	2.1	0.0051153	ARL2-SNX15 readthrough (NMD candidate)
ENSG00000204947	ZNF425	2.1	3.82E-46	zinc finger protein 425
ENSG00000068971	PPP2R5B	2.1	1.91E-48	protein phosphatase 2 regulatory subunit B'beta
ENSG00000167992	VWCE	2.1	1.25E-09	von Willebrand factor C and EGF domains
ENSG00000260287	TBC1D3G	2.1	0.0001566	TBC1 domain family member 3G
ENSG00000145246	ATP10D	2.1	2.53E-105	ATPase phospholipid transporting 10D (putative)
ENSG00000170356	OR2A20P	2.1	6.68E-11	olfactory receptor family 2 subfamily A member 20 pseudogene
ENSG00000278090	LUNAR1	2.1	0.0002225	leukemia-associated non-coding IGF1R activator RNA 1
ENSG00000100441	KHNYN	2.1	2.29E-127	KH and NYN domain containing
ENSG00000272734	ADIRF-AS1	2.1	1.12E-52	ADIRF antisense RNA 1
ENSG00000267909	CCDC177	2.1	4.97E-07	coiled-coil domain containing 177
ENSG00000280739	EIF1B-AS1	2.1	6.62E-08	EIF1B antisense RNA 1
ENSG00000176473	WDR25	2.1	1.28E-38	WD repeat domain 25
ENSG00000226471	-	2.1	1.84E-06	novel transcript
ENSG00000227036	LINC00511	2.1	3.70E-38	long intergenic non-protein coding RNA 511
ENSG00000286048	-	2.1	1.12E-05	novel transcript 2C antisense to ITGA2
ENSG00000188620	HMX3	2.1	9.03E-08	H6 family homeobox 3
ENSG00000162747	FCGR3B	2.1	2.54E-07	Fc fragment of IgG receptor IIIb
ENSG00000116285	ERRFI1	2.1	1.02E-117	ERBB receptor feedback inhibitor 1
ENSG00000165457	FOLR2	2.1	0.002982	folate receptor beta
ENSG00000166710	B2M	2.1	1.91E-101	beta-2-microglobulin
ENSG00000273032	DGCR5	2.1	4.22E-21	DiGeorge syndrome critical region gene 5
ENSG00000206337	HCP5	2.1	2.07E-77	HLA complex P5
ENSG00000141664	ZCCHC2	2.1	1.02E-48	zinc finger CCHC-type containing 2
ENSG00000222009	BTBD19	2.1	1.13E-12	BTB domain containing 19
ENSG00000226564	FTH1P20	2.1	5.69E-07	ferritin heavy chain 1 pseudogene 20
ENSG00000159167	STC1	2.1	2.46E-31	stanniocalcin 1



ENSG00000113739	STC2	2.1	1.18E-149	stanniocalcin 2
ENSG00000240106	RN7SL146P	2.1	0.0128441	RNA 2C 7SL 2C cytoplasmic 146 2C pseudogene
ENSG00000231274	SBK3	2.1	2.41E-26	SH3 domain binding kinase family member 3
ENSG00000159784	FAM131B	2.1	1.33E-05	family with sequence similarity 131 member B
ENSG00000254470	AP5B1	2	8.31E-152	adaptor related protein complex 5 subunit beta 1
ENSG00000188177	ZC3H6	2	2.02E-16	zinc finger CCCH-type containing 6
ENSG00000261168	-	2	0.0149556	novel transcript 2C sense overlapping SEMA6C
ENSG00000202078	Y_RNA	2	0.0177232	Y RNA
ENSG00000224397	PELATON	2	1.97E-13	plaque enriched lncRNA in atherosclerotic and inflammatory bowel macrophage regulation
ENSG00000236609	ZNF853	2	0.0273848	zinc finger protein 853
ENSG00000183044	ABAT	2	2.56E-10	4-aminobutyrate aminotransferase
ENSG00000261490	-	2	0.0005316	novel transcript 2C overlapping WDR1
ENSG00000166589	CDH16	2	9.30E-09	cadherin 16
ENSG00000208028	MIR616	2	0.0057834	microRNA 616
ENSG00000257221	-	2	0.0323078	novel transcript 2C antisense to SELPLG
ENSG00000261888	-	2	1.23E-24	novel transcript
ENSG00000146072	TNFRSF21	2	3.91E-86	TNF receptor superfamily member 21
ENSG00000227619	-	2	6.46E-18	novel transcript
ENSG00000186594	MIR22HG	2	2.30E-104	MIR22 host gene
ENSG00000256683	ZNF350	2	3.90E-22	zinc finger protein 350
ENSG00000182752	PAPPA	2	6.26E-34	pappalysin 1
ENSG00000267440	LINC02594	2	0.000312	long intergenic non-protein coding RNA 2594
ENSG00000150281	CTF1	2	0.0033873	cardiotrophin 1
ENSG00000115459	ELMOD3	2	2.59E-71	ELMO domain containing 3
ENSG00000262585	LINC01979	2	1.52E-07	long intergenic non-protein coding RNA 1979
ENSG00000286760	-	2	0.000131	novel transcript
ENSG00000135378	PRRG4	2	1.05E-60	proline rich and Gla domain 4
ENSG00000157657	ZNF618	2	1.96E-17	zinc finger protein 618
ENSG00000229299	-	2	9.13E-09	novel transcript
ENSG00000143178	TBX19	2	1.25E-07	T-box transcription factor 19
ENSG00000146278	PNRC1	2	7.49E-146	proline rich nuclear receptor coactivator 1
ENSG00000123609	NMI	2	6.68E-91	N-myc and STAT interactor
ENSG00000111801	BTN3A3	2	2.40E-95	butyrophilin subfamily 3 member A3
ENSG00000125730	C3	2	2.45E-81	complement C3
ENSG00000169429	CXCL8	2	9.11E-40	C-X-C motif chemokine ligand 8
ENSG00000137965	IFI44	2	2.25E-33	interferon induced protein 44
ENSG00000115257	PCSK4	2	2.90E-10	proprotein convertase subtilisin/kexin type 4
ENSG00000164713	BRI3	2	1.17E-57	brain protein I3
ENSG00000086062	B4GALT1	2	4.51E-97	beta-1 2C4-galactosyltransferase 1
ENSG00000114541	FRMD4B	2	1.85E-52	FERM domain containing 4B
ENSG00000214145	LINC00887	2	6.65E-35	long intergenic non-protein coding RNA 887
ENSG00000160323	ADAMTS13	2	6.04E-28	ADAM metalloproteinase with thrombospondin type 1 motif 13
ENSG00000215910	C1orf167	2	8.41E-10	chromosome 1 open reading frame 167
ENSG00000163393	SLC22A15	2	6.37E-53	solute carrier family 22 member 15

ENSG00000244560	-	2	1.22E-28	zinc finger protein pseudogene
ENSG00000240270	RPL12P37	2	0.0012343	ribosomal protein L12 pseudogene 37
ENSG00000107829	FBXW4	2	3.69E-58	F-box and WD repeat domain containing 4
ENSG00000254548	-	2	7.02E-10	novel transcript
ENSG00000073282	TP63	2	3.30E-05	tumor protein p63
ENSG00000232949	-	2	0.0028008	novel transcript 2C antisense to STEAP1B
ENSG00000109787	KLF3	2	4.51E-59	Kruppel like factor 3
ENSG00000163491	NEK10	2	0.0132528	NIMA related kinase 10
ENSG00000274213	-	2	2.30E-27	novel transcript
ENSG00000134755	DSC2	2	0.0050187	desmocollin 2
ENSG00000224609	FGGY-DT	2	0.0049328	FGGY divergent transcript
ENSG00000243176	-	2	1.67E-27	novel transcript
ENSG00000103642	LACTB	2	5.41E-100	lactamase beta
ENSG00000081087	OSTM1	2	1.13E-72	osteoclastogenesis associated transmembrane protein 1
ENSG00000131669	NINJ1	2	2.55E-39	ninjurin 1
ENSG00000197776	KLHDC1	2	0.0467206	kelch domain containing 1
ENSG00000068976	PYGM	2	0.0009116	glycogen phosphorylase 2C muscle associated
ENSG00000230204	FTH1P5	2	0.0005725	ferritin heavy chain 1 pseudogene 5
ENSG00000137817	PARP6	2	1.28E-126	poly(ADP-ribose) polymerase family member 6
ENSG00000256646	-	2	0.0001262	novel PSMA2 and C7orf25 readthrough
ENSG00000166188	ZNF319	2	8.54E-66	zinc finger protein 319
ENSG00000283235	-	2	0.0210275	novel transcript
ENSG00000186847	KRT14	2	0.0300463	keratin 14
ENSG00000173432	SAA1	2	1.39E-13	serum amyloid A1
ENSG00000259856	RAB43P1	2	1.13E-12	RAB43 pseudogene 1
ENSG00000162891	IL20	2	1.59E-07	interleukin 20
ENSG00000015520	NPC1L1	2	0.0046444	NPC1 like intracellular cholesterol transporter 1
ENSG00000243896	OR2A7	2	2.14E-09	olfactory receptor family 2 subfamily A member 7
ENSG00000151364	KCTD14	2	0.0040483	potassium channel tetramerization domain containing 14
ENSG00000165983	PTER	2	1.67E-87	phosphotriesterase related
ENSG00000237840	FAM21FP	2	5.73E-08	family with sequence similarity 21 member F 2C pseudogene
ENSG00000153930	ANKFN1	2	0.0061932	ankyrin repeat and fibronectin type III domain containing 1
ENSG00000152936	LMNTD1	2	0.0216517	lamin tail domain containing 1
ENSG00000257817	-	2	0.0011115	novel transcript
ENSG00000121905	HPCA	2	0.0103075	hippocalcin
ENSG00000234975	FTH1P2	2	3.52E-51	ferritin heavy chain 1 pseudogene 2
ENSG00000198959	TGM2	2	1.05E-36	transglutaminase 2
ENSG00000107140	TESK1	2	3.63E-40	testis associated actin remodelling kinase 1
ENSG00000177694	NAALADL2	2	0.0140526	N-acetylated alpha-linked acidic dipeptidase like 2
ENSG00000260466	-	2	8.03E-06	novel transcript 2C antisense to SLC7A5
ENSG00000224097	-	2	0.0002576	WD repeat domain 5 (WDR5) pseudogene
ENSG00000229950	TFAP2A-AS1	2	1.32E-26	TFAP2A antisense RNA 1
ENSG00000147416	ATP6V1B2	2	3.42E-188	ATPase H <sup>+</sup> transporting V1 subunit B2
ENSG00000248964	-	2	2.23E-05	novel transcript
ENSG00000134698	AGO4	2	1.77E-44	argonaute RISC component 4
ENSG00000184678	H2BC21	2	1.64E-78	H2B clustered histone 21

ENSG00000267727	-	2	0.0009822	novel transcript
ENSG00000175395	ZNF25	2	1.59E-13	zinc finger protein 25
ENSG00000197889	MEIG1	2	0.0013433	meiosis/spermiogenesis associated 1
ENSG00000122694	GLIPR2	2	1.38E-05	GLI pathogenesis related 2
ENSG00000246250	-	2	0.0214298	novel transcript
ENSG00000185250	PPIL6	2	1.01E-20	peptidylprolyl isomerase like 6
ENSG00000084710	EFR3B	2	1.92E-43	EFR3 homolog B
ENSG00000155026	RSPH10B	2	0.0017471	radial spoke head 10 homolog B
ENSG00000114127	XRN1	2	6.42E-09	5'-3' exoribonuclease 1
ENSG00000165006	UBAP1	2	6.95E-128	ubiquitin associated protein 1
ENSG00000163577	EIF5A2	2	5.78E-72	eukaryotic translation initiation factor 5A2
ENSG00000272512	-	2	0.0004291	novel transcript
ENSG00000161082	CELF5	2	0.0011158	CUGBP Elav-like family member 5
ENSG00000226963	-	1.9	7.38E-07	novel transcript
ENSG00000107372	ZFAND5	1.9	1.31E-85	zinc finger AN1-type containing 5
ENSG00000154265	ABCA5	1.9	3.13E-21	ATP binding cassette subfamily A member 5
ENSG00000118804	STBD1	1.9	2.92E-08	starch binding domain 1
ENSG00000171450	CDK5R2	1.9	8.00E-06	cyclin dependent kinase 5 regulatory subunit 2
ENSG00000163870	TPRA1	1.9	5.09E-57	transmembrane protein adipocyte associated 1
ENSG00000225643	-	1.9	0.003509	novel transcript
ENSG00000183426	NPIPA1	1.9	2.19E-39	nuclear pore complex interacting protein family member A1
ENSG00000163661	PTX3	1.9	0.0039583	pentraxin 3
ENSG00000186162	CIDECP1	1.9	3.71E-35	cell death inducing DFFA like effector c pseudogene 1
ENSG00000135899	SP110	1.9	2.52E-70	SP110 nuclear body protein
ENSG00000267426	-	1.9	0.0008583	novel protein
ENSG00000224376	-	1.9	4.23E-05	novel transcript
ENSG00000109819	PPARGC1A	1.9	6.33E-22	PPARG coactivator 1 alpha
ENSG00000148926	ADM	1.9	6.54E-42	adrenomedullin
ENSG00000197766	CFD	1.9	7.03E-47	complement factor D
ENSG00000174945	AMZ1	1.9	8.55E-17	archaelysin family metallopeptidase 1
ENSG00000246640	PICART1	1.9	9.53E-12	p53 inducible cancer associated RNA transcript 1
ENSG00000147852	VLDLR	1.9	7.51E-05	very low density lipoprotein receptor
ENSG00000101188	NTSR1	1.9	0.0102537	neurotensin receptor 1
ENSG00000171840	NINJ2	1.9	3.65E-16	ninjurin 2
ENSG00000008513	ST3GAL1	1.9	1.34E-111	ST3 beta-galactoside alpha-2 2C3-sialyltransferase 1
ENSG00000121060	TRIM25	1.9	1.94E-125	tripartite motif containing 25
ENSG00000092529	CAPN3	1.9	0.0023138	calpain 3
ENSG00000213214	ARHGEF35	1.9	9.63E-61	Rho guanine nucleotide exchange factor 35
ENSG00000068985	PAGE1	1.9	0.00825	PAGE family member 1
ENSG00000108785	HSD17B1P1	1.9	1.15E-08	hydroxysteroid 17-beta dehydrogenase 1 pseudogene 1
ENSG00000160190	SLC37A1	1.9	1.28E-43	solute carrier family 37 member 1
ENSG00000198711	SSBP3-AS1	1.9	0.029109	SSBP3 antisense RNA 1
ENSG00000249786	EAF1-AS1	1.9	0.0002754	EAF1 antisense RNA 1
ENSG00000132718	SYT11	1.9	3.65E-05	synaptotagmin 11

ENSG00000183889	-	1.9	2.75E-07	novel member of the nuclear pore complex interacting protein NPIP gene family
ENSG00000213694	S1PR3	1.9	2.24E-05	sphingosine-1-phosphate receptor 3
ENSG00000281406	BLACAT1	1.9	0.0007514	bladder cancer associated transcript 1
ENSG00000179058	C9orf50	1.9	0.0181455	chromosome 9 open reading frame 50
ENSG00000140287	HDC	1.9	4.20E-06	histidine decarboxylase
ENSG00000120549	KIAA1217	1.9	2.29E-41	KIAA1217
ENSG00000228643	-	1.9	0.0065626	novel transcript
ENSG00000255471	-	1.9	0.019727	novel transcript
ENSG00000163430	FSTL1	1.9	6.00E-17	folliculin like 1
ENSG00000236021	-	1.9	0.0022161	novel transcript
ENSG00000223361	FTH1P10	1.9	3.81E-32	ferritin heavy chain 1 pseudogene 10
ENSG00000254681	PKD1P5	1.9	3.10E-17	polycystin 1 2C transient receptor potential channel interacting pseudogene 5
ENSG00000225578	NCBP2-AS1	1.9	2.86E-06	NCBP2 antisense RNA 1
ENSG00000241170	-	1.9	1.41E-07	ribosomal protein L31 (RPL31) pseudogene
ENSG00000187634	SAMD11	1.9	2.01E-16	sterile alpha motif domain containing 11
ENSG00000263874	LINC00672	1.9	2.55E-05	long intergenic non-protein coding RNA 672
ENSG00000260633	-	1.9	0.0016282	novel transcript
ENSG00000166147	FBN1	1.9	7.49E-43	fibrillin 1
ENSG00000237938	-	1.9	0.0198018	novel transcript 2C antisense to SLC25A34 and PLEKHM2
ENSG00000272275	-	1.9	1.25E-08	novel transcript
ENSG00000262112	-	1.9	1.41E-11	novel transcript 2C antisense to TRIM25
ENSG00000074527	NTN4	1.9	2.63E-51	netrin 4
ENSG00000143013	LMO4	1.9	1.93E-111	LIM domain only 4
ENSG00000278948	-	1.9	1.57E-61	TEC
ENSG00000008516	MMP25	1.9	0.0061151	matrix metalloproteinase 25
ENSG00000254732	-	1.9	0.0200427	novel protein 2C C11orf31-CTNND1 readthrough
ENSG00000287502	-	1.9	0.0096794	novel transcript
ENSG00000237864	LINC00322	1.9	0.0007105	long intergenic non-protein coding RNA 322
ENSG00000268621	IGFL2-AS1	1.9	6.35E-101	IGFL2 antisense RNA 1
ENSG00000189233	NUGGC	1.9	0.0001651	nuclear GTPase 2C germinal center associated
ENSG00000228436	-	1.9	1.09E-10	novel transcript
ENSG00000225828	FAM229A	1.9	3.85E-55	family with sequence similarity 229 member A
ENSG00000283740	TAF11L11	1.9	0.0462	TATA-box binding protein associated factor 11 like 11
ENSG00000176692	FOXC2	1.9	1.21E-41	forkhead box C2
ENSG00000173451	THAP2	1.9	2.38E-51	THAP domain containing 2
ENSG00000143627	PKLR	1.9	0.0435064	pyruvate kinase L/R
ENSG00000140254	DUOXA1	1.9	0.0004499	dual oxidase maturation factor 1
ENSG00000280213	UCKL1-AS1	1.9	2.17E-16	UCKL1 antisense RNA 1
ENSG00000271992	-	1.9	0.013434	novel transcript
ENSG00000237276	ANO7L1	1.9	2.23E-07	anoctamin 7 like 1 (pseudogene)
ENSG00000128590	DNAJB9	1.9	1.66E-123	DnaJ heat shock protein family (Hsp40) member B9
ENSG00000131080	EDA2R	1.9	0.0304702	ectodysplasin A2 receptor
ENSG00000123892	RAB38	1.9	0.0006468	RAB38 2C member RAS oncogene family
ENSG00000105227	PRX	1.9	6.12E-33	periaxin

ENSG00000233024	NPIPA9	1.9	4.18E-11	nuclear pore complex interacting protein family 2C member A9
ENSG00000234311	-	1.9	3.19E-14	novel transcript
ENSG00000163347	CLDN1	1.9	2.67E-179	claudin 1
ENSG00000080845	DLGAP4	1.9	4.91E-61	DLG associated protein 4
ENSG00000161243	FBXO27	1.9	2.52E-09	F-box protein 27
ENSG00000150510	FAM124A	1.9	8.13E-07	family with sequence similarity 124 member A
ENSG00000286001	-	1.9	4.13E-07	novel protein
ENSG00000176903	PNMA1	1.9	8.93E-107	PNMA family member 1
ENSG00000227582	ADGRF5P1	1.9	0.0012711	adhesion G protein-coupled receptor F5 pseudogene 1
ENSG00000136436	CALCOCO2	1.9	1.39E-165	calcium binding and coiled-coil domain 2
ENSG00000178301	AQP11	1.9	1.90E-06	aquaporin 11
ENSG00000157693	TMEM268	1.9	7.22E-151	transmembrane protein 268
ENSG00000150867	PIP4K2A	1.9	1.03E-78	phosphatidylinositol-5-phosphate 4-kinase type 2 alpha
ENSG00000254122	PCDHGB7	1.9	0.005161	protocadherin gamma subfamily B 2C 7
ENSG00000179562	GCC1	1.9	3.17E-126	GRIP and coiled-coil domain containing 1
ENSG00000274419	TBC1D3D	1.9	1.23E-09	TBC1 domain family member 3D
ENSG00000178764	ZHX2	1.9	1.18E-63	zinc fingers and homeoboxes 2
ENSG00000123989	CHPF	1.9	1.88E-35	chondroitin polymerizing factor
ENSG00000233554	B4GALT1-AS1	1.9	2.51E-13	B4GALT1 antisense RNA 1
ENSG00000078237	TIGAR	1.9	2.46E-21	TP53 induced glycolysis regulatory phosphatase
ENSG00000167767	KRT80	1.9	1.92E-45	keratin 80
ENSG00000288612	-	1.9	1.55E-22	novel transcript
ENSG00000139636	LMBR1L	1.9	2.00E-40	limb development membrane protein 1 like
ENSG00000197019	SERTAD1	1.9	1.80E-23	SERTA domain containing 1
ENSG00000132429	POPDC3	1.9	6.86E-54	popeye domain containing 3
ENSG00000234814	SVIL2P	1.9	0.002473	supervillin family member 2 2C pseudogene
ENSG00000267750	RUNDC3A-AS1	1.9	1.29E-05	RUNDC3A antisense RNA 1
ENSG00000116668	SWT1	1.8	5.16E-17	SWT1 RNA endoribonuclease homolog
ENSG00000125266	EFNB2	1.8	2.21E-52	ephrin B2
ENSG00000241770	-	1.8	0.0032367	novel transcript
ENSG00000119227	PIGZ	1.8	5.59E-11	phosphatidylinositol glycan anchor biosynthesis class Z
ENSG00000226763	SRRM5	1.8	2.29E-08	serine/arginine repetitive matrix 5
ENSG00000198133	TMEM229B	1.8	1.76E-12	transmembrane protein 229B
ENSG00000254574	-	1.8	0.001001	novel transcript
ENSG00000005884	ITGA3	1.8	8.34E-58	integrin subunit alpha 3
ENSG00000272138	LINC01607	1.8	0.0016649	long intergenic non-protein coding RNA 1607
ENSG00000187556	NANOS3	1.8	0.0012431	nanos C2HC-type zinc finger 3
ENSG00000116991	SIPA1L2	1.8	5.75E-11	signal induced proliferation associated 1 like 2
ENSG00000270393	-	1.8	0.0064391	POM121 transmembrane nucleoporin (POM121) pseudogene
ENSG00000277310	-	1.8	0.0014919	novel transcript 2C sense intronic to CCDC11
ENSG00000166676	TVP23A	1.8	1.26E-09	trans-golgi network vesicle protein 23 homolog A
ENSG00000250133	HOXC-AS2	1.8	1.84E-07	HOXC cluster antisense RNA 2
ENSG00000196338	NLGN3	1.8	2.41E-34	neuroligin 3
ENSG00000275395	FCGBP	1.8	1.81E-16	Fc fragment of IgG binding protein
ENSG00000187905	LRRC74B	1.8	0.0010845	leucine rich repeat containing 74B



ENSG00000173261	PLAC8L1	1.8	5.58E-05	PLAC8 like 1
ENSG00000173706	HEG1	1.8	1.37E-41	heart development protein with EGF like domains 1
ENSG00000178685	PARP10	1.8	1.01E-35	poly(ADP-ribose) polymerase family member 10
ENSG00000120129	DUSP1	1.8	9.39E-26	dual specificity phosphatase 1
ENSG00000219626	FAM228B	1.8	7.25E-11	family with sequence similarity 228 member B
ENSG00000244161	FLNB-AS1	1.8	1.20E-06	FLNB antisense RNA 1
ENSG00000274114	ALOX15P1	1.8	0.0121877	arachidonate 15-lipoxygenase pseudogene 1
ENSG00000118849	RARRES1	1.8	4.89E-69	retinoic acid receptor responder 1
ENSG00000277895	-	1.8	0.0001925	novel transcript 2C antisense to TBK1
ENSG00000148671	ADIRF	1.8	0.0027466	adipogenesis regulatory factor
ENSG00000164465	DCBLD1	1.8	2.39E-65	discoidin 2C CUB and LCCL domain containing 1
ENSG00000140092	FBLN5	1.8	3.04E-51	fibulin 5
ENSG00000279392	-	1.8	0.0115271	ubiquitin-conjugating enzyme E2L 3 (UBE2L3) pseudogene
ENSG00000274512	TBC1D3L	1.8	2.50E-20	TBC1 domain family member 3L
ENSG00000260899	-	1.8	0.0001849	novel transcript
ENSG00000122863	CHST3	1.8	3.81E-65	carbohydrate sulfotransferase 3
ENSG00000154118	JPH3	1.8	3.57E-16	junctophilin 3
ENSG00000156042	CFAP70	1.8	1.10E-05	cilia and flagella associated protein 70
ENSG00000242866	STRC	1.8	0.0082125	stereocilin
ENSG00000198892	SHISA4	1.8	7.72E-15	shisa family member 4
ENSG00000230074	-	1.8	3.07E-08	novel transcript
ENSG00000158156	XKR8	1.8	1.01E-23	XK related 8
ENSG00000125826	RBCK1	1.8	1.89E-42	RANBP2-type and C3HC4-type zinc finger containing 1
ENSG00000137501	SYTL2	1.8	0.0346262	synaptotagmin like 2
ENSG00000169403	PTAFR	1.8	2.25E-05	platelet activating factor receptor
ENSG00000180113	TDRD6	1.8	0.001917	tudor domain containing 6
ENSG00000231133	HAR1B	1.8	3.13E-06	highly accelerated region 1B
ENSG00000106780	MEGF9	1.8	1.58E-42	multiple EGF like domains 9
ENSG00000197140	ADAM32	1.8	0.0008857	ADAM metallopeptidase domain 32
ENSG00000180720	CHRM4	1.8	0.0037888	cholinergic receptor muscarinic 4
ENSG00000156265	MAP3K7CL	1.8	1.43E-10	MAP3K7 C-terminal like
ENSG00000084636	COL16A1	1.8	2.10E-21	collagen type XVI alpha 1 chain
ENSG00000099785	MARCHF2	1.8	1.06E-21	membrane associated ring-CH-type finger 2
ENSG00000156510	HKDC1	1.8	2.90E-27	hexokinase domain containing 1
ENSG00000104432	IL7	1.8	7.95E-06	interleukin 7
ENSG00000160050	CCDC28B	1.8	0.0005539	coiled-coil domain containing 28B
ENSG00000196498	NCOR2	1.8	1.81E-80	nuclear receptor corepressor 2
ENSG00000154803	FLCN	1.8	2.05E-81	folliculin
ENSG00000173110	HSPA6	1.8	9.57E-07	heat shock protein family A (Hsp70) member 6
ENSG00000269892	-	1.8	0.0001013	novel transcript
ENSG00000230257	NFE4	1.8	0.0070713	nuclear factor 2C erythroid 4
ENSG00000252408	-	1.8	0.0219628	-
ENSG00000111885	MAN1A1	1.8	4.68E-28	mannosidase alpha class 1A member 1
ENSG00000183831	ANKRD45	1.8	0.0002783	ankyrin repeat domain 45
ENSG00000071051	NCK2	1.8	4.14E-41	NCK adaptor protein 2

ENSG00000105767	CADM4	1.8	2.00E-36	cell adhesion molecule 4
ENSG00000169184	MN1	1.8	8.08E-46	MN1 proto-oncogene 2C transcriptional regulator
ENSG00000164331	ANKRA2	1.8	2.78E-83	ankyrin repeat family A member 2
ENSG00000213221	DNLZ	1.8	0.0370258	DNL-type zinc finger
ENSG00000158865	SLC5A11	1.8	0.0009419	solute carrier family 5 member 11
ENSG00000166268	MYRFL	1.8	0.0014594	myelin regulatory factor like
ENSG00000108932	SLC16A6	1.8	4.16E-34	solute carrier family 16 member 6
ENSG00000072210	ALDH3A2	1.8	1.74E-75	aldehyde dehydrogenase 3 family member A2
ENSG00000175505	CLCF1	1.8	3.98E-45	cardiotrophin like cytokine factor 1
ENSG00000271303	SRXN1	1.8	4.20E-29	sulfiredoxin 1
ENSG00000176896	TCEANC	1.8	2.30E-18	transcription elongation factor A N-terminal and central domain containing
ENSG00000100253	MIOX	1.8	0.0078912	myo-inositol oxygenase
ENSG00000164621	SMAD5-AS1	1.8	1.76E-06	SMAD5 antisense RNA 1
ENSG00000278970	HEIH	1.8	3.22E-21	hepatocellular carcinoma up-regulated EZH2-associated long non-coding RNA
ENSG00000186832	KRT16	1.8	2.26E-15	keratin 16
ENSG00000183458	PKD1P3	1.8	8.27E-39	polycystin 1 2C transient receptor potential channel interacting pseudogene 3
ENSG00000248636	-	1.8	0.0468322	novel transcript
ENSG00000006756	ARSD	1.8	5.11E-46	arylsulfatase D
ENSG00000109814	UGDH	1.8	3.26E-57	UDP-glucose 6-dehydrogenase
ENSG00000121270	ABCC11	1.8	9.29E-05	ATP binding cassette subfamily C member 11
ENSG00000147872	PLIN2	1.8	1.50E-74	perilipin 2
ENSG00000285877	-	1.8	0.0057917	novel transcript 2C antisense to HELZ
ENSG00000125968	ID1	1.8	2.38E-40	inhibitor of DNA binding 1 2C HLH protein
ENSG00000257452	-	1.8	0.0004065	novel transcript 2C antisense to OAS1 2C OAS2 and OAS3
ENSG00000100311	PDGFB	1.8	8.52E-25	platelet derived growth factor subunit B
ENSG00000172667	ZMAT3	1.8	1.99E-29	zinc finger matrin-type 3
ENSG00000174738	NR1D2	1.8	4.70E-26	nuclear receptor subfamily 1 group D member 2
ENSG00000273812	-	1.8	3.78E-55	novel transcript
ENSG00000285601	-	1.8	0.0003399	novel transcript
ENSG00000268879	IGFL1P1	1.8	0.0144969	IGF like family member 1 pseudogene 1
ENSG00000123992	DNPEP	1.8	3.42E-42	aspartyl aminopeptidase
ENSG00000106034	CPED1	1.8	0.0040546	cadherin like and PC-esterase domain containing 1
ENSG00000050327	ARHGEF5	1.8	1.39E-95	Rho guanine nucleotide exchange factor 5
ENSG00000273437	-	1.8	0.005441	novel transcript
ENSG00000185950	IRS2	1.8	2.10E-93	insulin receptor substrate 2
ENSG00000262898	-	1.8	1.09E-10	novel transcript
ENSG00000135241	PNPLA8	1.8	1.50E-40	patatin like phospholipase domain containing 8
ENSG00000166046	TCP11L2	1.8	1.38E-22	t-complex 11 like 2
ENSG00000165972	CCDC38	1.8	0.0127056	coiled-coil domain containing 38
ENSG00000145244	CORIN	1.8	6.31E-06	corin 2C serine peptidase
ENSG00000261215	-	1.8	0.0464652	novel transcript (novel gene-CCL27 readthrough)
ENSG00000278611	ZNF426-DT	1.8	0.0002814	ZNF426 divergent transcript
ENSG00000116717	GADD45A	1.8	4.28E-29	growth arrest and DNA damage inducible alpha
ENSG00000161265	U2AF1L4	1.8	9.29E-28	U2 small nuclear RNA auxiliary factor 1 like 4

ENSG00000213997	PGAMIP7	1.8	0.0119562	phosphoglycerate mutase 1 pseudogene 7
ENSG00000261002	VPS39-DT	1.8	0.0066061	VPS39 divergent transcript
ENSG00000164597	COG5	1.8	8.51E-89	component of oligomeric golgi complex 5
ENSG00000139926	FRMD6	1.8	8.76E-53	FERM domain containing 6
ENSG00000279491	-	1.8	0.0005314	TEC
ENSG00000235448	LURAP1L-AS1	1.8	3.49E-05	LURAP1L antisense RNA 1
ENSG00000139278	GLIPR1	1.8	1.25E-06	GLI pathogenesis related 1
ENSG00000277449	CEBPB-AS1	1.8	2.93E-16	CEBPB antisense RNA 1
ENSG00000102265	TIMP1	1.8	4.61E-43	TIMP metalloproteinase inhibitor 1
ENSG00000182261	NLRP10	1.8	0.0366331	NLR family pyrin domain containing 10
ENSG00000261796	ISY1-RAB43	1.8	0.0040583	ISY1-RAB43 readthrough
ENSG00000233058	LINC00884	1.8	5.47E-12	long intergenic non-protein coding RNA 884
ENSG00000288538	-	1.8	6.77E-05	novel transcript 2C antisense to KCTD21
ENSG00000183793	NPIPA5	1.8	4.36E-06	nuclear pore complex interacting protein family member A5
ENSG00000105939	ZC3HAV1	1.8	1.21E-68	zinc finger CCCH-type containing 2C antiviral 1
ENSG00000266341	-	1.8	2.76E-06	novel transcript 2C antisense to NFE2L1
ENSG00000270021	-	1.8	0.0059424	novel transcript 2C antisense to H2AFY
ENSG00000261118	-	1.8	0.0098453	novel transcript 2C antisense to SPG7
ENSG00000168461	RAB31	1.8	6.01E-88	RAB31 2C member RAS oncogene family
ENSG00000176945	MUC20	1.7	2.92E-06	mucin 20 2C cell surface associated
ENSG00000269378	ITGB1P1	1.7	1.74E-51	integrin subunit beta 1 pseudogene 1
ENSG00000223799	IL10RB-DT	1.7	0.0026073	IL10RB divergent transcript
ENSG00000205746	PKD1P4	1.7	7.67E-10	polycystin 1 2C transient receptor potential channel interacting pseudogene 4
ENSG00000135636	DYSF	1.7	7.87E-47	dysferlin
ENSG00000165806	CASP7	1.7	5.00E-160	caspase 7
ENSG00000233929	MT1XP1	1.7	0.043742	metallothionein 1X pseudogene 1
ENSG00000129422	MTUS1	1.7	3.87E-09	microtubule associated scaffold protein 1
ENSG00000076067	RBMS2	1.7	2.22E-90	RNA binding motif single stranded interacting protein 2
ENSG00000169252	ADRB2	1.7	8.57E-12	adrenoceptor beta 2
ENSG00000136869	TLR4	1.7	4.81E-32	toll like receptor 4
ENSG00000137103	TMEM8B	1.7	5.15E-29	transmembrane protein 8B
ENSG00000111266	DUSP16	1.7	2.73E-46	dual specificity phosphatase 16
ENSG00000011422	PLAUR	1.7	1.35E-50	plasminogen activator 2C urokinase receptor
ENSG00000269371	-	1.7	0.0163686	novel transcript 2C antisense to ZNF358
ENSG00000261934	PCDHGA9	1.7	0.0017793	protocadherin gamma subfamily A 2C 9
ENSG00000146112	PPP1R18	1.7	7.40E-41	protein phosphatase 1 regulatory subunit 18
ENSG00000139351	SYCP3	1.7	0.0498993	synaptonemal complex protein 3
ENSG00000286540	-	1.7	0.0001507	novel transcript
ENSG00000155254	MARVELD1	1.7	5.89E-55	MARVEL domain containing 1
ENSG00000183287	CCBE1	1.7	0.0060706	collagen and calcium binding EGF domains 1
ENSG00000102763	VWA8	1.7	7.60E-57	von Willebrand factor A domain containing 8
ENSG00000083312	TNPO1	1.7	3.02E-30	transportin 1
ENSG00000186951	PPARA	1.7	1.32E-32	peroxisome proliferator activated receptor alpha
ENSG00000179406	LINC00174	1.7	3.61E-19	long intergenic non-protein coding RNA 174
ENSG00000230289	-	1.7	2.16E-05	novel transcript

ENSG00000166272	WBP1L	1.7	2.72E-87	WW domain binding protein 1 like
ENSG00000261251	EFCAB6-DT	1.7	0.001166	EFCAB6 divergent transcript
ENSG00000074657	ZNF532	1.7	8.05E-35	zinc finger protein 532
ENSG00000165935	SMCO2	1.7	1.79E-05	single-pass membrane protein with coiled-coil domains 2
ENSG00000131459	GFPT2	1.7	1.91E-93	glutamine-fructose-6-phosphate transaminase 2
ENSG00000101935	AMMECR1	1.7	2.64E-42	AMMECR nuclear protein 1
ENSG00000112715	VEGFA	1.7	1.28E-57	vascular endothelial growth factor A
ENSG00000271698	-	1.7	0.0233656	novel transcript
ENSG00000133639	BTG1	1.7	1.35E-108	BTG anti-proliferation factor 1
ENSG00000134369	NAV1	1.7	2.28E-15	neuron navigator 1
ENSG00000148498	PARD3	1.7	4.67E-108	par-3 family cell polarity regulator
ENSG00000203812	H2AC18	1.7	7.77E-06	H2A clustered histone 18
ENSG00000100345	MYH9	1.7	4.88E-56	myosin heavy chain 9
ENSG00000184185	KCNJ12	1.7	3.76E-26	potassium inwardly rectifying channel subfamily J member 12
ENSG00000155324	GRAMD2B	1.7	5.19E-106	GRAM domain containing 2B
ENSG00000245848	CEBPA	1.7	9.37E-24	CCAAT enhancer binding protein alpha
ENSG00000115738	ID2	1.7	4.73E-13	inhibitor of DNA binding 2
ENSG00000171992	SYNPO	1.7	9.90E-32	synaptopodin
ENSG00000135926	TMBIM1	1.7	5.50E-41	transmembrane BAX inhibitor motif containing 1
ENSG00000283849	-	1.7	0.0164974	novel transcript 2C antisense CSRNP1
ENSG00000248932	-	1.7	5.41E-14	novel transcript 2C antisense to RBP2 2C RBP1 26 NMNAT3
ENSG00000144642	RBMS3	1.7	1.23E-08	RNA binding motif single stranded interacting protein 3
ENSG00000275741	-	1.7	0.0218171	novel transcript 2C antisense to IRS2
ENSG00000204099	NEU4	1.7	0.0079256	neuraminidase 4
ENSG00000172403	SYNPO2	1.7	0.0076401	synaptopodin 2
ENSG00000204934	ATP6V0E2-AS1	1.7	0.0048741	ATP6V0E2 antisense RNA 1
ENSG00000105889	STEAP1B	1.7	0.0019475	STEAP family member 1B
ENSG00000236056	GAPDHP14	1.7	0.0127373	glyceraldehyde-3-phosphate dehydrogenase pseudogene 14
ENSG00000144468	RHBDD1	1.7	2.29E-35	rhomboid domain containing 1
ENSG00000205464	ATP6AP1L	1.7	4.89E-11	ATPase H <sup>+</sup> transporting accessory protein 1 like
ENSG00000266750	MIR4645	1.7	7.49E-07	microRNA 4645
ENSG00000166311	SMPD1	1.7	1.86E-38	sphingomyelin phosphodiesterase 1
ENSG00000103978	TMEM87A	1.7	1.36E-106	transmembrane protein 87A
ENSG00000151883	PARP8	1.7	1.58E-30	poly(ADP-ribose) polymerase family member 8
ENSG00000146576	C7orf26	1.7	9.53E-27	chromosome 7 open reading frame 26
ENSG00000115137	DNAJC27	1.7	1.43E-14	DnaJ heat shock protein family (Hsp40) member C27
ENSG00000137193	PIM1	1.7	2.71E-45	Pim-1 proto-oncogene 2C serine/threonine kinase
ENSG00000134108	ARL8B	1.7	3.48E-89	ADP ribosylation factor like GTPase 8B
ENSG00000136068	FLNB	1.7	9.99E-45	filamin B
ENSG00000170442	KRT86	1.7	1.05E-06	keratin 86
ENSG00000176919	C8G	1.7	9.44E-05	complement C8 gamma chain
ENSG00000267858	MZF1-AS1	1.7	2.10E-34	MZF1 antisense RNA 1
ENSG00000251396	LINC01301	1.7	0.0021339	long intergenic non-protein coding RNA 1301
ENSG00000180530	NRIP1	1.7	9.29E-09	nuclear receptor interacting protein 1
ENSG00000198517	MAFK	1.7	1.78E-64	MAF bZIP transcription factor K
ENSG00000129521	EGLN3	1.7	7.35E-41	egl-9 family hypoxia inducible factor 3

ENSG00000085741	WNT11	1.7	2.56E-06	Wnt family member 11
ENSG00000139178	C1RL	1.7	2.87E-106	complement C1r subcomponent like
ENSG00000163517	HDAC11	1.7	1.14E-21	histone deacetylase 11
ENSG00000276952	-	1.7	0.0311092	novel transcript 2C antisense to PYGB
ENSG00000189221	MAOA	1.7	4.99E-12	monoamine oxidase A
ENSG00000114670	NEK11	1.7	6.68E-32	NIMA related kinase 11
ENSG00000123685	BATF3	1.7	2.66E-05	basic leucine zipper ATF-like transcription factor 3
ENSG00000273062	RALGPS2-AS1	1.7	0.0007855	RALGPS2 antisense RNA 1
ENSG00000150093	ITGB1	1.7	3.68E-41	integrin subunit beta 1
ENSG00000164300	SERINC5	1.7	1.09E-47	serine incorporator 5
ENSG00000257663	-	1.7	2.90E-08	novel transcript 2C antisense to C12orf44
ENSG00000262211	-	1.7	0.0020428	novel transcript 2C antisense to IL6ST
ENSG00000189269	DRICH1	1.7	0.0266143	aspartate rich 1
ENSG00000118785	SPP1	1.7	0.0095296	secreted phosphoprotein 1
ENSG00000106404	CLDN15	1.7	2.32E-72	claudin 15
ENSG00000103942	HOMER2	1.7	1.82E-12	homer scaffold protein 2
ENSG00000187957	DNER	1.7	2.14E-28	delta/notch like EGF repeat containing
ENSG00000284820	-	1.7	0.0073313	novel protein
ENSG00000169740	ZNF32	1.7	5.15E-20	zinc finger protein 32
ENSG00000176076	KCNE5	1.7	3.44E-12	potassium voltage-gated channel subfamily E regulatory subunit 5
ENSG00000184557	SOCS3	1.7	3.03E-23	suppressor of cytokine signaling 3
ENSG00000237413	MGC27382	1.7	0.0327138	uncharacterized MGC27382
ENSG00000137343	ATAT1	1.7	0.0125951	alpha tubulin acetyltransferase 1
ENSG00000119922	IFIT2	1.7	2.93E-78	interferon induced protein with tetratricopeptide repeats 2
ENSG00000230454	-	1.7	0.0129904	novel transcript
ENSG00000164307	ERAP1	1.7	4.43E-50	endoplasmic reticulum aminopeptidase 1
ENSG00000127947	PTPN12	1.7	3.47E-44	protein tyrosine phosphatase non-receptor type 12
ENSG00000225791	TRAM2-AS1	1.7	6.16E-19	TRAM2 antisense RNA 1 (head to head)
ENSG00000215196	BASP1-AS1	1.7	8.20E-28	BASP1 antisense RNA 1
ENSG00000103222	ABCC1	1.7	2.27E-76	ATP binding cassette subfamily C member 1
ENSG00000108846	ABCC3	1.7	5.45E-68	ATP binding cassette subfamily C member 3
ENSG00000283709	FAM238C	1.7	0.0372669	family with sequence similarity 238 member C
ENSG00000105429	MEGF8	1.7	1.08E-43	multiple EGF like domains 8
ENSG00000038002	AGA	1.7	6.90E-100	aspartylglucosaminidase
ENSG00000198416	ZNF658B	1.7	0.0186538	zinc finger protein 658B (pseudogene)
ENSG00000006327	TNFRSF12A	1.7	5.29E-25	TNF receptor superfamily member 12A
ENSG00000163219	ARHGAP25	1.7	2.10E-11	Rho GTPase activating protein 25
ENSG00000288107	-	1.7	9.75E-05	novel transcript 2C antisense to FRG2Band SYCE1
ENSG00000266924	-	1.7	1.21E-06	novel transcript
ENSG00000196453	ZNF777	1.7	2.20E-34	zinc finger protein 777
ENSG00000197885	NKIRAS1	1.7	2.62E-66	NFKB inhibitor interacting Ras like 1
ENSG00000157992	KRTCAP3	1.7	0.0435498	keratinocyte associated protein 3
ENSG00000213123	DYNLT2B	1.7	2.24E-32	dynein light chain Tctex-type 2B
ENSG00000199546	Y_RNA	1.7	0.0102145	Y RNA
ENSG00000160712	IL6R	1.7	6.78E-42	interleukin 6 receptor



ENSG00000102452	NALCN	1.7	9.69E-13	sodium leak channel 2C non-selective
ENSG00000082641	NFE2L1	1.7	4.92E-84	nuclear factor 2C erythroid 2 like 1
ENSG00000227676	LINC01068	1.7	0.039357	long intergenic non-protein coding RNA 1068
ENSG00000111802	TDP2	1.7	6.62E-56	tyrosyl-DNA phosphodiesterase 2
ENSG00000156966	B3GNT7	1.7	0.0241854	UDP-GlcNAc:betaGal beta-1 2C3-N-acetylglucosaminyltransferase 7
ENSG00000099246	RAB18	1.7	1.48E-57	RAB18 2C member RAS oncogene family
ENSG00000250764	-	1.7	0.000607	novel transcript
ENSG00000182873	PRKCZ-AS1	1.7	4.13E-07	PRKCZ antisense RNA 1
ENSG00000128604	IRF5	1.7	0.0004657	interferon regulatory factor 5
ENSG00000151553	FAM160B1	1.7	5.68E-44	family with sequence similarity 160 member B1
ENSG00000110375	UPK2	1.7	0.0013923	uroplakin 2
ENSG00000149260	CAPN5	1.7	3.87E-06	calpain 5
ENSG00000006047	YBX2	1.7	0.0218166	Y-box binding protein 2
ENSG00000281756	C2-AS1	1.7	2.35E-07	C2 antisense RNA 1
ENSG00000274021	-	1.7	0.0006144	novel transcript 2C antisense to DUSP6
ENSG00000249771	-	1.7	0.0004213	novel transcript
ENSG00000100271	TTL1	1.7	6.95E-14	tubulin tyrosine ligase like 1
ENSG00000254231	-	1.7	0.0023273	novel transcript
ENSG00000155304	HSPA13	1.7	4.87E-41	heat shock protein family A (Hsp70) member 13
ENSG00000236529	-	1.7	0.0227873	novel transcript
ENSG00000177542	SLC25A22	1.7	1.88E-27	solute carrier family 25 member 22
ENSG00000175879	HOXD8	1.7	1.47E-11	homeobox D8
ENSG00000169180	XPO6	1.7	4.03E-88	exportin 6
ENSG00000165555	NOXRED1	1.7	0.0235997	NADP dependent oxidoreductase domain containing 1
ENSG00000100139	MICALL1	1.6	3.76E-67	MICAL like 1
ENSG00000172081	MOB3A	1.6	1.23E-44	MOB kinase activator 3A
ENSG00000259635	-	1.6	0.0073609	novel transcript 2C antisense OAZ2
ENSG00000116954	RRAGC	1.6	4.86E-52	Ras related GTP binding C
ENSG00000118564	FBXL5	1.6	8.63E-109	F-box and leucine rich repeat protein 5
ENSG00000204396	VWA7	1.6	2.60E-07	von Willebrand factor A domain containing 7
ENSG00000272661	-	1.6	2.33E-11	novel transcript 2C antisense to SMARCD3
ENSG00000128016	ZFP36	1.6	2.33E-26	ZFP36 ring finger protein
ENSG00000251144	-	1.6	0.0357912	novel transcript
ENSG00000162616	DNAJB4	1.6	6.41E-34	DnaJ heat shock protein family (Hsp40) member B4
ENSG00000110888	CAPRIN2	1.6	2.06E-15	caprin family member 2
ENSG00000134256	CD101	1.6	2.72E-09	CD101 molecule
ENSG00000164136	IL15	1.6	1.62E-41	interleukin 15
ENSG00000255498	-	1.6	1.06E-06	novel transcript
ENSG00000198380	GFPT1	1.6	4.78E-46	glutamine--fructose-6-phosphate transaminase 1
ENSG00000197935	ZNF311	1.6	1.29E-08	zinc finger protein 311
ENSG00000261396	-	1.6	0.0001393	novel transcript 2C antisense to FAM65A
ENSG00000261553	-	1.6	7.18E-06	novel transcript
ENSG00000272419	LINC01145	1.6	2.00E-25	long intergenic non-protein coding RNA 1145
ENSG00000258959	-	1.6	0.0139981	novel pseudogene 2C ortholog of 1700001K19Rik (M. musculus)

ENSG00000183308	-	1.6	0.018674	novel transcript
ENSG00000255100	-	1.6	2.70E-05	novel transcript
ENSG00000242960	FTH1P23	1.6	4.13E-10	ferritin heavy chain 1 pseudogene 23
ENSG00000118292	C1orf54	1.6	3.07E-11	chromosome 1 open reading frame 54
ENSG00000259448	LINC02352	1.6	0.021233	long intergenic non-protein coding RNA 2352
ENSG00000267011	-	1.6	0.0439929	novel transcript
ENSG00000125772	GPCPD1	1.6	2.70E-17	glycerophosphocholine phosphodiesterase 1
ENSG00000175482	POLD4	1.6	2.27E-18	DNA polymerase delta 4 2C accessory subunit
ENSG00000180089	TMEM86B	1.6	3.06E-08	transmembrane protein 86B
ENSG00000168591	TMUB2	1.6	1.32E-36	transmembrane and ubiquitin like domain containing 2
ENSG00000108175	ZMIZ1	1.6	5.51E-49	zinc finger MIZ-type containing 1
ENSG00000105982	RNF32	1.6	0.0004324	ring finger protein 32
ENSG00000267416	HEATR6-DT	1.6	1.78E-09	HEATR6 divergent transcript
ENSG00000145348	TBCK	1.6	3.22E-29	TBC1 domain containing kinase
ENSG00000280537	-	1.6	0.012677	novel protein 2C SLC23A3-NHEJ1 readthrough
ENSG00000260428	SCX	1.6	6.93E-08	scleraxis bHLH transcription factor
ENSG00000143819	EPHX1	1.6	1.67E-39	epoxide hydrolase 1
ENSG00000166783	MARF1	1.6	1.36E-25	meiosis regulator and mRNA stability factor 1
ENSG00000139656	SMIM2	1.6	0.0487398	small integral membrane protein 2
ENSG00000263718	SEPTIN9-DT	1.6	0.0030076	SEPTIN9 divergent transcript
ENSG00000266904	LINC00663	1.6	0.0029485	long intergenic non-protein coding RNA 663
ENSG00000063438	AHRR	1.6	6.41E-06	aryl-hydrocarbon receptor repressor
ENSG00000185418	TARS3	1.6	2.15E-26	threonyl-tRNA synthetase 3
ENSG00000228526	MIR34AHG	1.6	5.33E-11	MIR34A host gene
ENSG00000229222	KRT18P4	1.6	0.0470216	keratin 18 pseudogene 4
ENSG00000164418	GRIK2	1.6	0.00141	glutamate ionotropic receptor kainate type subunit 2
ENSG00000154114	TBCEL	1.6	6.18E-27	tubulin folding cofactor E like
ENSG00000044574	HSPA5	1.6	5.95E-167	heat shock protein family A (Hsp70) member 5
ENSG00000176624	MEX3C	1.6	1.74E-67	mex-3 RNA binding family member C
ENSG00000147255	IGSF1	1.6	9.99E-29	immunoglobulin superfamily member 1
ENSG00000163993	S100P	1.6	1.66E-25	S100 calcium binding protein P
ENSG00000006451	RALA	1.6	1.30E-64	RAS like proto-oncogene A
ENSG00000151491	EPS8	1.6	1.41E-40	epidermal growth factor receptor pathway substrate 8
ENSG00000157224	CLDN12	1.6	1.03E-55	claudin 12
ENSG00000125618	PAX8	1.6	4.27E-13	paired box 8
ENSG00000058799	YIPF1	1.6	1.51E-31	Yip1 domain family member 1
ENSG00000257298	-	1.6	0.0399426	novel transcript 2C sense intronic to LIMA1
ENSG00000062598	ELMO2	1.6	4.74E-84	engulfment and cell motility 2
ENSG00000107338	SHB	1.6	4.64E-43	SH2 domain containing adaptor protein B
ENSG00000110195	FOLR1	1.6	1.70E-37	folate receptor alpha
ENSG00000120451	SNX19	1.6	5.64E-35	sorting nexin 19
ENSG00000249740	OSMR-AS1	1.6	1.72E-21	OSMR antisense RNA 1 (head to head)
ENSG00000179833	SERTAD2	1.6	9.42E-47	SERTA domain containing 2
ENSG00000111981	ULBP1	1.6	5.34E-11	UL16 binding protein 1
ENSG00000183722	LHFPL6	1.6	0.0336962	LHFPL tetraspan subfamily member 6
ENSG00000269952	-	1.6	0.0001573	novel transcript 2C sense intronic to CREM

ENSG00000139629	GALNT6	1.6	0.0012138	polypeptide N-acetylgalactosaminyltransferase 6
ENSG00000140464	PML	1.6	1.00E-35	PML nuclear body scaffold
ENSG00000146242	TPBG	1.6	1.24E-117	trophoblast glycoprotein
ENSG00000126391	FRMD8	1.6	1.68E-64	FERM domain containing 8
ENSG00000099337	KCNK6	1.6	0.0012395	potassium two pore domain channel subfamily K member 6
ENSG00000125726	CD70	1.6	2.35E-16	CD70 molecule
ENSG00000157654	PALM2AKAP2	1.6	3.83E-11	PALM2 and AKAP2 fusion
ENSG00000088899	LZTS3	1.6	5.55E-33	leucine zipper tumor suppressor family member 3
ENSG00000086544	ITPKC	1.6	1.71E-23	inositol-trisphosphate 3-kinase C
ENSG00000259230	LINC02323	1.6	7.92E-11	long intergenic non-protein coding RNA 2323
ENSG00000261693	-	1.6	0.0166554	novel transcript 2C antisense to TSNARE1
ENSG00000259075	POC1B-GALNT4	1.6	0.001774	POC1B-GALNT4 readthrough
ENSG00000137145	DENND4C	1.6	8.86E-18	DENN domain containing 4C
ENSG00000172936	MYD88	1.6	3.71E-41	MYD88 innate immune signal transduction adaptor
ENSG00000197461	PDGFA	1.6	1.16E-20	platelet derived growth factor subunit A
ENSG00000113369	ARRDC3	1.6	3.95E-44	arrestin domain containing 3
ENSG00000059378	PARP12	1.6	2.08E-59	poly(ADP-ribose) polymerase family member 12
ENSG00000261652	C15orf65	1.6	1.75E-17	chromosome 15 open reading frame 65
ENSG00000103723	AP3B2	1.6	0.0154521	adaptor related protein complex 3 subunit beta 2
ENSG00000254837	-	1.6	6.62E-20	novel transcript
ENSG00000095383	TBC1D2	1.6	4.14E-42	TBC1 domain family member 2
ENSG00000165197	VEGFD	1.6	0.0192586	vascular endothelial growth factor D
ENSG00000048140	TSPAN17	1.6	4.65E-27	tetraspanin 17
ENSG00000232907	DLGAP4-AS1	1.6	0.0001433	DLGAP4 antisense RNA 1
ENSG00000116016	EPAS1	1.6	7.35E-53	endothelial PAS domain protein 1
ENSG00000152763	DNAI4	1.6	0.0009391	dynein axonemal intermediate chain 4
ENSG00000253669	GASAL1	1.6	6.62E-16	growth arrest associated lncRNA 1
ENSG00000198055	GRK6	1.6	9.32E-20	G protein-coupled receptor kinase 6
ENSG00000286599	-	1.6	0.0439312	novel transcript 2C antisense to EXOC1
ENSG00000287402	-	1.6	0.0032627	novel transcript
ENSG00000286118	-	1.6	0.0305513	novel transcript 2C antisense to FAM156A
ENSG00000229915	-	1.6	0.0460532	novel transcript
ENSG00000071537	SEL1L	1.6	4.88E-38	SEL1L adaptor subunit of ERAD E3 ubiquitin ligase
ENSG00000145743	FBXL17	1.6	5.53E-47	F-box and leucine rich repeat protein 17
ENSG00000023902	PLEKHO1	1.6	0.0016393	pleckstrin homology domain containing O1
ENSG00000138821	SLC39A8	1.6	4.24E-103	solute carrier family 39 member 8
ENSG00000107742	SPOCK2	1.6	9.40E-19	SPARC (osteonectin) 2C cwcw and kazal like domains proteoglycan 2
ENSG00000015532	XYLT2	1.6	2.22E-39	xylosyltransferase 2
ENSG00000286585	-	1.6	0.000497	novel transcript
ENSG00000261716	H2BC20P	1.6	3.25E-14	H2B clustered histone 20 2C pseudogene
ENSG00000148655	LRMDA	1.6	3.61E-16	leucine rich melanocyte differentiation associated
ENSG00000043355	ZIC2	1.6	2.82E-76	Zic family member 2
ENSG00000267898	-	1.6	0.0032998	novel transcript
ENSG00000139211	AMIGO2	1.6	2.19E-56	adhesion molecule with Ig like domain 2

ENSG00000147119	CHST7	1.6	2.00E-08	carbohydrate sulfotransferase 7
ENSG00000221883	ARIH2OS	1.6	8.75E-12	ARIH2 opposite strand lncRNA
ENSG00000135334	AKIRIN2	1.6	7.05E-71	akirin 2
ENSG00000129515	SNX6	1.6	4.71E-89	sorting nexin 6
ENSG00000148175	STOM	1.6	9.97E-89	stomatin
ENSG00000167034	NKX3-1	1.6	7.60E-57	NK3 homeobox 1
ENSG00000223745	CCDC18-AS1	1.6	2.54E-11	CCDC18 antisense RNA 1
ENSG00000204946	ZNF783	1.6	2.11E-42	zinc finger family member 783
ENSG00000224063	-	1.6	4.52E-21	novel transcript 2C antisense to TFPI and CALCRL
ENSG00000144791	LIMD1	1.6	1.35E-88	LIM domains containing 1
ENSG00000168961	LGALS9	1.6	0.002283	galectin 9
ENSG00000122862	SRGN	1.6	1.22E-05	serglycin
ENSG00000277938	-	1.6	1.12E-11	novel transcript
ENSG00000079257	LXN	1.6	1.12E-45	latexin
ENSG00000197122	SRC	1.6	0.0007041	SRC proto-oncogene 2C non-receptor tyrosine kinase
ENSG00000259523	-	1.6	0.0400176	novel transcript 2C antisense to TJP1
ENSG00000157578	LCA5L	1.6	4.58E-17	lebercilin LCA5 like
ENSG00000136153	LMO7	1.6	2.53E-19	LIM domain 7
ENSG00000180279	LINC01869	1.6	0.0016462	long intergenic non-protein coding RNA 1869
ENSG00000171766	GATM	1.6	0.0001481	glycine amidinotransferase
ENSG00000099769	IGFALS	1.6	0.0231782	insulin like growth factor binding protein acid labile subunit
ENSG00000184923	NUTM2A	1.6	0.0001667	NUT family member 2A
ENSG00000282034	-	1.6	1.39E-06	novel transcript
ENSG00000157106	SMG1	1.6	7.22E-05	SMG1 nonsense mediated mRNA decay associated PI3K related kinase
ENSG00000215717	TMEM167B	1.6	3.67E-60	transmembrane protein 167B
ENSG00000115109	EPB41L5	1.6	7.94E-16	erythrocyte membrane protein band 4.1 like 5
ENSG00000142046	TMEM91	1.6	8.04E-06	transmembrane protein 91
ENSG00000196611	MMP1	1.6	2.09E-18	matrix metalloproteinase 1
ENSG00000234665	LERFS	1.6	4.02E-16	lncRNA negative regulator of fibroblast-like synovioocyte migration 2C SYNCRIP interacting
ENSG00000167363	FN3K	1.6	0.0001276	fructosamine 3 kinase
ENSG00000159256	MORC3	1.6	3.78E-17	MORC family CW-type zinc finger 3
ENSG00000152684	PELO	1.6	1.88E-59	pelota mRNA surveillance and ribosome rescue factor
ENSG00000119979	DENND10	1.6	4.54E-72	DENN domain containing 10
ENSG00000175084	DES	1.6	5.78E-08	desmin
ENSG00000161011	SQSTM1	1.6	9.19E-34	sequestosome 1
ENSG00000197457	STMN3	1.6	2.94E-06	stathmin 3
ENSG00000119669	IRF2BPL	1.6	1.82E-49	interferon regulatory factor 2 binding protein like
ENSG00000074410	CA12	1.6	1.22E-35	carbonic anhydrase 12
ENSG00000015285	WAS	1.6	3.57E-09	WASP actin nucleation promoting factor
ENSG00000198074	AKR1B10	1.6	5.05E-05	aldo-keto reductase family 1 member B10
ENSG00000196954	CASP4	1.5	1.63E-97	caspase 4
ENSG00000136630	HLX	1.5	7.74E-08	H2.0 like homeobox
ENSG00000145107	TM4SF19	1.5	2.95E-12	transmembrane 4 L six family member 19
ENSG00000173482	PTPRM	1.5	4.28E-26	protein tyrosine phosphatase receptor type M

ENSG00000144036	EXOC6B	1.5	6.30E-52	exocyst complex component 6B
ENSG00000261211	-	1.5	2.29E-05	novel transcript
ENSG00000183154	-	1.5	0.0090102	novel transcript 2C antisense to ERLIN2
ENSG00000166323	C11orf65	1.5	0.0097466	chromosome 11 open reading frame 65
ENSG00000267317	-	1.5	6.82E-25	novel transcript 2C antisense to APC2
ENSG00000162783	IER5	1.5	1.29E-40	immediate early response 5
ENSG00000166173	LARP6	1.5	1.78E-23	La ribonucleoprotein 6 2C translational regulator
ENSG00000220323	H2BC19P	1.5	1.08E-17	H2B clustered histone 19 2C pseudogene
ENSG00000266208	-	1.5	1.43E-21	novel transcript 2C antisense to GJD3
ENSG00000185112	FAM43A	1.5	1.10E-18	family with sequence similarity 43 member A
ENSG00000182197	EXT1	1.5	5.03E-85	exostosin glycosyltransferase 1
ENSG00000160710	ADAR	1.5	3.39E-66	adenosine deaminase RNA specific
ENSG00000257433	-	1.5	5.41E-13	novel transcript 2C antisense to ENDOU and RAPGEF3
ENSG00000147883	CDKN2B	1.5	3.67E-32	cyclin dependent kinase inhibitor 2B
ENSG00000284747	-	1.5	0.0237081	novel transcript 2C antisense to ERRFI1
ENSG00000163738	MTHFD2L	1.5	4.03E-57	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2 like
ENSG00000172748	ZNF596	1.5	4.84E-07	zinc finger protein 596
ENSG00000100647	SUSD6	1.5	1.55E-55	sushi domain containing 6
ENSG00000172985	SH3RF3	1.5	1.56E-45	SH3 domain containing ring finger 3
ENSG00000161642	ZNF385A	1.5	3.52E-49	zinc finger protein 385A
ENSG00000167202	TBC1D2B	1.5	9.19E-73	TBC1 domain family member 2B
ENSG00000188611	ASAH2	1.5	4.44E-06	N-acylsphingosine amidohydrolase 2
ENSG00000030582	GRN	1.5	3.54E-47	granulin precursor
ENSG00000087076	HSD17B14	1.5	0.0083852	hydroxysteroid 17-beta dehydrogenase 14
ENSG00000138639	ARHGAP24	1.5	2.39E-08	Rho GTPase activating protein 24
ENSG00000135750	KCNK1	1.5	6.92E-81	potassium two pore domain channel subfamily K member 1
ENSG00000069956	MAPK6	1.5	2.26E-32	mitogen-activated protein kinase 6
ENSG00000233056	ERVH48-1	1.5	1.79E-07	endogenous retrovirus group 48 member 1
ENSG00000011198	ABHD5	1.5	3.17E-75	abhydrolase domain containing 5 2C lysophosphatidic acid acyltransferase
ENSG00000203799	CCDC162P	1.5	0.0062152	coiled-coil domain containing 162 2C pseudogene
ENSG00000178093	TSSK6	1.5	1.52E-17	testis specific serine kinase 6
ENSG00000142178	SIK1	1.5	2.97E-86	salt inducible kinase 1
ENSG00000145780	FEM1C	1.5	4.58E-22	fem-1 homolog C
ENSG00000172771	EFCAB12	1.5	0.0001141	EF-hand calcium binding domain 12
ENSG00000168026	TTC21A	1.5	1.88E-06	tetratricopeptide repeat domain 21A
ENSG00000130340	SNX9	1.5	1.86E-73	sorting nexin 9
ENSG00000070610	GBA2	1.5	4.67E-40	glucosylceramidase beta 2
ENSG00000261684	-	1.5	0.0163667	novel transcript 2C antisense to SNAP23
ENSG00000013374	NUB1	1.5	3.48E-118	negative regulator of ubiquitin like proteins 1
ENSG00000105974	CAV1	1.5	7.77E-29	caveolin 1
ENSG00000176788	BASP1	1.5	1.62E-131	brain abundant membrane attached signal protein 1
ENSG00000228043	-	1.5	0.0067025	novel transcript
ENSG00000151376	ME3	1.5	4.17E-28	malic enzyme 3
ENSG00000241322	CDRT1	1.5	8.00E-05	CMT1A duplicated region transcript 1

ENSG00000272645	GTF2IP20	1.5	8.51E-13	general transcription factor Ili pseudogene 20
ENSG00000204681	GABBR1	1.5	3.44E-13	gamma-aminobutyric acid type B receptor subunit 1
ENSG00000188996	HUS1B	1.5	0.0025614	HUS1 checkpoint clamp component B
ENSG00000274922	-	1.5	0.0004479	novel transcript
ENSG00000167470	MIDN	1.5	1.80E-38	midnolin
ENSG00000197558	SSPOP	1.5	0.0421508	SCO-spondin 2C pseudogene
ENSG00000261737	CLCA4-AS1	1.5	0.0003816	CLCA4 antisense RNA 1
ENSG00000164576	SAP30L	1.5	9.38E-115	SAP30 like
ENSG00000213190	MLLT11	1.5	1.75E-05	MLLT11 transcription factor 7 cofactor
ENSG00000269374	-	1.5	1.49E-13	zinc finger 2C AN1-type domain 5 (ZFAND5) pseudogene
ENSG00000188766	SPRED3	1.5	2.19E-17	sprouty related EVH1 domain containing 3
ENSG00000156804	FBXO32	1.5	1.79E-17	F-box protein 32
ENSG00000183337	BCOR	1.5	3.59E-55	BCL6 corepressor
ENSG00000257551	HLX-AS1	1.5	0.0010913	HLX antisense RNA 1
ENSG00000166224	SGPL1	1.5	8.71E-70	sphingosine-1-phosphate lyase 1
ENSG00000205336	ADGRG1	1.5	5.65E-39	adhesion G protein-coupled receptor G1
ENSG00000251580	LINC02482	1.5	0.0402247	long intergenic non-protein coding RNA 2482
ENSG00000170919	TPT1-AS1	1.5	1.97E-33	TPT1 antisense RNA 1
ENSG00000125875	TBC1D20	1.5	6.72E-77	TBC1 domain family member 20
ENSG00000104043	ATP8B4	1.5	1.48E-21	ATPase phospholipid transporting 8B4 (putative)
ENSG00000130758	MAP3K10	1.5	3.96E-28	mitogen-activated protein kinase kinase kinase 10
ENSG00000156219	ART3	1.5	6.02E-08	ADP-ribosyltransferase 3 (inactive)
ENSG00000232788	ITGA6-AS1	1.5	0.0071188	ITGA6 antisense RNA 1
ENSG00000147650	LRP12	1.5	5.24E-26	LDL receptor related protein 12
ENSG00000130755	GMFG	1.5	0.010441	glia maturation factor gamma
ENSG00000171174	RBKS	1.5	1.40E-18	ribokinase
ENSG00000093000	NUP50	1.5	1.83E-22	nucleoporin 50
ENSG00000127666	TICAM1	1.5	6.45E-27	toll like receptor adaptor molecule 1
ENSG00000259705	-	1.5	0.0021398	novel transcript
ENSG00000143355	LHX9	1.5	0.0031973	LIM homeobox 9
ENSG00000178381	ZFAND2A	1.5	2.43E-31	zinc finger AN1-type containing 2A
ENSG00000219682	-	1.5	0.0012858	nucleoporin 50kD (NUP50) pseudogene
ENSG00000101928	MOSPD1	1.5	1.82E-66	motile sperm domain containing 1
ENSG00000186567	CEACAM19	1.5	3.48E-20	CEA cell adhesion molecule 19
ENSG00000144730	IL17RD	1.5	1.38E-14	interleukin 17 receptor D
ENSG00000243646	IL10RB	1.5	7.75E-31	interleukin 10 receptor subunit beta
ENSG00000162458	FBLIM1	1.5	1.49E-26	filamin binding LIM protein 1
ENSG00000100911	PSME2	1.5	2.95E-42	proteasome activator subunit 2
ENSG00000157637	SLC38A10	1.5	3.04E-30	solute carrier family 38 member 10
ENSG00000115977	AAK1	1.5	5.94E-22	AP2 associated kinase 1
ENSG00000130529	TRPM4	1.5	1.40E-12	transient receptor potential cation channel subfamily M member 4
ENSG00000142197	DOP1B	1.5	7.31E-27	DOP1 leucine zipper like protein B
ENSG00000099814	CEP170B	1.5	8.23E-31	centrosomal protein 170B
ENSG00000135406	PRPH	1.5	0.0145139	peripherin



ENSG00000184014	DENND5A	1.5	6.40E-114	DENN domain containing 5A
ENSG00000148680	HTR7	1.5	1.54E-13	5-hydroxytryptamine receptor 7
ENSG00000232859	LYRM9	1.5	8.73E-07	LYR motif containing 9
ENSG00000279692	-	1.5	3.94E-12	TEC
ENSG00000164181	ELOVL7	1.5	5.69E-26	ELOVL fatty acid elongase 7
ENSG00000168264	IRF2BP2	1.5	3.84E-75	interferon regulatory factor 2 binding protein 2
ENSG00000247679	-	1.5	3.60E-25	novel transcript
ENSG00000160973	FOXH1	1.5	0.0084557	forkhead box H1
ENSG00000012124	CD22	1.5	0.0175105	CD22 molecule
ENSG00000126368	NR1D1	1.5	9.43E-26	nuclear receptor subfamily 1 group D member 1
ENSG00000131374	TBC1D5	1.5	4.42E-29	TBC1 domain family member 5
ENSG00000136048	DRAM1	1.5	5.97E-58	DNA damage regulated autophagy modulator 1
ENSG00000257052	-	1.5	0.0001136	novel transcript
ENSG00000163683	SMIM14	1.5	6.86E-57	small integral membrane protein 14
ENSG00000275342	PRAG1	1.5	4.16E-32	PEAK1 related 2C kinase-activating pseudokinase 1
ENSG00000197818	SLC9A8	1.5	5.40E-57	solute carrier family 9 member A8
ENSG00000228933	-	1.5	0.000186	novel transcript
ENSG00000231528	FAM225A	1.5	4.13E-07	family with sequence similarity 225 member A
ENSG00000082014	SMARCD3	1.5	1.72E-22	SWI/SNF related 2C matrix associated 2C actin dependent regulator of chromatin 2C subfamily d 2C member 3
ENSG00000088053	GP6	1.5	0.003894	glycoprotein VI platelet
ENSG00000060491	OGFR	1.5	2.45E-26	opioid growth factor receptor
ENSG00000231711	LINC00899	1.5	2.59E-20	long intergenic non-protein coding RNA 899
ENSG00000240038	AMY2B	1.5	0.0032514	amylase alpha 2B
ENSG00000165424	ZCCHC24	1.5	2.33E-43	zinc finger CCHC-type containing 24
ENSG00000141504	SAT2	1.5	2.19E-24	spermidine/spermine N1-acetyltransferase family member 2
ENSG00000213937	CLDN9	1.5	0.0003148	claudin 9
ENSG00000163874	ZC3H12A	1.5	2.73E-34	zinc finger CCCH-type containing 12A
ENSG00000170458	CD14	1.5	5.15E-09	CD14 molecule
ENSG00000169118	CSNK1G1	1.5	2.15E-48	casein kinase 1 gamma 1
ENSG00000247199	-	1.5	3.56E-05	novel transcript 2C antisense to SPINK9 2C SPINK7 and SPINK13
ENSG00000187678	SPRY4	1.5	2.16E-40	sprouty RTK signaling antagonist 4
ENSG00000163703	CRELD1	1.5	1.43E-19	cysteine rich with EGF like domains 1
ENSG00000198205	ZXDA	1.5	2.52E-31	zinc finger X-linked duplicated A
ENSG00000030110	BAK1	1.5	5.31E-21	BCL2 antagonist/killer 1
ENSG00000256073	URB1-AS1	1.5	8.62E-08	URB1 antisense RNA 1 (head to head)
ENSG00000131196	NFATC1	1.5	0.0404957	nuclear factor of activated T cells 1
ENSG00000225663	MCRIP1	1.5	4.85E-14	MAPK regulated corepressor interacting protein 1
ENSG00000169733	RFNG	1.5	1.85E-16	RFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase
ENSG00000232485	RPL37A-DT	1.5	0.0124857	RPL37A divergent transcript
ENSG00000128218	VPREB3	1.5	0.0094895	V-set pre-B cell surrogate light chain 3
ENSG00000183598	H3C13	1.5	0.0186639	H3 clustered histone 13
ENSG00000169714	CNBP	1.5	1.72E-112	CCHC-type zinc finger nucleic acid binding protein
ENSG00000229951	FLJ31356	1.5	1.92E-06	uncharacterized protein FLJ31356

ENSG00000076685	NT5C2	1.5	1.16E-73	5'-nucleotidase 2C cytosolic II
ENSG00000110756	HPS5	1.5	8.32E-39	HPS5 biogenesis of lysosomal organelles complex 2 subunit 2
ENSG00000065970	FOXJ2	1.5	7.54E-69	forkhead box J2
ENSG00000249379	-	1.5	0.001128	novel transcript
ENSG00000161939	RNASEK-C17orf49	1.5	5.19E-06	RNASEK-C17orf49 readthrough
ENSG00000102032	RENBP	1.5	0.0170412	renin binding protein
ENSG00000227906	SNAP25-AS1	1.5	0.0037375	SNAP25 antisense RNA 1
ENSG00000287507	-	1.5	0.021473	novel transcript 2C sense intronic to C21orf33and PDXKand MX2
ENSG00000251322	SHANK3	1.5	4.35E-05	SH3 and multiple ankyrin repeat domains 3
ENSG00000118689	FOXO3	1.5	5.61E-39	forkhead box O3
ENSG00000233672	RNASEH2B-AS1	1.5	0.0326995	RNASEH2B antisense RNA 1
ENSG00000110851	PRDM4	1.5	7.58E-83	PR/SET domain 4
ENSG00000140465	CYP1A1	1.5	1.15E-28	cytochrome P450 family 1 subfamily A member 1
ENSG00000182831	C16orf72	1.5	4.65E-65	chromosome 16 open reading frame 72
ENSG00000177706	FAM20C	1.4	4.27E-31	FAM20C golgi associated secretory pathway kinase
ENSG00000134070	IRAK2	1.4	1.14E-54	interleukin 1 receptor associated kinase 2
ENSG00000164877	MICALL2	1.4	2.89E-25	MICAL like 2
ENSG00000167173	C15orf39	1.4	8.06E-30	chromosome 15 open reading frame 39
ENSG00000085117	CD82	1.4	2.89E-06	CD82 molecule
ENSG00000166925	TSC22D4	1.4	2.34E-33	TSC22 domain family member 4
ENSG00000267780	-	1.4	0.0010248	novel transcript
ENSG00000275993	SIK1B	1.4	1.18E-75	salt inducible kinase 1B (putative)
ENSG00000120149	MSX2	1.4	1.40E-08	msh homeobox 2
ENSG00000143384	MCL1	1.4	8.71E-70	MCL1 apoptosis regulator 2C BCL2 family member
ENSG00000116044	NFE2L2	1.4	6.81E-49	nuclear factor 2C erythroid 2 like 2
ENSG00000054598	FOXC1	1.4	1.43E-83	forkhead box C1
ENSG00000056972	TRAF3IP2	1.4	2.70E-51	TRAF3 interacting protein 2
ENSG00000129925	PGAP6	1.4	1.45E-34	post-glycosylphosphatidylinositol attachment to proteins 6
ENSG00000288007	-	1.4	0.0009505	novel transcript
ENSG00000229320	KRT8P12	1.4	4.01E-20	keratin 8 pseudogene 12
ENSG00000121578	B4GALT4	1.4	2.37E-43	beta-1 2C4-galactosyltransferase 4
ENSG00000167123	CERCAM	1.4	0.000388	cerebral endothelial cell adhesion molecule
ENSG00000133958	UNC79	1.4	0.007966	unc-79 homolog 2C NALCN channel complex subunit
ENSG00000197780	TAF13	1.4	4.12E-65	TATA-box binding protein associated factor 13
ENSG00000178631	ACTG1P1	1.4	0.035591	actin gamma 1 pseudogene 1
ENSG00000233429	HOTAIRM1	1.4	4.08E-43	HOXA transcript antisense RNA 2C myeloid-specific 1
ENSG00000204682	MIR1915HG	1.4	7.42E-16	MIR1915 host gene
ENSG00000287725	-	1.4	0.0168756	novel protein 2C TPCN2 - SMIM38 readthrough
ENSG00000086717	PPEF1	1.4	4.43E-07	protein phosphatase with EF-hand domain 1
ENSG00000254614	-	1.4	2.55E-23	novel transcript 2C antisense to CAPN1
ENSG00000273002	ARHGEF2-AS2	1.4	1.79E-07	ARHGEF2 antisense RNA 2
ENSG00000111961	SASH1	1.4	2.11E-23	SAM and SH3 domain containing 1
ENSG00000143067	ZNF697	1.4	6.04E-40	zinc finger protein 697
ENSG00000112343	TRIM38	1.4	1.89E-36	tripartite motif containing 38
ENSG00000121064	SCPEP1	1.4	5.33E-38	serine carboxypeptidase 1

ENSG00000283538	-	1.4	0.015429	novel transcript
ENSG00000272848	-	1.4	0.0008107	novel transcript
ENSG00000172432	GTPBP2	1.4	3.99E-51	GTP binding protein 2
ENSG00000126264	HCST	1.4	9.95E-06	hematopoietic cell signal transducer
ENSG00000286388	-	1.4	6.07E-55	novel transcript
ENSG00000182220	ATP6AP2	1.4	2.48E-61	ATPase H <sup>+</sup> transporting accessory protein 2
ENSG00000271643	PDCD6IP-DT	1.4	2.49E-09	PDCD6IP divergent transcript
ENSG00000065559	MAP2K4	1.4	2.41E-47	mitogen-activated protein kinase kinase 4
ENSG00000130164	LDLR	1.4	1.22E-42	low density lipoprotein receptor
ENSG00000107566	ERLIN1	1.4	1.73E-77	ER lipid raft associated 1
ENSG00000175073	VCPIP1	1.4	9.63E-20	valosin containing protein interacting protein 1
ENSG00000143367	TUFT1	1.4	9.29E-26	tuftelin 1
ENSG00000197063	MAFG	1.4	9.38E-89	MAF bZIP transcription factor G
ENSG00000257497	-	1.4	3.76E-15	novel transcript 2C antisense to GLIPR1
ENSG00000140948	ZCCHC14	1.4	3.23E-25	zinc finger CCHC-type containing 14
ENSG00000108262	GIT1	1.4	2.48E-23	GIT ArfGAP 1
ENSG00000288060	-	1.4	0.0011171	novel transcript
ENSG00000119522	DENND1A	1.4	1.25E-39	DENN domain containing 1A
ENSG00000265666	RARA-AS1	1.4	0.0006626	RARA antisense RNA 1
ENSG00000167191	GPRC5B	1.4	0.0002807	G protein-coupled receptor class C group 5 member B
ENSG00000085982	USP40	1.4	4.05E-37	ubiquitin specific peptidase 40
ENSG00000186976	EFCAB6	1.4	0.0227095	EF-hand calcium binding domain 6
ENSG00000261889	-	1.4	3.08E-08	novel transcript
ENSG00000159176	CSRP1	1.4	3.28E-19	cysteine and glycine rich protein 1
ENSG00000166548	TK2	1.4	1.03E-44	thymidine kinase 2
ENSG00000274615	-	1.4	0.0002199	aminopeptidase puromycin sensitive (NPEPPS) pseudogene
ENSG00000171621	SPSB1	1.4	3.57E-42	splA/ryanodine receptor domain and SOCS box containing 1
ENSG00000177410	ZFAS1	1.4	1.27E-24	ZNFX1 antisense RNA 1
ENSG00000008086	CDKL5	1.4	1.87E-12	cyclin dependent kinase like 5
ENSG00000225190	PLEKHM1	1.4	6.19E-62	pleckstrin homology and RUN domain containing M1
ENSG00000227992	-	1.4	0.0023812	pseudogene similar to part of ubiquitin carboxyl-terminal hydrolase L5 UCHL5
ENSG00000175471	MCTP1	1.4	3.26E-20	multiple C2 and transmembrane domain containing 1
ENSG00000157625	TAB3	1.4	6.19E-18	TGF-beta activated kinase 1 (MAP3K7) binding protein 3
ENSG00000264769	-	1.4	0.0021866	novel transcript 2C antisense MAFG
ENSG00000153029	MR1	1.4	3.00E-88	major histocompatibility complex 2C class I-related
ENSG00000274750	H3C6	1.4	1.43E-07	H3 clustered histone 6
ENSG00000136026	CKAP4	1.4	3.82E-50	cytoskeleton associated protein 4
ENSG00000198142	SOWAHC	1.4	8.49E-51	soosondawah ankyrin repeat domain family member C
ENSG00000104856	RELB	1.4	4.39E-14	RELB proto-oncogene 2C NF-kB subunit
ENSG00000134352	IL6ST	1.4	7.31E-06	interleukin 6 signal transducer
ENSG00000121068	TBX2	1.4	5.50E-35	T-box transcription factor 2
ENSG00000235831	BHLHE40-AS1	1.4	7.15E-08	BHLHE40 antisense RNA 1
ENSG00000172086	KRCC1	1.4	2.77E-21	lysine rich coiled-coil 1
ENSG00000173559	NABP1	1.4	4.25E-19	nucleic acid binding protein 1

ENSG00000154144	TBRG1	1.4	5.04E-34	transforming growth factor beta regulator 1
ENSG00000133398	MED10	1.4	2.97E-46	mediator complex subunit 10
ENSG00000135709	KIAA0513	1.4	6.13E-32	KIAA0513
ENSG00000127952	STYXL1	1.4	6.89E-29	serine/threonine/tyrosine interacting like 1
ENSG00000185986	SDHAP3	1.4	3.66E-20	succinate dehydrogenase complex flavoprotein subunit A pseudogene 3
ENSG00000186714	CCDC73	1.4	0.0013329	coiled-coil domain containing 73
ENSG00000132819	RBM38	1.4	1.89E-21	RNA binding motif protein 38
ENSG00000204264	PSMB8	1.4	2.26E-20	proteasome 20S subunit beta 8
ENSG00000132792	CTNBL1	1.4	6.95E-60	catenin beta like 1
ENSG00000013364	MVP	1.4	8.28E-28	major vault protein
ENSG00000082996	RNF13	1.4	5.84E-38	ring finger protein 13
ENSG00000231890	DARS1-AS1	1.4	7.19E-11	DARS1 antisense RNA 1
ENSG00000282933	RHOXF1P3	1.4	0.0368411	Rhox homeobox family member 1 pseudogene 3
ENSG00000042286	AIFM2	1.4	3.52E-48	apoptosis inducing factor mitochondria associated 2
ENSG00000134954	ETS1	1.4	4.91E-36	ETS proto-oncogene 1 2C transcription factor
ENSG00000101596	SMCHD1	1.4	2.67E-05	structural maintenance of chromosomes flexible hinge domain containing 1
ENSG00000167977	KCTD5	1.4	4.00E-32	potassium channel tetramerization domain containing 5
ENSG00000181045	SLC26A11	1.4	3.18E-48	solute carrier family 26 member 11
ENSG00000261641	-	1.4	0.0002266	novel transcript 2C antisense to CLCN7
ENSG00000187231	SESTD1	1.4	1.91E-12	SEC14 and spectrin domain containing 1
ENSG00000174343	CHRNA9	1.4	4.88E-82	cholinergic receptor nicotinic alpha 9 subunit
ENSG00000151117	TMEM86A	1.4	4.50E-11	transmembrane protein 86A
ENSG00000107290	SETX	1.4	0.0001884	senataxin
ENSG00000197006	METTL9	1.4	3.02E-117	methyltransferase like 9
ENSG00000160094	ZNF362	1.4	1.48E-18	zinc finger protein 362
ENSG00000073756	PTGS2	1.4	6.06E-17	prostaglandin-endoperoxide synthase 2
ENSG00000160961	ZNF333	1.4	4.61E-19	zinc finger protein 333
ENSG00000169155	ZBTB43	1.4	8.18E-18	zinc finger and BTB domain containing 43
ENSG00000244151	-	1.4	3.16E-07	novel transcript
ENSG00000173575	CHD2	1.4	3.03E-14	chromodomain helicase DNA binding protein 2
ENSG00000095951	HIVEP1	1.4	2.12E-12	HIVEP zinc finger 1
ENSG00000205560	CPT1B	1.4	4.35E-05	carnitine palmitoyltransferase 1B
ENSG00000223764	LINC02593	1.4	5.01E-06	long intergenic non-protein coding RNA 2593
ENSG00000136603	SKIL	1.4	2.83E-12	SKI like proto-oncogene
ENSG00000148411	NACC2	1.4	1.69E-78	NACC family member 2
ENSG00000176809	LRRC37A3	1.4	4.23E-14	leucine rich repeat containing 37 member A3
ENSG00000135148	TRAFD1	1.4	1.58E-39	TRAF-type zinc finger domain containing 1
ENSG00000175730	BAK1P1	1.4	0.0031829	BCL2 antagonist/killer 1 pseudogene 1
ENSG00000262420	-	1.4	2.78E-07	novel transcript 2C antisense to TXNDC11
ENSG00000115216	NRBP1	1.4	5.01E-33	nuclear receptor binding protein 1
ENSG00000109220	CHIC2	1.4	5.93E-29	cysteine rich hydrophobic domain 2
ENSG00000249898	MCPH1-AS1	1.4	0.0032292	MCPH1 antisense RNA 1
ENSG00000109511	ANXA10	1.4	1.31E-18	annexin A10
ENSG00000123358	NR4A1	1.4	8.93E-15	nuclear receptor subfamily 4 group A member 1

ENSG00000153885	KCTD15	1.4	1.92E-61	potassium channel tetramerization domain containing 15
ENSG00000124151	NCOA3	1.4	2.41E-15	nuclear receptor coactivator 3
ENSG00000139083	ETV6	1.4	3.50E-46	ETS variant transcription factor 6
ENSG00000130956	HABP4	1.4	3.32E-30	hyaluronan binding protein 4
ENSG00000128274	A4GALT	1.4	3.65E-24	alpha 1 2C4-galactosyltransferase (P blood group)
ENSG00000107249	GLIS3	1.4	1.98E-05	GLIS family zinc finger 3
ENSG00000230091	TMEM254-AS1	1.4	0.0053797	TMEM254 antisense RNA 1
ENSG00000128342	LIF	1.4	2.24E-45	LIF interleukin 6 family cytokine
ENSG00000141582	CBX4	1.4	4.03E-25	chromobox 4
ENSG00000088826	SMOX	1.4	5.00E-26	spermine oxidase
ENSG00000264324	-	1.4	1.56E-06	novel protein
ENSG00000279253	-	1.4	9.89E-09	novel transcript
ENSG00000130147	SH3BP4	1.4	1.20E-39	SH3 domain binding protein 4
ENSG00000179532	DNHD1	1.4	5.71E-29	dynein heavy chain domain 1
ENSG00000183196	CHST6	1.4	6.45E-07	carbohydrate sulfotransferase 6
ENSG00000113083	LOX	1.4	3.58E-49	lysyl oxidase
ENSG00000258472	-	1.4	0.015808	novel protein
ENSG00000272079	-	1.4	1.05E-06	novel transcript
ENSG00000105550	FGF21	1.4	0.0010156	fibroblast growth factor 21
ENSG00000179021	C3orf38	1.4	2.66E-37	chromosome 3 open reading frame 38
ENSG00000115762	PLEKHB2	1.4	1.57E-99	pleckstrin homology domain containing B2
ENSG00000160325	CACFD1	1.4	2.36E-14	calcium channel flower domain containing 1
ENSG00000198753	PLXNB3	1.4	1.66E-08	plexin B3
ENSG00000113594	LIFR	1.4	2.79E-05	LIF receptor subunit alpha
ENSG00000140265	ZSCAN29	1.4	2.31E-27	zinc finger and SCAN domain containing 29
ENSG00000143862	ARL8A	1.4	3.18E-26	ADP ribosylation factor like GTPase 8A
ENSG00000222033	LINC01124	1.4	0.0466627	long intergenic non-protein coding RNA 1124
ENSG00000075426	FOSL2	1.4	2.14E-55	FOS like 2 2C AP-1 transcription factor subunit
ENSG00000110218	PANX1	1.4	1.21E-50	pannexin 1
ENSG00000257557	PPP1R12A-AS1	1.4	0.0010106	PPP1R12A antisense RNA 1
ENSG00000105655	ISYNA1	1.4	2.42E-15	inositol-3-phosphate synthase 1
ENSG00000204959	ARHGEF34P	1.4	9.28E-24	Rho guanine nucleotide exchange factor 34 2C pseudogene
ENSG00000214429	CYCSP6	1.4	0.0374294	CYCS pseudogene 6
ENSG00000138031	ADCY3	1.4	1.10E-44	adenylate cyclase 3
ENSG00000286650	-	1.4	0.0184213	novel transcript
ENSG00000204173	LRRC37A5P	1.4	0.0112405	leucine rich repeat containing 37 member A5 2C pseudogene
ENSG00000143774	GUK1	1.4	4.82E-15	guanylate kinase 1
ENSG00000173926	MARCHF3	1.4	7.94E-11	membrane associated ring-CH-type finger 3
ENSG00000118960	HS1BP3	1.4	1.03E-25	HCLS1 binding protein 3
ENSG00000203814	H2BC18	1.4	8.29E-06	H2B clustered histone 18
ENSG00000133393	CEP20	1.4	1.10E-77	centrosomal protein 20
ENSG00000272695	GAS6-DT	1.4	0.0002314	GAS6 divergent transcript
ENSG00000132003	ZSWIM4	1.4	2.18E-28	zinc finger SWIM-type containing 4
ENSG00000141179	PCTP	1.4	1.29E-30	phosphatidylcholine transfer protein
ENSG00000167785	ZNF558	1.4	1.24E-14	zinc finger protein 558



ENSG00000041357	PSMA4	1.4	3.20E-51	proteasome 20S subunit alpha 4
ENSG00000160293	VAV2	1.4	5.37E-60	vav guanine nucleotide exchange factor 2
ENSG00000157240	FZD1	1.4	6.69E-18	frizzled class receptor 1
ENSG00000172456	FGGY	1.4	1.16E-09	FGGY carbohydrate kinase domain containing
ENSG00000278662	GOLGA6L10	1.4	0.004785	golgin A6 family like 10
ENSG00000272086	GOLPH3-DT	1.4	4.36E-20	GOLPH3 divergent transcript
ENSG00000136002	ARHGEF4	1.4	3.51E-56	Rho guanine nucleotide exchange factor 4
ENSG00000099194	SCD	1.4	1.78E-39	stearoyl-CoA desaturase
ENSG00000198363	ASPH	1.4	1.29E-26	aspartate beta-hydroxylase
ENSG00000158411	MITD1	1.4	2.03E-39	microtubule interacting and trafficking domain containing 1
ENSG00000155016	CYP2U1	1.4	8.09E-09	cytochrome P450 family 2 subfamily U member 1
ENSG00000286502	-	1.4	0.0128214	novel transcript 2C antisense to COL5A1
ENSG00000135069	PSAT1	1.4	1.14E-86	phosphoserine aminotransferase 1
ENSG00000156639	ZFAND3	1.4	2.96E-47	zinc finger AN1-type containing 3
ENSG00000232160	RAP2C-AS1	1.4	0.0010465	RAP2C antisense RNA 1
ENSG00000163660	CCNL1	1.4	1.42E-18	cyclin L1
ENSG00000104497	SNX16	1.4	2.69E-12	sorting nexin 16
ENSG00000256966	-	1.4	0.0153627	novel transcript
ENSG00000230438	SERPINB9P1	1.4	5.18E-67	serpin family B member 9 pseudogene 1
ENSG00000225138	SLC9A3-AS1	1.4	4.55E-73	SLC9A3 antisense RNA 1
ENSG00000227258	SMIM2-AS1	1.4	4.35E-14	SMIM2 antisense RNA 1
ENSG00000101665	SMAD7	1.4	7.38E-24	SMAD family member 7
ENSG00000105755	ETHE1	1.4	9.00E-19	ETHE1 persulfide dioxygenase
ENSG00000173276	ZBTB21	1.4	1.22E-16	zinc finger and BTB domain containing 21
ENSG00000034677	RNF19A	1.4	1.30E-23	ring finger protein 19A 2C RBR E3 ubiquitin protein ligase
ENSG00000261582	-	1.4	0.0143943	novel transcript
ENSG00000231304	SGO1-AS1	1.4	4.25E-05	SGO1 antisense RNA 1
ENSG00000181004	BBS12	1.4	3.75E-12	Bardet-Biedl syndrome 12
ENSG00000136156	ITM2B	1.4	6.21E-110	integral membrane protein 2B
ENSG00000275882	IKBKGP1	1.4	0.0154159	inhibitor of nuclear factor kappa B kinase subunit gamma pseudogene 1
ENSG00000174804	FZD4	1.4	9.20E-07	frizzled class receptor 4
ENSG00000153250	RBMS1	1.4	4.77E-32	RNA binding motif single stranded interacting protein 1
ENSG00000111371	SLC38A1	1.4	7.33E-17	solute carrier family 38 member 1
ENSG00000143434	SEMA6C	1.3	2.08E-08	semaphorin 6C
ENSG00000108602	ALDH3A1	1.3	4.95E-14	aldehyde dehydrogenase 3 family member A1
ENSG00000204616	TRIM31	1.3	3.05E-06	tripartite motif containing 31
ENSG00000147324	MFHAS1	1.3	1.73E-62	malignant fibrous histiocytoma amplified sequence 1
ENSG00000109436	TBC1D9	1.3	1.98E-19	TBC1 domain family member 9
ENSG00000182459	TEX19	1.3	1.54E-06	testis expressed 19
ENSG00000273010	-	1.3	1.15E-05	novel transcript 2C antisense to LRIF1
ENSG00000228775	WEE2-AS1	1.3	0.00201	WEE2 antisense RNA 1
ENSG00000198455	ZXDB	1.3	3.08E-38	zinc finger X-linked duplicated B
ENSG00000149679	CABLES2	1.3	6.56E-44	Cdk5 and Abl enzyme substrate 2
ENSG00000175582	RAB6A	1.3	5.68E-75	RAB6A 2C member RAS oncogene family
ENSG00000160683	CXCR5	1.3	0.0199082	C-X-C motif chemokine receptor 5



ENSG00000180891	CUEDC1	1.3	1.98E-16	CUE domain containing 1
ENSG00000173821	RNF213	1.3	1.36E-14	ring finger protein 213
ENSG00000282988	-	1.3	6.28E-10	novel protein
ENSG00000153485	TMEM251	1.3	3.78E-32	transmembrane protein 251
ENSG00000275734	-	1.3	8.32E-06	novel transcript 2C sense overlapping CDK10
ENSG00000117151	CTBS	1.3	1.54E-31	chitobiase
ENSG00000126062	TMEM115	1.3	1.69E-27	transmembrane protein 115
ENSG00000226067	LINC00623	1.3	2.07E-07	long intergenic non-protein coding RNA 623
ENSG00000162591	MEGF6	1.3	8.95E-44	multiple EGF like domains 6
ENSG00000175895	PLEKHF2	1.3	2.45E-37	pleckstrin homology and FYVE domain containing 2
ENSG00000137752	CASP1	1.3	2.19E-54	caspase 1
ENSG00000175224	ATG13	1.3	3.54E-40	autophagy related 13
ENSG00000124786	SLC35B3	1.3	6.22E-26	solute carrier family 35 member B3
ENSG00000170681	CAVIN4	1.3	0.0154555	caveolae associated protein 4
ENSG00000240230	COX19	1.3	3.04E-76	cytochrome c oxidase assembly factor COX19
ENSG00000250509	-	1.3	0.0005071	novel transcript
ENSG00000243766	HOTTIP	1.3	0.0108162	HOXA distal transcript antisense RNA
ENSG00000137834	SMAD6	1.3	1.39E-40	SMAD family member 6
ENSG00000185015	CA13	1.3	7.23E-20	carbonic anhydrase 13
ENSG00000169018	FEM1B	1.3	4.53E-40	fem-1 homolog B
ENSG00000179134	SAMD4B	1.3	2.48E-36	sterile alpha motif domain containing 4B
ENSG00000091592	NLRP1	1.3	0.0056067	NLR family pyrin domain containing 1
ENSG00000128512	DOCK4	1.3	7.07E-14	dedicator of cytokinesis 4
ENSG00000170802	FOXP2	1.3	4.80E-13	forkhead box N2
ENSG00000112041	TULP1	1.3	0.0075814	TUB like protein 1
ENSG00000101966	XIAP	1.3	1.07E-13	X-linked inhibitor of apoptosis
ENSG00000124145	SDC4	1.3	5.11E-42	syndecan 4
ENSG00000162496	DHRS3	1.3	9.97E-15	dehydrogenase/reductase 3
ENSG00000276570	-	1.3	6.80E-12	novel transcript
ENSG00000196275	GTF2IRD2	1.3	7.04E-07	GTF2I repeat domain containing 2
ENSG00000140941	MAP1LC3B	1.3	2.54E-95	microtubule associated protein 1 light chain 3 beta
ENSG00000179588	ZFPM1	1.3	1.48E-16	zinc finger protein 2C FOG family member 1
ENSG00000233654	-	1.3	0.0110797	novel transcript
ENSG00000171160	MORN4	1.3	8.00E-14	MORN repeat containing 4
ENSG00000124788	ATXN1	1.3	4.06E-20	ataxin 1
ENSG00000173011	TADA2B	1.3	2.22E-39	transcriptional adaptor 2B
ENSG00000128573	FOXP2	1.3	1.53E-09	forkhead box P2
ENSG00000138433	CIR1	1.3	8.95E-13	corepressor interacting with RBPJ 2C CIR1
ENSG00000272768	-	1.3	0.0014498	novel transcript 2C antisense to PURB
ENSG00000123999	INHHA	1.3	0.0007823	inhibin subunit alpha
ENSG00000267811	-	1.3	0.0183881	novel transcript 2C antisense to TAF6L
ENSG00000224470	ATXN1L	1.3	8.62E-52	ataxin 1 like
ENSG00000243279	PRAF2	1.3	1.91E-21	PRA1 domain family member 2
ENSG00000091490	SEL1L3	1.3	4.89E-35	SEL1L family member 3
ENSG00000130818	ZNF426	1.3	1.17E-26	zinc finger protein 426
ENSG00000210117	MT-TW	1.3	0.0496535	mitochondrially encoded tRNA-Trp (UGA/G)

ENSG00000285799	-	1.3	0.0142145	MHC class I polypeptide-related sequence F pseudogene
ENSG00000224886	-	1.3	0.0001803	novel pseudogene
ENSG00000159733	ZFYVE28	1.3	1.53E-15	zinc finger FYVE-type containing 28
ENSG00000139625	MAP3K12	1.3	3.61E-14	mitogen-activated protein kinase kinase kinase 12
ENSG00000255248	MIR100HG	1.3	6.27E-11	mir-100-let-7a-2-mir-125b-1 cluster host gene
ENSG00000116786	PLEKHM2	1.3	3.50E-24	pleckstrin homology and RUN domain containing M2
ENSG00000262001	DLGAP1-AS2	1.3	3.58E-23	DLGAP1 antisense RNA 2
ENSG00000265478	-	1.3	0.0176714	novel transcript
ENSG00000196743	GM2A	1.3	9.46E-53	GM2 ganglioside activator
ENSG00000229893	TAX1BP1-AS1	1.3	0.006638	TAX1BP1 antisense RNA 1
ENSG00000072364	AFF4	1.3	3.16E-13	AF4/FMR2 family member 4
ENSG00000100246	DNAL4	1.3	9.38E-14	dynein axonemal light chain 4
ENSG00000156232	WHAMM	1.3	3.19E-45	WASP homolog associated with actin 2C golgi membranes and microtubules
ENSG00000248508	SRP14-AS1	1.3	2.02E-17	SRP14 antisense RNA1 (head to head)
ENSG00000153879	CEBPG	1.3	4.32E-44	CCAAT enhancer binding protein gamma
ENSG00000174032	SLC25A30	1.3	9.13E-18	solute carrier family 25 member 30
ENSG00000171813	PWWP2B	1.3	5.26E-17	PWWP domain containing 2B
ENSG00000116761	CTH	1.3	4.67E-58	cystathionine gamma-lyase
ENSG00000131737	KRT34	1.3	3.53E-08	keratin 34
ENSG00000055070	SZRD1	1.3	3.74E-27	SUZ RNA binding domain containing 1
ENSG00000179292	TMEM151A	1.3	0.0010614	transmembrane protein 151A
ENSG00000184922	FMNL1	1.3	1.73E-27	formin like 1
ENSG00000003436	TFPI	1.3	2.25E-27	tissue factor pathway inhibitor
ENSG00000257181	-	1.3	0.0039212	novel transcript
ENSG00000204625	HCG9	1.3	0.006865	HLA complex group 9
ENSG00000237765	FAM200B	1.3	3.71E-26	family with sequence similarity 200 member B
ENSG00000273320	-	1.3	0.0030998	novel transcript 2C antisense to NAMPT
ENSG00000188315	C3orf62	1.3	4.37E-23	chromosome 3 open reading frame 62
ENSG00000259275	-	1.3	0.0314127	novel transcript
ENSG00000163235	TGFA	1.3	4.80E-65	transforming growth factor alpha
ENSG00000105996	HOXA2	1.3	0.0436868	homeobox A2
ENSG00000184271	POU6F1	1.3	3.19E-29	POU class 6 homeobox 1
ENSG00000173039	RELA	1.3	1.06E-23	RELA proto-oncogene 2C NF-kB subunit
ENSG00000251050	RBX1P2	1.3	0.0124333	RBX1 pseudogene 2
ENSG00000140022	STON2	1.3	1.10E-13	stonin 2
ENSG00000280355	-	1.3	2.02E-10	novel transcript
ENSG00000262468	LINC01569	1.3	1.70E-14	long intergenic non-protein coding RNA 1569
ENSG00000254860	TMEM9B-AS1	1.3	9.00E-17	TMEM9B antisense RNA 1
ENSG00000273445	-	1.3	0.0028941	novel transcript
ENSG00000273033	LINC02035	1.3	7.61E-10	long intergenic non-protein coding RNA 2035
ENSG00000166454	ATMIN	1.3	4.19E-32	ATM interactor
ENSG00000196421	C20orf204	1.3	7.57E-05	chromosome 20 open reading frame 204
ENSG00000141527	CARD14	1.3	0.0012865	caspase recruitment domain family member 14
ENSG00000151694	ADAM17	1.3	1.15E-33	ADAM metallopeptidase domain 17
ENSG00000117425	PTCH2	1.3	0.0001006	patched 2

ENSG00000165030	NFIL3	1.3	6.84E-47	nuclear factor 2C interleukin 3 regulated
ENSG00000232040	ZBED9	1.3	9.86E-08	zinc finger BED-type containing 9
ENSG00000143622	RIT1	1.3	4.56E-43	Ras like without CAAX 1
ENSG00000163453	IGFBP7	1.3	1.62E-05	insulin like growth factor binding protein 7
ENSG00000106052	TAX1BP1	1.3	4.82E-19	Tax1 binding protein 1
ENSG00000245498	-	1.3	0.0004836	novel transcript 2C antisense to C11orf61
ENSG00000139410	SDSL	1.3	1.71E-12	serine dehydratase like
ENSG00000124226	RNF114	1.3	7.17E-55	ring finger protein 114
ENSG00000207579	MIR662	1.3	0.0145482	microRNA 662
ENSG00000089820	ARHGAP4	1.3	1.79E-07	Rho GTPase activating protein 4
ENSG00000219200	RNASEK	1.3	1.00E-18	ribonuclease K
ENSG00000143162	CREG1	1.3	7.49E-76	cellular repressor of E1A stimulated genes 1
ENSG00000248323	LUCAT1	1.3	8.38E-15	lung cancer associated transcript 1
ENSG00000273729	-	1.3	4.31E-09	novel transcript 2C antisense to IRF2BPL
ENSG00000136010	ALDH1L2	1.3	0.0024751	aldehyde dehydrogenase 1 family member L2
ENSG00000174021	GNG5	1.3	5.43E-28	G protein subunit gamma 5
ENSG00000166349	RAG1	1.3	0.0330366	recombination activating 1
ENSG00000095321	CRAT	1.3	1.96E-19	carnitine O-acetyltransferase
ENSG00000111711	GOLT1B	1.3	1.20E-50	golgi transport 1B
ENSG00000144655	CSRNP1	1.3	1.68E-13	cysteine and serine rich nuclear protein 1
ENSG00000154065	ANKRD29	1.3	4.62E-27	ankyrin repeat domain 29
ENSG00000178386	ZNF223	1.3	0.017632	zinc finger protein 223
ENSG00000284526	-	1.3	0.033797	novel protein
ENSG00000267940	-	1.3	4.77E-05	novel transcript
ENSG00000078487	ZCWPW1	1.3	1.57E-14	zinc finger CW-type and PWWP domain containing 1
ENSG00000185437	SH3BGR	1.3	0.0003904	SH3 domain binding glutamate rich protein
ENSG00000176845	METRNL	1.3	1.81E-20	meteorin like 2C glial cell differentiation regulator
ENSG00000124782	RREB1	1.3	1.06E-27	ras responsive element binding protein 1
ENSG00000149177	PTPRJ	1.3	1.13E-36	protein tyrosine phosphatase receptor type J
ENSG00000253837	-	1.3	0.0160934	novel transcript
ENSG00000173281	PPP1R3B	1.3	5.09E-22	protein phosphatase 1 regulatory subunit 3B
ENSG00000121671	CRY2	1.3	3.65E-18	cryptochrome circadian regulator 2
ENSG00000268223	ARL14EPL	1.3	0.00167	ADP ribosylation factor like GTPase 14 effector protein like
ENSG00000205209	SCGB2B2	1.3	6.46E-06	secretoglobin family 2B member 2
ENSG00000130635	COL5A1	1.3	1.57E-42	collagen type V alpha 1 chain
ENSG00000177335	C8orf31	1.3	4.63E-07	chromosome 8 open reading frame 31
ENSG00000100221	JOSD1	1.3	1.97E-40	Josephin domain containing 1
ENSG00000272196	H2AC19	1.3	0.0017546	H2A clustered histone 19
ENSG00000169926	KLF13	1.3	2.49E-56	Kruppel like factor 13
ENSG00000115904	SOS1	1.3	1.83E-11	SOS Ras/Rac guanine nucleotide exchange factor 1
ENSG00000226549	SCDP1	1.3	4.62E-06	stearoyl-CoA desaturase pseudogene 1
ENSG00000165861	ZFYVE1	1.3	3.08E-26	zinc finger FYVE-type containing 1
ENSG00000180801	ARSJ	1.3	4.99E-20	arylsulfatase family member J
ENSG00000203875	SNHG5	1.3	3.32E-19	small nucleolar RNA host gene 5
ENSG00000197142	ACSL5	1.3	1.74E-58	acyl-CoA synthetase long chain family member 5
ENSG00000148450	MSRB2	1.3	1.71E-14	methionine sulfoxide reductase B2

ENSG00000169991	IFFO2	1.3	6.26E-21	intermediate filament family orphan 2
ENSG00000260101	-	1.3	0.0157489	novel transcript
ENSG00000119725	ZNF410	1.3	1.73E-18	zinc finger protein 410
ENSG00000286938	-	1.3	8.20E-10	novel transcript
ENSG00000117500	TMED5	1.3	1.96E-29	transmembrane p24 trafficking protein 5
ENSG00000165695	AK8	1.3	9.88E-05	adenylate kinase 8
ENSG00000273137	-	1.3	0.0280747	novel transcript 2C antisense to SELO
ENSG00000254812	-	1.3	0.0104045	novel transcript
ENSG00000251161	-	1.3	4.22E-06	novel transcript
ENSG00000133985	TTC9	1.3	4.21E-06	tetratricopeptide repeat domain 9
ENSG00000177663	IL17RA	1.3	1.88E-38	interleukin 17 receptor A
ENSG00000002919	SNX11	1.3	1.45E-15	sorting nexin 11
ENSG00000118900	UBN1	1.3	1.96E-56	ubiquitin 1
ENSG00000092010	PSME1	1.3	4.08E-27	proteasome activator subunit 1
ENSG00000171889	MIR31HG	1.3	2.52E-20	MIR31 host gene
ENSG00000111911	HINT3	1.3	9.53E-31	histidine triad nucleotide binding protein 3
ENSG00000285872	-	1.3	0.0011458	novel transcript
ENSG00000062725	APPBP2	1.3	7.42E-26	amyloid beta precursor protein binding protein 2
ENSG00000139977	NAA30	1.3	1.68E-34	N-alpha-acetyltransferase 30 2C NatC catalytic subunit
ENSG00000159263	SIM2	1.3	2.04E-22	SIM bHLH transcription factor 2
ENSG00000162702	ZNF281	1.3	1.60E-25	zinc finger protein 281
ENSG00000158055	GRHL3	1.3	0.0218881	grainyhead like transcription factor 3
ENSG00000110987	BCL7A	1.3	2.42E-21	BAF chromatin remodeling complex subunit BCL7A
ENSG00000164543	STK17A	1.3	1.24E-48	serine/threonine kinase 17a
ENSG00000272933	-	1.3	1.58E-05	novel transcript
ENSG00000159625	DRC7	1.3	0.0486358	dynein regulatory complex subunit 7
ENSG00000174151	CYB561D1	1.3	3.43E-28	cytochrome b561 family member D1
ENSG00000158006	PAFAH2	1.3	4.06E-49	platelet activating factor acetylhydrolase 2
ENSG00000198113	TOR4A	1.3	8.47E-19	torsin family 4 member A
ENSG00000227295	ELL2P1	1.3	5.42E-07	elongation factor for RNA polymerase II 2 pseudogene 1
ENSG00000221890	NPTXR	1.3	1.18E-22	neuronal pentraxin receptor
ENSG00000101849	TBL1X	1.3	8.44E-52	transducin beta like 1 X-linked
ENSG00000268173	-	1.3	0.0255886	novel protein 2C readthrough between PIK3R2 and IFI30
ENSG00000155975	VPS37A	1.3	2.94E-59	VPS37A subunit of ESCRT-I
ENSG00000080815	PSEN1	1.3	3.43E-60	presenilin 1
ENSG00000256690	-	1.3	0.0097849	novel transcript
ENSG00000069399	BCL3	1.3	5.09E-18	BCL3 transcription coactivator
ENSG00000105991	HOXA1	1.3	0.0031935	homeobox A1
ENSG00000145723	GIN1	1.3	6.00E-14	gypsy retrotransposon integrase 1
ENSG00000123395	ATG101	1.3	1.63E-16	autophagy related 101
ENSG00000237330	RNF223	1.3	7.56E-05	ring finger protein 223
ENSG00000116260	QSOX1	1.3	3.34E-23	quiescin sulfhydryl oxidase 1
ENSG00000130958	SLC35D2	1.3	4.39E-30	solute carrier family 35 member D2
ENSG00000115145	STAM2	1.3	2.64E-20	signal transducing adaptor molecule 2
ENSG00000171451	DSEL	1.3	1.82E-11	dermatan sulfate epimerase like
ENSG00000147174	GCNA	1.3	2.96E-05	germ cell nuclear acidic peptidase

ENSG00000262580	-	1.3	2.34E-22	novel transcript 2C antisense to CARD14
ENSG00000116191	RALGPS2	1.3	4.38E-13	Ral GEF with PH domain and SH3 binding motif 2
ENSG00000136051	WASHC4	1.3	1.72E-05	WASH complex subunit 4
ENSG00000174705	SH3PXD2B	1.3	1.35E-24	SH3 and PX domains 2B
ENSG00000224536	-	1.3	0.0006493	novel transcript
ENSG00000169957	ZNF768	1.3	5.39E-20	zinc finger protein 768
ENSG00000154380	ENAH	1.3	5.31E-32	ENAH actin regulator
ENSG00000133606	MKRN1	1.3	7.30E-95	makorin ring finger protein 1
ENSG00000235527	HIPK1-AS1	1.3	0.0385962	HIPK1 antisense RNA 1
ENSG00000148842	CNNM2	1.3	3.38E-52	cyclin and CBS domain divalent metal cation transport mediator 2
ENSG00000106012	IQCE	1.3	2.12E-44	IQ motif containing E
ENSG00000151687	ANKAR	1.2	4.99E-06	ankyrin and armadillo repeat containing
ENSG00000124222	STX16	1.2	2.63E-30	syntaxin 16
ENSG00000132294	EFR3A	1.2	7.79E-23	EFR3 homolog A
ENSG00000198960	ARMCX6	1.2	2.92E-15	armadillo repeat containing X-linked 6
ENSG00000187953	PMS2CL	1.2	4.09E-32	PMS2 C-terminal like pseudogene
ENSG00000183840	GPR39	1.2	3.62E-21	G protein-coupled receptor 39
ENSG00000152332	UHMK1	1.2	1.73E-14	U2AF homology motif kinase 1
ENSG00000113583	C5orf15	1.2	2.24E-90	chromosome 5 open reading frame 15
ENSG00000258102	MAP1LC3B2	1.2	2.07E-32	microtubule associated protein 1 light chain 3 beta 2
ENSG00000255517	-	1.2	2.63E-12	novel transcript
ENSG00000279259	-	1.2	8.68E-07	TEC
ENSG00000106683	LIMK1	1.2	1.99E-18	LIM domain kinase 1
ENSG00000115998	C2orf42	1.2	1.00E-31	chromosome 2 open reading frame 42
ENSG00000248734	-	1.2	0.0342473	novel transcript
ENSG00000164951	PDP1	1.2	9.80E-31	pyruvate dehydrogenase phosphatase catalytic subunit 1
ENSG00000287387	-	1.2	6.19E-05	novel transcript 2C antisense to ZFP36L2
ENSG00000207181	SNORA14B	1.2	3.51E-05	small nucleolar RNA 2C H/ACA box 14B
ENSG00000074590	NUAK1	1.2	1.75E-35	NUAK family kinase 1
ENSG00000136888	ATP6V1G1	1.2	3.39E-76	ATPase H <sup>+</sup> transporting V1 subunit G1
ENSG00000183153	GJD3	1.2	0.0038596	gap junction protein delta 3
ENSG00000274315	-	1.2	0.0451698	novel transcript 2C antisense to FAR2
ENSG00000167106	FAM102A	1.2	2.76E-27	family with sequence similarity 102 member A
ENSG00000172382	PRSS27	1.2	5.31E-14	serine protease 27
ENSG00000116604	MEF2D	1.2	1.08E-34	myocyte enhancer factor 2D
ENSG00000112210	RAB23	1.2	6.45E-24	RAB23 2C member RAS oncogene family
ENSG00000213462	ERV3-1	1.2	2.45E-08	endogenous retrovirus group 3 member 1 2C envelope
ENSG00000134294	SLC38A2	1.2	3.81E-22	solute carrier family 38 member 2
ENSG00000225871	-	1.2	0.0076998	family with sequence similarity 91 2C member A1 (FAM91A1) pseudogene
ENSG00000176407	KCMF1	1.2	2.61E-63	potassium channel modulatory factor 1
ENSG00000135318	NT5E	1.2	1.77E-39	5'-nucleotidase ecto
ENSG00000173567	ADGRF3	1.2	8.52E-06	adhesion G protein-coupled receptor F3
ENSG00000130653	PNPLA7	1.2	3.60E-11	patatin like phospholipase domain containing 7
ENSG00000014914	MTMR11	1.2	4.85E-12	myotubularin related protein 11
ENSG00000223768	LINC00205	1.2	1.07E-21	long intergenic non-protein coding RNA 205

ENSG00000148082	SHC3	1.2	2.58E-09	SHC adaptor protein 3
ENSG00000136235	GPNMB	1.2	3.65E-06	glycoprotein nmb
ENSG00000100902	PSMA6	1.2	2.71E-29	proteasome 20S subunit alpha 6
ENSG00000161638	ITGA5	1.2	8.23E-31	integrin subunit alpha 5
ENSG0000010818	HIVEP2	1.2	3.23E-09	HIVEP zinc finger 2
ENSG00000254332	-	1.2	1.27E-34	tropomyosin 4 (TPM4) pseudogene
ENSG00000008083	JARID2	1.2	1.09E-24	jumonji and AT-rich interaction domain containing 2
ENSG00000267379	-	1.2	7.95E-05	novel transcript 2C antisense to CD97
ENSG00000181885	CLDN7	1.2	5.02E-13	claudin 7
ENSG00000263843	MIF4GD-DT	1.2	9.21E-09	MIF4GD divergent transcript
ENSG00000100299	ARSA	1.2	2.43E-16	arylsulfatase A
ENSG00000064393	HIPK2	1.2	1.88E-11	homeodomain interacting protein kinase 2
ENSG00000161021	MAML1	1.2	2.30E-62	mastermind like transcriptional coactivator 1
ENSG0000020577	SAMD4A	1.2	1.68E-12	sterile alpha motif domain containing 4A
ENSG00000213250	RBMS2P1	1.2	0.0134791	RNA binding motif single stranded interacting protein 2 pseudogene 1
ENSG00000000457	SCYL3	1.2	1.85E-25	SCY1 like pseudokinase 3
ENSG00000125551	PLGLB2	1.2	0.0327248	plasminogen like B2
ENSG00000107443	CCNJ	1.2	1.70E-27	cyclin J
ENSG00000264278	ZNF236-DT	1.2	0.0054279	ZNF236 divergent transcript
ENSG00000143776	CDC42BPA	1.2	0.0002404	CDC42 binding protein kinase alpha
ENSG00000259943	-	1.2	4.15E-25	novel transcript 2C antisense to ZMPSTE24
ENSG00000271122	HERPUD2-AS1	1.2	1.32E-08	HERPUD2 antisense RNA 1
ENSG00000101470	TNNC2	1.2	0.0112868	troponin C2 2C fast skeletal type
ENSG00000249867	LINC02742	1.2	0.0172284	long intergenic non-protein coding RNA 2742
ENSG00000167994	RAB3IL1	1.2	5.88E-19	RAB3A interacting protein like 1
ENSG00000104825	NFKBIB	1.2	5.34E-31	NFKB inhibitor beta
ENSG00000166340	TPP1	1.2	5.01E-43	tripeptidyl peptidase 1
ENSG00000147912	FBXO10	1.2	2.35E-11	F-box protein 10
ENSG00000261286	ATP2C2-AS1	1.2	2.36E-05	ATP2C2 antisense RNA 1
ENSG00000099864	PALM	1.2	2.83E-16	paralemmin
ENSG00000204160	ZDHHC18	1.2	2.67E-22	zinc finger DHHC-type palmitoyltransferase 18
ENSG00000105499	PLA2G4C	1.2	2.04E-08	phospholipase A2 group IVC
ENSG00000082146	STRADB	1.2	7.37E-50	STE20 related adaptor beta
ENSG00000228878	SEPTIN7-DT	1.2	0.0001723	SEPTIN7 divergent transcript
ENSG00000099822	HCN2	1.2	1.34E-18	hyperpolarization activated cyclic nucleotide gated potassium and sodium channel 2
ENSG00000196517	SLC6A9	1.2	5.28E-23	solute carrier family 6 member 9
ENSG00000130584	ZBTB46	1.2	8.61E-13	zinc finger and BTB domain containing 46
ENSG00000221909	FAM200A	1.2	9.10E-09	family with sequence similarity 200 member A
ENSG00000143479	DYRK3	1.2	1.06E-26	dual specificity tyrosine phosphorylation regulated kinase 3
ENSG00000255200	PGAM1P8	1.2	0.0112822	phosphoglycerate mutase 1 pseudogene 8
ENSG00000159461	AMFR	1.2	1.57E-32	autocrine motility factor receptor
ENSG00000251615	-	1.2	1.34E-05	novel transcript
ENSG00000173212	MAB21L3	1.2	0.0009927	mab-21 like 3
ENSG00000255031	-	1.2	4.34E-08	novel transcript 2C antisense to CHKA
ENSG00000119686	FLVCR2	1.2	8.19E-10	FLVCR heme transporter 2



ENSG00000125846	ZNF133	1.2	3.47E-23	zinc finger protein 133
ENSG00000184986	TMEM121	1.2	0.0375304	transmembrane protein 121
ENSG00000155363	MOV10	1.2	1.64E-30	Mov10 RISC complex RNA helicase
ENSG00000175426	PCSK1	1.2	4.26E-26	proprotein convertase subtilisin/kexin type 1
ENSG00000135127	BICDL1	1.2	3.71E-38	BICD family like cargo adaptor 1
ENSG00000117305	HMGCL	1.2	3.41E-31	3-hydroxy-3-methylglutaryl-CoA lyase
ENSG00000180901	KCTD2	1.2	9.03E-31	potassium channel tetramerization domain containing 2
ENSG00000164715	LMTK2	1.2	1.27E-22	lemur tyrosine kinase 2
ENSG00000275491	LINC01730	1.2	7.17E-05	long intergenic non-protein coding RNA 1730
ENSG00000166887	VPS39	1.2	8.46E-43	VPS39 subunit of HOPS complex
ENSG00000197976	AKAP17A	1.2	2.12E-51	A-kinase anchoring protein 17A
ENSG00000134901	POGLUT2	1.2	7.81E-63	protein O-glucosyltransferase 2
ENSG00000065308	TRAM2	1.2	8.92E-51	translocation associated membrane protein 2
ENSG00000259024	TVP23C-CDRT4	1.2	1.15E-05	TVP23C-CDRT4 readthrough
ENSG00000258279	LINC00592	1.2	0.0035072	long intergenic non-protein coding RNA 592
ENSG00000170222	ADPRM	1.2	5.58E-29	ADP-ribose/CDP-alcohol diphosphatase 2C manganese dependent
ENSG00000168300	PCMTD1	1.2	1.06E-11	protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 1
ENSG00000162804	SNED1	1.2	0.0019079	sushi 2C nidogen and EGF like domains 1
ENSG00000063587	ZNF275	1.2	2.67E-24	zinc finger protein 275
ENSG00000176994	SMCR8	1.2	3.28E-35	SMCR8-C9orf72 complex subunit
ENSG00000135766	EGLN1	1.2	1.63E-26	egl-9 family hypoxia inducible factor 1
ENSG00000103042	SLC38A7	1.2	3.56E-46	solute carrier family 38 member 7
ENSG00000162734	PEA15	1.2	6.66E-20	proliferation and apoptosis adaptor protein 15
ENSG00000085644	ZNF213	1.2	9.56E-21	zinc finger protein 213
ENSG00000123728	RAP2C	1.2	6.38E-36	RAP2C 2C member of RAS oncogene family
ENSG00000196388	INCA1	1.2	0.0068609	inhibitor of CDK 2C cyclin A1 interacting protein 1
ENSG00000221869	CEBPD	1.2	3.75E-15	CCAAT enhancer binding protein delta
ENSG00000065665	SEC61A2	1.2	3.66E-13	SEC61 translocon subunit alpha 2
ENSG00000196730	DAPK1	1.2	3.45E-22	death associated protein kinase 1
ENSG00000131381	RBSN	1.2	1.14E-49	rabenosyn 2C RAB effector
ENSG00000223496	EXOSC6	1.2	7.36E-63	exosome component 6
ENSG00000097007	ABL1	1.2	2.00E-36	ABL proto-oncogene 1 2C non-receptor tyrosine kinase
ENSG00000123607	TTC21B	1.2	1.75E-08	tetratricopeptide repeat domain 21B
ENSG00000184828	ZBTB7C	1.2	3.95E-33	zinc finger and BTB domain containing 7C
ENSG00000115902	SLC1A4	1.2	3.08E-14	solute carrier family 1 member 4
ENSG00000161835	TAMALIN	1.2	9.97E-05	trafficking regulator and scaffold protein tamalin
ENSG00000172738	TMEM217	1.2	7.01E-12	transmembrane protein 217
ENSG00000186301	MST1P2	1.2	0.0011217	macrophage stimulating 1 pseudogene 2
ENSG00000181019	NQO1	1.2	9.76E-33	NAD(P)H quinone dehydrogenase 1
ENSG00000108771	DHX58	1.2	0.0039176	DEXH-box helicase 58
ENSG00000169131	ZNF354A	1.2	2.78E-10	zinc finger protein 354A
ENSG00000179428	IL6-AS1	1.2	0.0288834	IL6 antisense RNA 1
ENSG00000162927	PUS10	1.2	2.24E-12	pseudouridine synthase 10
ENSG00000003402	CFLAR	1.2	7.46E-19	CASP8 and FADD like apoptosis regulator

ENSG00000100600	LGMN	1.2	1.65E-41	legumain
ENSG00000188786	MTF1	1.2	4.97E-31	metal regulatory transcription factor 1
ENSG00000180385	EMC3-AS1	1.2	3.29E-26	EMC3 antisense RNA 1
ENSG00000101350	KIF3B	1.2	1.77E-26	kinesin family member 3B
ENSG00000261744	ZFPM1-AS1	1.2	0.0193732	ZFPM1 antisense RNA 1
ENSG00000110925	CSRNP2	1.2	3.34E-38	cysteine and serine rich nuclear protein 2
ENSG00000233101	HOXB-AS3	1.2	0.0429381	HOXB cluster antisense RNA 3
ENSG00000107864	CPEB3	1.2	4.93E-15	cytoplasmic polyadenylation element binding protein 3
ENSG00000050820	BCAR1	1.2	3.02E-17	BCAR1 scaffold protein 2C Cas family member
ENSG00000167460	TPM4	1.2	6.76E-88	tropomyosin 4
ENSG00000073464	CLCN4	1.2	1.13E-06	chloride voltage-gated channel 4
ENSG00000162433	AK4	1.2	1.21E-30	adenylate kinase 4
ENSG00000180628	PCGF5	1.2	3.89E-18	polycomb group ring finger 5
ENSG00000196352	CD55	1.2	5.66E-49	CD55 molecule (Cromer blood group)
ENSG00000138798	EGF	1.2	0.0083914	epidermal growth factor
ENSG00000173653	RCE1	1.2	1.94E-14	Ras converting CAAX endopeptidase 1
ENSG00000048392	RRM2B	1.2	1.04E-13	ribonucleotide reductase regulatory TP53 inducible subunit M2B
ENSG00000131979	GCH1	1.2	6.22E-25	GTP cyclohydrolase 1
ENSG00000229044	-	1.2	0.0027536	novel transcript
ENSG00000187676	B3GLCT	1.2	4.53E-24	beta 3-glucosyltransferase
ENSG00000177842	ZNF620	1.2	0.0088797	zinc finger protein 620
ENSG00000182853	VMO1	1.2	6.24E-05	vitelline membrane outer layer 1 homolog
ENSG00000066455	GOLGA5	1.2	5.18E-26	golgin A5
ENSG00000180423	HARBI1	1.2	1.37E-18	harbinger transposase derived 1
ENSG00000135956	TMEM127	1.2	1.26E-55	transmembrane protein 127
ENSG00000122557	HERPUD2	1.2	1.16E-33	HERPUD family member 2
ENSG00000259863	SH3RF3-AS1	1.2	0.0353892	SH3RF3 antisense RNA 1
ENSG00000023287	RB1CC1	1.2	0.0024652	RB1 inducible coiled-coil 1
ENSG00000106460	TMEM106B	1.2	1.45E-24	transmembrane protein 106B
ENSG00000196208	GREB1	1.2	2.77E-17	growth regulating estrogen receptor binding 1
ENSG00000245522	LINC02709	1.2	0.0057616	long intergenic non-protein coding RNA 2709
ENSG00000161277	THAP8	1.2	3.40E-07	THAP domain containing 8
ENSG00000269927	-	1.2	3.50E-06	novel transcript
ENSG00000100263	RHBDD3	1.2	2.05E-13	rhomboid domain containing 3
ENSG00000023318	ERP44	1.2	5.12E-79	endoplasmic reticulum protein 44
ENSG00000271978	-	1.2	5.09E-05	novel transcript
ENSG00000181751	MACIR	1.2	1.27E-48	macrophage immunometabolism regulator
ENSG00000157741	UBN2	1.2	0.001196	ubiquitin 2
ENSG00000260526	-	1.2	0.0115335	novel transcript 2C antisense to APIAR
ENSG00000158125	XDH	1.2	3.81E-05	xanthine dehydrogenase
ENSG00000227741	-	1.2	0.0008135	novel transcript
ENSG00000232956	SNHG15	1.2	1.48E-14	small nucleolar RNA host gene 15
ENSG00000104976	SNAPC2	1.2	5.77E-12	small nuclear RNA activating complex polypeptide 2
ENSG00000140993	TIGD7	1.2	0.0003725	tigger transposable element derived 7
ENSG00000120925	RNF170	1.2	4.95E-33	ring finger protein 170

ENSG00000134575	ACP2	1.2	6.68E-33	acid phosphatase 2 2C lysosomal
ENSG00000267598	-	1.2	4.86E-14	novel transcript 2C antisense to IER2
ENSG00000162746	FCRLB	1.2	0.0006793	Fc receptor like B
ENSG00000005238	FAM214B	1.2	5.62E-24	family with sequence similarity 214 member B
ENSG00000268751	SCGB1B2P	1.2	0.0013183	secretoglobin family 1B member 2 2C pseudogene
ENSG00000167323	STIM1	1.2	3.30E-24	stromal interaction molecule 1
ENSG00000204186	ZDBF2	1.2	0.0150261	zinc finger DBF-type containing 2
ENSG00000197980	LEKR1	1.2	0.0393656	leucine 2C glutamate and lysine rich 1
ENSG00000286753	-	1.2	7.90E-06	novel transcript 2C antisense to ICE1
ENSG00000163380	LMOD3	1.2	0.0029321	leiomodin 3
ENSG00000132581	SDF2	1.2	6.67E-26	stromal cell derived factor 2
ENSG00000063322	MED29	1.2	2.32E-43	mediator complex subunit 29
ENSG00000166024	R3HCC1L	1.2	2.05E-15	R3H domain and coiled-coil containing 1 like
ENSG00000235706	DICER1-AS1	1.2	6.83E-08	DICER1 antisense RNA 1
ENSG00000160117	ANKLE1	1.2	3.21E-08	ankyrin repeat and LEM domain containing 1
ENSG00000234776	C11orf94	1.2	0.0002194	chromosome 11 open reading frame 94
ENSG00000262089	-	1.2	0.0121618	novel transcript
ENSG00000130363	RSPH3	1.2	2.46E-20	radial spoke head 3
ENSG00000146373	RNF217	1.2	5.79E-10	ring finger protein 217
ENSG00000123146	ADGRE5	1.2	3.12E-27	adhesion G protein-coupled receptor E5
ENSG00000236810	ELOA-AS1	1.2	1.31E-12	ELOA antisense RNA 1
ENSG00000152894	PTPRK	1.2	2.44E-23	protein tyrosine phosphatase receptor type K
ENSG00000172361	CFAP53	1.2	4.99E-08	cilia and flagella associated protein 53
ENSG00000001084	GCLC	1.2	1.44E-21	glutamate-cysteine ligase catalytic subunit
ENSG00000124613	ZNF391	1.2	5.38E-09	zinc finger protein 391
ENSG00000162894	FCMR	1.2	3.54E-19	Fc fragment of IgM receptor
ENSG00000148357	HMCN2	1.2	0.0261347	hemocentin 2
ENSG00000163513	TGFBR2	1.2	3.72E-38	transforming growth factor beta receptor 2
ENSG00000099290	WASHC2A	1.2	1.77E-37	WASH complex subunit 2A
ENSG00000186577	SMIM29	1.2	1.71E-13	small integral membrane protein 29
ENSG00000150551	LYPD1	1.2	0.045094	LY6/PLAUR domain containing 1
ENSG00000244486	SCARF2	1.2	3.58E-05	scavenger receptor class F member 2
ENSG00000143669	LYST	1.2	2.93E-07	lysosomal trafficking regulator
ENSG00000065911	MTHFD2	1.2	3.55E-89	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2 2C methenyltetrahydrofolate cyclohydrolase
ENSG00000245060	LINC00847	1.2	0.0001358	long intergenic non-protein coding RNA 847
ENSG00000166343	MSS51	1.2	0.0058994	MSS51 mitochondrial translational activator
ENSG00000283050	GTF2IP12	1.2	4.44E-06	general transcription factor Ili pseudogene 12
ENSG00000099860	GADD45B	1.2	1.49E-11	growth arrest and DNA damage inducible beta
ENSG00000131791	PRKAB2	1.2	2.40E-26	protein kinase AMP-activated non-catalytic subunit beta 2
ENSG00000129474	AJUBA	1.2	1.21E-16	ajuba LIM protein
ENSG00000176909	MAMSTR	1.2	0.0064374	MEF2 activating motif and SAP domain containing transcriptional regulator
ENSG00000288559	-	1.2	9.92E-10	novel transcript
ENSG00000163141	BNIP1L	1.2	0.0020882	BCL2 interacting protein like
ENSG00000174365	SNHG11	1.2	1.14E-14	small nucleolar RNA host gene 11

ENSG00000237484	LINC01684	1.2	3.07E-05	long intergenic non-protein coding RNA 1684
ENSG00000168310	IRF2	1.2	3.07E-39	interferon regulatory factor 2
ENSG00000109072	VTN	1.2	7.25E-21	vitronectin
ENSG00000271853	-	1.2	3.12E-07	novel transcript
ENSG00000261884	-	1.2	1.83E-12	novel transcript
ENSG00000136830	NIBAN2	1.2	3.55E-18	niban apoptosis regulator 2
ENSG00000097033	SH3GLB1	1.2	6.25E-32	SH3 domain containing GRB2 like 2C endophilin B1
ENSG00000196998	WDR45	1.2	5.38E-18	WD repeat domain 45
ENSG00000164342	TLR3	1.2	6.82E-15	toll like receptor 3
ENSG00000164010	ERMAP	1.2	1.79E-23	erythroblast membrane associated protein (Scianna blood group)
ENSG00000172661	WASHC2C	1.2	6.03E-32	WASH complex subunit 2C
ENSG00000138759	FRAS1	1.2	2.52E-14	Fraser extracellular matrix complex subunit 1
ENSG00000113732	ATP6V0E1	1.2	3.23E-23	ATPase H+ transporting V0 subunit e1
ENSG00000100292	HMOX1	1.2	3.31E-23	heme oxygenase 1
ENSG00000176170	SPHK1	1.2	1.27E-12	sphingosine kinase 1
ENSG00000256576	LINC02361	1.2	0.0001366	long intergenic non-protein coding RNA 2361
ENSG00000105219	CCNP	1.1	0.016373	cyclin P
ENSG00000167608	TMC4	1.1	0.011959	transmembrane channel like 4
ENSG00000275052	PPP4R3B	1.1	6.33E-19	protein phosphatase 4 regulatory subunit 3B
ENSG00000198018	ENTPD7	1.1	8.34E-19	ectonucleoside triphosphate diphosphohydrolase 7
ENSG00000197622	CDC42SE1	1.1	6.29E-27	CDC42 small effector 1
ENSG00000279821	-	1.1	2.35E-07	TEC
ENSG00000178209	PLEC	1.1	8.73E-22	plectin
ENSG00000225830	ERCC6	1.1	1.43E-14	ERCC excision repair 6 2C chromatin remodeling factor
ENSG00000282851	BISPR	1.1	7.72E-24	BST2 interferon stimulated positive regulator
ENSG00000188997	KCTD21	1.1	4.91E-18	potassium channel tetramerization domain containing 21
ENSG00000267422	-	1.1	0.0004897	increased sodium tolerance 1 homolog (yeast) (IST1) pseudogene
ENSG00000132128	LRRC41	1.1	3.44E-20	leucine rich repeat containing 41
ENSG00000287576	-	1.1	0.0023655	novel transcript
ENSG00000104863	LIN7B	1.1	4.96E-05	lin-7 homolog B 2C crumbs cell polarity complex component
ENSG00000122008	POLK	1.1	4.43E-10	DNA polymerase kappa
ENSG00000104695	PPP2CB	1.1	1.06E-75	protein phosphatase 2 catalytic subunit beta
ENSG00000146426	TIAM2	1.1	5.62E-05	TIAM Rac1 associated GEF 2
ENSG00000047365	ARAP2	1.1	4.03E-09	ArfGAP with RhoGAP domain 2C ankyrin repeat and PH domain 2
ENSG00000145623	OSMR	1.1	2.35E-22	oncostatin M receptor
ENSG00000198964	SGMS1	1.1	7.24E-32	sphingomyelin synthase 1
ENSG00000163755	HPS3	1.1	1.76E-20	HPS3 biogenesis of lysosomal organelles complex 2 subunit 1
ENSG00000166167	BTRC	1.1	1.23E-32	beta-transducin repeat containing E3 ubiquitin protein ligase
ENSG00000131626	PPFIA1	1.1	4.75E-21	PTPRF interacting protein alpha 1
ENSG00000230487	PSMG3-AS1	1.1	8.68E-10	PSMG3 antisense RNA 1 (head to head)
ENSG00000171206	TRIM8	1.1	3.00E-23	tripartite motif containing 8
ENSG00000187144	SPATA21	1.1	6.32E-05	spermatogenesis associated 21
ENSG00000273058	-	1.1	0.0062926	novel transcript
ENSG00000272449	-	1.1	0.0116083	novel transcript

ENSG00000143878	RHOB	1.1	2.24E-18	ras homolog family member B
ENSG00000051128	HOMER3	1.1	2.57E-13	homer scaffold protein 3
ENSG00000258458	-	1.1	0.0360403	novel transcript 2C antisense to OXA1L
ENSG00000126821	SGPP1	1.1	4.32E-47	sphingosine-1-phosphate phosphatase 1
ENSG00000154493	C10orf90	1.1	4.70E-10	chromosome 10 open reading frame 90
ENSG00000124209	RAB22A	1.1	1.07E-46	RAB22A 2C member RAS oncogene family
ENSG00000278922	-	1.1	0.0187504	novel transcript
ENSG00000253352	TUG1	1.1	7.76E-12	taurine up-regulated 1
ENSG00000168917	SLC35G2	1.1	2.57E-40	solute carrier family 35 member G2
ENSG00000169967	MAP3K2	1.1	0.0003622	mitogen-activated protein kinase kinase kinase 2
ENSG00000232295	-	1.1	0.0244617	novel transcript 2C antisense OGFRL1
ENSG00000117407	ARTN	1.1	0.0002982	artemin
ENSG00000136770	DNAJC1	1.1	3.22E-39	DnaJ heat shock protein family (Hsp40) member C1
ENSG00000134531	EMP1	1.1	1.12E-53	epithelial membrane protein 1
ENSG00000187800	PEAR1	1.1	0.0039291	platelet endothelial aggregation receptor 1
ENSG00000204623	ZNRD1ASP	1.1	4.11E-10	zinc ribbon domain containing 1 antisense 2C pseudogene
ENSG00000158985	CDC42SE2	1.1	1.24E-40	CDC42 small effector 2
ENSG00000120051	CFAP58	1.1	0.0246866	cilia and flagella associated protein 58
ENSG00000136870	ZNF189	1.1	2.71E-11	zinc finger protein 189
ENSG00000233221	-	1.1	4.84E-13	novel transcript 2C antisense to ARHGEF4
ENSG00000272970	-	1.1	0.0486974	novel transcript
ENSG00000260448	LCMT1-AS1	1.1	0.0147724	LCMT1 antisense RNA 1
ENSG00000113845	TIMMDC1	1.1	3.58E-43	translocase of inner mitochondrial membrane domain containing 1
ENSG00000026103	FAS	1.1	4.02E-17	Fas cell surface death receptor
ENSG00000182308	DCAF4L1	1.1	0.01974	DDB1 and CUL4 associated factor 4 like 1
ENSG00000138623	SEMA7A	1.1	1.50E-05	semaphorin 7A (John Milton Hagen blood group)
ENSG00000158615	PPP1R15B	1.1	2.00E-29	protein phosphatase 1 regulatory subunit 15B
ENSG00000102547	CAB39L	1.1	2.34E-14	calcium binding protein 39 like
ENSG00000090971	NAT14	1.1	2.53E-12	N-acetyltransferase 14 (putative)
ENSG00000171940	ZNF217	1.1	3.11E-14	zinc finger protein 217
ENSG00000150457	LATS2	1.1	1.04E-18	large tumor suppressor kinase 2
ENSG00000090432	MUL1	1.1	4.79E-15	mitochondrial E3 ubiquitin protein ligase 1
ENSG00000214860	EVPLL	1.1	8.74E-07	envoplakin like
ENSG00000177406	NINJ2-AS1	1.1	2.72E-14	NINJ2 antisense RNA 1
ENSG00000271984	-	1.1	0.0134975	novel transcript 2C antisense to CTSA
ENSG00000120889	TNFRSF10B	1.1	9.30E-43	TNF receptor superfamily member 10b
ENSG00000126001	CEP250	1.1	3.09E-19	centrosomal protein 250
ENSG00000224687	RASAL2-AS1	1.1	2.07E-05	RASAL2 antisense RNA 1
ENSG00000145214	DGKQ	1.1	4.83E-10	diacylglycerol kinase theta
ENSG00000131931	THAP1	1.1	1.01E-29	THAP domain containing 1
ENSG00000262712	-	1.1	2.60E-12	novel transcript
ENSG00000047644	WWC3	1.1	1.46E-44	WWC family member 3
ENSG00000231770	TMEM44-AS1	1.1	4.91E-18	TMEM44 antisense RNA 1
ENSG00000183281	PLGLB1	1.1	0.0498516	plasminogen like B1
ENSG00000068024	HDAC4	1.1	2.96E-25	histone deacetylase 4



ENSG00000173210	ABLIM3	1.1	6.12E-20	actin binding LIM protein family member 3
ENSG00000109103	UNC119	1.1	2.52E-17	unc-119 lipid binding chaperone
ENSG00000145817	YIPF5	1.1	6.54E-59	Yip1 domain family member 5
ENSG00000214106	PAXIP1-AS2	1.1	1.18E-09	PAXIP1 antisense RNA 2
ENSG00000185885	IFITM1	1.1	1.63E-13	interferon induced transmembrane protein 1
ENSG00000245025	-	1.1	5.86E-08	novel transcript 2C antisense to RHOBTB2
ENSG00000267283	-	1.1	5.91E-05	novel transcript 2C antisense to BTBD2
ENSG00000109472	CPE	1.1	1.83E-33	carboxypeptidase E
ENSG00000140830	TXNL4B	1.1	5.74E-27	thioredoxin like 4B
ENSG00000132694	ARHGEF11	1.1	6.27E-32	Rho guanine nucleotide exchange factor 11
ENSG00000273763	-	1.1	0.0005924	marker of proliferation Ki-67 (MKI67) pseudogene
ENSG00000100731	PCNX1	1.1	3.31E-11	pecanex 1
ENSG00000260916	CCPG1	1.1	2.29E-09	cell cycle progression 1
ENSG00000114796	KLHL24	1.1	6.37E-12	kelch like family member 24
ENSG00000204876	-	1.1	0.039932	novel transcript
ENSG00000148400	NOTCH1	1.1	2.23E-19	notch receptor 1
ENSG00000165458	INPPL1	1.1	3.77E-25	inositol polyphosphate phosphatase like 1
ENSG00000204052	LRRC73	1.1	0.0032374	leucine rich repeat containing 73
ENSG00000187105	HEATR4	1.1	0.0011006	HEAT repeat containing 4
ENSG00000153975	ZUP1	1.1	9.05E-17	zinc finger containing ubiquitin peptidase 1
ENSG00000147044	CASK	1.1	6.73E-21	calcium/calmodulin dependent serine protein kinase
ENSG00000175573	C11orf68	1.1	5.04E-12	chromosome 11 open reading frame 68
ENSG00000273599	-	1.1	0.0006757	novel transcript 2C antisense to CTBP2
ENSG00000185442	FAM174B	1.1	5.89E-07	family with sequence similarity 174 member B
ENSG00000179564	LSMEM2	1.1	0.0012342	leucine rich single-pass membrane protein 2
ENSG00000226754	-	1.1	0.0050577	novel transcript 2C antisense to MAGOH
ENSG00000241288	LINC02614	1.1	9.82E-05	long intergenic non-protein coding RNA 2614
ENSG00000134152	KATNBL1	1.1	1.85E-15	katanin regulatory subunit B1 like 1
ENSG00000145476	CYP4V2	1.1	3.17E-20	cytochrome P450 family 4 subfamily V member 2
ENSG00000072840	EVC	1.1	5.48E-09	EvC ciliary complex subunit 1
ENSG00000137177	KIF13A	1.1	7.78E-14	kinesin family member 13A
ENSG00000095794	CREM	1.1	5.22E-30	cAMP responsive element modulator
ENSG00000173163	COMMD1	1.1	1.58E-16	copper metabolism domain containing 1
ENSG00000148426	PROSER2	1.1	1.24E-13	proline and serine rich 2
ENSG00000197302	ZNF720	1.1	1.88E-07	zinc finger protein 720
ENSG00000130202	NECTIN2	1.1	3.16E-19	nectin cell adhesion molecule 2
ENSG00000120370	GORAB	1.1	2.12E-09	golgin 2C RAB6 interacting
ENSG00000251192	ZNF674	1.1	1.28E-10	zinc finger protein 674
ENSG00000213144	-	1.1	0.0026905	PDGFA associated protein 1 (PDAP1) pseudogene
ENSG00000225973	PIGBOS1	1.1	4.95E-30	PIGB opposite strand 1
ENSG00000078902	TOLLIP	1.1	5.29E-19	toll interacting protein
ENSG00000259332	ST20-MTHFS	1.1	9.74E-06	ST20-MTHFS readthrough
ENSG00000258499	LINC02287	1.1	0.0403071	long intergenic non-protein coding RNA 2287
ENSG00000143751	SDE2	1.1	3.23E-31	SDE2 telomere maintenance homolog
ENSG00000166507	NDST2	1.1	6.16E-09	N-deacetylase and N-sulfotransferase 2
ENSG00000117479	SLC19A2	1.1	1.37E-17	solute carrier family 19 member 2



ENSG00000227536	SOCS5P4	1.1	0.0169541	suppressor of cytokine signaling 5 pseudogene 4
ENSG00000164054	SHISA5	1.1	3.59E-15	shisa family member 5
ENSG00000205323	SARNP	1.1	3.97E-12	SAP domain containing ribonucleoprotein
ENSG00000197566	ZNF624	1.1	3.93E-05	zinc finger protein 624
ENSG00000106571	GLI3	1.1	5.46E-20	GLI family zinc finger 3
ENSG00000101098	RIMS4	1.1	9.41E-06	regulating synaptic membrane exocytosis 4
ENSG00000183506	PI4KAP2	1.1	7.71E-08	phosphatidylinositol 4-kinase alpha pseudogene 2
ENSG00000231856	-	1.1	0.0126631	novel transcript
ENSG00000165113	GKAP1	1.1	2.99E-13	G kinase anchoring protein 1
ENSG00000240875	LINC00886	1.1	0.0031249	long intergenic non-protein coding RNA 886
ENSG00000037637	FBXO42	1.1	1.59E-34	F-box protein 42
ENSG00000246174	KCTD21-AS1	1.1	7.32E-09	KCTD21 antisense RNA 1
ENSG00000248971	KRT8P46	1.1	0.0248404	keratin 8 pseudogene 46
ENSG00000075420	FNDC3B	1.1	1.97E-12	fibronectin type III domain containing 3B
ENSG00000035115	SH3YL1	1.1	5.34E-08	SH3 and SYLF domain containing 1
ENSG00000152518	ZFP36L2	1.1	6.31E-36	ZFP36 ring finger protein like 2
ENSG00000141012	GALNS	1.1	1.53E-21	galactosamine (N-acetyl)-6-sulfatase
ENSG00000196139	AKR1C3	1.1	1.43E-20	aldo-keto reductase family 1 member C3
ENSG00000074370	ATP2A3	1.1	0.0034004	ATPase sarcoplasmic/endoplasmic reticulum Ca <sup>2+</sup> transporting 3
ENSG00000117475	BLZF1	1.1	2.06E-10	basic leucine zipper nuclear factor 1
ENSG00000152484	USP12	1.1	2.23E-19	ubiquitin specific peptidase 12
ENSG00000217128	FNIP1	1.1	7.89E-08	folliculin interacting protein 1
ENSG00000138459	SLC35A5	1.1	6.32E-27	solute carrier family 35 member A5
ENSG00000254422	-	1.1	0.027046	novel transcript
ENSG00000099338	CATSPERG	1.1	0.0301174	cation channel sperm associated auxiliary subunit gamma
ENSG00000087266	SH3BP2	1.1	3.14E-39	SH3 domain binding protein 2
ENSG00000141622	RNF165	1.1	5.54E-26	ring finger protein 165
ENSG00000126246	IGFLR1	1.1	0.0013431	IGF like family receptor 1
ENSG00000147471	PLPBP	1.1	1.09E-47	pyridoxal phosphate binding protein
ENSG00000151893	CACUL1	1.1	2.04E-23	CDK2 associated cullin domain 1
ENSG00000112531	QKI	1.1	4.54E-22	QKI 2C KH domain containing RNA binding
ENSG00000116918	TSNAX	1.1	2.91E-24	translin associated factor X
ENSG00000231160	KLF3-AS1	1.1	0.0078218	KLF3 antisense RNA 1
ENSG00000131943	C19orf12	1.1	4.55E-31	chromosome 19 open reading frame 12
ENSG00000074660	SCARF1	1.1	1.18E-05	scavenger receptor class F member 1
ENSG00000226742	HSBP1L1	1.1	1.19E-27	heat shock factor binding protein 1 like 1
ENSG00000042445	RETSAT	1.1	2.16E-39	retinol saturase
ENSG00000255236	-	1.1	0.0119618	novel transcript
ENSG00000196878	LAMB3	1.1	5.19E-17	laminin subunit beta 3
ENSG00000171310	CHST11	1.1	3.05E-19	carbohydrate sulfotransferase 11
ENSG00000088298	EDEM2	1.1	4.48E-19	ER degradation enhancing alpha-mannosidase like protein 2
ENSG00000269335	IKBKG	1.1	1.42E-16	inhibitor of nuclear factor kappa B kinase regulatory subunit gamma
ENSG00000155366	RHOC	1.1	3.16E-12	ras homolog family member C
ENSG00000086619	ERO1B	1.1	2.61E-10	endoplasmic reticulum oxidoreductase 1 beta

ENSG00000170471	RALGAPB	1.1	9.85E-16	Ral GTPase activating protein non-catalytic subunit beta
ENSG00000260465	-	1.1	0.0103493	novel transcript
ENSG00000168807	SNTB2	1.1	4.79E-14	syntrophin beta 2
ENSG00000133816	MICAL2	1.1	3.84E-26	microtubule associated monooxygenase 2C calponin and LIM domain containing 2
ENSG00000144182	LIPT1	1.1	3.62E-08	lipoyltransferase 1
ENSG00000260269	-	1.1	0.0457289	novel transcript
ENSG00000247317	LY6E-DT	1.1	0.00142	LY6E divergent transcript
ENSG00000068697	LAPTM4A	1.1	2.64E-27	lysosomal protein transmembrane 4 alpha
ENSG00000148483	TMEM236	1.1	0.0455563	transmembrane protein 236
ENSG00000005339	CREBBP	1.1	9.80E-20	CREB binding protein
ENSG00000236432	MFF-DT	1.1	8.71E-05	MFF divergent transcript
ENSG00000288558	DUS4L-BCAP29	1.1	1.12E-11	DUS4L-BCAP29 readthrough
ENSG00000132000	PODNL1	1.1	2.32E-05	podocan like 1
ENSG00000226029	LINC01772	1.1	0.0067273	long intergenic non-protein coding RNA 1772
ENSG00000138760	SCARB2	1.1	5.82E-31	scavenger receptor class B member 2
ENSG00000245556	SCAMP1-AS1	1.1	4.08E-18	SCAMP1 antisense RNA 1
ENSG00000145349	CAMK2D	1.1	8.39E-13	calcium/calmodulin dependent protein kinase II delta
ENSG00000007866	TEAD3	1.1	1.45E-19	TEA domain transcription factor 3
ENSG00000169302	STK32A	1.1	0.0324059	serine/threonine kinase 32A
ENSG00000164039	BDH2	1.1	2.91E-20	3-hydroxybutyrate dehydrogenase 2
ENSG00000226328	NUP50-DT	1.1	8.58E-14	NUP50 divergent transcript
ENSG00000118507	AKAP7	1.1	3.92E-07	A-kinase anchoring protein 7
ENSG00000023608	SNAPC1	1.1	2.28E-16	small nuclear RNA activating complex polypeptide 1
ENSG00000185947	ZNF267	1.1	3.17E-06	zinc finger protein 267
ENSG00000157540	DYRK1A	1.1	3.47E-18	dual specificity tyrosine phosphorylation regulated kinase 1A
ENSG00000137166	FOXP4	1.1	2.09E-15	forkhead box P4
ENSG00000186615	KTN1-AS1	1.1	4.14E-08	KTN1 antisense RNA 1
ENSG00000235703	LINC00894	1.1	0.0051167	long intergenic non-protein coding RNA 894
ENSG00000226281	-	1.1	1.35E-07	novel transcript
ENSG00000133056	PIK3C2B	1.1	1.16E-25	phosphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 beta
ENSG00000197180	CH17-340M24.3	1.1	8.58E-06	uncharacterized protein BC009467
ENSG00000110025	SNX15	1.1	0.0099259	sorting nexin 15
ENSG00000128564	VGF	1.1	3.48E-06	VGF nerve growth factor inducible
ENSG00000135631	RAB11FIP5	1.1	2.89E-15	RAB11 family interacting protein 5
ENSG00000112319	EYA4	1.1	2.22E-10	EYA transcriptional coactivator and phosphatase 4
ENSG00000105778	AVL9	1.1	1.65E-16	AVL9 cell migration associated
ENSG00000197619	ZNF615	1.1	0.0004204	zinc finger protein 615
ENSG00000239305	RNF103	1.1	1.93E-20	ring finger protein 103
ENSG00000287299	-	1.1	0.0277948	novel transcript 2C antisense to SPATS2L
ENSG00000235191	NUCB1-AS1	1.1	7.97E-05	NUCB1 antisense RNA 1
ENSG00000146457	WTAP	1.1	5.73E-23	WT1 associated protein
ENSG00000221930	DENND10P1	1.1	5.13E-09	DENND10 pseudogene 1
ENSG00000134830	C5AR2	1.1	2.61E-13	complement component 5a receptor 2
ENSG00000084676	NCOA1	1.1	4.15E-12	nuclear receptor coactivator 1

ENSG00000125863	MKKS	1.1	2.10E-30	McKusick-Kaufman syndrome
ENSG00000106004	HOXA5	1.1	2.35E-12	homeobox A5
ENSG00000135049	AGTPBP1	1.1	7.04E-10	ATP/GTP binding protein 1
ENSG00000276101	-	1.1	0.0010597	novel transcript 2C antisense to SLC38A10
ENSG00000198520	ARMH1	1.1	0.0009513	armadillo like helical domain containing 1
ENSG00000121350	PYROXD1	1.1	3.47E-07	pyridine nucleotide-disulphide oxidoreductase domain 1
ENSG00000144214	LYG1	1.1	0.0130704	lysozyme g1
ENSG00000125508	SRMS	1.1	8.09E-07	src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites
ENSG00000114554	PLXNA1	1.1	7.93E-22	plexin A1
ENSG00000171148	TADA3	1.1	1.39E-11	transcriptional adaptor 3
ENSG00000149346	SLX4IP	1.1	2.09E-09	SLX4 interacting protein
ENSG00000133773	CCDC59	1.1	8.64E-22	coiled-coil domain containing 59
ENSG00000141232	TOB1	1.1	9.84E-47	transducer of ERBB2 2C 1
ENSG00000264364	DYNLL2	1.1	1.05E-38	dynein light chain LC8-type 2
ENSG00000100092	SH3BP1	1.1	0.0444022	SH3 domain binding protein 1
ENSG00000175147	TMEM51-AS1	1.1	0.0001121	TMEM51 antisense RNA 1
ENSG00000171862	PTEN	1.1	1.41E-16	phosphatase and tensin homolog
ENSG00000164442	CITED2	1.1	4.24E-10	Cbp/p300 interacting transactivator with Glu/Asp rich carboxy-terminal domain 2
ENSG00000184182	UBE2F	1.1	1.25E-49	ubiquitin conjugating enzyme E2 F (putative)
ENSG00000205707	ETFRF1	1.1	1.44E-18	electron transfer flavoprotein regulatory factor 1
ENSG00000250337	PURPL	1.1	1.41E-21	p53 upregulated regulator of p53 levels
ENSG00000156711	MAPK13	1.1	0.00691	mitogen-activated protein kinase 13
ENSG00000135679	MDM2	1.1	5.44E-12	MDM2 proto-oncogene
ENSG00000101347	SAMHD1	1.1	9.66E-43	SAM and HD domain containing deoxynucleoside triphosphate triphosphohydrolase 1
ENSG00000106459	NRF1	1	5.13E-21	nuclear respiratory factor 1
ENSG00000185651	UBE2L3	1	2.02E-30	ubiquitin conjugating enzyme E2 L3
ENSG00000059728	MXD1	1	9.29E-21	MAX dimerization protein 1
ENSG00000162413	KLHL21	1	7.26E-21	kelch like family member 21
ENSG00000185621	LMLN	1	1.91E-09	leishmanolysin like peptidase
ENSG00000154813	DPH3	1	1.32E-21	diphthamide biosynthesis 3
ENSG00000120885	CLU	1	4.26E-22	clusterin
ENSG00000126778	SIX1	1	0.0004666	SIX homeobox 1
ENSG00000138119	MYOF	1	2.33E-27	myoferlin
ENSG00000104375	STK3	1	8.73E-24	serine/threonine kinase 3
ENSG00000148120	AOPEP	1	5.49E-27	aminopeptidase O (putative)
ENSG00000179918	SEPHS2	1	4.05E-62	selenophosphate synthetase 2
ENSG00000135720	DYNC1LI2	1	2.56E-18	dynein cytoplasmic 1 light intermediate chain 2
ENSG00000100485	SOS2	1	1.51E-07	SOS Ras/Rho guanine nucleotide exchange factor 2
ENSG00000244405	ETV5	1	7.21E-32	ETS variant transcription factor 5
ENSG00000119523	ALG2	1	3.71E-33	ALG2 alpha-1 2C3/1 2C6-mannosyltransferase
ENSG00000197948	FCHSD1	1	2.42E-12	FCH and double SH3 domains 1
ENSG00000198853	RUSC2	1	7.85E-24	RUN and SH3 domain containing 2
ENSG00000105519	CAPS	1	0.0064557	calcyphosine

ENSG00000069020	MAST4	1	2.48E-10	microtubule associated serine/threonine kinase family member 4
ENSG00000177337	DLGAP1-AS1	1	1.29E-14	DLGAP1 antisense RNA 1
ENSG00000155287	SLC25A28	1	4.40E-14	solute carrier family 25 member 28
ENSG00000283959	-	1	0.0002335	novel transcript
ENSG00000257923	CUX1	1	8.84E-16	cut like homeobox 1
ENSG00000178502	KLHL11	1	3.16E-10	kelch like family member 11
ENSG00000266921	ZNF230-DT	1	0.0135806	ZNF230 divergent transcript
ENSG00000243725	TTC4	1	2.83E-17	tetratricopeptide repeat domain 4
ENSG00000133678	TMEM254	1	3.80E-16	transmembrane protein 254
ENSG00000068323	TFE3	1	6.60E-15	transcription factor binding to IGHM enhancer 3
ENSG00000162814	SPATA17	1	1.58E-05	spermatogenesis associated 17
ENSG00000120694	HSPH1	1	4.82E-16	heat shock protein family H (Hsp110) member 1
ENSG00000151651	ADAM8	1	2.07E-07	ADAM metallopeptidase domain 8
ENSG00000285816	-	1	2.72E-12	novel protein 2C POLA2-CDC42EP2 readthrough
ENSG00000258539	-	1	0.0094175	novel transcript 2C METTL10-FAM53B readthrough
ENSG00000174282	ZBTB4	1	6.85E-36	zinc finger and BTB domain containing 4
ENSG00000068305	MEF2A	1	6.74E-18	myocyte enhancer factor 2A
ENSG00000154359	LONRF1	1	8.09E-24	LON peptidase N-terminal domain and ring finger 1
ENSG00000105928	GSDME	1	5.38E-29	gasdermin E
ENSG00000261824	LINC00662	1	5.21E-27	long intergenic non-protein coding RNA 662
ENSG00000186591	UBE2H	1	8.56E-30	ubiquitin conjugating enzyme E2 H
ENSG00000106636	YKT6	1	1.58E-16	YKT6 v-SNARE homolog
ENSG00000162729	IGSF8	1	5.75E-15	immunoglobulin superfamily member 8
ENSG00000146556	WASH2P	1	3.11E-05	WASP family homolog 2 2C pseudogene
ENSG00000106086	PLEKHA8	1	1.28E-08	pleckstrin homology domain containing A8
ENSG00000105971	CAV2	1	5.04E-21	caveolin 2
ENSG00000163795	ZNF513	1	5.54E-08	zinc finger protein 513
ENSG00000257524	-	1	4.07E-11	novel protein
ENSG00000106733	NMRK1	1	2.97E-25	nicotinamide riboside kinase 1
ENSG00000233611	-	1	0.0160664	novel transcript 2C antisense to ASB18 and GBX2
ENSG00000204227	RING1	1	1.13E-15	ring finger protein 1
ENSG00000107789	MINPP1	1	1.16E-41	multiple inositol-polyphosphate phosphatase 1
ENSG00000159217	IGF2BP1	1	8.80E-33	insulin like growth factor 2 mRNA binding protein 1
ENSG00000272092	-	1	0.0034004	novel transcript
ENSG00000086061	DNAJA1	1	3.75E-35	DnaJ heat shock protein family (Hsp40) member A1
ENSG00000134986	NREP	1	5.07E-07	neuronal regeneration related protein
ENSG00000140332	TLE3	1	3.98E-24	TLE family member 3 2C transcriptional corepressor
ENSG00000088356	PDRG1	1	4.76E-14	p53 and DNA damage regulated 1
ENSG00000277597	-	1	0.0217715	novel transcript 2C antisense to PRPF8
ENSG00000072121	ZFYVE26	1	5.28E-26	zinc finger FYVE-type containing 26
ENSG00000279207	-	1	8.33E-05	novel transcript
ENSG00000287263	-	1	4.76E-16	novel transcript
ENSG00000162889	MAPKAPK2	1	1.72E-21	MAPK activated protein kinase 2
ENSG00000180257	ZNF816	1	0.0004279	zinc finger protein 816
ENSG00000153094	BCL2L11	1	9.27E-16	BCL2 like 11

ENSG00000162994	CLHC1	1	8.08E-13	clathrin heavy chain linker domain containing 1
ENSG00000153037	SRP19	1	1.73E-27	signal recognition particle 19
ENSG00000156052	GNAQ	1	1.35E-14	G protein subunit alpha q
ENSG00000256152	-	1	0.0174197	novel transcript
ENSG00000134013	LOXL2	1	1.48E-25	lysyl oxidase like 2
ENSG00000176024	ZNF613	1	0.0033848	zinc finger protein 613
ENSG00000140950	MEAK7	1	2.47E-33	MTOR associated protein 2C eak-7 homolog
ENSG00000140262	TCF12	1	2.50E-17	transcription factor 12
ENSG00000228606	-	1	0.0042857	novel transcript
ENSG00000224023	EDRF1-DT	1	0.0009992	EDRF1 divergent transcript
ENSG00000003400	CASP10	1	5.50E-20	caspase 10
ENSG00000184281	TSSC4	1	9.44E-10	tumor suppressing subtransferable candidate 4
ENSG00000244045	TMEM199	1	1.25E-21	transmembrane protein 199
ENSG00000136868	SLC31A1	1	7.60E-65	solute carrier family 31 member 1
ENSG00000164162	ANAPC10	1	2.22E-13	anaphase promoting complex subunit 10
ENSG00000204427	ABHD16A	1	1.28E-07	abhydrolase domain containing 16A 2C phospholipase
ENSG00000070413	DGCR2	1	4.12E-17	DiGeorge syndrome critical region gene 2
ENSG00000239697	TNFSF12	1	2.69E-05	TNF superfamily member 12

ENSG00000138660	APIAR	1	4.26E-14	adaptor related protein complex 1 associated regulatory protein
ENSG00000181027	FKRP	1	3.54E-19	fukutin related protein
ENSG00000168275	COA6	1	8.90E-20	cytochrome c oxidase assembly factor 6
ENSG00000110497	AMBRA1	1	2.94E-14	autophagy and beclin 1 regulator 1
ENSG00000164916	FOXK1	1	2.25E-30	forkhead box K1
ENSG00000005893	LAMP2	1	1.30E-35	lysosomal associated membrane protein 2
ENSG00000144136	SLC20A1	1	9.15E-22	solute carrier family 20 member 1
ENSG00000264247	ZNF407-AS1	1	6.14E-14	ZNF407 antisense RNA 1
ENSG00000164296	TIGD6	1	6.48E-17	tigger transposable element derived 6
ENSG00000127241	MASP1	1	0.010208	mannan binding lectin serine peptidase 1
ENSG00000272031	ANKRD34A	1	5.75E-14	ankyrin repeat domain 34A
ENSG00000196922	ZNF252P	1	1.43E-08	zinc finger protein 252 2C pseudogene
ENSG00000086666	ZFAND6	1	1.26E-30	zinc finger AN1-type containing 6
ENSG00000109501	WFS1	1	2.69E-09	wolframin ER transmembrane glycoprotein
ENSG00000178996	SNX18	1	3.17E-27	sorting nexin 18
ENSG00000228830	-	1	0.0015263	novel transcript
ENSG00000118985	ELL2	1	6.26E-22	elongation factor for RNA polymerase II 2
ENSG00000156671	SAMD8	1	1.19E-09	sterile alpha motif domain containing 8
ENSG00000189376	C8orf76	1	3.26E-20	chromosome 8 open reading frame 76
ENSG00000272669	-	1	1.41E-05	novel transcript 2C antisense to SUN2
ENSG00000121851	POLR3GL	1	1.72E-12	RNA polymerase III subunit GL
ENSG00000146826	TRAPPC14	1	1.01E-15	trafficking protein particle complex 14
ENSG00000175550	DRAP1	1	1.39E-10	DR1 associated protein 1
ENSG00000216937	CCDC7	1	0.0014045	coiled-coil domain containing 7

ENSG00000165895	ARHGAP42	1	1.78E-08	Rho GTPase activating protein 42
ENSG00000115310	RTN4	1	9.09E-45	reticulon 4
ENSG00000186063	AIDA	1	4.00E-18	axin interactor 2C dorsalization associated
ENSG00000198814	GK	1	9.80E-13	glycerol kinase
ENSG00000151090	THRB	1	1.69E-10	thyroid hormone receptor beta
ENSG00000164736	SOX17	1	6.11E-05	SRY-box transcription factor 17
ENSG00000070961	ATP2B1	1	0.000626	ATPase plasma membrane Ca <sup>2+</sup> transporting 1
ENSG00000166398	GARRE1	1	1.29E-22	granule associated Rac and RHO G effector 1
ENSG00000155428	TRIM74	1	0.0269467	tripartite motif containing 74
ENSG00000181481	RNF135	1	3.36E-13	ring finger protein 135
ENSG00000285085	-	1	1.20E-07	novel protein
ENSG00000198718	TOGARAM1	1	4.44E-07	TOG array regulator of axonemal microtubules 1
ENSG00000075391	RASAL2	1	1.09E-10	RAS protein activator like 2
ENSG00000167985	SDHAF2	1	4.92E-12	succinate dehydrogenase complex assembly factor 2
ENSG00000090905	TNRC6A	1	8.98E-09	trinucleotide repeat containing adaptor 6A
ENSG00000244627	TPTEP2	1	1.73E-08	TPTE pseudogene 2
ENSG00000156931	VPS8	1	1.04E-09	VPS8 subunit of CORVET complex
ENSG00000163412	EIF4E3	1	0.0020625	eukaryotic translation initiation factor 4E family member 3
ENSG00000132357	CARD6	1	8.46E-18	caspase recruitment domain family member 6
ENSG00000167333	TRIM68	1	2.93E-11	tripartite motif containing 68
ENSG00000204314	PRRT1	1	2.81E-10	proline rich transmembrane protein 1
ENSG00000261423	TMEM202-AS1	1	4.89E-06	TMEM202 antisense RNA 1
ENSG00000104412	EMC2	1	1.97E-11	ER membrane protein complex subunit 2
ENSG00000178719	GRINA	1	1.26E-13	glutamate ionotropic receptor NMDA type subunit associated protein 1
ENSG00000159184	HOXB13	1	3.94E-05	homeobox B13
ENSG00000163823	CCR1	1	0.0136156	C-C motif chemokine receptor 1
ENSG00000122778	KIAA1549	1	2.39E-11	KIAA1549
ENSG00000102921	N4BP1	1	1.96E-19	NEDD4 binding protein 1
ENSG00000261691	-	1	0.0482454	novel transcript 2C antisense to SOLH
ENSG00000166289	PLEKHF1	1	0.0001357	pleckstrin homology and FYVE domain containing 1
ENSG00000137312	FLOT1	1	2.21E-10	flotillin 1
ENSG00000197860	SGTB	1	8.20E-12	small glutamine rich tetratricopeptide repeat containing beta

Supplementary Table 3: List of the down-regulated DEGs.

Gene ID	Gene Symbol	log <sub>2</sub> (FoldChange)	p-adj	Description
ENSG00000107159	CA9	-11	9.69E-38	carbonic anhydrase 9
ENSG00000185432	METTL7A	-8.7	6.16E-24	methyltransferase like 7A
ENSG00000141639	MAPK4	-8.5	1.79E-15	mitogen-activated protein kinase 4
ENSG00000106541	AGR2	-8.5	1.31E-15	anterior gradient 2 2C protein disulphide isomerase family member
ENSG00000213809	KLRK1	-8.4	2.56E-15	killer cell lectin like receptor K1
ENSG00000099958	DERL3	-7.7	1.07E-12	derlin 3
ENSG00000154654	NCAM2	-7.6	2.47E-12	neural cell adhesion molecule 2
ENSG00000164692	COL1A2	-7.5	2.52E-12	collagen type I alpha 2 chain
ENSG00000186160	CYP4Z1	-7.3	3.92E-11	cytochrome P450 family 4 subfamily Z member 1



ENSG00000135346	CGA	-7.3	0	glycoprotein hormones 2C alpha polypeptide
ENSG00000227158	-	-7.2	7.08E-11	ligand of numb-protein X 1 2C E3 ubiquitin protein ligase pseudogene
ENSG00000224177	LINC00570	-7.2	4.59E-11	long intergenic non-protein coding RNA 570
ENSG00000179776	CDH5	-6.8	2.48E-14	cadherin 5
ENSG00000163485	ADORA1	-6.6	8.59E-55	adenosine A1 receptor
ENSG00000249406	-	-6.5	9.64E-09	novel transcript
ENSG00000124839	RAB17	-6.4	8.30E-51	RAB17 2C member RAS oncogene family
ENSG00000129038	LOXL1	-6.3	7.29E-85	lysyl oxidase like 1
ENSG00000150361	KLHL1	-6.1	1.47E-136	kelch like family member 1
ENSG00000241369	LINC01192	-6.1	7.71E-08	long intergenic non-protein coding RNA 1192
ENSG00000154146	NRGN	-6.1	5.31E-08	neurogranin
ENSG00000111348	ARHGDI1	-6.1	1.96E-07	Rho GDP dissociation inhibitor beta
ENSG00000168542	COL3A1	-6.1	5.88E-46	collagen type III alpha 1 chain
ENSG00000134042	MRO	-6	1.14E-07	maestro
ENSG00000112175	BMP5	-6	6.74E-08	bone morphogenetic protein 5
ENSG00000236519	LINC01424	-5.8	7.46E-06	long intergenic non-protein coding RNA 1424
ENSG00000163072	NOSTRIN	-5.8	1.26E-06	nitric oxide synthase trafficking
ENSG00000184544	DHRS7C	-5.8	2.09E-10	dehydrogenase/reductase 7C
ENSG00000142623	PADI1	-5.8	6.80E-07	peptidyl arginine deiminase 1
ENSG00000265107	GJA5	-5.7	3.59E-22	gap junction protein alpha 5
ENSG00000260266	PPIAP46	-5.7	1.26E-64	peptidylprolyl isomerase A pseudogene 46
ENSG00000151882	CCL28	-5.7	7.23E-07	C-C motif chemokine ligand 28
ENSG00000253500	-	-5.6	9.40E-10	novel transcript 2C antisense to CNBD1
ENSG00000117983	MUC5B	-5.5	2.22E-06	mucin 5B 2C oligomeric mucus/gel-forming
ENSG00000122711	SPINK4	-5.5	0	serine peptidase inhibitor Kazal type 4
ENSG00000233643	LINC02625	-5.5	7.75E-06	long intergenic non-protein coding RNA 2625
ENSG00000161798	AQP5	-5.5	1.56E-23	aquaporin 5
ENSG00000184486	POU3F2	-5.5	9.52E-07	POU class 3 homeobox 2
ENSG00000285593	-	-5.5	4.36E-06	novel transcript
ENSG00000173626	TRAPPC3L	-5.5	1.81E-06	trafficking protein particle complex 3 like
ENSG00000248791	-	-5.5	1.78E-05	pleckstrin homology domain containing 2C family A (phosphoinositide binding specific) member 1 (PLEKHA1) pseudogene
ENSG00000278982	-	-5.5	1.31E-15	TEC
ENSG00000257588	-	-5.4	5.62E-25	novel transcript 2C antisense to AQP5
ENSG00000137440	FGFBP1	-5.4	2.12E-120	fibroblast growth factor binding protein 1
ENSG00000224957	LINC01266	-5.3	8.69E-06	long intergenic non-protein coding RNA 1266
ENSG00000189350	TOGARAM2	-5.3	2.76E-16	TOG array regulator of axonemal microtubules 2
ENSG00000197119	SLC25A29	-5.3	5.37E-99	solute carrier family 25 member 29
ENSG00000170500	LONRF2	-5.3	8.73E-06	LON peptidase N-terminal domain and ring finger 2
ENSG00000086159	AQP6	-5.3	2.98E-05	aquaporin 6
ENSG00000221164	SNORA11F	-5.3	3.14E-05	small nucleolar RNA 2C H/ACA box 11F
ENSG00000145569	OTULINL	-5.3	0	OTU deubiquitinase with linear linkage specificity like
ENSG00000164089	ETNPPL	-5.2	4.56E-13	ethanolamine-phosphate phospho-lyase
ENSG00000250247	SEPHS2P1	-5.2	4.64E-05	selenophosphate synthetase 2 pseudogene 1

ENSG00000154438	ASZ1	-5.2	4.36E-05	ankyrin repeat 2C SAM and basic leucine zipper domain containing 1
ENSG00000175877	TMEM270	-5.2	3.12E-05	transmembrane protein 270
ENSG00000256427	-	-5.1	2.00E-05	novel transcript
ENSG00000170439	METTL7B	-5.1	4.83E-19	methyltransferase like 7B
ENSG00000271857	-	-5.1	2.05E-05	novel transcript 2C antisense to RUNX2
ENSG00000206073	SERPINB4	-5.1	1.12E-24	serpin family B member 4
ENSG00000038295	TLL1	-5.1	7.98E-06	tolloid like 1
ENSG00000257771	LINC02395	-5.1	2.39E-65	long intergenic non-protein coding RNA 2395
ENSG00000278637	H4C1	-5	0.0001281	H4 clustered histone 1
ENSG00000288459	-	-5	9.56E-05	novel transcript
ENSG00000237914	SIRPG-AS1	-5	0.000258	SIRPG antisense RNA 1
ENSG00000260293	-	-5	4.47E-20	novel transcript 2C intronic to TBC1D24
ENSG00000185261	KIAA0825	-5	1.26E-113	KIAA0825
ENSG00000109107	ALDOC	-5	2.66E-152	aldolase 2C fructose-bisphosphate C
ENSG00000175164	ABO	-4.9	1.15E-19	ABO 2C alpha 1-3-N-acetylgalactosaminyltransferase and alpha 1-3-galactosyltransferase
ENSG00000265763	ZNF488	-4.9	2.29E-05	zinc finger protein 488
ENSG00000101307	SIRPB1	-4.9	8.29E-10	signal regulatory protein beta 1
ENSG00000225173	-	-4.9	5.07E-05	novel transcript
ENSG00000274825	-	-4.9	4.13E-05	novel transcript
ENSG00000133710	SPINK5	-4.9	1.91E-95	serine peptidase inhibitor Kazal type 5
ENSG00000118513	MYB	-4.9	1.44E-44	MYB proto-oncogene 2C transcription factor
ENSG00000253414	LINC01605	-4.8	9.10E-05	long intergenic non-protein coding RNA 1605
ENSG00000248514	-	-4.8	0.0007694	novel transcript
ENSG00000057149	SERPINB3	-4.8	9.87E-64	serpin family B member 3
ENSG00000143839	REN	-4.8	8.42E-05	renin
ENSG00000254290	-	-4.8	7.26E-05	novel transcript
ENSG00000131650	KREMEN2	-4.8	1.21E-23	kringle containing transmembrane protein 2
ENSG00000265800	-	-4.7	0.0001966	novel transcript 2C sense intronic to HN1
ENSG00000273155	-	-4.7	0.0006594	novel LIPT1-MRPL30 readthrough
ENSG00000258711	-	-4.7	0.0006955	novel transcript
ENSG00000285427	SOD2-OT1	-4.7	5.95E-05	SOD2 overlapping transcript 1
ENSG00000272896	-	-4.7	0.0001645	novel protein
ENSG00000282012	-	-4.7	7.72E-09	novel transcript
ENSG00000181856	SLC2A4	-4.7	1.08E-08	solute carrier family 2 member 4
ENSG00000235281	-	-4.7	0.0005515	novel transcript
ENSG00000155918	RAET1L	-4.7	0.0004162	retinoic acid early transcript 1L
ENSG00000287812	-	-4.7	0.0003592	novel transcript
ENSG00000204021	LIPK	-4.6	0.0010862	lipase family member K
ENSG00000183914	DNAH2	-4.6	2.31E-73	dynein axonemal heavy chain 2
ENSG00000167600	CYP2S1	-4.6	8.57E-132	cytochrome P450 family 2 subfamily S member 1
ENSG00000198157	HMGN5	-4.6	1.11E-145	high mobility group nucleosome binding domain 5
ENSG00000281133	-	-4.6	0.0006968	-
ENSG00000277170	-	-4.6	0.0003535	novel transcript 2C sense intronic with DNAJA3
ENSG00000100078	PLA2G3	-4.6	9.45E-05	phospholipase A2 group III

ENSG00000269534	-	-4.6	0.0009705	novel transcript 2C antisense to LIG1
ENSG00000128886	ELL3	-4.6	1.97E-12	elongation factor for RNA polymerase II 3
ENSG00000070915	SLC12A3	-4.6	2.18E-189	solute carrier family 12 member 3
ENSG00000271002	-	-4.5	0.0018508	ribosomal protein L11 (RPL11) pseudogene
ENSG00000132938	MTUS2	-4.5	2.70E-188	microtubule associated scaffold protein 2
ENSG00000143847	PPFIA4	-4.5	3.80E-06	PTPRF interacting protein alpha 4
ENSG00000011465	DCN	-4.5	5.86E-06	decorin
ENSG00000234949	-	-4.5	0.0017841	novel transcript 2C antisense to RAB17
ENSG00000124157	SEMG2	-4.5	0.0014214	semenogelin 2
ENSG00000231826	LINC01819	-4.5	0.0012905	long intergenic non-protein coding RNA 1819
ENSG00000124233	SEMG1	-4.5	2.32E-61	semenogelin 1
ENSG00000205755	CRLF2	-4.5	3.65E-15	cytokine receptor like factor 2
ENSG00000240583	AQP1	-4.5	0.0012121	aquaporin 1 (Colton blood group)
ENSG00000207751	-	-4.4	0.0025983	novel transcript
ENSG00000231131	LNCAROD	-4.4	0.0025983	lncRNA activating regulator of DKK1
ENSG00000282390	-	-4.4	0.0007698	novel transcript 2C sense intronic to ADARB2
ENSG00000196407	THEM5	-4.4	0.0026473	thioesterase superfamily member 5
ENSG00000198774	RASSF9	-4.4	1.23E-84	Ras association domain family member 9
ENSG00000260681	-	-4.4	0.0004163	novel transcript 2C antisense to TMC5
ENSG00000196668	LINC00173	-4.4	0.0004093	long intergenic non-protein coding RNA 173
ENSG00000110881	ASIC1	-4.4	9.01E-228	acid sensing ion channel subunit 1
ENSG00000149926	TLCD3B	-4.4	1.15E-09	TLC domain containing 3B
ENSG00000250073	-	-4.3	9.27E-09	novel transcript 2C antisense to ESAM
ENSG00000135472	FAIM2	-4.3	0.0008539	Fas apoptotic inhibitory molecule 2
ENSG00000288618	-	-4.3	0.0041896	novel transcript
ENSG00000152766	ANKRD22	-4.3	1.32E-26	ankyrin repeat domain 22
ENSG00000274422	-	-4.3	0.0010023	novel transcript
ENSG00000126217	MCF2L	-4.3	5.16E-21	MCF.2 cell line derived transforming sequence like
ENSG00000212391	-	-4.3	0.0039314	-
ENSG00000189057	FAM111B	-4.3	1.39E-100	FAM111 trypsin like peptidase B
ENSG00000187908	DMBT1	-4.3	3.17E-296	deleted in malignant brain tumors 1
ENSG00000283486	FAM95C	-4.2	8.54E-07	family with sequence similarity 95 member C
ENSG00000123838	C4BPA	-4.2	4.46E-199	complement component 4 binding protein alpha
ENSG00000253530	-	-4.2	0.0053507	novel transcript
ENSG00000270917	-	-4.2	0.0065674	chromatin assembly factor 1 2C subunit A (p150) (CHAF1A) pseudogene
ENSG00000234373	SNX18P7	-4.2	2.35E-09	sorting nexin 18 pseudogene 7
ENSG00000234707	SEC61G-DT	-4.2	2.21E-05	SEC61G divergent transcript
ENSG00000181409	AATK	-4.2	4.05E-138	apoptosis associated tyrosine kinase
ENSG00000171060	C8orf74	-4.2	0.0019573	chromosome 8 open reading frame 74
ENSG00000164188	RANBP3L	-4.2	0.011017	RAN binding protein 3 like
ENSG00000169583	CLIC3	-4.2	3.15E-87	chloride intracellular channel 3
ENSG00000267279	-	-4.2	0.0093756	novel transcript
ENSG00000114854	TNNC1	-4.2	2.36E-18	troponin C1 2C slow skeletal and cardiac type
ENSG00000188833	ENTPD8	-4.2	0.0048675	ectonucleoside triphosphate diphosphohydrolase 8
ENSG00000233760	-	-4.2	1.30E-08	novel transcript

ENSG00000158104	HPD	-4.2	5.62E-10	4-hydroxyphenylpyruvate dioxygenase
ENSG00000253773	C8orf37-AS1	-4.2	0.0047549	C8orf37 antisense RNA 1
ENSG00000174514	MFSD4A	-4.2	0.0040129	major facilitator superfamily domain containing 4A
ENSG00000183128	CALHM3	-4.2	0.0041614	calcium homeostasis modulator 3
ENSG00000269425	-	-4.2	0.001582	novel transcript 2C antisense to STAP2
ENSG00000246792	-	-4.1	0.0010274	novel transcript
ENSG00000014257	ACP3	-4.1	9.51E-17	acid phosphatase 3
ENSG00000276867	-	-4.1	0.0108475	novel transcript
ENSG00000143494	VASH2	-4.1	1.88E-10	vasohibin 2
ENSG00000245248	USP2-AS1	-4.1	6.21E-24	USP2 antisense RNA 1 (head to head)
ENSG00000260139	CSPG4P13	-4.1	0.0021687	chondroitin sulfate proteoglycan 4 pseudogene 13
ENSG00000168333	PPDPFL	-4.1	2.84E-13	pancreatic progenitor cell differentiation and proliferation factor like
ENSG00000179111	HES7	-4.1	3.78E-112	hes family bHLH transcription factor 7
ENSG00000132196	HSD17B7	-4.1	0	hydroxysteroid 17-beta dehydrogenase 7
ENSG00000218052	ADAMTS7P4	-4.1	0.0130318	ADAMTS7 pseudogene 4
ENSG00000228437	LINC02474	-4.1	0.0006904	long intergenic non-protein coding RNA 2474
ENSG00000260289	-	-4.1	1.77E-09	novel transcript
ENSG00000093009	CDC45	-4.1	1.72E-192	cell division cycle 45
ENSG00000174527	MYO1H	-4	0.0139025	myosin IH
ENSG00000149573	MPZL2	-4	0	myelin protein zero like 2
ENSG00000197467	COL13A1	-4	1.56E-53	collagen type XIII alpha 1 chain
ENSG00000166578	IQCD	-4	2.81E-11	IQ motif containing D
ENSG00000166321	NUDT13	-4	1.80E-27	nudix hydrolase 13
ENSG00000286467	-	-4	2.68E-112	novel transcript
ENSG00000181634	TNFSF15	-4	5.29E-49	TNF superfamily member 15
ENSG00000132437	DDC	-4	0.0023751	dopa decarboxylase
ENSG00000268941	LINC01711	-4	0.0097767	long intergenic non-protein coding RNA 1711
ENSG00000275591	XKR5	-4	0.0085704	XK related 5
ENSG00000274427	-	-4	0.0089484	novel transcript 2C sense intronic to RILPL1
ENSG00000272416	-	-4	0.0095308	novel transcript
ENSG00000156398	SFXN2	-3.9	3.16E-117	sideroflexin 2
ENSG00000225462	FDPSP1	-3.9	0.0392111	farnesyl diphosphate synthase pseudogene 1
ENSG00000243988	RPS24P17	-3.9	3.69E-08	ribosomal protein S24 pseudogene 17
ENSG00000280381	-	-3.9	0.0067886	novel transcript
ENSG00000286538	-	-3.9	0.0054914	novel transcript
ENSG00000261801	LOXL1-AS1	-3.9	5.59E-07	LOXL1 antisense RNA 1
ENSG00000134061	CD180	-3.9	0.0263677	CD180 molecule
ENSG00000221986	MYBPHL	-3.9	0.0157762	myosin binding protein H like
ENSG00000079435	LIPE	-3.9	0.0407186	lipase E 2C hormone sensitive type
ENSG00000242445	RPL7AP11	-3.9	0.0001504	ribosomal protein L7a pseudogene 11
ENSG00000271931	PNRC1-DT	-3.9	0.0265186	PNRC1 divergent transcript
ENSG00000157613	CREB3L1	-3.9	2.44E-26	cAMP responsive element binding protein 3 like 1
ENSG00000259659	-	-3.9	0.003857	novel transcript
ENSG00000267340	-	-3.9	0.0127979	ribosomal protein 2C large 2C P1 (RPLP1) pseudogene
ENSG00000175920	DOK7	-3.9	7.40E-05	docking protein 7

ENSG00000105255	FSD1	-3.9	7.14E-05	fibronectin type III and SPRY domain containing 1
ENSG00000214548	MEG3	-3.9	0.004011	maternally expressed 3
ENSG00000102048	ASB9	-3.9	7.61E-46	ankyrin repeat and SOCS box containing 9
ENSG00000180998	GPR137C	-3.9	2.05E-16	G protein-coupled receptor 137C
ENSG00000251611	FAM160A1-DT	-3.9	0.0018692	FAM160A1 divergent transcript
ENSG00000274677	-	-3.8	0.0031837	novel transcript 2C sense intronic to MBTPS1
ENSG00000115590	IL1R2	-3.8	0.004587	interleukin 1 receptor type 2
ENSG00000113140	SPARC	-3.8	7.48E-12	secreted protein acidic and cysteine rich
ENSG00000142619	PADI3	-3.8	0.0419979	peptidyl arginine deiminase 3
ENSG00000158769	F11R	-3.8	2.54E-170	F11 receptor
ENSG00000253395	-	-3.8	0.0072215	novel transcript
ENSG00000162068	NTN3	-3.8	1.11E-07	netrin 3
ENSG00000169884	WNT10B	-3.8	2.20E-63	Wnt family member 10B
ENSG00000120437	ACAT2	-3.8	0	acetyl-CoA acetyltransferase 2
ENSG00000223783	LINC01983	-3.8	4.32E-09	long intergenic non-protein coding RNA 1983
ENSG00000108405	P2RX1	-3.8	0.0132436	purinergic receptor P2X 1
ENSG00000254166	CASC19	-3.8	2.50E-133	cancer susceptibility 19
ENSG00000186115	CYP4F2	-3.8	0.0224171	cytochrome P450 family 4 subfamily F member 2
ENSG00000081138	CDH7	-3.8	0.0223092	cadherin 7
ENSG00000126878	AIF1L	-3.8	9.37E-291	allograft inflammatory factor 1 like
ENSG00000285625	-	-3.8	0.0082769	novel protein
ENSG00000175567	UCP2	-3.8	2.21E-185	uncoupling protein 2
ENSG00000115380	EFEMP1	-3.8	2.73E-204	EGF containing fibulin extracellular matrix protein 1
ENSG00000176890	TYMS	-3.8	5.92E-261	thymidylate synthetase
ENSG00000222489	SNORA79B	-3.8	0.0217996	small nucleolar RNA 2C H/ACA box 79B
ENSG00000089012	SIRPG	-3.8	1.94E-05	signal regulatory protein gamma
ENSG00000171236	LRG1	-3.8	9.15E-23	leucine rich alpha-2-glycoprotein 1
ENSG00000197046	SIGLEC15	-3.8	0.0389631	sialic acid binding Ig like lectin 15
ENSG00000214999	-	-3.8	0.0345504	novel transcript 2C antisense to ALOX12B
ENSG00000269959	SPACA6P-AS	-3.8	0.0001931	SPACA6P antisense RNA
ENSG00000137642	SORL1	-3.8	4.29E-14	sortilin related receptor 1
ENSG00000280426	-	-3.8	0.0104454	TEC
ENSG00000235162	C12orf75	-3.8	2.39E-196	chromosome 12 open reading frame 75
ENSG00000135414	GDF11	-3.8	1.36E-240	growth differentiation factor 11
ENSG00000109205	ODAM	-3.8	0.0216758	odontogenic 2C ameloblast associated
ENSG00000259341	-	-3.8	0.0001676	novel transcript
ENSG00000125731	SH2D3A	-3.8	1.17E-116	SH2 domain containing 3A
ENSG00000101489	CELF4	-3.8	0.010288	CUGBP Elav-like family member 4
ENSG00000106538	RARRES2	-3.7	5.45E-12	retinoic acid receptor responder 2
ENSG00000129195	PIMREG	-3.7	1.74E-81	PICALM interacting mitotic regulator
ENSG00000163687	DNASE1L3	-3.7	2.98E-07	deoxyribonuclease 1 like 3
ENSG00000221025	MIR1250	-3.7	0.0111422	microRNA 1250
ENSG00000230342	FANCD2P2	-3.7	0.0380759	FANCD2 pseudogene 2
ENSG00000267724	-	-3.7	0.0048283	novel transcript 2C antisense to HDHD2
ENSG00000173702	MUC13	-3.7	7.31E-73	mucin 13 2C cell surface associated
ENSG00000272583	-	-3.7	0.0003654	novel transcript

ENSG00000271937	-	-3.7	0.0327138	novel transcript 2C antisense to TCAIM
ENSG00000258303	-	-3.7	0.0282025	novel transcript
ENSG00000273300	-	-3.7	0.0002801	novel transcript 2C antisense to UFD1L
ENSG00000164796	CSMD3	-3.7	4.42E-18	CUB and Sushi multiple domains 3
ENSG00000188039	NWD1	-3.7	1.05E-49	NACHT and WD repeat domain containing 1
ENSG00000154553	PDLIM3	-3.7	0.0334531	PDZ and LIM domain 3
ENSG00000237595	LINC01275	-3.7	0.0121762	long intergenic non-protein coding RNA 1275
ENSG00000224728	IMPDH1P8	-3.7	0.0104457	inosine monophosphate dehydrogenase 1 pseudogene 8
ENSG00000235100	-	-3.7	0.0301708	novel transcript
ENSG00000278023	RDM1	-3.7	0.0034244	RAD52 motif containing 1
ENSG00000119969	HELLS	-3.7	5.25E-154	helicase 2C lymphoid specific
ENSG00000254595	-	-3.7	3.58E-05	voltage-dependent anion channel 1(VDAC1) pseudogene
ENSG00000076706	MCAM	-3.7	3.84E-163	melanoma cell adhesion molecule
ENSG00000204856	FAM216A	-3.7	1.07E-216	family with sequence similarity 216 member A
ENSG00000167580	AQP2	-3.7	0.0073434	aquaporin 2
ENSG00000029534	ANK1	-3.7	8.25E-21	ankyrin 1
ENSG00000272953	-	-3.6	0.0006538	novel transcript
ENSG00000198237	GUSBP13	-3.6	0.002133	GUSB pseudogene 13
ENSG00000158525	CPA5	-3.6	0.0457716	carboxypeptidase A5
ENSG00000237248	LINC00987	-3.6	2.57E-18	long intergenic non-protein coding RNA 987
ENSG00000220875	H3C9P	-3.6	0.0140065	H3 clustered histone 9 2C pseudogene
ENSG00000117632	STMN1	-3.6	1.18E-226	stathmin 1
ENSG00000260668	-	-3.6	0.0159962	emopamil binding protein-like (EBPL) pseudogene
ENSG00000171462	DLK2	-3.6	7.14E-11	delta like non-canonical Notch ligand 2
ENSG00000179477	ALOX12B	-3.6	7.92E-18	arachidonate 12-lipoxygenase 2C 12R type
ENSG00000270332	SMC2-DT	-3.6	4.75E-05	SMC2 divergent transcript
ENSG00000164362	TERT	-3.6	0.006726	telomerase reverse transcriptase
ENSG00000281189	GHET1	-3.6	0.0417148	gastric carcinoma proliferation enhancing transcript 1
ENSG00000203327	-	-3.6	0.0100309	novel transcript
ENSG00000130600	H19	-3.6	3.41E-12	H19 imprinted maternally expressed transcript
ENSG00000105141	CASP14	-3.6	2.29E-29	caspase 14
ENSG00000273045	C2orf15	-3.6	9.40E-40	chromosome 2 open reading frame 15
ENSG00000235990	RPL23AP20	-3.6	0.0425216	ribosomal protein L23a pseudogene 20
ENSG00000243478	AOX2P	-3.6	0.0425216	aldehyde oxidase 2 2C pseudogene
ENSG00000154556	SORBS2	-3.6	0.0114133	sorbin and SH3 domain containing 2
ENSG00000130005	GAMT	-3.6	3.78E-160	guanidinoacetate N-methyltransferase
ENSG00000115194	SLC30A3	-3.6	2.04E-10	solute carrier family 30 member 3
ENSG00000221241	SNORD88A	-3.6	0.010139	small nucleolar RNA 2C C/D box 88A
ENSG00000239474	KLHL41	-3.6	0.0354155	kelch like family member 41
ENSG00000164120	HPGD	-3.6	3.57E-16	15-hydroxyprostaglandin dehydrogenase
ENSG00000005448	WDR54	-3.5	9.93E-87	WD repeat domain 54
ENSG00000127954	STEAP4	-3.5	0.0018896	STEAP4 metalloredutase
ENSG00000166963	MAP1A	-3.5	7.14E-08	microtubule associated protein 1A
ENSG00000273760	-	-3.5	1.15E-12	novel transcript
ENSG00000109084	TMEM97	-3.5	0	transmembrane protein 97
ENSG00000186603	HPDL	-3.5	7.39E-110	4-hydroxyphenylpyruvate dioxygenase like



ENSG00000141968	VAV1	-3.5	1.24E-05	vav guanine nucleotide exchange factor 1
ENSG00000146205	ANO7	-3.5	0.0009163	anoctamin 7
ENSG00000171408	PDE7B	-3.5	1.54E-40	phosphodiesterase 7B
ENSG00000204362	LINC02783	-3.5	0.0011491	long intergenic non-protein coding RNA 2783
ENSG00000136542	GALNT5	-3.5	0.0159542	polypeptide N-acetylgalactosaminyltransferase 5
ENSG00000276757	RN7SL192P	-3.5	0.0457647	RNA 2C 7SL 2C cytoplasmic 192 2C pseudogene
ENSG00000283167	-	-3.5	0.0457647	novel pseudogene 2C similar to zonadhesin (Zan)
ENSG00000196118	CCDC189	-3.5	1.89E-84	coiled-coil domain containing 189
ENSG00000216775	-	-3.5	0.0007542	heterogeneous nuclear ribonucleoprotein A/B (HNRNPAB) pseudogene
ENSG00000229983	-	-3.5	0.0147834	novel transcript
ENSG00000114547	ROPN1B	-3.5	0.0442811	rhopilin associated tail protein 1B
ENSG00000234460	-	-3.5	0.0139879	cathepsin L (CTSL) pseudogene
ENSG00000261557	EEF1A1P38	-3.5	0.0137569	eukaryotic translation elongation factor 1 alpha 1 pseudogene 38
ENSG00000274090	-	-3.5	0.0160737	novel transcript
ENSG00000236305	SLC12A9-AS1	-3.4	0.0018855	SLC12A9 antisense RNA 1
ENSG00000287332	-	-3.4	0.000269	novel transcript
ENSG00000137404	NRM	-3.4	1.75E-66	nurim
ENSG00000167900	TK1	-3.4	1.41E-83	thymidine kinase 1
ENSG00000227598	-	-3.4	0.026495	novel transcript
ENSG00000041515	MYO16	-3.4	0.0001683	myosin XVI
ENSG00000100162	CENPM	-3.4	5.32E-80	centromere protein M
ENSG00000124102	PI3	-3.4	3.67E-171	peptidase inhibitor 3
ENSG00000159708	LRRC36	-3.4	0.0299576	leucine rich repeat containing 36
ENSG00000267595	BRCA1P1	-3.4	0.0121209	BRCA1 pseudogene 1
ENSG00000002587	HS3ST1	-3.4	7.34E-46	heparan sulfate-glucosamine 3-sulfotransferase 1
ENSG00000160182	TFF1	-3.4	3.06E-118	trefoil factor 1
ENSG00000197614	MFAP5	-3.4	0	microfibril associated protein 5
ENSG00000198574	SH2D1B	-3.4	1.32E-10	SH2 domain containing 1B
ENSG00000135976	ANKRD36	-3.4	2.91E-28	ankyrin repeat domain 36
ENSG00000286830	-	-3.4	0.0244404	novel transcript
ENSG00000254911	SCARNA9	-3.4	0.0128582	small Cajal body-specific RNA 9
ENSG00000087245	MMP2	-3.4	0.0013278	matrix metalloproteinase 2
ENSG00000236137	-	-3.4	2.18E-06	novel transcript
ENSG00000162618	ADGRL4	-3.4	0.0101055	adhesion G protein-coupled receptor L4
ENSG00000284634	-	-3.4	2.02E-05	novel transcript
ENSG00000186940	CHCHD2P9	-3.4	0.0193556	coiled-coil-helix-coiled-coil-helix domain containing 2 pseudogene 9
ENSG00000132688	NES	-3.4	5.97E-56	nestin
ENSG00000276170	-	-3.4	6.69E-106	novel transcript 2C antisense to ARHGAP23
ENSG00000274080	-	-3.4	0.019714	novel transcript
ENSG00000129354	AP1M2	-3.4	3.76E-154	adaptor related protein complex 1 subunit mu 2
ENSG00000164530	PI16	-3.4	9.55E-06	peptidase inhibitor 16
ENSG00000213958	KRT18P29	-3.4	0.0090038	keratin 18 pseudogene 29
ENSG00000258130	-	-3.3	7.66E-05	coiled-coil domain containing 101 (CCDC101) pseudogene
ENSG00000223935	LGALS1-DT	-3.3	0.0413202	LGALS1 divergent transcript

ENSG00000246334	PRR7-AS1	-3.3	4.94E-21	PRR7 antisense RNA 1
ENSG00000138152	BTBD16	-3.3	0.0182052	BTB domain containing 16
ENSG00000255650	FAM222A-AS1	-3.3	2.32E-17	FAM222A antisense RNA 1
ENSG00000248473	LINC01962	-3.3	7.15E-05	long intergenic non-protein coding RNA 1962
ENSG00000212371	-	-3.3	0.0486517	-
ENSG00000149596	JPH2	-3.3	2.24E-51	junctophilin 2
ENSG00000186871	ERCC6L	-3.3	4.98E-23	ERCC excision repair 6 like 2C spindle assembly checkpoint helicase
ENSG00000279555	-	-3.3	0.0141284	TEC
ENSG00000265112	MIR3153	-3.3	0.0183464	microRNA 3153
ENSG00000274976	-	-3.3	0.0281454	novel transcript 2C sense intronic to PKP2
ENSG00000198056	PRIM1	-3.3	4.30E-177	DNA primase subunit 1
ENSG00000187017	ESPN	-3.3	8.15E-18	espin
ENSG00000160181	TFF2	-3.3	4.85E-132	trefoil factor 2
ENSG00000239415	-	-3.3	0.0136689	novel transcript 2C antisense to MCM3APAS
ENSG00000196950	SLC39A10	-3.3	3.01E-101	solute carrier family 39 member 10
ENSG00000283930	PLD5P1	-3.2	0.0264418	PLD5 pseudogene 1
ENSG00000277423	-	-3.2	0.0007688	novel transcript
ENSG00000108551	RASD1	-3.2	1.06E-34	ras related dexamethasone induced 1
ENSG00000214274	ANG	-3.2	4.61E-39	angiogenin
ENSG00000138835	RGS3	-3.2	7.74E-51	regulator of G protein signaling 3
ENSG00000156463	SH3RF2	-3.2	4.63E-120	SH3 domain containing ring finger 2
ENSG00000266289	-	-3.2	0.0482654	novel transcript
ENSG00000144810	COL8A1	-3.2	2.20E-33	collagen type VIII alpha 1 chain
ENSG00000280032	-	-3.2	0.0001885	TEC
ENSG00000167771	RCOR2	-3.2	1.62E-08	REST corepressor 2
ENSG00000261949	GFY	-3.2	0.0053004	golgi associated olfactory signaling regulator
ENSG00000226562	CYP4F26P	-3.2	3.21E-22	cytochrome P450 family 4 subfamily F member 26 2C pseudogene
ENSG00000262202	-	-3.2	0.0461687	novel transcript
ENSG00000143412	ANXA9	-3.2	9.77E-29	annexin A9
ENSG00000160752	FDPS	-3.2	2.00E-158	farnesyl diphosphate synthase
ENSG00000144339	TMEFF2	-3.2	0.0499829	transmembrane protein with EGF like and two follistatin like domains 2
ENSG00000237429	-	-3.2	2.32E-05	novel transcript
ENSG00000167799	NUDT8	-3.2	7.73E-59	nudix hydrolase 8
ENSG00000168491	CCDC110	-3.2	0.0002515	coiled-coil domain containing 110
ENSG00000117266	CDK18	-3.2	9.67E-83	cyclin dependent kinase 18
ENSG00000179750	APOBEC3B	-3.2	1.32E-48	apolipoprotein B mRNA editing enzyme catalytic subunit 3B
ENSG00000220157	HNRNPA1P12	-3.2	0.0368072	heterogeneous nuclear ribonucleoprotein A1 pseudogene 12
ENSG00000179674	ARL14	-3.2	0.0009023	ADP ribosylation factor like GTPase 14
ENSG00000279384	-	-3.2	0.0057785	TEC
ENSG00000175874	CREG2	-3.2	9.86E-152	cellular repressor of E1A stimulated genes 2
ENSG00000176438	SYNE3	-3.2	6.31E-46	spectrin repeat containing nuclear envelope family member 3
ENSG00000135723	FHOD1	-3.2	6.42E-96	formin homology 2 domain containing 1
ENSG00000140451	PIF1	-3.2	6.66E-45	PIF1 5'-to-3' DNA helicase
ENSG00000228716	DHFR	-3.2	1.79E-219	dihydrofolate reductase
ENSG00000106268	NUDT1	-3.2	7.33E-65	nudix hydrolase 1

ENSG00000223922	ASS1P2	-3.2	0.0352845	argininosuccinate synthetase 1 pseudogene 2
ENSG00000262904	TMPOP2	-3.2	0.0004518	thymopoietin pseudogene 2
ENSG00000150783	TEX12	-3.2	0.0163114	testis expressed 12
ENSG00000266983	RANBP3-DT	-3.1	3.28E-10	RANBP3 divergent transcript
ENSG00000102384	CENPI	-3.1	9.03E-81	centromere protein I
ENSG00000256813	-	-3.1	0.0020688	novel transcript
ENSG00000101276	SLC52A3	-3.1	2.22E-16	solute carrier family 52 member 3
ENSG00000153246	PLA2R1	-3.1	3.68E-18	phospholipase A2 receptor 1
ENSG00000259209	-	-3.1	0.0058914	novel transcript 2C antisense to ZFH3
ENSG00000254872	LINC02688	-3.1	1.58E-34	long intergenic non-protein coding RNA 2688
ENSG00000147155	EBP	-3.1	4.41E-117	EBP cholesterol delta-isomerase
ENSG00000106178	CCL24	-3.1	0.0002322	C-C motif chemokine ligand 24
ENSG00000186897	C1QL4	-3.1	0.000139	complement C1q like 4
ENSG00000130762	ARHGEF16	-3.1	1.00E-89	Rho guanine nucleotide exchange factor 16
ENSG00000121769	FABP3	-3.1	9.55E-10	fatty acid binding protein 3
ENSG00000225969	ABHD11-AS1	-3.1	0.0064127	ABHD11 antisense RNA 1 (tail to tail)
ENSG00000235508	RPS2P7	-3.1	0.025461	ribosomal protein S2 pseudogene 7
ENSG00000281332	LINC00997	-3.1	1.55E-05	long intergenic non-protein coding RNA 997
ENSG00000187688	TRPV2	-3.1	2.48E-10	transient receptor potential cation channel subfamily V member 2
ENSG00000062822	POLD1	-3.1	2.56E-138	DNA polymerase delta 1 2C catalytic subunit
ENSG00000253616	-	-3.1	1.37E-19	novel transcript
ENSG00000161981	SNRNP25	-3.1	2.05E-68	small nuclear ribonucleoprotein U11/U12 subunit 25
ENSG00000171126	KCNG3	-3.1	0.0313617	potassium voltage-gated channel modifier subfamily G member 3
ENSG00000251169	LINC01843	-3.1	0.0059544	long intergenic non-protein coding RNA 1843
ENSG00000112984	KIF20A	-3.1	5.32E-198	kinesin family member 20A
ENSG00000128298	BAIAP2L2	-3.1	2.12E-14	BAR/IMD domain containing adaptor protein 2 like 2
ENSG00000100526	CDKN3	-3.1	4.46E-63	cyclin dependent kinase inhibitor 3
ENSG00000140534	TICRR	-3.1	5.37E-114	TOPBP1 interacting checkpoint and replication regulator
ENSG00000138182	KIF20B	-3.1	1.63E-19	kinesin family member 20B
ENSG00000139219	COL2A1	-3.1	0.0050393	collagen type II alpha 1 chain
ENSG00000204228	HSD17B8	-3.1	4.46E-41	hydroxysteroid 17-beta dehydrogenase 8
ENSG00000272510	-	-3.1	0.0001608	novel transcript 2C antisense to DNAJC16
ENSG00000133636	NTS	-3.1	0.0265784	neurotensin
ENSG00000273063	-	-3.1	0.0260813	novel transcript
ENSG00000225855	RUSC1-AS1	-3.1	5.03E-48	RUSC1 antisense RNA 1
ENSG00000231993	EP300-AS1	-3.1	2.45E-07	EP300 antisense RNA 1
ENSG00000172260	NEGR1	-3.1	5.78E-36	neuronal growth regulator 1
ENSG00000066279	ASPM	-3.1	9.14E-52	assembly factor for spindle microtubules
ENSG00000198758	EPS8L3	-3.1	1.39E-08	EPS8 like 3
ENSG00000255847	-	-3.1	5.56E-12	novel transcript
ENSG00000105486	LIG1	-3.1	2.51E-257	DNA ligase 1
ENSG00000281706	LINC01012	-3.1	3.01E-11	long intergenic non-protein coding RNA 1012
ENSG00000085999	RAD54L	-3.1	1.26E-70	RAD54 like
ENSG00000186314	PRELID2	-3.1	1.29E-37	PRELI domain containing 2
ENSG00000231738	TSPAN19	-3.1	6.68E-50	tetraspanin 19

ENSG00000282418	-	-3.1	0.0269111	novel transcript
ENSG00000226472	-	-3	0.0004475	tetraspanin family pseudogene
ENSG00000284946	-	-3	5.92E-34	novel protein
ENSG00000245293	CYP2U1-AS1	-3	4.00E-05	CYP2U1 and SGMS2 antisense RNA 1
ENSG00000251596	HADHAP1	-3	0.0104296	HADHA pseudogene 1
ENSG00000213942	-	-3	0.0087516	ribosomal protein L31 (RPL31) pseudogene
ENSG00000256013	-	-3	0.0024111	novel transcript 2C antisense to EMP2
ENSG00000105289	TJP3	-3	2.13E-67	tight junction protein 3
ENSG00000181418	DDN	-3	7.48E-116	dendrin
ENSG00000228137	-	-3	3.32E-07	novel transcript
ENSG00000119326	CTNNAL1	-3	2.79E-188	catenin alpha like 1
ENSG00000278389	-	-3	0.0018272	novel transcript
ENSG00000162636	FAM102B	-3	1.38E-76	family with sequence similarity 102 member B
ENSG00000259006	-	-3	0.0387369	novel transcript 2C antisense to MC1R
ENSG00000137880	GCHFR	-3	6.06E-96	GTP cyclohydrolase I feedback regulator
ENSG00000182809	CRIP2	-3	6.64E-23	cysteine rich protein 2
ENSG00000172893	DHCR7	-3	3.12E-165	7-dehydrocholesterol reductase
ENSG00000123080	CDKN2C	-3	3.08E-111	cyclin dependent kinase inhibitor 2C
ENSG00000144821	MYH15	-3	0.0014881	myosin heavy chain 15
ENSG00000196912	ANKRD36B	-3	1.56E-13	ankyrin repeat domain 36B
ENSG00000100479	POLE2	-3	2.14E-83	DNA polymerase epsilon 2 2C accessory subunit
ENSG00000260213	CENPN-AS1	-3	0.0012589	CENPN antisense RNA 1
ENSG00000212766	EWSAT1	-3	5.79E-25	Ewing sarcoma associated transcript 1
ENSG00000138778	CENPE	-3	9.61E-26	centromere protein E
ENSG00000102271	KLHL4	-3	5.23E-08	kelch like family member 4
ENSG00000281398	SNHG4	-3	3.98E-84	small nucleolar RNA host gene 4
ENSG00000126895	AVPR2	-3	5.67E-09	arginine vasopressin receptor 2
ENSG00000280327	-	-3	0.0014066	tec
ENSG00000197415	VEPH1	-2.9	1.85E-13	ventricular zone expressed PH domain containing 1
ENSG00000223466	LINC01825	-2.9	3.49E-10	long intergenic non-protein coding RNA 1825
ENSG00000276672	-	-2.9	5.01E-17	novel transcript 2C sense intronic to RFC3
ENSG00000006576	PHTF2	-2.9	3.64E-101	putative homeodomain transcription factor 2
ENSG00000173237	C11orf86	-2.9	1.20E-92	chromosome 11 open reading frame 86
ENSG00000136982	DSCC1	-2.9	5.66E-122	DNA replication and sister chromatid cohesion 1
ENSG00000171817	ZNF540	-2.9	4.95E-05	zinc finger protein 540
ENSG00000112414	ADGRG6	-2.9	4.89E-95	adhesion G protein-coupled receptor G6
ENSG00000152078	TLCD4	-2.9	4.27E-46	TLC domain containing 4
ENSG00000251095	-	-2.9	6.76E-11	novel transcript
ENSG00000180071	ANKRD18A	-2.9	4.23E-06	ankyrin repeat domain 18A
ENSG00000079393	DUSP13	-2.9	1.67E-05	dual specificity phosphatase 13
ENSG00000185347	TEDC1	-2.9	1.24E-55	tubulin epsilon and delta complex 1
ENSG00000125454	SLC25A19	-2.9	3.17E-84	solute carrier family 25 member 19
ENSG00000278879	-	-2.9	0.0145931	TEC
ENSG00000163913	IFT122	-2.9	4.41E-91	intraflagellar transport 122
ENSG00000286444	-	-2.9	0.0152815	novel transcript 2C antisense to APMAP
ENSG00000005102	MEOX1	-2.9	1.94E-12	mesenchyme homeobox 1
ENSG00000258199	-	-2.9	0.047599	novel transcript 2C sense overlapping to SMARCC2

ENSG00000271996	-	-2.9	0.0437858	novel transcript 2C antisense to NFE2L2
ENSG00000111732	AICDA	-2.9	0.0112728	activation induced cytidine deaminase
ENSG00000287625	-	-2.9	3.97E-06	novel transcript
ENSG00000180537	RNF182	-2.9	1.92E-209	ring finger protein 182
ENSG00000241741	RPL7AP30	-2.9	6.34E-20	ribosomal protein L7a pseudogene 30
ENSG00000235559	NOP56P1	-2.9	0.0415966	NOP56 ribonucleoprotein pseudogene 1
ENSG00000133640	LRRIQ1	-2.9	6.09E-11	leucine rich repeats and IQ motif containing 1
ENSG00000113231	PDE8B	-2.9	6.79E-33	phosphodiesterase 8B
ENSG00000186487	MYT1L	-2.9	9.25E-06	myelin transcription factor 1 like
ENSG00000179913	B3GNT3	-2.9	4.97E-95	UDP-GlcNAc:betaGal beta-1 2C3-N-acetylglucosaminyltransferase 3
ENSG00000159958	TNFRSF13C	-2.9	8.35E-09	TNF receptor superfamily member 13C
ENSG00000172731	LRRC20	-2.9	1.60E-51	leucine rich repeat containing 20
ENSG00000104549	SQLE	-2.9	2.93E-234	squalene epoxidase
ENSG00000279347	-	-2.9	0.0001895	TEC
ENSG00000178035	IMPDH2	-2.9	3.58E-90	inosine monophosphate dehydrogenase 2
ENSG00000274964	-	-2.9	4.16E-07	novel transcript 2C sense intronic to BICD1
ENSG00000221829	FANCG	-2.9	1.06E-78	FA complementation group G
ENSG00000244184	-	-2.9	0.0110234	novel transcript
ENSG00000255118	-	-2.9	0.0099939	novel transcript
ENSG00000134545	KLRC1	-2.9	0.000957	killer cell lectin like receptor C1
ENSG00000105649	RAB3A	-2.9	1.34E-10	RAB3A 2C member RAS oncogene family
ENSG00000116983	HPCAL4	-2.9	0.0447994	hippocalcin like 4
ENSG00000166803	PCLAF	-2.9	3.12E-135	PCNA clamp associated factor
ENSG0000016402	IL20RA	-2.8	6.43E-20	interleukin 20 receptor subunit alpha
ENSG00000189143	CLDN4	-2.8	3.96E-77	claudin 4
ENSG00000229388	LINC01715	-2.8	0.0170863	long intergenic non-protein coding RNA 1715
ENSG00000116711	PLA2G4A	-2.8	1.01E-109	phospholipase A2 group IVA
ENSG00000163633	C4orf36	-2.8	0.0230701	chromosome 4 open reading frame 36
ENSG00000162390	ACOT11	-2.8	6.39E-15	acyl-CoA thioesterase 11
ENSG00000279425	-	-2.8	0.0167842	TEC
ENSG00000276850	-	-2.8	3.97E-22	novel transcript
ENSG00000227039	ITGB2-AS1	-2.8	0.0001343	ITGB2 antisense RNA 1
ENSG00000232504	ST3GAL5-AS1	-2.8	0.0068977	ST3GAL5 antisense RNA 1 (head to head)
ENSG00000138650	PCDH10	-2.8	1.98E-22	protocadherin 10
ENSG00000276368	H2AC14	-2.8	0.0179052	H2A clustered histone 14
ENSG00000111077	TNS2	-2.8	6.31E-95	tensin 2
ENSG00000137843	PAK6	-2.8	0.0060277	p21 (RAC1) activated kinase 6
ENSG00000215158	-	-2.8	2.41E-11	Putative beta-glucuronidase-like protein FLJ75287 pseudogene
ENSG00000232931	LINC00342	-2.8	2.51E-14	long intergenic non-protein coding RNA 342
ENSG00000083807	SLC27A5	-2.8	3.98E-84	solute carrier family 27 member 5
ENSG00000234432	-	-2.8	0.0054029	novel transcript
ENSG00000260060	-	-2.8	0.0012433	novel transcript 2C antisense to PYCARD
ENSG00000169684	CHRNA5	-2.8	5.65E-104	cholinergic receptor nicotinic alpha 5 subunit
ENSG00000161888	SPC24	-2.8	3.70E-76	SPC24 component of NDC80 kinetochore complex
ENSG00000095303	PTGS1	-2.8	2.16E-75	prostaglandin-endoperoxide synthase 1
ENSG00000155066	PROM2	-2.8	0.00537	prominin 2

ENSG00000255508	-	-2.8	1.84E-61	novel protein
ENSG00000286010	-	-2.8	1.02E-16	novel transcript
ENSG00000286161	-	-2.8	0.0172158	novel transcript
ENSG00000165795	NDRG2	-2.8	1.59E-39	NDRG family member 2
ENSG00000256879	-	-2.8	2.40E-05	novel transcript
ENSG00000273102	-	-2.8	0.0015085	novel transcript
ENSG00000137841	PLCB2	-2.8	8.60E-13	phospholipase C beta 2
ENSG00000110318	CEP126	-2.8	5.12E-08	centrosomal protein 126
ENSG00000108852	MPP2	-2.8	5.52E-59	membrane palmitoylated protein 2
ENSG00000057294	PKP2	-2.8	1.48E-133	plakophilin 2
ENSG00000261266	-	-2.8	0.0017509	novel transcript
ENSG00000243830	-	-2.8	0.0165316	ribosomal protein L15 (RPL15) pseudogene
ENSG00000117399	CDC20	-2.8	6.77E-73	cell division cycle 20
ENSG00000169710	FASN	-2.8	1.78E-91	fatty acid synthase
ENSG00000160606	TLCD1	-2.8	3.95E-70	TLC domain containing 1
ENSG00000164976	MYORG	-2.8	6.67E-102	myogenesis regulating glycosidase (putative)
ENSG00000172000	ZNF556	-2.8	1.18E-27	zinc finger protein 556
ENSG00000113119	TMCO6	-2.8	1.90E-37	transmembrane and coiled-coil domains 6
ENSG00000073350	LLGL2	-2.7	2.19E-108	LLGL scribble cell polarity complex component 2
ENSG00000121152	NCAPH	-2.7	2.43E-143	non-SMC condensin I complex subunit H
ENSG00000006071	ABCC8	-2.7	3.52E-08	ATP binding cassette subfamily C member 8
ENSG00000266642	-	-2.7	0.008802	novel transcript 2C antisense to DHRS13
ENSG00000111665	CDCA3	-2.7	4.50E-125	cell division cycle associated 3
ENSG00000143919	CAMKMT	-2.7	1.07E-70	calmodulin-lysine N-methyltransferase
ENSG00000075218	GTSE1	-2.7	3.48E-147	G2 and S-phase expressed 1
ENSG00000285043	-	-2.7	5.40E-40	novel protein
ENSG00000053918	KCNQ1	-2.7	1.27E-07	potassium voltage-gated channel subfamily Q member 1
ENSG00000281566	-	-2.7	4.79E-20	novel transcript
ENSG00000138400	MDH1B	-2.7	0.0112349	malate dehydrogenase 1B
ENSG00000228008	-	-2.7	0.0403755	novel transcript 2C antisense to MON1A
ENSG00000257167	TMPO-AS1	-2.7	1.30E-87	TMPO antisense RNA 1
ENSG00000144354	CDCA7	-2.7	8.75E-106	cell division cycle associated 7
ENSG00000226009	KCNIP2-AS1	-2.7	0.0001372	KCNIP2 antisense RNA 1
ENSG00000065057	NTHL1	-2.7	4.82E-59	nth like DNA glycosylase 1
ENSG00000126803	HSPA2	-2.7	3.79E-06	heat shock protein family A (Hsp70) member 2
ENSG00000096092	TMEM14A	-2.7	4.73E-80	transmembrane protein 14A
ENSG00000106327	TFR2	-2.7	1.93E-72	transferrin receptor 2
ENSG00000213853	EMP2	-2.7	0	epithelial membrane protein 2
ENSG00000276216	-	-2.7	0.033936	novel transcript
ENSG00000108821	COL1A1	-2.7	1.44E-103	collagen type I alpha 1 chain
ENSG00000170522	ELOVL6	-2.7	6.40E-125	ELOVL fatty acid elongase 6
ENSG00000271503	CCL5	-2.7	1.65E-51	C-C motif chemokine ligand 5
ENSG00000232335	-	-2.7	0.0008912	novel transcript
ENSG00000100116	GCAT	-2.7	2.55E-41	glycine C-acetyltransferase
ENSG00000272599	-	-2.7	1.64E-07	novel transcript to NUDT13
ENSG00000214870	-	-2.7	0.0004049	novel transcript



ENSG00000230453	ANKRD18B	-2.7	1.35E-09	ankyrin repeat domain 18B
ENSG00000215210	RBMXP2	-2.7	0.0162976	RBMX pseudogene 2
ENSG00000178568	ERBB4	-2.7	3.28E-13	erb-b2 receptor tyrosine kinase 4
ENSG00000151575	TEX9	-2.7	6.19E-20	testis expressed 9
ENSG00000248668	OXCT1-AS1	-2.7	0.0003598	OXCT1 antisense RNA 1
ENSG00000238266	LINC00707	-2.7	5.95E-34	long intergenic non-protein coding RNA 707
ENSG00000030419	IKZF2	-2.7	1.03E-22	IKAROS family zinc finger 2
ENSG00000174501	ANKRD36C	-2.7	5.95E-10	ankyrin repeat domain 36C
ENSG00000225218	-	-2.7	2.33E-05	novel transcript
ENSG00000143799	PARP1	-2.7	4.08E-187	poly(ADP-ribose) polymerase 1
ENSG00000100344	PNPLA3	-2.7	8.18E-54	patatin like phospholipase domain containing 3
ENSG00000271367	-	-2.7	0.000649	novel transcript
ENSG00000131747	TOP2A	-2.7	6.66E-86	DNA topoisomerase II alpha
ENSG00000079459	FDFT1	-2.7	1.49E-139	farnesyl-diphosphate farnesyltransferase 1
ENSG00000184709	LRRC26	-2.7	1.25E-27	leucine rich repeat containing 26
ENSG00000164251	F2RL1	-2.7	3.86E-05	F2R like trypsin receptor 1
ENSG00000159674	SPON2	-2.7	6.52E-08	spondin 2
ENSG00000099251	HSD17B7P2	-2.7	3.52E-05	hydroxysteroid 17-beta dehydrogenase 7 pseudogene 2
ENSG00000271871	-	-2.7	0.0015322	novel transcript 2C antisense to PCDH12
ENSG00000006025	OSBPL7	-2.7	3.61E-27	oxysterol binding protein like 7
ENSG00000166974	MAPRE2	-2.7	1.91E-142	microtubule associated protein RP/EB family member 2
ENSG00000070526	ST6GALNAC1	-2.7	5.38E-94	ST6 N-acetylgalactosaminide alpha-2 2C6-sialyltransferase 1
ENSG00000228501	RPL15P18	-2.7	0.026554	ribosomal protein L15 pseudogene 18
ENSG00000226950	DANCR	-2.7	1.18E-113	differentiation antagonizing non-protein coding RNA
ENSG00000288656	-	-2.7	0.0077222	novel protein
ENSG00000105011	ASF1B	-2.6	2.99E-66	anti-silencing function 1B histone chaperone
ENSG00000108578	BLMH	-2.6	4.11E-143	bleomycin hydrolase
ENSG00000186815	TPCN1	-2.6	8.89E-104	two pore segment channel 1
ENSG00000258620	-	-2.6	8.36E-10	novel transcript 2C intronic to WDR25
ENSG00000254285	KRT8P3	-2.6	0.000285	keratin 8 pseudogene 3
ENSG00000288649	ACTL10	-2.6	2.00E-16	actin like 10
ENSG00000266278	LINC01910	-2.6	8.75E-05	long intergenic non-protein coding RNA 1910
ENSG00000255008	LINC02739	-2.6	0.0016693	long intergenic non-protein coding RNA 2739
ENSG00000007264	MATK	-2.6	6.82E-93	megakaryocyte-associated tyrosine kinase
ENSG00000100629	CEP128	-2.6	2.73E-23	centrosomal protein 128
ENSG00000136261	BZW2	-2.6	9.98E-202	basic leucine zipper and W2 domains 2
ENSG00000003987	MTMR7	-2.6	0.003137	myotubularin related protein 7
ENSG00000149823	VPS51	-2.6	1.78E-86	VPS51 subunit of GARP complex
ENSG00000270133	-	-2.6	0.0025031	novel transcript 2C sense intronic to C5orf36
ENSG00000286311	-	-2.6	0.0047742	novel transcript 2C antisense to NOL4L
ENSG00000228950	-	-2.6	0.0197681	novel transcript
ENSG00000124429	POF1B	-2.6	1.09E-07	POF1B actin binding protein
ENSG00000138172	CALHM2	-2.6	4.01E-12	calcium homeostasis modulator family member 2
ENSG00000100297	MCM5	-2.6	2.74E-50	minichromosome maintenance complex component 5
ENSG00000188985	DHFRP1	-2.6	3.81E-49	dihydrofolate reductase pseudogene 1
ENSG00000251503	CENPS-CORT	-2.6	0.0047609	CENPS-CORT readthrough

ENSG00000158486	DNAH3	-2.6	0.0012115	dynein axonemal heavy chain 3
ENSG00000145882	PCYOX1L	-2.6	9.85E-21	prenylcysteine oxidase 1 like
ENSG00000122966	CIT	-2.6	5.06E-137	citron rho-interacting serine/threonine kinase
ENSG00000228021	-	-2.6	3.50E-05	novel transcript
ENSG00000283674	-	-2.6	0.0011729	novel transcript
ENSG00000167525	PROCA1	-2.6	6.31E-16	protein interacting with cyclin A1
ENSG00000182010	RTKN2	-2.6	3.01E-13	rhotekin 2
ENSG00000249375	CASC11	-2.6	3.27E-13	cancer susceptibility 11
ENSG00000075702	WDR62	-2.6	2.45E-60	WD repeat domain 62
ENSG00000227373	RABGAP1L-DT	-2.6	0.0002194	RABGAP1L divergent transcript
ENSG00000117472	TSPAN1	-2.6	1.05E-80	tetraspanin 1
ENSG00000253978	CTB-178M22.2	-2.6	0.0250692	uncharacterized LOC101927862
ENSG00000127084	FGD3	-2.6	1.89E-11	FYVE 2C RhoGEF and PH domain containing 3
ENSG00000251411	-	-2.6	5.97E-05	actin related protein 2/3 complex 2C subunit 1A 2C 41kDa (ARPC1A) pseudogene
ENSG00000287750	-	-2.6	0.0177918	novel transcript
ENSG00000164070	HSPA4L	-2.6	3.44E-97	heat shock protein family A (Hsp70) member 4 like
ENSG00000119333	DYNC2I2	-2.6	2.63E-61	dynein 2 intermediate chain 2
ENSG00000162004	CCDC78	-2.6	1.87E-16	coiled-coil domain containing 78
ENSG00000171246	NPTX1	-2.6	2.60E-80	neuronal pentraxin 1
ENSG00000148773	MKI67	-2.6	2.81E-49	marker of proliferation Ki-67
ENSG00000272473	-	-2.6	9.57E-21	novel transcript
ENSG00000261773	-	-2.5	0.0003477	novel transcript 2C overlapping to FAM3A
ENSG00000186377	CYP4X1	-2.5	4.09E-52	cytochrome P450 family 4 subfamily X member 1
ENSG00000129173	E2F8	-2.5	2.71E-49	E2F transcription factor 8
ENSG00000140057	AK7	-2.5	1.60E-23	adenylate kinase 7
ENSG00000263786	-	-2.5	0.0045819	novel transcript 2C sense intronic to HN1
ENSG00000127564	PKMYT1	-2.5	1.74E-51	protein kinase 2C membrane associated tyrosine/threonine 1
ENSG00000231851	MRPS9-AS1	-2.5	0.0020594	MRPS9 antisense RNA 1
ENSG00000232445	EMSLR	-2.5	1.73E-91	E2F1 mRNA stabilizing lncRNA
ENSG00000254756	-	-2.5	0.0005884	novel transcript
ENSG00000052802	MSMO1	-2.5	1.26E-196	methylsterol monooxygenase 1
ENSG00000169100	SLC25A6	-2.5	1.14E-67	solute carrier family 25 member 6
ENSG00000286887	-	-2.5	1.49E-30	novel transcript 2C antisense to SGK1
ENSG00000166246	C16orf71	-2.5	4.27E-08	chromosome 16 open reading frame 71
ENSG00000230082	PRRT3-AS1	-2.5	1.46E-11	PRRT3 antisense RNA 1
ENSG00000178922	HYI	-2.5	1.43E-69	hydroxypyruvate isomerase (putative)
ENSG00000180855	ZNF443	-2.5	3.63E-08	zinc finger protein 443
ENSG00000258657	-	-2.5	0.0073776	novel transcript 2C antisense to GZMB
ENSG00000278985	-	-2.5	0.0109701	novel transcript
ENSG00000122952	ZWINT	-2.5	2.38E-152	ZW10 interacting kinetochore protein
ENSG00000179431	FJX1	-2.5	1.15E-62	four-jointed box kinase 1
ENSG00000171848	RRM2	-2.5	1.12E-207	ribonucleotide reductase regulatory subunit M2
ENSG00000206538	VGLL3	-2.5	1.68E-32	vestigial like family member 3
ENSG00000151150	ANK3	-2.5	4.42E-11	ankyrin 3
ENSG00000126249	PDCD2L	-2.5	4.88E-37	programmed cell death 2 like

ENSG00000176208	ATAD5	-2.5	2.40E-27	ATPase family AAA domain containing 5
ENSG00000267757	EML2-AS1	-2.5	6.99E-63	EML2 antisense RNA 1
ENSG00000101220	C20orf27	-2.5	6.50E-64	chromosome 20 open reading frame 27
ENSG00000123843	C4BPB	-2.5	2.94E-294	complement component 4 binding protein beta
ENSG00000203279	-	-2.5	1.22E-14	novel transcript
ENSG00000160326	SLC2A6	-2.5	5.43E-106	solute carrier family 2 member 6
ENSG00000198754	OXCT2	-2.5	5.67E-05	3-oxoacid CoA-transferase 2
ENSG00000254244	PAICSP4	-2.5	0.0384425	phosphoribosylaminoimidazole carboxylase 2C phosphoribosylaminoimidazole succinocarboxamide synthetase pseudogene 4
ENSG00000204531	POU5F1	-2.5	1.36E-06	POU class 5 homeobox 1
ENSG00000267500	ZNF887P	-2.5	2.15E-11	zinc finger protein 887 2C pseudogene
ENSG00000242083	RPL7AP31	-2.5	0.0024934	ribosomal protein L7a pseudogene 31
ENSG00000198088	NUP62CL	-2.5	9.67E-56	nucleoporin 62 C-terminal like
ENSG00000137310	TCF19	-2.5	6.69E-106	transcription factor 19
ENSG00000286180	-	-2.5	0.0097946	novel transcript
ENSG00000101868	POLA1	-2.5	8.76E-95	DNA polymerase alpha 1 2C catalytic subunit
ENSG00000286729	-	-2.5	0.0006046	novel transcript 2C antisense to COPG1
ENSG00000172830	SSH3	-2.5	7.02E-111	slingshot protein phosphatase 3
ENSG00000267698	-	-2.5	2.01E-06	novel transcript 2C antisense to CLIP3 and THAP8
ENSG00000143797	MBOAT2	-2.5	6.06E-27	membrane bound O-acyltransferase domain containing 2
ENSG00000166689	PLEKHA7	-2.5	3.52E-37	pleckstrin homology domain containing A7
ENSG00000162139	NEU3	-2.5	6.46E-82	neuraminidase 3
ENSG00000235776	-	-2.5	0.0033732	ribosomal protein L7a (RPL7A) pseudogene
ENSG00000280214	-	-2.5	0.0192314	TEC
ENSG00000167536	DHRS13	-2.5	1.43E-61	dehydrogenase/reductase 13
ENSG00000287445	-	-2.5	0.0027544	novel transcript
ENSG00000183048	SLC25A10	-2.5	1.33E-47	solute carrier family 25 member 10
ENSG00000060558	GNA15	-2.5	6.74E-07	G protein subunit alpha 15
ENSG00000071539	TRIP13	-2.5	2.74E-202	thyroid hormone receptor interactor 13
ENSG00000269106	-	-2.5	0.0012615	novel transcript 2C antisense to ZNF446
ENSG00000101057	MYBL2	-2.5	2.00E-51	MYB proto-oncogene like 2
ENSG00000131153	GINS2	-2.5	1.13E-59	GINS complex subunit 2
ENSG00000110921	MVK	-2.5	5.59E-110	mevalonate kinase
ENSG00000092853	CLSPN	-2.5	2.31E-50	claspin
ENSG00000117724	CENPF	-2.5	4.54E-40	centromere protein F
ENSG00000170421	KRT8	-2.5	6.88E-56	keratin 8
ENSG00000188517	COL25A1	-2.5	5.69E-50	collagen type XXV alpha 1 chain
ENSG00000115687	PASK	-2.5	1.12E-60	PAS domain containing serine/threonine kinase
ENSG00000287865	-	-2.5	0.0003781	novel transcript
ENSG00000278763	FAM27B	-2.5	2.54E-05	family with sequence similarity 27 member B
ENSG00000178999	AURKB	-2.5	6.48E-57	aurora kinase B
ENSG00000133302	SLF1	-2.5	2.93E-51	SMC5-SMC6 complex localization factor 1
ENSG00000128408	RIBC2	-2.5	1.70E-21	RIB43A domain with coiled-coils 2
ENSG00000011052	NME1-NME2	-2.5	5.02E-12	NME1-NME2 readthrough
ENSG00000258748	-	-2.5	0.002466	novel transcript 2C antisense to KIF26A
ENSG00000144061	NPHP1	-2.5	3.20E-26	nephrocystin 1

ENSG00000224578	HNRNPA1P48	-2.4	7.05E-170	heterogeneous nuclear ribonucleoprotein A1 pseudogene 48
ENSG00000138606	SHF	-2.4	0.0001509	Src homology 2 domain containing F
ENSG00000158106	RHPN1	-2.4	4.77E-50	rhophilin Rho GTPase binding protein 1
ENSG00000287853	-	-2.4	0.0082452	novel transcript
ENSG00000232110	-	-2.4	2.86E-101	novel transcript 2C antisense to LIPA
ENSG00000105607	GCDH	-2.4	1.70E-29	glutaryl-CoA dehydrogenase
ENSG00000234997	-	-2.4	0.0002537	novel transcript
ENSG00000231007	CDC20P1	-2.4	1.80E-07	cell division cycle 20 pseudogene 1
ENSG00000119403	PHF19	-2.4	1.61E-67	PHD finger protein 19
ENSG00000138658	ZGRF1	-2.4	2.96E-05	zinc finger GRF-type containing 1
ENSG00000153044	CENPH	-2.4	1.03E-112	centromere protein H
ENSG00000184574	LPAR5	-2.4	6.01E-36	lysophosphatidic acid receptor 5
ENSG00000277654	-	-2.4	0.0307536	glioma tumor suppressor candidate region gene 2 (GLTSCR2) pseudogene
ENSG00000136636	KCTD3	-2.4	7.45E-135	potassium channel tetramerization domain containing 3
ENSG00000001461	NIPAL3	-2.4	1.26E-151	NIPA like domain containing 3
ENSG00000258554	-	-2.4	2.73E-12	novel transcript 2C antisense to CDK2
ENSG00000164611	PTTG1	-2.4	7.86E-41	PTTG1 regulator of sister chromatid separation 2C securin
ENSG00000206145	P2RX6P	-2.4	2.71E-09	purinergic receptor P2X 6 pseudogene
ENSG00000286633	-	-2.4	0.0315913	novel transcript 2C antisense to RIPOR2
ENSG00000205436	EXOC3L4	-2.4	0.0011727	exocyst complex component 3 like 4
ENSG00000188211	NCR3LG1	-2.4	7.55E-65	natural killer cell cytotoxicity receptor 3 ligand 1
ENSG00000077152	UBE2T	-2.4	2.02E-81	ubiquitin conjugating enzyme E2 T
ENSG00000140284	SLC27A2	-2.4	1.04E-186	solute carrier family 27 member 2
ENSG00000175886	RPL7AP66	-2.4	3.02E-17	ribosomal protein L7a pseudogene 66
ENSG00000127324	TSPAN8	-2.4	3.29E-80	tetraspanin 8
ENSG00000148803	FUOM	-2.4	5.06E-29	fucose mutarotase
ENSG00000117115	PADI2	-2.4	2.52E-13	peptidyl arginine deiminase 2
ENSG00000286451	-	-2.4	2.18E-10	novel transcript
ENSG00000165215	CLDN3	-2.4	5.50E-08	claudin 3
ENSG00000107859	PITX3	-2.4	1.50E-06	paired like homeodomain 3
ENSG00000225695	HNRNPA1P35	-2.4	3.02E-08	heterogeneous nuclear ribonucleoprotein A1 pseudogene 35
ENSG00000167880	EVPL	-2.4	7.12E-70	envoplakin
ENSG00000253366	GUSBP16	-2.4	0.0125259	GUSB pseudogene 16
ENSG00000255857	PXN-AS1	-2.4	7.99E-39	PXN antisense RNA 1
ENSG00000261236	BOP1	-2.4	1.10E-58	BOP1 ribosomal biogenesis factor
ENSG00000164237	CMBL	-2.4	2.18E-179	carboxymethylenebutenolidase homolog
ENSG00000259479	SORD2P	-2.4	1.18E-60	sorbitol dehydrogenase 2 2C pseudogene
ENSG00000273004	-	-2.4	5.10E-07	novel transcript
ENSG00000232553	CLK2P1	-2.4	0.0292738	CDC like kinase 2 2C pseudogene 1
ENSG00000135083	CCNJL	-2.4	1.64E-07	cyclin J like
ENSG00000136943	CTSV	-2.4	3.53E-11	cathepsin V
ENSG00000146376	ARHGAP18	-2.4	7.41E-41	Rho GTPase activating protein 18
ENSG00000068489	PRR11	-2.4	7.49E-210	proline rich 11
ENSG00000161996	WDR90	-2.4	3.15E-80	WD repeat domain 90
ENSG00000240914	RPL15P2	-2.4	0.0050991	ribosomal protein L15 pseudogene 2
ENSG00000176092	CRYBG2	-2.4	7.30E-36	crystallin beta-gamma domain containing 2

ENSG00000188095	MESP2	-2.4	0.0001348	mesoderm posterior bHLH transcription factor 2
ENSG00000277972	CISD3	-2.4	2.80E-44	CDGSH iron sulfur domain 3
ENSG00000259687	LINC01220	-2.4	0.0037828	long intergenic non-protein coding RNA 1220
ENSG00000198901	PRC1	-2.4	2.75E-116	protein regulator of cytokinesis 1
ENSG00000104889	RNASEH2A	-2.4	4.02E-33	ribonuclease H2 subunit A
ENSG00000231419	LINC00689	-2.4	4.24E-19	long intergenic non-protein coding RNA 689
ENSG00000280924	LINC00628	-2.4	7.54E-05	long intergenic non-protein coding RNA 628
ENSG00000180318	ALX1	-2.4	2.07E-93	ALX homeobox 1
ENSG00000092470	WDR76	-2.4	8.90E-190	WD repeat domain 76
ENSG00000273014	-	-2.4	4.27E-08	novel transcript
ENSG00000151725	CENPU	-2.4	1.79E-49	centromere protein U
ENSG00000223478	-	-2.4	5.63E-51	novel transcript
ENSG00000183690	EFHC2	-2.4	2.75E-06	EF-hand domain containing 2
ENSG00000135451	TROAP	-2.4	7.66E-64	trophinin associated protein
ENSG00000065328	MCM10	-2.4	3.14E-89	minichromosome maintenance 10 replication initiation factor
ENSG00000275632	-	-2.4	2.51E-05	novel transcript
ENSG00000174837	ADGRE1	-2.4	4.78E-26	adhesion G protein-coupled receptor E1
ENSG00000268536	-	-2.4	0.0213846	novel transcript
ENSG00000280129	-	-2.4	0.0333133	TEC
ENSG00000134490	TMEM241	-2.4	1.33E-32	transmembrane protein 241
ENSG00000152292	SH2D6	-2.4	4.01E-05	SH2 domain containing 6
ENSG00000163293	NIPAL1	-2.4	5.01E-38	NIPA like domain containing 1
ENSG00000214826	DDX12P	-2.4	1.37E-38	DEAD/H-box helicase 12 2C pseudogene
ENSG00000168010	ATG16L2	-2.4	2.63E-29	autophagy related 16 like 2
ENSG00000254876	STRA6LP	-2.4	0.0218881	STRA6 like 2C pseudogene
ENSG00000087301	TXNDC16	-2.4	4.91E-68	thioredoxin domain containing 16
ENSG00000143228	NUF2	-2.4	6.98E-42	NUF2 component of NDC80 kinetochore complex
ENSG00000112759	SLC29A1	-2.4	1.02E-90	solute carrier family 29 member 1 (Augustine blood group)
ENSG00000126457	PRMT1	-2.4	1.70E-56	protein arginine methyltransferase 1
ENSG00000104140	RHOV	-2.4	4.80E-53	ras homolog family member V
ENSG00000069482	GAL	-2.4	6.50E-45	galanin and GMAP prepropeptide
ENSG00000152256	PDK1	-2.4	4.89E-76	pyruvate dehydrogenase kinase 1
ENSG00000178802	MPI	-2.4	7.27E-82	mannose phosphate isomerase
ENSG00000164056	SPRY1	-2.4	2.35E-24	sprouty RTK signaling antagonist 1
ENSG00000003989	SLC7A2	-2.4	3.20E-65	solute carrier family 7 member 2
ENSG00000183742	MACC1	-2.4	3.43E-14	MET transcriptional regulator MACC1
ENSG00000174177	CTU2	-2.3	1.14E-51	cytosolic thiouridylase subunit 2
ENSG00000101871	MID1	-2.3	1.42E-97	midline 1
ENSG00000169683	LRRC45	-2.3	2.64E-67	leucine rich repeat containing 45
ENSG00000167508	MVD	-2.3	9.18E-67	mevalonate diphosphate decarboxylase
ENSG0000014138	POLA2	-2.3	1.36E-36	DNA polymerase alpha 2 2C accessory subunit
ENSG00000083123	BCKDHB	-2.3	1.15E-58	branched chain keto acid dehydrogenase E1 subunit beta
ENSG00000160796	NBEAL2	-2.3	2.87E-121	neurobeachin like 2
ENSG00000278259	MYO19	-2.3	7.48E-162	myosin XIX
ENSG00000181577	C6orf223	-2.3	7.31E-104	chromosome 6 open reading frame 223
ENSG00000118193	KIF14	-2.3	3.37E-09	kinesin family member 14



ENSG00000146918	NCAPG2	-2.3	1.35E-131	non-SMC condensin II complex subunit G2
ENSG00000175063	UBE2C	-2.3	1.94E-41	ubiquitin conjugating enzyme E2 C
ENSG00000167513	CDT1	-2.3	8.75E-39	chromatin licensing and DNA replication factor 1
ENSG00000213621	RPSAP54	-2.3	2.41E-06	ribosomal protein SA pseudogene 54
ENSG00000261341	-	-2.3	2.62E-08	novel protein
ENSG00000186185	KIF18B	-2.3	1.86E-89	kinesin family member 18B
ENSG00000275532	-	-2.3	1.67E-10	novel transcript 2C antisense to MLLT6
ENSG00000259959	-	-2.3	2.97E-10	novel transcript
ENSG00000164062	APEH	-2.3	1.14E-65	acylaminoacyl-peptide hydrolase
ENSG00000166387	PPFIBP2	-2.3	9.91E-29	PPFIA binding protein 2
ENSG00000286138	-	-2.3	0.0083852	novel transcript
ENSG00000105676	ARMC6	-2.3	3.91E-68	armadillo repeat containing 6
ENSG00000278022	-	-2.3	0.0069816	novel transcript 2C sense intronic to IGF1R
ENSG00000067064	IDI1	-2.3	3.17E-165	isopentenyl-diphosphate delta isomerase 1
ENSG00000140525	FANCI	-2.3	6.27E-79	FA complementation group I
ENSG00000130748	TMEM160	-2.3	3.31E-47	transmembrane protein 160
ENSG00000117148	ACTL8	-2.3	9.75E-14	actin like 8
ENSG00000235314	LINC00957	-2.3	0.009151	long intergenic non-protein coding RNA 957
ENSG00000288098	-	-2.3	2.35E-28	novel transcript
ENSG00000184154	LRTOMT	-2.3	6.58E-09	leucine rich transmembrane and O-methyltransferase domain containing
ENSG00000176387	HSD11B2	-2.3	3.90E-11	hydroxysteroid 11-beta dehydrogenase 2
ENSG00000236081	ELFN1-AS1	-2.3	8.14E-58	ELFN1 antisense RNA 1
ENSG00000178921	PFAS	-2.3	9.71E-67	phosphoribosylformylglycinamide synthase
ENSG00000126787	DLGAP5	-2.3	5.79E-43	DLG associated protein 5
ENSG00000006611	USH1C	-2.3	5.00E-14	USH1 protein network component harmonin
ENSG00000260196	-	-2.3	1.54E-42	antisense to KCNJ11 and overlapping to a novel gene
ENSG00000213609	RPL7AP50	-2.3	0.001582	ribosomal protein L7a pseudogene 50
ENSG00000149922	TBX6	-2.3	0.0123611	T-box transcription factor 6
ENSG00000065325	GLP2R	-2.3	9.57E-193	glucagon like peptide 2 receptor
ENSG00000228649	SNHG26	-2.3	5.10E-28	small nucleolar RNA host gene 26
ENSG00000167094	TTC16	-2.3	2.82E-07	tetratricopeptide repeat domain 16
ENSG00000171345	KRT19	-2.3	3.51E-38	keratin 19
ENSG00000103067	ESRP2	-2.3	2.57E-106	epithelial splicing regulatory protein 2
ENSG00000089356	FXYP3	-2.3	3.70E-39	FXYP domain containing ion transport regulator 3
ENSG00000254211	LINC01485	-2.3	0.0006994	long intergenic non-protein coding RNA 1485
ENSG00000166845	C18orf54	-2.3	2.89E-15	chromosome 18 open reading frame 54
ENSG00000185420	SMYD3	-2.3	4.10E-81	SET and MYND domain containing 3
ENSG00000277701	-	-2.3	0.0241892	novel transcript
ENSG00000077312	SNRPA	-2.3	3.79E-75	small nuclear ribonucleoprotein polypeptide A
ENSG00000162009	SSTR5	-2.3	4.93E-07	somatostatin receptor 5
ENSG00000131351	HAUS8	-2.3	4.24E-60	HAUS augmin like complex subunit 8
ENSG00000126822	PLEKHG3	-2.3	1.90E-60	pleckstrin homology and RhoGEF domain containing G3
ENSG00000026652	AGPAT4	-2.3	3.37E-28	1-acylglycerol-3-phosphate O-acyltransferase 4
ENSG00000181544	FANCB	-2.3	7.97E-35	FA complementation group B
ENSG00000139428	MMAB	-2.3	1.35E-118	metabolism of cobalamin associated B



ENSG00000185065	-	-2.3	2.01E-07	novel transcript 2C antisense to C22orf39
ENSG00000203711	C6orf99	-2.3	0.0002582	chromosome 6 putative open reading frame 99
ENSG00000202337	RNU6-8	-2.3	0.0001599	RNA 2C U6 small nuclear 8
ENSG00000104369	JPH1	-2.3	1.27E-74	junctophilin 1
ENSG00000166851	PLK1	-2.3	3.56E-47	polo like kinase 1
ENSG00000203761	MSTO2P	-2.3	5.57E-11	misato family member 2 2C pseudogene
ENSG00000111788	-	-2.3	8.76E-21	DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide like pseudogene
ENSG00000113070	HBEGF	-2.3	4.56E-29	heparin binding EGF like growth factor
ENSG00000164904	ALDH7A1	-2.3	5.02E-166	aldehyde dehydrogenase 7 family member A1
ENSG00000123374	CDK2	-2.3	1.12E-162	cyclin dependent kinase 2
ENSG00000131473	ACLY	-2.3	4.73E-114	ATP citrate lyase
ENSG00000266714	MYO15B	-2.3	2.09E-36	myosin XVb
ENSG00000251634	NAIPP4	-2.3	0.0326141	NAIP pseudogene 4
ENSG00000273297	-	-2.3	2.54E-41	novel transcript
ENSG00000254343	-	-2.3	8.00E-10	novel transcript
ENSG00000175745	NR2F1	-2.3	4.89E-113	nuclear receptor subfamily 2 group F member 1
ENSG00000106484	MEST	-2.3	9.04E-117	mesoderm specific transcript
ENSG00000178977	LINC00324	-2.3	2.05E-12	long intergenic non-protein coding RNA 324
ENSG00000166165	CKB	-2.2	3.02E-40	creatine kinase B
ENSG00000137700	SLC37A4	-2.2	1.07E-39	solute carrier family 37 member 4
ENSG00000261762	-	-2.2	0.0034771	novel transcript 2C antisense to CHRNA5
ENSG00000003096	KLHL13	-2.2	3.27E-31	kelch like family member 13
ENSG00000279407	-	-2.2	3.21E-30	TEC
ENSG00000135486	HNRNPA1	-2.2	9.16E-134	heterogeneous nuclear ribonucleoprotein A1
ENSG00000155367	PPM1J	-2.2	0.0021118	protein phosphatase 2C Mg2+/Mn2+ dependent 1J
ENSG00000232732	-	-2.2	0.0051754	novel transcript
ENSG00000163710	PCOLCE2	-2.2	4.82E-76	procollagen C-endopeptidase enhancer 2
ENSG00000005189	REXO5	-2.2	2.02E-43	RNA exonuclease 5
ENSG00000119888	EPCAM	-2.2	2.03E-05	epithelial cell adhesion molecule
ENSG00000123219	CENPK	-2.2	4.50E-54	centromere protein K
ENSG00000196415	PRTN3	-2.2	0.0035587	proteinase 3
ENSG00000198744	MTCO3P12	-2.2	0.0128708	MT-CO3 pseudogene 12
ENSG00000010319	SEMA3G	-2.2	1.48E-37	semaphorin 3G
ENSG00000039139	DNAH5	-2.2	6.09E-06	dynein axonemal heavy chain 5
ENSG00000232386	-	-2.2	5.60E-05	novel transcript
ENSG00000112667	DNPH1	-2.2	7.96E-38	2'-deoxynucleoside 5'-phosphate N-hydrolase 1
ENSG00000242539	-	-2.2	0.0013324	novel transcript
ENSG00000166508	MCM7	-2.2	6.84E-57	minichromosome maintenance complex component 7
ENSG00000048342	CC2D2A	-2.2	8.42E-60	coiled-coil and C2 domain containing 2A
ENSG00000166682	TMPRSS5	-2.2	0.0186279	transmembrane serine protease 5
ENSG00000272807	-	-2.2	0.0343262	novel transcript 2C antisense to KANSL1L
ENSG00000235237	-	-2.2	0.0235469	novel transcript
ENSG00000118420	UBE3D	-2.2	4.14E-60	ubiquitin protein ligase E3D
ENSG00000141750	STAC2	-2.2	0.026554	SH3 and cysteine rich domain 2
ENSG00000271155	-	-2.2	5.22E-06	novel transcript 2C antisense to PTCH1
ENSG00000273486	-	-2.2	0.0002109	novel transcript 2C antisense to SLC35G2

ENSG00000229994	RPL5P4	-2.2	2.30E-09	ribosomal protein L5 pseudogene 4
ENSG00000278903	-	-2.2	0.0014531	novel transcript
ENSG00000161547	SRSF2	-2.2	1.95E-188	serine and arginine rich splicing factor 2
ENSG00000161249	DMKN	-2.2	1.34E-58	dermokine
ENSG00000104213	PDGFRL	-2.2	4.13E-24	platelet derived growth factor receptor like
ENSG00000138111	MFSD13A	-2.2	1.89E-50	major facilitator superfamily domain containing 13A
ENSG00000116299	ELAPOR1	-2.2	4.27E-17	endosome-lysosome associated apoptosis and autophagy regulator 1
ENSG00000085840	ORC1	-2.2	4.47E-82	origin recognition complex subunit 1
ENSG00000255062	-	-2.2	0.0035587	novel transcript 2C antisense to DCPS and TIRAP
ENSG00000273449	-	-2.2	0.0207814	novel transcript
ENSG00000280789	PAGR1	-2.2	1.02E-74	PAXIP1 associated glutamate rich protein 1
ENSG00000125434	SLC25A35	-2.2	1.46E-21	solute carrier family 25 member 35
ENSG00000167964	RAB26	-2.2	2.22E-60	RAB26 2C member RAS oncogene family
ENSG00000140263	SORD	-2.2	5.94E-94	sorbitol dehydrogenase
ENSG00000056736	IL17RB	-2.2	4.22E-46	interleukin 17 receptor B
ENSG00000259772	-	-2.2	0.0069477	novel transcript
ENSG00000257337	-	-2.2	5.18E-86	novel transcript 2C antisense to TENC1 26 EIF4B
ENSG00000116771	AGMAT	-2.2	7.04E-83	agmatinase
ENSG00000101546	RBFA	-2.2	6.72E-54	ribosome binding factor A
ENSG00000185133	INPP5J	-2.2	8.99E-32	inositol polyphosphate-5-phosphatase J
ENSG00000126522	ASL	-2.2	1.28E-64	argininosuccinate lyase
ENSG00000179240	GVQW3	-2.2	4.47E-20	GVQW motif containing 3
ENSG00000105325	FZR1	-2.2	2.93E-74	fizzy and cell division cycle 20 related 1
ENSG00000136997	MYC	-2.2	7.43E-83	MYC proto-oncogene 2C bHLH transcription factor
ENSG00000137473	TTC29	-2.2	0.0247714	tetratricopeptide repeat domain 29
ENSG00000205809	KLRC2	-2.2	8.45E-100	killer cell lectin like receptor C2
ENSG00000151503	NCAPD3	-2.2	1.34E-180	non-SMC condensin II complex subunit D3
ENSG00000174371	EXO1	-2.2	1.40E-86	exonuclease 1
ENSG00000120055	C10orf95	-2.2	0.003443	chromosome 10 open reading frame 95
ENSG00000188761	BCL2L15	-2.2	0.0469143	BCL2 like 15
ENSG00000156471	PTDSS1	-2.2	2.33E-123	phosphatidylserine synthase 1
ENSG00000073050	XRCC1	-2.2	1.07E-76	X-ray repair cross complementing 1
ENSG00000166816	LDHD	-2.2	1.02E-08	lactate dehydrogenase D
ENSG00000220378	KRT8P42	-2.2	1.31E-08	keratin 8 pseudogene 42
ENSG00000103534	TMC5	-2.2	8.40E-101	transmembrane channel like 5
ENSG00000197816	CCDC180	-2.2	0.000735	coiled-coil domain containing 180
ENSG00000254862	LGR4-AS1	-2.2	0.00496	LGR4 antisense RNA 1
ENSG00000102317	RBM3	-2.2	1.98E-173	RNA binding motif protein 3
ENSG00000187741	FANCA	-2.2	2.71E-85	FA complementation group A
ENSG00000174370	C11orf45	-2.2	8.40E-12	chromosome 11 open reading frame 45
ENSG00000166407	LMO1	-2.2	0.0003504	LIM domain only 1
ENSG00000272457	-	-2.2	0.0449971	novel transcript 2C antisense to RGS20
ENSG00000134709	HOOK1	-2.1	1.85E-18	hook microtubule tethering protein 1
ENSG00000156869	FRRS1	-2.1	7.05E-34	ferric chelate reductase 1
ENSG00000146166	LGSN	-2.1	0.0078067	lengsin 2C lens protein with glutamine synthetase domain

ENSG00000279794	-	-2.1	0.023977	TEC
ENSG00000101417	PXMP4	-2.1	1.79E-28	peroxisomal membrane protein 4
ENSG00000178971	CTC1	-2.1	5.99E-33	CST telomere replication complex component 1
ENSG00000279602	-	-2.1	0.0001981	TEC
ENSG00000196155	PLEKHG4	-2.1	9.43E-61	pleckstrin homology and RhoGEF domain containing G4
ENSG00000213186	TRIM59	-2.1	4.62E-11	tripartite motif containing 59
ENSG00000224621	-	-2.1	0.0013464	novel transcript
ENSG00000113048	MRPS27	-2.1	4.07E-132	mitochondrial ribosomal protein S27
ENSG00000133119	RFC3	-2.1	1.59E-127	replication factor C subunit 3
ENSG00000179284	DAND5	-2.1	0.0037244	DAN domain BMP antagonist family member 5
ENSG00000198947	DMD	-2.1	1.24E-74	dystrophin
ENSG00000198089	SFI1	-2.1	4.83E-31	SFI1 centrin binding protein
ENSG00000163808	KIF15	-2.1	3.28E-32	kinesin family member 15
ENSG00000123485	HJURP	-2.1	8.08E-87	Holliday junction recognition protein
ENSG00000258459	-	-2.1	0.0066203	novel transcript 2C antisense to CCNB1IP1
ENSG00000218890	NUFIP1P1	-2.1	0.0319607	NUFIP1 pseudogene 1
ENSG00000184428	TOP1MT	-2.1	1.98E-114	DNA topoisomerase I mitochondrial
ENSG00000112742	TTK	-2.1	1.07E-34	TTK protein kinase
ENSG00000272703	-	-2.1	0.0240198	novel transcript
ENSG00000147144	CCDC120	-2.1	2.67E-44	coiled-coil domain containing 120
ENSG00000250299	MRPS31P4	-2.1	0.000156	mitochondrial ribosomal protein S31 pseudogene 4
ENSG00000250920	-	-2.1	1.27E-42	novel transcript
ENSG00000053371	AKR7A2	-2.1	1.44E-34	aldo-keto reductase family 7 member A2
ENSG00000104524	PYCR3	-2.1	3.69E-42	pyrroline-5-carboxylate reductase 3
ENSG00000205208	C4orf46	-2.1	1.52E-45	chromosome 4 open reading frame 46
ENSG00000236090	LDHAP3	-2.1	0.0005567	lactate dehydrogenase A pseudogene 3
ENSG00000230592	RPSAP8	-2.1	0.0037246	ribosomal protein SA pseudogene 8
ENSG00000142856	ITGB3BP	-2.1	5.36E-40	integrin subunit beta 3 binding protein
ENSG00000137699	TRIM29	-2.1	1.02E-45	tripartite motif containing 29
ENSG00000040731	CDH10	-2.1	9.37E-22	cadherin 10
ENSG00000227939	RPL3P2	-2.1	8.71E-11	ribosomal protein L3 pseudogene 2
ENSG00000100065	CARD10	-2.1	6.41E-75	caspase recruitment domain family member 10
ENSG00000131470	PSMC3IP	-2.1	2.97E-98	PSMC3 interacting protein
ENSG00000168077	SCARA3	-2.1	4.52E-48	scavenger receptor class A member 3
ENSG00000255468	-	-2.1	0.0001281	novel transcript 2C antisense to SLC29A2
ENSG00000183431	SF3A3	-2.1	2.24E-226	splicing factor 3a subunit 3
ENSG00000287331	-	-2.1	4.16E-08	novel transcript
ENSG00000285991	-	-2.1	0.0023116	novel transcript
ENSG00000188501	LCTL	-2.1	0.0347411	lactase like
ENSG00000142227	EMP3	-2.1	6.88E-54	epithelial membrane protein 3
ENSG00000232648	-	-2.1	0.0213095	novel transcript
ENSG00000162063	CCNF	-2.1	9.53E-27	cyclin F
ENSG00000160867	FGFR4	-2.1	2.96E-53	fibroblast growth factor receptor 4
ENSG00000229891	LINC01315	-2.1	2.69E-18	long intergenic non-protein coding RNA 1315
ENSG00000215492	HNRNPA1P7	-2.1	1.83E-176	heterogeneous nuclear ribonucleoprotein A1 pseudogene 7
ENSG00000180211	-	-2.1	0.000239	pseudogene similar to part of ribosomal protein L23 RPL23

ENSG00000239672	NME1	-2.1	2.01E-56	NME/NM23 nucleoside diphosphate kinase 1
ENSG00000153944	MSI2	-2.1	4.76E-51	musashi RNA binding protein 2
ENSG00000273306	-	-2.1	2.42E-07	novel transcript
ENSG00000186767	SPIN4	-2.1	8.35E-57	spindlin family member 4
ENSG00000227704	-	-2.1	0.040323	novel transcript
ENSG00000237649	KIFC1	-2.1	2.67E-40	kinesin family member C1
ENSG00000178531	CTXN1	-2.1	2.16E-19	cortixin 1
ENSG00000109805	NCAPG	-2.1	1.93E-51	non-SMC condensin I complex subunit G
ENSG00000167775	CD320	-2.1	6.21E-34	CD320 molecule
ENSG00000198938	MT-CO3	-2.1	4.04E-89	mitochondrially encoded cytochrome c oxidase III
ENSG00000108479	GALK1	-2.1	1.54E-56	galactokinase 1
ENSG00000161692	DBF4B	-2.1	3.60E-54	DBF4 zinc finger B
ENSG00000142731	PLK4	-2.1	4.06E-23	polo like kinase 4
ENSG00000007968	E2F2	-2.1	7.23E-44	E2F transcription factor 2
ENSG00000274849	-	-2.1	3.20E-06	novel transcript 2C sense intronic to MOCOS
ENSG00000100767	PAPLN	-2.1	6.50E-10	papilin 2C proteoglycan like sulfated glycoprotein
ENSG00000239322	ATP6V1B1-AS1	-2.1	0.0344057	ATP6V1B1 antisense RNA 1
ENSG00000112029	FBXO5	-2.1	7.93E-63	F-box protein 5
ENSG00000237886	NALT1	-2.1	1.18E-12	NOTCH1 associated lncRNA in T cell acute lymphoblastic leukemia 1
ENSG00000160991	ORAI2	-2.1	2.19E-68	ORAI calcium release-activated calcium modulator 2
ENSG00000287974	-	-2.1	7.51E-34	novel transcript
ENSG00000149577	SIDT2	-2.1	4.68E-45	SID1 transmembrane family member 2
ENSG00000180739	S1PR5	-2.1	1.72E-12	sphingosine-1-phosphate receptor 5
ENSG00000235823	OLMALINC	-2.1	1.43E-83	oligodendrocyte maturation-associated long intergenic non-coding RNA
ENSG00000168393	DTYMK	-2.1	9.34E-34	deoxythymidylate kinase
ENSG00000101444	AHCY	-2.1	1.17E-49	adenosylhomocysteinase
ENSG00000272654	-	-2.1	1.23E-11	novel transcript
ENSG00000170312	CDK1	-2.1	2.94E-76	cyclin dependent kinase 1
ENSG00000111144	LTA4H	-2.1	2.34E-204	leukotriene A4 hydrolase
ENSG00000176532	PRR15	-2.1	9.15E-16	proline rich 15
ENSG00000243943	ZNF512	-2.1	3.59E-44	zinc finger protein 512
ENSG00000168490	PHYHIP	-2.1	3.94E-23	phytanoyl-CoA 2-hydroxylase interacting protein
ENSG00000100504	PYGL	-2.1	2.72E-211	glycogen phosphorylase L
ENSG00000086730	LAT2	-2.1	1.77E-06	linker for activation of T cells family member 2
ENSG00000227959	-	-2.1	5.65E-10	novel transcript
ENSG00000186862	PDZD7	-2.1	1.28E-05	PDZ domain containing 7
ENSG00000249115	HAUS5	-2.1	1.14E-62	HAUS augmin like complex subunit 5
ENSG00000186451	SPATA12	-2.1	0.0331566	spermatogenesis associated 12
ENSG00000273162	-	-2.1	2.76E-09	novel transcript
ENSG00000188051	TMEM221	-2.1	1.25E-11	transmembrane protein 221
ENSG00000167325	RRM1	-2.1	4.30E-162	ribonucleotide reductase catalytic subunit M1
ENSG00000234494	SP2-AS1	-2.1	1.08E-07	SP2 antisense RNA 1
ENSG00000160753	RUSC1	-2.1	1.62E-53	RUN and SH3 domain containing 1
ENSG00000134827	TCN1	-2.1	0.0135647	transcobalamin 1
ENSG00000162062	TEDC2	-2.1	2.71E-17	tubulin epsilon and delta complex 2

ENSG00000287778	-	-2.1	1.82E-11	novel transcript 2C antisense to HS3ST1
ENSG00000214223	HNRNPA1P10	-2.1	7.05E-150	heterogeneous nuclear ribonucleoprotein A1 pseudogene 10
ENSG00000278535	DHRS11	-2.1	9.73E-42	dehydrogenase/reductase 11
ENSG00000144554	FANCD2	-2.1	8.87E-58	FA complementation group D2
ENSG00000100908	EMC9	-2.1	1.50E-28	ER membrane protein complex subunit 9
ENSG00000137812	KNL1	-2.1	5.34E-10	kinetochore scaffold 1
ENSG00000253187	HOXA10-AS	-2.1	2.15E-10	HOXA10 antisense RNA
ENSG00000140015	KCNH5	-2.1	5.83E-05	potassium voltage-gated channel subfamily H member 5
ENSG00000099219	ERMP1	-2	2.41E-57	endoplasmic reticulum metalloproteinase 1
ENSG00000152253	SPC25	-2	2.09E-41	SPC25 component of NDC80 kinetochore complex
ENSG00000171227	TMEM37	-2	1.16E-11	transmembrane protein 37
ENSG00000271659	-	-2	0.0032238	novel transcript 2C antisense to PTCH1
ENSG00000204618	RNF39	-2	1.50E-07	ring finger protein 39
ENSG00000102967	DHODH	-2	4.90E-49	dihydroorotate dehydrogenase (quinone)
ENSG00000123179	EBPL	-2	3.32E-66	EBP like
ENSG00000272711	HK2-DT	-2	1.12E-32	HK2 divergent transcript
ENSG00000149503	INCENP	-2	6.47E-100	inner centromere protein
ENSG00000096060	FKBP5	-2	3.66E-101	FKBP prolyl isomerase 5
ENSG00000163026	WDCP	-2	3.07E-61	WD repeat and coiled coil containing
ENSG00000111799	COL12A1	-2	1.34E-32	collagen type XII alpha 1 chain
ENSG00000233203	DHCR24-DT	-2	0.0034913	DHCR24 divergent transcript
ENSG00000099840	IZUMO4	-2	3.46E-07	IZUMO family member 4
ENSG00000241549	GUSBP2	-2	0.014812	GUSB pseudogene 2
ENSG00000162641	AKNAD1	-2	0.0329601	AKNA domain containing 1
ENSG00000185480	PARPBP	-2	3.74E-49	PARP1 binding protein
ENSG00000180096	SEPTIN1	-2	2.82E-07	septin 1
ENSG00000133466	CIQTNF6	-2	3.94E-102	CIq and TNF related 6
ENSG00000180448	ARHGAP45	-2	2.91E-48	Rho GTPase activating protein 45
ENSG00000101246	ARFRP1	-2	6.91E-51	ADP ribosylation factor related protein 1
ENSG00000121957	GPSM2	-2	5.46E-55	G protein signaling modulator 2
ENSG00000101447	FAM83D	-2	2.66E-68	family with sequence similarity 83 member D
ENSG00000147082	CCNB3	-2	3.65E-06	cyclin B3
ENSG00000243710	CFAP57	-2	1.13E-08	cilia and flagella associated protein 57
ENSG00000267060	PTGES3L	-2	7.52E-12	prostaglandin E synthase 3 like
ENSG00000197299	BLM	-2	7.60E-30	BLM RecQ like helicase
ENSG00000172137	CALB2	-2	2.12E-35	calbindin 2
ENSG00000173267	SNCG	-2	3.72E-23	synuclein gamma
ENSG00000182841	RRP7BP	-2	7.92E-40	ribosomal RNA processing 7 homolog B 2C pseudogene
ENSG00000160298	C21orf58	-2	4.51E-47	chromosome 21 open reading frame 58
ENSG00000130270	ATP8B3	-2	2.07E-34	ATPase phospholipid transporting 8B3
ENSG00000229344	MTCO2P12	-2	0.0049383	MT-CO2 pseudogene 12
ENSG00000101003	GINS1	-2	8.76E-97	GINS complex subunit 1
ENSG00000286134	-	-2	1.37E-54	novel transcript
ENSG00000117650	NEK2	-2	1.64E-84	NIMA related kinase 2
ENSG00000099797	TECR	-2	5.74E-47	trans-2-2C3-enoyl-CoA reductase
ENSG00000160193	WDR4	-2	1.60E-65	WD repeat domain 4



ENSG00000114026	OGG1	-2	5.46E-49	8-oxoguanine DNA glycosylase
ENSG00000249855	EEF1A1P19	-2	0.0004062	eukaryotic translation elongation factor 1 alpha 1 pseudogene 19
ENSG00000067057	PFKP	-2	1.86E-66	phosphofructokinase 2C platelet
ENSG00000125246	CLYBL	-2	2.73E-27	citramalyl-CoA lyase
ENSG00000257851	HNRNPA3P10	-2	0.0032869	heterogeneous nuclear ribonucleoprotein A3 pseudogene 10
ENSG00000214544	GTF2IRD2P1	-2	0.0002035	GTF2I repeat domain containing 2 pseudogene 1
ENSG00000171097	KYAT1	-2	1.00E-26	kynurenine aminotransferase 1
ENSG00000260442	ATP2A1-AS1	-2	1.52E-20	ATP2A1 antisense RNA 1
ENSG00000203778	FAM229B	-2	4.26E-14	family with sequence similarity 229 member B
ENSG00000124249	KCNK15	-2	9.58E-35	potassium two pore domain channel subfamily K member 15
ENSG00000215182	MUC5AC	-2	3.44E-17	mucin 5AC 2C oligomeric mucus/gel-forming
ENSG00000175305	CCNE2	-2	3.01E-45	cyclin E2
ENSG00000268520	-	-2	0.0257884	novel transcript 2C sense intronic to ETFB
ENSG00000135617	PRADC1	-2	4.81E-28	protease associated domain containing 1
ENSG00000070814	TCOF1	-2	1.42E-99	treacle ribosome biogenesis factor 1
ENSG00000164920	OSR2	-2	6.30E-28	odd-skipped related transcription factor 2
ENSG00000132646	PCNA	-2	2.35E-142	proliferating cell nuclear antigen
ENSG00000163803	PLB1	-2	2.78E-25	phospholipase B1
ENSG00000099624	ATP5F1D	-2	2.73E-29	ATP synthase F1 subunit delta
ENSG00000235058	ZMYND10-AS1	-2	5.66E-06	ZMYND10 antisense RNA 1
ENSG00000157456	CCNB2	-2	7.82E-123	cyclin B2
ENSG00000268643	-	-2	0.0296736	novel protein
ENSG00000101412	E2F1	-2	1.34E-50	E2F transcription factor 1
ENSG00000116455	WDR77	-2	1.31E-93	WD repeat domain 77
ENSG00000138160	KIF11	-2	1.63E-39	kinesin family member 11
ENSG00000136492	BRIP1	-2	2.47E-23	BRCA1 interacting protein C-terminal helicase 1
ENSG00000063180	CA11	-2	4.37E-36	carbonic anhydrase 11
ENSG00000106785	TRIM14	-2	4.68E-83	tripartite motif containing 14
ENSG00000268362	-	-2	5.36E-20	novel transcript
ENSG00000266402	SNHG25	-2	7.11E-06	small nucleolar RNA host gene 25
ENSG00000173480	ZNF417	-2	3.47E-05	zinc finger protein 417
ENSG00000225200	-	-2	0.0317776	ribosomal protein S8 (RPS8) pseudogene
ENSG00000104356	POP1	-2	1.72E-69	POP1 homolog 2C ribonuclease P/MRP subunit
ENSG00000116830	TTF2	-2	4.85E-80	transcription termination factor 2
ENSG00000225580	PA2G4P5	-2	0.0042821	proliferation-associated 2G4 pseudogene 5
ENSG00000235043	TECRP1	-2	1.94E-20	trans-2 2C3-enoyl-CoA reductase pseudogene 1
ENSG00000133026	MYH10	-2	3.00E-45	myosin heavy chain 10
ENSG00000187240	DYNC2H1	-2	5.47E-09	dynein cytoplasmic 2 heavy chain 1
ENSG00000258526	-	-2	2.31E-05	novel transcript
ENSG00000115073	ACTR1B	-2	1.62E-48	actin related protein 1B
ENSG00000273373	-	-2	0.0001798	novel transcript 2C antisense to SLC16A4
ENSG00000115392	FANCL	-2	2.51E-80	FA complementation group L
ENSG00000100714	MTHFD1	-2	7.48E-166	methylenetetrahydrofolate dehydrogenase 2C cyclohydrolase and formyltetrahydrofolate synthetase 1
ENSG00000107819	SFXN3	-2	6.91E-99	sideroflexin 3
ENSG00000235381	-	-2	0.0180734	novel transcript



ENSG00000131941	RHPN2	-2	3.38E-109	rhopilin Rho GTPase binding protein 2
ENSG00000135643	KCNMB4	-2	0.000484	potassium calcium-activated channel subfamily M regulatory beta subunit 4
ENSG00000173581	CCDC106	-2	1.16E-33	coiled-coil domain containing 106
ENSG00000197332	-	-2	0.0003787	novel transcript
ENSG00000112972	HMGCS1	-2	1.38E-100	3-hydroxy-3-methylglutaryl-CoA synthase 1
ENSG00000115604	IL18R1	-2	3.81E-06	interleukin 18 receptor 1
ENSG00000188266	HYKK	-2	7.68E-20	hydroxylysine kinase
ENSG00000002330	BAD	-2	4.30E-43	BCL2 associated agonist of cell death
ENSG00000232352	SEMA3B-AS1	-2	0.0046674	SEMA3B antisense RNA 1 (head to head)
ENSG00000247627	MTND4P12	-2	0.0310136	MT-ND4 pseudogene 12
ENSG00000126602	TRAP1	-1.9	7.75E-46	TNF receptor associated protein 1
ENSG00000188312	CENPP	-1.9	6.35E-50	centromere protein P
ENSG00000130713	EXOSC2	-1.9	1.49E-92	exosome component 2
ENSG00000138376	BARD1	-1.9	4.42E-39	BRCA1 associated RING domain 1
ENSG00000279199	-	-1.9	0.019542	novel transcript
ENSG00000272931	LRRC8D-DT	-1.9	2.62E-05	LRRC8D divergent transcript
ENSG00000227470	RPL39P16	-1.9	0.0230254	ribosomal protein L39 pseudogene 16
ENSG00000272655	POLR2J4	-1.9	7.18E-15	RNA polymerase II subunit J4 2C pseudogene
ENSG00000159259	CHAF1B	-1.9	2.87E-74	chromatin assembly factor 1 subunit B
ENSG00000213862	-	-1.9	1.58E-26	ribosomal protein L7a (RPL7A) pseudogene
ENSG00000141738	GRB7	-1.9	2.20E-26	growth factor receptor bound protein 7
ENSG00000188596	CFAP54	-1.9	0.0079783	cilia and flagella associated protein 54
ENSG00000128050	PAICS	-1.9	3.63E-190	phosphoribosylaminoimidazole carboxylase and phosphoribosylaminoimidazolesuccinocarboxamide synthase
ENSG00000078399	HOXA9	-1.9	4.46E-08	homeobox A9
ENSG00000133935	ERG28	-1.9	9.94E-61	ergosterol biosynthesis 28 homolog
ENSG00000185186	LINC00313	-1.9	0.0077949	long intergenic non-protein coding RNA 313
ENSG00000280160	-	-1.9	0.0001397	novel transcript
ENSG00000224897	POT1-AS1	-1.9	0.0006987	POT1 antisense RNA 1
ENSG00000160957	RECQL4	-1.9	7.26E-66	RecQ like helicase 4
ENSG00000266680	-	-1.9	2.53E-15	novel transcript 2C antisense to PTP4A1
ENSG00000134057	CCNB1	-1.9	5.78E-57	cyclin B1
ENSG00000185361	TNFAIP8L1	-1.9	1.74E-09	TNF alpha induced protein 8 like 1
ENSG00000215424	MCM3AP-AS1	-1.9	6.32E-40	MCM3AP antisense RNA 1
ENSG00000068615	REEP1	-1.9	7.74E-66	receptor accessory protein 1
ENSG00000177602	HASPIN	-1.9	1.57E-53	histone H3 associated protein kinase
ENSG00000116661	FBXO2	-1.9	1.47E-41	F-box protein 2
ENSG00000255910	-	-1.9	1.38E-05	novel transcript
ENSG00000265393	-	-1.9	0.0025109	novel transcript 2C antisense to RECQL4
ENSG00000187994	RINL	-1.9	1.36E-13	Ras and Rab interactor like
ENSG00000175591	P2RY2	-1.9	1.08E-10	purinergic receptor P2Y2
ENSG00000237214	-	-1.9	0.0151947	ribosomal protein S9 (RPS9) pseudogene
ENSG00000273456	-	-1.9	0.0364101	novel transcript
ENSG00000179523	EIF3J-DT	-1.9	5.39E-43	EIF3J divergent transcript
ENSG00000115129	TP53I3	-1.9	3.38E-34	tumor protein p53 inducible protein 3
ENSG00000170264	FAM161A	-1.9	1.22E-19	FAM161 centrosomal protein A

ENSG00000224616	RTCA-AS1	-1.9	0.0001275	RTCA antisense RNA 1
ENSG00000198840	MT-ND3	-1.9	3.22E-41	mitochondrially encoded NADH:ubiquinone oxidoreductase core subunit 3
ENSG00000147813	NAPRT	-1.9	1.93E-34	nicotinate phosphoribosyltransferase
ENSG00000240395	RPL5P23	-1.9	5.16E-06	ribosomal protein L5 pseudogene 23
ENSG00000124406	ATP8A1	-1.9	5.03E-06	ATPase phospholipid transporting 8A1
ENSG00000139132	FGD4	-1.9	2.90E-12	FYVE 2C RhoGEF and PH domain containing 4
ENSG00000275769	-	-1.9	0.001752	novel transcript 2C sense intronic to DENND5B
ENSG00000272701	MESTIT1	-1.9	0.0291069	MEST intronic transcript 1 2C antisense RNA
ENSG00000152556	PFKM	-1.9	1.26E-92	phosphofructokinase 2C muscle
ENSG00000171320	ESCO2	-1.9	1.66E-38	establishment of sister chromatid cohesion N-acetyltransferase 2
ENSG00000111057	KRT18	-1.9	7.49E-33	keratin 18
ENSG00000167653	PSCA	-1.9	7.70E-61	prostate stem cell antigen
ENSG00000076382	SPAG5	-1.9	1.37E-152	sperm associated antigen 5
ENSG00000258857	-	-1.9	0.0066725	novel transcript
ENSG00000148334	PTGES2	-1.9	1.39E-66	prostaglandin E synthase 2
ENSG00000108528	SLC25A11	-1.9	3.65E-45	solute carrier family 25 member 11
ENSG00000217555	CKLF	-1.9	1.98E-49	chemokine like factor
ENSG00000272767	JMJD1C-AS1	-1.9	0.0009407	JMJD1C antisense RNA 1
ENSG00000278192	-	-1.9	1.64E-09	novel transcript
ENSG00000213347	MXD3	-1.9	5.46E-30	MAX dimerization protein 3
ENSG00000283696	-	-1.9	3.41E-05	novel transcript
ENSG00000142733	MAP3K6	-1.9	5.69E-38	mitogen-activated protein kinase kinase kinase 6
ENSG00000246308	-	-1.9	0.0482786	novel transcript 2C antisense to ZBED5
ENSG00000218537	MIF-AS1	-1.9	4.45E-19	MIF antisense RNA 1
ENSG00000242262	-	-1.9	0.0386865	ribosomal protein L15 (RPL15) pseudogene
ENSG00000058056	USP13	-1.9	2.73E-68	ubiquitin specific peptidase 13
ENSG00000122378	PRXL2A	-1.9	3.01E-76	peroxiredoxin like 2A
ENSG00000189229	-	-1.9	1.82E-16	novel transcript
ENSG00000215183	MSMP	-1.9	0.0013191	microseminoprotein 2C prostate associated
ENSG00000183298	RPSAP19	-1.9	5.24E-23	ribosomal protein SA pseudogene 19
ENSG00000039650	PNKP	-1.9	2.32E-52	polynucleotide kinase 3'-phosphatase
ENSG00000152056	AP1S3	-1.9	1.72E-55	adaptor related protein complex 1 subunit sigma 3
ENSG00000204394	VAR51	-1.9	1.90E-39	valyl-tRNA synthetase 1
ENSG00000177084	POLE	-1.9	1.87E-77	DNA polymerase epsilon 2C catalytic subunit
ENSG00000204620	-	-1.9	9.00E-07	novel transcript 2C antisense to RBM3
ENSG00000112118	MCM3	-1.9	4.85E-132	minichromosome maintenance complex component 3
ENSG00000118965	WDR35	-1.9	8.76E-33	WD repeat domain 35
ENSG00000186854	TRABD2A	-1.9	1.20E-88	TraB domain containing 2A
ENSG00000255346	NOX5	-1.9	3.97E-22	NADPH oxidase 5
ENSG00000183207	RUVBL2	-1.9	3.02E-36	RuvB like AAA ATPase 2
ENSG00000255837	TAS2R20	-1.9	0.0067032	taste 2 receptor member 20
ENSG00000005022	SLC25A5	-1.9	7.83E-62	solute carrier family 25 member 5
ENSG00000169758	TMEM266	-1.9	1.84E-07	transmembrane protein 266
ENSG00000233834	-	-1.9	0.0093365	novel transcript
ENSG00000099800	TIMM13	-1.9	1.26E-38	translocase of inner mitochondrial membrane 13

ENSG00000249042	-	-1.9	1.27E-57	novel transcript
ENSG00000137872	SEMA6D	-1.9	1.45E-17	semaphorin 6D
ENSG00000247796	-	-1.9	1.19E-09	novel transcript 2C antisense to MOCS2
ENSG00000262160	-	-1.9	3.96E-48	novel transcript 2C antisense to NFATC3
ENSG00000184363	PKP3	-1.9	2.30E-42	plakophilin 3
ENSG00000287569	-	-1.9	0.0003724	novel transcript
ENSG00000277534	-	-1.9	7.14E-24	novel transcript 2C sense intronic to KCTD1
ENSG00000227857	-	-1.9	0.0426198	novel transcript
ENSG00000236345	SCAT8	-1.9	1.68E-11	S-phase cancer associated transcript 8
ENSG00000182379	NXPH4	-1.9	1.29E-13	neurexophilin 4
ENSG00000181513	ACBD4	-1.9	2.47E-24	acyl-CoA binding domain containing 4
ENSG00000114023	FAM162A	-1.9	2.79E-43	family with sequence similarity 162 member A
ENSG00000152642	GPD1L	-1.9	3.19E-75	glycerol-3-phosphate dehydrogenase 1 like
ENSG00000240137	ERICH6-AS1	-1.9	0.006289	ERICH6 antisense RNA 1
ENSG00000173638	SLC19A1	-1.9	2.27E-30	solute carrier family 19 member 1
ENSG00000137054	POLR1E	-1.9	6.96E-103	RNA polymerase I subunit E
ENSG00000178429	RPS3AP5	-1.9	0.0011936	RPS3A pseudogene 5
ENSG00000115325	DOK1	-1.9	5.38E-15	docking protein 1
ENSG00000189149	CRYM-AS1	-1.9	0.0006088	CRYM antisense RNA 1
ENSG00000138175	ARL3	-1.9	1.80E-50	ADP ribosylation factor like GTPase 3
ENSG00000092036	HAUS4	-1.9	1.20E-46	HAUS augmin like complex subunit 4
ENSG00000025423	HSD17B6	-1.9	3.16E-09	hydroxysteroid 17-beta dehydrogenase 6
ENSG00000243701	DUBR	-1.9	6.07E-12	DPPA2 Uptream binding RNA
ENSG00000134285	FKBP11	-1.9	7.33E-83	FKBP prolyl isomerase 11
ENSG00000243566	UPK3B	-1.9	5.32E-05	uroplakin 3B
ENSG00000240972	MIF	-1.9	3.15E-28	macrophage migration inhibitory factor
ENSG00000179958	DCTPP1	-1.9	1.20E-30	dCTP pyrophosphatase 1
ENSG00000112877	CEP72	-1.9	4.78E-44	centrosomal protein 72
ENSG00000094804	CDC6	-1.9	2.23E-129	cell division cycle 6
ENSG00000158402	CDC25C	-1.9	6.22E-23	cell division cycle 25C
ENSG00000236756	DNAJC9-AS1	-1.9	6.40E-06	DNAJC9 antisense RNA 1
ENSG00000242114	MTFP1	-1.9	7.44E-26	mitochondrial fission process 1
ENSG00000280758	-	-1.9	2.12E-17	novel transcript 2C antisense to SPTAN1
ENSG00000129810	SGO1	-1.9	3.69E-44	shugoshin 1
ENSG00000137573	SULF1	-1.9	2.00E-36	sulfatase 1
ENSG00000237004	ZNRF2P1	-1.9	2.59E-11	zinc and ring finger 2 pseudogene 1
ENSG00000284968	-	-1.9	2.40E-14	Novel transcript 2C antisense to AFF1
ENSG00000142173	COL6A2	-1.9	0.01903	collagen type VI alpha 2 chain
ENSG00000131187	F12	-1.9	1.12E-25	coagulation factor XII
ENSG00000186687	LYRM7	-1.9	3.71E-36	LYR motif containing 7
ENSG00000278829	-	-1.9	0.035342	novel transcript 2C sense intronic to STAT5B
ENSG00000175279	CENPS	-1.9	3.29E-35	centromere protein S
ENSG00000111247	RAD51AP1	-1.9	3.21E-63	RAD51 associated protein 1
ENSG00000127586	CHTF18	-1.9	1.17E-50	chromosome transmission fidelity factor 18
ENSG00000060566	CREB3L3	-1.9	9.44E-13	cAMP responsive element binding protein 3 like 3
ENSG00000171241	SHCBP1	-1.9	5.62E-90	SHC binding and spindle associated 1

ENSG00000185614	INKA1	-1.8	0.0005382	inka box actin regulator 1
ENSG00000276390	-	-1.8	5.13E-05	novel transcript 2C sense intronic to RPAP3
ENSG00000280063	-	-1.8	0.0304555	tec
ENSG00000256663	-	-1.8	6.84E-39	ubiquitin-like with PHD and ring finger domains 1 (UHRF1) pseudogene
ENSG00000265190	ANXA8	-1.8	2.40E-32	annexin A8
ENSG00000130675	MNX1	-1.8	3.42E-20	motor neuron and pancreas homeobox 1
ENSG00000242071	RPL7AP6	-1.8	1.70E-41	ribosomal protein L7a pseudogene 6
ENSG00000198879	SFMBT2	-1.8	1.53E-66	Scm like with four mbt domains 2
ENSG00000114346	ECT2	-1.8	2.37E-31	epithelial cell transforming 2
ENSG00000081181	ARG2	-1.8	2.13E-45	arginase 2
ENSG00000100726	TELO2	-1.8	1.17E-34	telomere maintenance 2
ENSG00000108622	ICAM2	-1.8	6.40E-05	intercellular adhesion molecule 2
ENSG00000134222	PSRC1	-1.8	2.14E-24	proline and serine rich coiled-coil 1
ENSG00000035499	DEPDC1B	-1.8	5.98E-37	DEP domain containing 1B
ENSG00000184178	SCFD2	-1.8	2.53E-28	sec1 family domain containing 2
ENSG00000237506	RPSAP15	-1.8	3.73E-27	ribosomal protein SA pseudogene 15
ENSG00000136305	CIDEB	-1.8	3.15E-20	cell death inducing DFFA like effector b
ENSG00000079616	KIF22	-1.8	7.52E-29	kinesin family member 22
ENSG00000243989	ACY1	-1.8	2.17E-12	aminoacylase 1
ENSG00000138346	DNA2	-1.8	1.88E-23	DNA replication helicase/nuclease 2
ENSG00000188677	PARVB	-1.8	4.34E-46	parvin beta
ENSG00000033011	ALG1	-1.8	9.02E-49	ALG1 chitobiosyldiphosphodolichol beta-mannosyltransferase
ENSG00000267308	LINC01764	-1.8	3.47E-05	long intergenic non-protein coding RNA 1764
ENSG00000241923	RPL14P3	-1.8	0.0003778	ribosomal protein L14 pseudogene 3
ENSG00000157379	DHRS1	-1.8	2.05E-35	dehydrogenase/reductase 1
ENSG00000079691	CARMIL1	-1.8	6.36E-74	capping protein regulator and myosin 1 linker 1
ENSG00000198695	MT-ND6	-1.8	4.53E-44	mitochondrially encoded NADH:ubiquinone oxidoreductase core subunit 6
ENSG00000213145	CRIP1	-1.8	2.98E-12	cysteine rich protein 1
ENSG00000167604	NFKBID	-1.8	2.35E-21	NFKB inhibitor delta
ENSG00000250222	-	-1.8	5.45E-05	novel transcript
ENSG00000103202	NME4	-1.8	8.29E-22	NME/NM23 nucleoside diphosphate kinase 4
ENSG00000174721	FGFBP3	-1.8	5.09E-18	fibroblast growth factor binding protein 3
ENSG00000138796	HADH	-1.8	6.91E-68	hydroxyacyl-CoA dehydrogenase
ENSG00000230207	RPL4P5	-1.8	6.96E-11	ribosomal protein L4 pseudogene 5
ENSG00000179546	HTR1D	-1.8	7.42E-51	5-hydroxytryptamine receptor 1D
ENSG00000196684	HSH2D	-1.8	9.97E-14	hematopoietic SH2 domain containing
ENSG00000231066	NPM1P9	-1.8	0.0062249	nucleophosmin 1 pseudogene 9
ENSG00000228253	MT-ATP8	-1.8	3.25E-62	mitochondrially encoded ATP synthase membrane subunit 8
ENSG00000276043	UHRF1	-1.8	2.00E-48	ubiquitin like with PHD and ring finger domains 1
ENSG00000235750	KIAA0040	-1.8	1.27E-46	KIAA0040
ENSG00000172922	RNASEH2C	-1.8	2.92E-82	ribonuclease H2 subunit C
ENSG0000017483	SLC38A5	-1.8	1.00E-30	solute carrier family 38 member 5
ENSG00000179066	-	-1.8	0.0023138	novel transcript
ENSG00000161179	YDJC	-1.8	1.09E-35	YdjC chitoooligosaccharide deacetylase homolog
ENSG00000240541	TM4SF1-AS1	-1.8	1.01E-12	TM4SF1 antisense RNA 1

ENSG00000246898	LINC00920	-1.8	0.0037371	long intergenic non-protein coding RNA 920
ENSG00000231064	THBS3-AS1	-1.8	3.82E-12	THBS3 antisense RNA 1
ENSG00000049541	RFC2	-1.8	1.18E-54	replication factor C subunit 2
ENSG00000012963	UBR7	-1.8	4.94E-112	ubiquitin protein ligase E3 component n-recogin 7
ENSG000000111445	RFC5	-1.8	1.90E-100	replication factor C subunit 5
ENSG00000084693	AGBL5	-1.8	9.91E-57	ATP/GTP binding protein like 5
ENSG000000118894	EEF2KMT	-1.8	6.92E-34	eukaryotic elongation factor 2 lysine methyltransferase
ENSG000000154743	TSEN2	-1.8	1.16E-92	tRNA splicing endonuclease subunit 2
ENSG000000079462	PAFAH1B3	-1.8	3.92E-18	platelet activating factor acetylhydrolase 1b catalytic subunit 3
ENSG000000168071	CCDC88B	-1.8	3.82E-13	coiled-coil domain containing 88B
ENSG000000234420	ZNF37BP	-1.8	0.0035521	zinc finger protein 37B 2C pseudogene
ENSG000000169679	BUB1	-1.8	1.77E-69	BUB1 mitotic checkpoint serine/threonine kinase
ENSG000000169188	APEX2	-1.8	2.15E-48	apurinic/aprimidinic endodeoxyribonuclease 2
ENSG000000269343	ZNF587B	-1.8	3.38E-30	zinc finger protein 587B
ENSG000000227388	-	-1.8	8.67E-05	novel transcript
ENSG000000231806	PCAT7	-1.8	3.40E-19	prostate cancer associated transcript 7
ENSG000000197785	ATAD3A	-1.8	3.41E-31	ATPase family AAA domain containing 3A
ENSG000000132600	PRMT7	-1.8	1.50E-40	protein arginine methyltransferase 7
ENSG000000036672	USP2	-1.8	2.59E-06	ubiquitin specific peptidase 2
ENSG000000198467	TPM2	-1.8	6.54E-40	tropomyosin 2
ENSG000000134262	AP4B1	-1.8	7.15E-46	adaptor related protein complex 4 subunit beta 1
ENSG000000139734	DIAPH3	-1.8	2.36E-36	diaphanous related formin 3
ENSG000000163629	PTPN13	-1.8	5.62E-18	protein tyrosine phosphatase non-receptor type 13
ENSG000000198515	CNGA1	-1.8	0.0249263	cyclic nucleotide gated channel subunit alpha 1
ENSG000000124813	RUNX2	-1.8	4.60E-37	RUNX family transcription factor 2
ENSG000000183542	KLRC4	-1.8	0.0166274	killer cell lectin like receptor C4
ENSG000000261575	-	-1.8	0.0459968	C17orf58 pseudogene
ENSG000000164109	MAD2L1	-1.8	4.16E-93	mitotic arrest deficient 2 like 1
ENSG000000127419	TMEM175	-1.8	6.62E-32	transmembrane protein 175
ENSG000000113810	SMC4	-1.8	4.55E-08	structural maintenance of chromosomes 4
ENSG000000196584	XRCC2	-1.8	2.25E-08	X-ray repair cross complementing 2
ENSG000000267577	DNAAF3-AS1	-1.8	0.015915	DNAAF3 antisense RNA 1
ENSG000000102096	PIM2	-1.8	3.19E-34	Pim-2 proto-oncogene 2C serine/threonine kinase
ENSG000000125885	MCM8	-1.8	3.45E-06	minichromosome maintenance 8 homologous recombination repair factor
ENSG000000104147	OIP5	-1.8	3.27E-44	Opa interacting protein 5
ENSG000000105447	GRWD1	-1.8	1.87E-42	glutamate rich WD repeat containing 1
ENSG000000175772	LINC01106	-1.8	7.32E-08	long intergenic non-protein coding RNA 1106
ENSG000000092208	GEMIN2	-1.8	4.99E-26	gem nuclear organelle associated protein 2
ENSG000000204410	MSH5	-1.8	1.80E-12	mutS homolog 5
ENSG000000101911	PRPS2	-1.8	2.92E-105	phosphoribosyl pyrophosphate synthetase 2
ENSG000000127124	HIVEP3	-1.8	3.70E-06	HIVEP zinc finger 3
ENSG000000247121	-	-1.8	0.000458	novel transcript 2C antisense to LNPEP and ERAP2
ENSG000000184117	NIPSNAP1	-1.8	6.76E-59	nipsnap homolog 1
ENSG000000072571	HMMR	-1.8	7.16E-19	hyaluronan mediated motility receptor
ENSG000000067191	CACNB1	-1.8	1.28E-20	calcium voltage-gated channel auxiliary subunit beta 1



ENSG00000145912	NHP2	-1.8	5.99E-41	NHP2 ribonucleoprotein
ENSG00000225345	SNX18P3	-1.8	0.0102786	sorting nexin 18 pseudogene 3
ENSG00000263528	IKBKE	-1.8	1.01E-29	inhibitor of nuclear factor kappa B kinase subunit epsilon
ENSG00000172878	METAP1D	-1.8	5.02E-28	methionyl aminopeptidase type 1D 2C mitochondrial
ENSG00000174917	MICOS13	-1.8	9.80E-35	mitochondrial contact site and cristae organizing system subunit 13
ENSG00000130731	METTL26	-1.8	3.08E-25	methyltransferase like 26
ENSG00000177646	ACAD9	-1.8	3.80E-106	acyl-CoA dehydrogenase family member 9
ENSG00000234476	LINC02765	-1.8	1.31E-24	long intergenic non-protein coding RNA 2765
ENSG00000175899	A2M	-1.8	2.43E-06	alpha-2-macroglobulin
ENSG00000214049	UCA1	-1.8	5.53E-68	urothelial cancer associated 1
ENSG00000113356	POLR3G	-1.8	1.07E-29	RNA polymerase III subunit G
ENSG00000163050	COQ8A	-1.8	4.76E-16	coenzyme Q8A
ENSG00000185697	MYBL1	-1.8	4.74E-18	MYB proto-oncogene like 1
ENSG00000175793	SFN	-1.8	9.87E-28	stratifin
ENSG00000177519	RPRM	-1.8	0.0148467	reprimin 2 TP53 dependent G2 arrest mediator homolog
ENSG00000119397	CNTRL	-1.8	7.63E-14	centriolin
ENSG00000156970	BUB1B	-1.8	1.97E-66	BUB1 mitotic checkpoint serine/threonine kinase B
ENSG00000149554	CHEK1	-1.8	8.05E-53	checkpoint kinase 1
ENSG00000175294	CATSPER1	-1.8	4.03E-10	cation channel sperm associated 1
ENSG00000165704	HPRT1	-1.8	4.78E-107	hypoxanthine phosphoribosyltransferase 1
ENSG00000166153	DEPDC4	-1.8	7.45E-05	DEP domain containing 4
ENSG00000236017	ASMTL-AS1	-1.8	0.0036462	ASMTL antisense RNA 1
ENSG00000178226	PRSS36	-1.8	1.52E-16	serine protease 36
ENSG00000272205	POU2F1-DT	-1.8	0.0287728	POU2F1 divergent transcript
ENSG00000234062	-	-1.8	3.96E-08	transmembrane 9 superfamily member 2 (TM9SF2) pseudogene
ENSG00000142945	KIF2C	-1.8	5.32E-36	kinesin family member 2C
ENSG00000166451	CENPN	-1.8	5.48E-146	centromere protein N
ENSG00000125531	FNDC11	-1.8	1.53E-10	fibronectin type III domain containing 11
ENSG00000174669	SLC29A2	-1.8	2.52E-54	solute carrier family 29 member 2
ENSG00000184508	HDCC3	-1.8	1.38E-30	HD domain containing 3
ENSG00000143882	ATP6V1C2	-1.8	4.51E-17	ATPase H+ transporting V1 subunit C2
ENSG00000176714	CCDC121	-1.8	4.49E-06	coiled-coil domain containing 121
ENSG00000011426	ANLN	-1.8	1.36E-29	anillin actin binding protein
ENSG00000130827	PLXNA3	-1.8	2.11E-28	plexin A3
ENSG00000234009	RPL5P34	-1.8	1.40E-23	ribosomal protein L5 pseudogene 34
ENSG00000242288	BMS1P4-AGAP5	-1.8	0.0345126	BMS1P4-AGAP5 readthrough
ENSG00000168268	NT5DC2	-1.8	3.88E-29	5'-nucleotidase domain containing 2
ENSG00000159618	ADGRG5	-1.8	0.0321085	adhesion G protein-coupled receptor G5
ENSG00000157064	NMNAT2	-1.8	3.56E-21	nicotinamide nucleotide adenyltransferase 2
ENSG00000160613	PCSK7	-1.8	1.73E-36	proprotein convertase subtilisin/kexin type 7
ENSG00000189007	ADAT2	-1.8	4.75E-42	adenosine deaminase tRNA specific 2
ENSG00000236871	LINC00106	-1.8	0.0041049	long intergenic non-protein coding RNA 106
ENSG00000147955	SIGMAR1	-1.8	1.20E-47	sigma non-opioid intracellular receptor 1
ENSG00000135119	RNFT2	-1.8	1.07E-32	ring finger protein 2C transmembrane 2



ENSG00000188610	FAM72B	-1.8	9.37E-27	family with sequence similarity 72 member B
ENSG00000229666	MAST4-AS1	-1.8	0.0015761	MAST4 antisense RNA 1
ENSG00000132763	MMACHC	-1.8	1.28E-31	metabolism of cobalamin associated C
ENSG00000073536	NLE1	-1.8	1.60E-64	notchless homolog 1
ENSG00000166136	NDUFB8	-1.8	6.04E-56	NADH:ubiquinone oxidoreductase subunit B8
ENSG00000175274	TP53I11	-1.8	0.0324067	tumor protein p53 inducible protein 11
ENSG00000198951	NAGA	-1.8	6.68E-47	alpha-N-acetylgalactosaminidase
ENSG00000104522	GFUS	-1.8	1.28E-32	GDP-L-fucose synthase
ENSG00000258512	LINC00239	-1.7	0.0001967	long intergenic non-protein coding RNA 239
ENSG00000152061	RABGAP1L	-1.7	2.34E-21	RAB GTPase activating protein 1 like
ENSG00000262587	-	-1.7	0.0045995	leucine carboxyl methyltransferase 1 (LCMT1) pseudogene
ENSG00000253106	-	-1.7	3.67E-05	novel transcript 2C antisense to TATDN1
ENSG00000257660	ADCY6-DT	-1.7	0.0183131	ADCY6 divergent transcript
ENSG00000223813	-	-1.7	0.0429056	novel transcript 2C antisense to CHN2
ENSG00000127423	AUNIP	-1.7	1.54E-40	aurora kinase A and ninein interacting protein
ENSG00000179046	TRIML2	-1.7	0.0022097	tripartite motif family like 2
ENSG00000162813	BPNT1	-1.7	4.32E-65	3'(2') 2C 5'-bisphosphate nucleotidase 1
ENSG00000113368	LMNB1	-1.7	1.69E-90	lamin B1
ENSG00000170464	DNAJC18	-1.7	4.92E-28	DnaJ heat shock protein family (Hsp40) member C18
ENSG00000265096	C1QTNF1-AS1	-1.7	3.14E-14	C1QTNF1 antisense RNA 1
ENSG00000287024	-	-1.7	0.019937	novel transcript
ENSG00000242125	SNHG3	-1.7	7.80E-116	small nucleolar RNA host gene 3
ENSG00000188735	TMEM120B	-1.7	4.49E-42	transmembrane protein 120B
ENSG00000158882	TOMM40L	-1.7	5.26E-52	translocase of outer mitochondrial membrane 40 like
ENSG00000287080	H3C3	-1.7	0.0209267	H3 clustered histone 3
ENSG00000156535	CD109	-1.7	1.08E-38	CD109 molecule
ENSG00000234648	-	-1.7	2.77E-12	pseudogene similar to part of ribosomal protein L3 (RPL3)
ENSG00000259248	USP3-AS1	-1.7	2.95E-06	USP3 antisense RNA 1
ENSG00000122884	P4HA1	-1.7	6.70E-69	prolyl 4-hydroxylase subunit alpha 1
ENSG00000104738	MCM4	-1.7	7.27E-162	minichromosome maintenance complex component 4
ENSG00000128833	MYO5C	-1.7	2.63E-21	myosin VC
ENSG00000167658	EEF2	-1.7	1.73E-28	eukaryotic translation elongation factor 2
ENSG00000171604	CXXC5	-1.7	2.78E-34	CXXC finger protein 5
ENSG00000101945	SUV39H1	-1.7	1.39E-25	suppressor of variegation 3-9 homolog 1
ENSG00000241962	-	-1.7	3.18E-05	novel protein 2C C2orf15-MRPL30-novel lincRNA read-through
ENSG00000123405	NFE2	-1.7	3.04E-13	nuclear factor 2C erythroid 2
ENSG00000257954	-	-1.7	0.0402959	FGFR1 oncogene partner 2 (FGFR1OP2) pseudogene
ENSG00000176912	TYMSOS	-1.7	7.80E-10	TYMS opposite strand
ENSG00000231864	-	-1.7	5.83E-07	novel transcript
ENSG00000128254	C22orf24	-1.7	0.0022084	chromosome 22 putative open reading frame 24
ENSG00000106153	CHCHD2	-1.7	2.01E-25	coiled-coil-helix-coiled-coil-helix domain containing 2
ENSG00000275183	LENG9	-1.7	5.27E-34	leukocyte receptor cluster member 9
ENSG00000106399	RPA3	-1.7	1.05E-62	replication protein A3
ENSG00000047410	TPR	-1.7	7.27E-07	translocated promoter region 2C nuclear basket protein
ENSG00000158286	RNF207	-1.7	1.43E-16	ring finger protein 207

ENSG00000227347	HNRNPKP2	-1.7	0.0133743	heterogeneous nuclear ribonucleoprotein K pseudogene 2
ENSG00000100490	CDKL1	-1.7	2.47E-16	cyclin dependent kinase like 1
ENSG00000100075	SLC25A1	-1.7	8.57E-33	solute carrier family 25 member 1
ENSG00000213930	GALT	-1.7	2.63E-30	galactose-1-phosphate uridylyltransferase
ENSG00000198700	IPO9	-1.7	5.61E-60	importin 9
ENSG00000177721	ANXA2R	-1.7	4.07E-06	annexin A2 receptor
ENSG00000198189	HSD17B11	-1.7	1.03E-67	hydroxysteroid 17-beta dehydrogenase 11
ENSG00000198931	APRT	-1.7	3.84E-23	adenine phosphoribosyltransferase
ENSG00000172572	PDE3A	-1.7	3.74E-37	phosphodiesterase 3A
ENSG00000173715	C11orf80	-1.7	5.00E-30	chromosome 11 open reading frame 80
ENSG00000139531	SUOX	-1.7	1.24E-34	sulfite oxidase
ENSG00000125648	SLC25A23	-1.7	2.32E-59	solute carrier family 25 member 23
ENSG00000272870	SAP30-DT	-1.7	2.12E-11	SAP30 divergent transcript
ENSG00000138002	IFT172	-1.7	3.34E-57	intraflagellar transport 172
ENSG00000165168	CYBB	-1.7	2.23E-10	cytochrome b-245 beta chain
ENSG00000154920	EME1	-1.7	1.71E-45	essential meiotic structure-specific endonuclease 1
ENSG00000165171	METTL27	-1.7	4.02E-09	methyltransferase like 27
ENSG00000148908	RGS10	-1.7	2.16E-32	regulator of G protein signaling 10
ENSG00000164211	STARD4	-1.7	2.17E-19	StAR related lipid transfer domain containing 4
ENSG00000279453	-	-1.7	0.0008698	TEC
ENSG00000123353	ORMDL2	-1.7	1.04E-58	ORMDL sphingolipid biosynthesis regulator 2
ENSG00000274943	-	-1.7	0.0017297	novel transcript 2C sense intronic to PPHLN1
ENSG00000108465	CDK5RAP3	-1.7	1.74E-45	CDK5 regulatory subunit associated protein 3
ENSG00000137821	LRRC49	-1.7	6.56E-08	leucine rich repeat containing 49
ENSG00000125898	FAM110A	-1.7	1.12E-13	family with sequence similarity 110 member A
ENSG00000164659	ELAPOR2	-1.7	2.87E-29	endosome-lysosome associated apoptosis and autophagy regulator family member 2
ENSG00000004487	KDM1A	-1.7	5.90E-114	lysine demethylase 1A
ENSG00000116133	DHCR24	-1.7	4.57E-46	24-dehydrocholesterol reductase
ENSG00000122406	RPL5	-1.7	1.45E-75	ribosomal protein L5
ENSG00000104983	CCDC61	-1.7	5.30E-07	coiled-coil domain containing 61
ENSG00000170786	SDR16C5	-1.7	6.95E-21	short chain dehydrogenase/reductase family 16C member 5
ENSG00000083828	ZNF586	-1.7	9.95E-25	zinc finger protein 586
ENSG00000111181	SLC6A12	-1.7	5.12E-12	solute carrier family 6 member 12
ENSG00000171219	CDC42BPG	-1.7	9.55E-06	CDC42 binding protein kinase gamma
ENSG00000054938	CHRD2	-1.7	1.55E-25	chordin like 2
ENSG00000156172	C8orf37	-1.7	1.40E-19	chromosome 8 open reading frame 37
ENSG00000198788	MUC2	-1.7	4.55E-19	mucin 2 2C oligomeric mucus/gel-forming
ENSG0000020922	MRE11	-1.7	1.04E-30	MRE11 homolog 2C double strand break repair nuclease
ENSG00000259918	NDUFA5P11	-1.7	0.0307059	NADH:ubiquinone oxidoreductase subunit A5 pseudogene 11
ENSG00000167656	LY6D	-1.7	0.0295551	lymphocyte antigen 6 family member D
ENSG00000121211	MND1	-1.7	3.73E-07	meiotic nuclear divisions 1
ENSG00000184949	FAM227A	-1.7	1.50E-08	family with sequence similarity 227 member A
ENSG00000160602	NEK8	-1.7	1.96E-31	NIMA related kinase 8
ENSG00000105202	FBL	-1.7	6.60E-31	fibrillarlin
ENSG00000186638	KIF24	-1.7	2.35E-29	kinesin family member 24

ENSG00000287653	-	-1.7	5.17E-09	novel transcript
ENSG00000047597	XK	-1.7	3.52E-62	X-linked Kx blood group
ENSG00000187024	PTRH1	-1.7	5.88E-23	peptidyl-tRNA hydrolase 1 homolog
ENSG00000273443	-	-1.7	0.0002503	novel transcript
ENSG00000166532	RIMKLB	-1.7	1.11E-38	ribosomal modification protein rimK like family member B
ENSG00000120756	PLS1	-1.7	1.51E-30	plastin 1
ENSG00000171877	FRMD5	-1.7	1.55E-07	FERM domain containing 5
ENSG00000258704	SRP54-AS1	-1.7	0.0001965	SRP54 antisense RNA 1 (head to head)
ENSG00000160447	PKN3	-1.7	2.28E-47	protein kinase N3
ENSG00000185201	IFITM2	-1.7	1.08E-28	interferon induced transmembrane protein 2
ENSG00000115107	STEAP3	-1.7	8.27E-48	STEAP3 metalloredutase
ENSG00000125966	MMP24	-1.7	0.0028698	matrix metallopeptidase 24
ENSG00000115875	SRSF7	-1.7	5.22E-116	serine and arginine rich splicing factor 7
ENSG00000037757	MRI1	-1.7	1.36E-57	methylthioribose-1-phosphate isomerase 1
ENSG00000260552	COSMOC	-1.7	4.00E-21	cell fate and sterol metabolism associated divergent transcript of MOCOS
ENSG00000269846	-	-1.7	0.0257402	novel transcript 2C antisense to RBL1
ENSG00000115290	GRB14	-1.7	0.0001579	growth factor receptor bound protein 14
ENSG00000114767	RRP9	-1.7	2.18E-26	ribosomal RNA processing 9 2C U3 small nucleolar RNA binding protein
ENSG00000281344	HELLPAR	-1.7	6.62E-06	HELLP associated long non-coding RNA
ENSG00000123739	PLA2G12A	-1.7	2.93E-71	phospholipase A2 group XIA
ENSG00000143127	ITGA10	-1.7	1.79E-09	integrin subunit alpha 10
ENSG00000025434	NR1H3	-1.7	3.93E-33	nuclear receptor subfamily 1 group H member 3
ENSG00000008277	ADAM22	-1.7	1.07E-13	ADAM metallopeptidase domain 22
ENSG00000107438	PDLIM1	-1.7	6.88E-43	PDZ and LIM domain 1
ENSG00000168496	FEN1	-1.7	8.51E-63	flap structure-specific endonuclease 1
ENSG00000182057	OGFRP1	-1.7	3.18E-25	opioid growth factor receptor pseudogene 1
ENSG00000261614	YBX3P1	-1.7	9.30E-06	Y-box binding protein 3 pseudogene 1
ENSG00000052344	PRSS8	-1.7	0.0051217	serine protease 8
ENSG00000186056	MATN1-AS1	-1.7	2.21E-12	MATN1 antisense RNA 1
ENSG00000182957	SPATA13	-1.7	8.24E-33	spermatogenesis associated 13
ENSG00000089685	BIRC5	-1.7	1.48E-36	baculoviral IAP repeat containing 5
ENSG00000251179	TMEM92-AS1	-1.7	1.99E-14	TMEM92 antisense RNA 1
ENSG00000165929	TC2N	-1.7	1.26E-31	tandem C2 domains 2C nuclear
ENSG00000225031	EIF4BP7	-1.7	3.24E-68	eukaryotic translation initiation factor 4B pseudogene 7
ENSG00000213801	ZNF321P	-1.7	0.003089	zinc finger protein 321 2C pseudogene
ENSG00000150275	PCDH15	-1.7	0.0305625	protocadherin related 15
ENSG00000092758	COL9A3	-1.7	7.49E-28	collagen type IX alpha 3 chain
ENSG00000117877	POLR1G	-1.7	6.26E-51	RNA polymerase I subunit G
ENSG00000106628	POLD2	-1.7	4.78E-25	DNA polymerase delta 2 2C accessory subunit
ENSG00000188856	RPSAP47	-1.7	4.52E-22	ribosomal protein SA pseudogene 47
ENSG00000145386	CCNA2	-1.7	4.62E-102	cyclin A2
ENSG00000148303	RPL7A	-1.7	7.07E-38	ribosomal protein L7a
ENSG00000075188	NUP37	-1.7	8.11E-62	nucleoporin 37
ENSG00000171916	LGALS9C	-1.7	0.0058457	galectin 9C
ENSG00000223705	NSUN5P1	-1.7	4.13E-34	NSUN5 pseudogene 1

ENSG00000038210	PI4K2B	-1.7	7.23E-35	phosphatidylinositol 4-kinase type 2 beta
ENSG00000188368	PRR19	-1.7	1.46E-11	proline rich 19
ENSG00000182257	PRR34	-1.7	3.92E-05	PRR34 long non-coding RNA
ENSG00000167774	-	-1.7	1.96E-11	novel transcript
ENSG00000141556	TBCD	-1.7	2.54E-58	tubulin folding cofactor D
ENSG00000237973	MTCO1P12	-1.7	9.90E-84	MT-CO1 pseudogene 12
ENSG00000008311	AASS	-1.7	0.0041777	aminoadipate-semialdehyde synthase
ENSG00000106537	TSPAN13	-1.7	2.72E-35	tetraspanin 13
ENSG00000231167	YBX1P2	-1.6	0.0005428	Y-box binding protein 1 pseudogene 2
ENSG00000285103	-	-1.6	0.0468873	novel transcript
ENSG00000187210	GCNT1	-1.6	1.20E-11	glucosaminyl (N-acetyl) transferase 1
ENSG00000173272	MZT2A	-1.6	3.58E-15	mitotic spindle organizing protein 2A
ENSG00000187486	KCNJ11	-1.6	9.62E-16	potassium inwardly rectifying channel subfamily J member 11
ENSG00000149218	ENDOD1	-1.6	8.97E-27	endonuclease domain containing 1
ENSG00000238279	-	-1.6	0.0069809	novel transcript
ENSG00000203497	PDCD4-AS1	-1.6	1.31E-15	PDCD4 antisense RNA 1
ENSG00000253408	IKBKB-DT	-1.6	0.044117	IKBKB divergent transcript
ENSG00000215784	FAM72D	-1.6	3.23E-09	family with sequence similarity 72 member D
ENSG00000118898	PPL	-1.6	1.21E-53	periplakin
ENSG00000232472	EEF1B2P3	-1.6	2.93E-23	eukaryotic translation elongation factor 1 beta 2 pseudogene 3
ENSG00000064042	LIMCH1	-1.6	5.26E-35	LIM and calponin homology domains 1
ENSG00000139445	FOXN4	-1.6	0.0001002	forkhead box N4
ENSG00000139187	KLRG1	-1.6	7.41E-06	killer cell lectin like receptor G1
ENSG00000162620	LRR1Q3	-1.6	0.0001274	leucine rich repeats and IQ motif containing 3
ENSG00000175018	TEX36	-1.6	1.80E-11	testis expressed 36
ENSG00000164053	ATRIP	-1.6	9.62E-32	ATR interacting protein
ENSG00000136279	DBNL	-1.6	1.27E-30	drebrin like
ENSG00000167670	CHAF1A	-1.6	9.25E-75	chromatin assembly factor 1 subunit A
ENSG00000255121	CENATAC-DT	-1.6	1.35E-07	CENATAC divergent transcript
ENSG00000241095	CYP51A1P1	-1.6	0.016983	cytochrome P450 family 51 subfamily A member 1 pseudogene 1
ENSG00000158555	GDPD5	-1.6	2.61E-47	glycerophosphodiester phosphodiesterase domain containing 5
ENSG00000161980	POLR3K	-1.6	2.64E-29	RNA polymerase III subunit K
ENSG00000242147	LASTR	-1.6	8.47E-06	lncRNA associated with SART3 regulation of splicing
ENSG00000131797	CLUHP3	-1.6	1.61E-14	clustered mitochondria homolog pseudogene 3
ENSG00000269242	-	-1.6	6.00E-11	novel transcript
ENSG00000198899	MT-ATP6	-1.6	1.26E-60	mitochondrially encoded ATP synthase membrane subunit 6
ENSG00000159214	CCDC24	-1.6	6.84E-06	coiled-coil domain containing 24
ENSG00000122861	PLAU	-1.6	1.25E-05	plasminogen activator 2C urokinase
ENSG00000156414	TDRD9	-1.6	4.14E-44	tudor domain containing 9
ENSG00000140848	CPNE2	-1.6	1.79E-32	copine 2
ENSG00000136319	TTC5	-1.6	6.95E-28	tetratricopeptide repeat domain 5
ENSG00000227070	EPS15-AS1	-1.6	0.0146094	EPS15 antisense RNA 1
ENSG00000248527	MTATP6P1	-1.6	3.75E-42	MT-ATP6 pseudogene 1
ENSG00000214776	-	-1.6	0.0004083	alpha-2-macroglobulin like 1 pseudogene
ENSG00000149499	EML3	-1.6	4.91E-34	EMAP like 3

ENSG00000232640	-	-1.6	0.0053472	novel transcript
ENSG00000287697	-	-1.6	0.0134898	novel transcript 2C antisense to CACYBP
ENSG00000198712	MT-CO2	-1.6	1.13E-39	mitochondrially encoded cytochrome c oxidase II
ENSG00000178445	GLDC	-1.6	0.0008396	glycine decarboxylase
ENSG00000070785	EIF2B3	-1.6	5.75E-56	eukaryotic translation initiation factor 2B subunit gamma
ENSG00000251495	PPIAP11	-1.6	1.18E-07	peptidylprolyl isomerase A pseudogene 11
ENSG00000269982	-	-1.6	0.0223334	novel transcript 2C antisense to TMEM111
ENSG00000100749	VRK1	-1.6	9.21E-40	VRK serine/threonine kinase 1
ENSG00000160051	IQCC	-1.6	1.75E-17	IQ motif containing C
ENSG00000111816	FRK	-1.6	1.23E-10	fyn related Src family tyrosine kinase
ENSG00000283667	-	-1.6	0.0225505	novel transcript 2C antisense to SERPINB8
ENSG00000111716	LDHB	-1.6	4.27E-77	lactate dehydrogenase B
ENSG00000147642	SYBU	-1.6	1.65E-28	syntabulin
ENSG00000275464	-	-1.6	1.76E-30	novel protein 2C similar to PWP2 periodic tryptophan protein homolog (yeast) PWP2
ENSG00000269139	-	-1.6	0.0014004	novel transcript 2C antisense to CTXN1 and TIMM44
ENSG00000177096	PHETA2	-1.6	1.96E-23	PH domain containing endocytic trafficking adaptor 2
ENSG00000173898	SPTBN2	-1.6	8.16E-63	spectrin beta 2C non-erythrocytic 2
ENSG00000100351	GRAP2	-1.6	0.0422984	GRB2 related adaptor protein 2
ENSG00000087111	PIGS	-1.6	2.96E-62	phosphatidylinositol glycan anchor biosynthesis class S
ENSG00000133315	MACROD1	-1.6	5.79E-28	mono-ADP ribosylhydrolase 1
ENSG00000160200	CBS	-1.6	8.93E-21	cystathionine beta-synthase
ENSG00000234694	-	-1.6	3.45E-05	novel transcript
ENSG00000213025	COX20P1	-1.6	7.59E-09	COX20 pseudogene 1
ENSG00000103121	CMC2	-1.6	1.55E-56	C-X9-C motif containing 2
ENSG00000109099	PMP22	-1.6	9.67E-35	peripheral myelin protein 22
ENSG00000096093	EFHC1	-1.6	3.84E-33	EF-hand domain containing 1
ENSG00000197822	OCLN	-1.6	4.45E-16	occludin
ENSG00000064309	CDON	-1.6	2.36E-19	cell adhesion associated 2C oncogene regulated
ENSG00000168291	PDHB	-1.6	2.95E-143	pyruvate dehydrogenase E1 subunit beta
ENSG00000287064	-	-1.6	6.23E-06	novel transcript
ENSG00000233077	LINC01271	-1.6	0.0009008	long intergenic non-protein coding RNA 1271
ENSG00000136378	ADAMTS7	-1.6	0.003607	ADAM metalloproteinase with thrombospondin type 1 motif 7
ENSG00000130770	ATP5IF1	-1.6	1.73E-49	ATP synthase inhibitory factor subunit 1
ENSG00000149485	FADS1	-1.6	3.34E-89	fatty acid desaturase 1
ENSG00000213839	TMX2P1	-1.6	0.0080733	thioredoxin related transmembrane protein 2 pseudogene 1
ENSG00000141258	SGSM2	-1.6	5.92E-60	small G protein signaling modulator 2
ENSG00000215417	MIR17HG	-1.6	1.64E-09	miR-17-92a-1 cluster host gene
ENSG00000272335	-	-1.6	0.0053721	novel transcript
ENSG00000270157	-	-1.6	0.0009131	novel transcript
ENSG00000167535	CACNB3	-1.6	9.40E-36	calcium voltage-gated channel auxiliary subunit beta 3
ENSG00000118298	CA14	-1.6	0.0429105	carbonic anhydrase 14
ENSG00000188107	EYS	-1.6	5.09E-05	eyes shut homolog
ENSG00000130829	DUSP9	-1.6	9.49E-22	dual specificity phosphatase 9
ENSG00000161048	NAPEPLD	-1.6	1.70E-10	N-acyl phosphatidylethanolamine phospholipase D
ENSG00000197043	ANXA6	-1.6	5.11E-27	annexin A6



ENSG00000115163	CENPA	-1.6	1.31E-51	centromere protein A
ENSG00000273387	-	-1.6	0.0237391	novel transcript 2C antisense to SMTN
ENSG00000106077	ABHD11	-1.6	3.94E-25	abhydrolase domain containing 11
ENSG00000227467	LINC01537	-1.6	2.09E-77	long intergenic non-protein coding RNA 1537
ENSG00000065675	PRKCQ	-1.6	7.34E-09	protein kinase C theta
ENSG00000104835	SARS2	-1.6	3.26E-18	seryl-tRNA synthetase 2 2C mitochondrial
ENSG00000180336	MEIOC	-1.6	0.0202498	meiosis specific with coiled-coil domain
ENSG00000148835	TAF5	-1.6	1.83E-37	TATA-box binding protein associated factor 5
ENSG00000152377	SPOCK1	-1.6	2.40E-70	SPARC (osteonectin) 2C cwcv and kazal like domains proteoglycan 1
ENSG00000050555	LAMC3	-1.6	5.00E-11	laminin subunit gamma 3
ENSG00000214439	FAM185BP	-1.6	0.0169895	family with sequence similarity 185 member B 2C pseudogene
ENSG00000186480	INSIG1	-1.6	1.79E-116	insulin induced gene 1
ENSG00000224805	LINC00853	-1.6	0.0031787	long intergenic non-protein coding RNA 853
ENSG00000159335	PTMS	-1.6	1.59E-32	parathyrosin
ENSG00000231503	PTMAP4	-1.6	0.0001576	prothymosin alpha pseudogene 4
ENSG00000001497	LAS1L	-1.6	4.81E-64	LAS1 like ribosome biogenesis factor
ENSG00000278112	-	-1.6	0.0368877	novel transcript 2C sense intronic to RILPL1
ENSG00000141349	G6PC3	-1.6	2.87E-32	glucose-6-phosphatase catalytic subunit 3
ENSG00000284491	THSD8	-1.6	0.0007564	thrombospondin type 1 domain containing 8
ENSG00000154839	SKA1	-1.6	2.36E-34	spindle and kinetochore associated complex subunit 1
ENSG00000167700	MFSD3	-1.6	5.14E-22	major facilitator superfamily domain containing 3
ENSG00000214029	ZNF891	-1.6	0.0004199	zinc finger protein 891
ENSG00000230658	KLHL7-DT	-1.6	0.0405447	KLHL7 divergent transcript
ENSG00000201302	SNORA65	-1.6	0.0310212	small nucleolar RNA 2C H/ACA box 65
ENSG00000082196	C1QTNF3	-1.6	0.0006842	C1q and TNF related 3
ENSG00000272990	-	-1.6	2.78E-06	novel transcript 2C antisense to KCNAB1
ENSG00000177855	CACYBPP2	-1.6	0.0001988	calcyclin binding protein pseudogene 2
ENSG00000008382	MPND	-1.6	1.40E-17	MPN domain containing
ENSG00000237943	PRKCQ-AS1	-1.6	1.35E-12	PRKCQ antisense RNA 1
ENSG00000175183	CSRP2	-1.6	1.25E-12	cysteine and glycine rich protein 2
ENSG00000143401	ANP32E	-1.6	4.31E-44	acidic nuclear phosphoprotein 32 family member E
ENSG00000092094	OSGEP	-1.6	1.16E-35	O-sialoglycoprotein endopeptidase
ENSG00000166171	DPCD	-1.6	4.42E-30	deleted in primary ciliary dyskinesia homolog (mouse)
ENSG00000267255	-	-1.6	0.0077216	novel transcript 2C antisense to CHAF1A
ENSG00000104299	INTS9	-1.6	7.42E-42	integrator complex subunit 9
ENSG00000236603	RANP1	-1.6	4.78E-14	RAN pseudogene 1
ENSG00000198707	CEP290	-1.6	5.56E-09	centrosomal protein 290
ENSG00000225159	NPM1P39	-1.6	0.0008545	nucleophosmin 1 pseudogene 39
ENSG00000125247	TMTC4	-1.6	4.49E-37	transmembrane O-mannosyltransferase targeting cadherins 4
ENSG00000212232	SNORD17	-1.6	6.13E-10	small nucleolar RNA 2C C/D box 17
ENSG00000198168	SVIP	-1.6	1.97E-39	small VCP interacting protein
ENSG00000145833	DDX46	-1.6	1.95E-28	DEAD-box helicase 46
ENSG00000165244	ZNF367	-1.6	9.97E-67	zinc finger protein 367
ENSG00000213397	HAUS7	-1.6	1.90E-10	HAUS augmin like complex subunit 7
ENSG00000139155	SLCO1C1	-1.6	0.0014698	solute carrier organic anion transporter family member 1C1



ENSG00000214050	FBXO16	-1.6	0.0008365	F-box protein 16
ENSG00000221949	LINC01465	-1.6	0.0026454	long intergenic non-protein coding RNA 1465
ENSG00000151466	SCLT1	-1.6	1.98E-21	sodium channel and clathrin linker 1
ENSG00000269399	-	-1.6	4.76E-10	novel transcript
ENSG00000196943	NOP9	-1.6	7.94E-67	NOP9 nucleolar protein
ENSG00000157110	RBPMS	-1.6	1.77E-24	RNA binding protein 2C mRNA processing factor
ENSG00000121775	TMEM39B	-1.6	4.93E-41	transmembrane protein 39B
ENSG00000128510	CPA4	-1.6	2.19E-21	carboxypeptidase A4
ENSG00000184445	KNTC1	-1.6	2.83E-17	kinetochore associated 1
ENSG00000135245	HILPDA	-1.6	7.63E-35	hypoxia inducible lipid droplet associated
ENSG00000170037	CNTROB	-1.6	4.03E-39	centrobin 2C centriole duplication and spindle assembly protein
ENSG00000251141	MRPS30-DT	-1.6	4.03E-10	MRPS30 divergent transcript
ENSG00000269825	-	-1.6	0.0003724	novel zinc finger protein
ENSG00000166473	PKD1L2	-1.6	0.0220558	polycystin 1 like 2 (gene/pseudogene)
ENSG00000172244	C5orf34	-1.6	2.85E-29	chromosome 5 open reading frame 34
ENSG00000254706	-	-1.6	1.12E-05	novel protein
ENSG00000170364	SETMAR	-1.6	1.88E-13	SET domain and mariner transposase fusion gene
ENSG00000112218	GPR63	-1.6	0.017721	G protein-coupled receptor 63
ENSG00000225178	RPSAP58	-1.6	4.16E-22	ribosomal protein SA pseudogene 58
ENSG00000253392	-	-1.6	0.0227585	novel transcript 2C antisense to ZNF57
ENSG00000155189	AGPAT5	-1.6	3.14E-55	1-acylglycerol-3-phosphate O-acyltransferase 5
ENSG00000188015	S100A3	-1.6	8.12E-18	S100 calcium binding protein A3
ENSG00000196405	EVL	-1.6	3.60E-21	Enah/Vasp-like
ENSG00000130816	DNMT1	-1.6	3.38E-87	DNA methyltransferase 1
ENSG00000167646	DNAAF3	-1.6	2.45E-35	dynein axonemal assembly factor 3
ENSG00000110660	SLC35F2	-1.6	1.94E-87	solute carrier family 35 member F2
ENSG00000018280	SLC11A1	-1.6	0.0355117	solute carrier family 11 member 1
ENSG00000122870	BICC1	-1.6	1.09E-23	BicC family RNA binding protein 1
ENSG00000287114	-	-1.6	1.03E-13	novel transcript
ENSG00000165644	COMTD1	-1.6	2.12E-19	catechol-O-methyltransferase domain containing 1
ENSG00000272842	-	-1.6	0.0022433	novel transcript 2C antisense to DENND4C
ENSG00000180354	MTURN	-1.6	1.09E-37	maturin 2C neural progenitor differentiation regulator homolog
ENSG00000099385	BCL7C	-1.6	1.43E-30	BAF chromatin remodeling complex subunit BCL7C
ENSG00000182628	SKA2	-1.6	3.50E-73	spindle and kinetochore associated complex subunit 2
ENSG00000151914	DST	-1.6	1.11E-06	dystonin
ENSG00000213881	NPM1P6	-1.5	0.0021065	nucleophosmin 1 pseudogene 6
ENSG00000103064	SLC7A6	-1.5	1.57E-50	solute carrier family 7 member 6
ENSG00000159199	ATP5MC1	-1.5	9.84E-22	ATP synthase membrane subunit c locus 1
ENSG00000172687	ZNF738	-1.5	1.97E-07	zinc finger protein 738
ENSG00000100290	BIK	-1.5	2.78E-05	BCL2 interacting killer
ENSG00000275835	TUBGCP5	-1.5	8.80E-32	tubulin gamma complex associated protein 5
ENSG00000143028	SYPL2	-1.5	2.01E-29	synaptophysin like 2
ENSG00000147536	GINS4	-1.5	3.81E-40	GINS complex subunit 4
ENSG00000160172	FAM86C2P	-1.5	3.89E-17	family with sequence similarity 86 member C2 2C pseudogene

ENSG00000144815	NXPE3	-1.5	9.54E-22	neurexophilin and PC-esterase domain family member 3
ENSG00000172339	ALG14	-1.5	1.37E-29	ALG14 UDP-N-acetylglucosaminyltransferase subunit
ENSG00000198468	FLVCR1-DT	-1.5	3.10E-14	FLVCR1 divergent transcript
ENSG00000167272	POP5	-1.5	3.33E-36	POP5 homolog 2C ribonuclease P/MRP subunit
ENSG00000113161	HMGCR	-1.5	5.96E-40	3-hydroxy-3-methylglutaryl-CoA reductase
ENSG00000115525	ST3GAL5	-1.5	9.88E-36	ST3 beta-galactoside alpha-2 2C3-sialyltransferase 5
ENSG00000198929	NOS1AP	-1.5	1.44E-17	nitric oxide synthase 1 adaptor protein
ENSG00000130244	FAM98C	-1.5	4.79E-20	family with sequence similarity 98 member C
ENSG00000206075	SERPINB5	-1.5	3.06E-52	serpin family B member 5
ENSG00000125740	FOSB	-1.5	1.15E-10	FosB proto-oncogene 2C AP-1 transcription factor subunit
ENSG00000197417	SHPK	-1.5	4.76E-08	sedoheptulokinase
ENSG00000160818	GPATCH4	-1.5	5.30E-62	G-patch domain containing 4
ENSG00000233728	-	-1.5	0.0258856	novel transcript
ENSG00000240087	RPSAP12	-1.5	7.01E-16	ribosomal protein SA pseudogene 12
ENSG00000075234	TTC38	-1.5	3.42E-28	tetratricopeptide repeat domain 38
ENSG00000172840	PDP2	-1.5	5.55E-36	pyruvate dehydrogenase phosphatase catalytic subunit 2
ENSG00000082516	GEMIN5	-1.5	1.63E-71	gem nuclear organelle associated protein 5
ENSG00000131069	ACSS2	-1.5	9.28E-32	acyl-CoA synthetase short chain family member 2
ENSG00000261334	-	-1.5	0.0499829	novel transcript
ENSG00000260630	SNAI3-AS1	-1.5	2.40E-17	SNAI3 antisense RNA 1
ENSG00000255276	RRM1-AS1	-1.5	0.0073722	RRM1 antisense RNA 1
ENSG00000179029	TMEM107	-1.5	1.33E-24	transmembrane protein 107
ENSG00000262728	-	-1.5	0.033901	novel transcript 2C antisense to GOLGA8N
ENSG00000127914	AKAP9	-1.5	1.27E-14	A-kinase anchoring protein 9
ENSG00000137824	RMDN3	-1.5	9.13E-72	regulator of microtubule dynamics 3
ENSG00000106211	HSPB1	-1.5	3.45E-18	heat shock protein family B (small) member 1
ENSG00000143942	CHAC2	-1.5	1.36E-35	ChaC glutathione specific gamma-glutamylcyclotransferase 2
ENSG00000267737	-	-1.5	0.0005556	novel transcript
ENSG00000121057	AKAP1	-1.5	1.82E-73	A-kinase anchoring protein 1
ENSG00000165792	METTL17	-1.5	6.82E-45	methyltransferase like 17
ENSG00000085871	MGST2	-1.5	1.25E-35	microsomal glutathione S-transferase 2
ENSG00000115507	OTX1	-1.5	2.77E-12	orthodenticle homeobox 1
ENSG00000118777	ABCG2	-1.5	5.75E-38	ATP binding cassette subfamily G member 2 (Junior blood group)
ENSG00000213920	MDP1	-1.5	5.12E-05	magnesium dependent phosphatase 1
ENSG00000143416	SELENBP1	-1.5	7.92E-24	selenium binding protein 1
ENSG00000177030	DEAF1	-1.5	2.54E-23	DEAF1 transcription factor
ENSG00000196154	S100A4	-1.5	4.08E-30	S100 calcium binding protein A4
ENSG00000152749	GPR180	-1.5	5.26E-32	G protein-coupled receptor 180
ENSG00000237748	UQCRBP1	-1.5	0.0236266	ubiquinol-cytochrome c reductase binding protein pseudogene 1
ENSG00000282386	-	-1.5	1.59E-05	novel transcript 2C antisense to SLC39A1
ENSG00000182054	IDH2	-1.5	5.05E-18	isocitrate dehydrogenase (NADP(+)) 2
ENSG00000135476	ESPL1	-1.5	1.73E-30	extra spindle pole bodies like 1 2C separase
ENSG00000066735	KIF26A	-1.5	4.79E-21	kinesin family member 26A
ENSG00000108924	HLF	-1.5	0.020805	HLF transcription factor 2C PAR bZIP family member
ENSG00000141510	TP53	-1.5	3.72E-28	tumor protein p53

ENSG00000138092	CENPO	-1.5	3.49E-42	centromere protein O
ENSG00000025770	NCAPH2	-1.5	3.48E-37	non-SMC condensin II complex subunit H2
ENSG00000210127	MT-TA	-1.5	0.0227838	mitochondrially encoded tRNA-Ala (GCN)
ENSG00000169972	PUSL1	-1.5	1.16E-20	pseudouridine synthase like 1
ENSG00000109881	CCDC34	-1.5	8.06E-30	coiled-coil domain containing 34
ENSG00000234602	MCIDAS	-1.5	2.96E-18	multiciliate differentiation and DNA synthesis associated cell cycle protein
ENSG00000163535	SGO2	-1.5	9.61E-08	shugoshin 2
ENSG00000108797	CNTNAP1	-1.5	1.82E-17	contactin associated protein 1
ENSG00000184307	ZDHHC23	-1.5	1.65E-16	zinc finger DHHC-type palmitoyltransferase 23
ENSG00000188001	TPRG1	-1.5	0.0254663	tumor protein p63 regulated 1
ENSG00000248873	SERBP1P6	-1.5	0.0060007	SERPINE1 mRNA binding protein 1 pseudogene 6
ENSG00000272338	-	-1.5	0.0008466	novel transcript
ENSG00000258471	-	-1.5	0.0294993	novel transcript 2C antisense to SLC39A2
ENSG00000267030	-	-1.5	1.37E-05	novel transcript 2C antisense to UBXN6
ENSG00000221539	SNORD99	-1.5	0.0437489	small nucleolar RNA 2C C/D box 99
ENSG00000131094	C1QL1	-1.5	1.05E-06	complement C1q like 1
ENSG00000170558	CDH2	-1.5	5.91E-05	cadherin 2
ENSG00000252827	RN7SKP11	-1.5	0.0491014	RN7SK pseudogene 11
ENSG00000278133	-	-1.5	0.0031668	novel transcript 2C sense intronic to KAT8
ENSG00000196872	CRACDL	-1.5	3.79E-08	CRACD like
ENSG00000255139	-	-1.5	0.001202	novel transcript
ENSG00000186193	SAPCD2	-1.5	1.70E-25	suppressor APC domain containing 2
ENSG00000107554	DNMBP	-1.5	6.07E-34	dynamamin binding protein
ENSG00000110042	DTX4	-1.5	6.19E-22	deltex E3 ubiquitin ligase 4
ENSG00000167393	PPP2R3B	-1.5	2.16E-36	protein phosphatase 2 regulatory subunit B'beta
ENSG00000144827	ABHD10	-1.5	4.63E-49	abhydrolase domain containing 10 2C depalmitoylase
ENSG00000137135	ARHGEF39	-1.5	1.61E-35	Rho guanine nucleotide exchange factor 39
ENSG00000168028	RPSA	-1.5	2.10E-18	ribosomal protein SA
ENSG00000138629	UBL7	-1.5	4.14E-25	ubiquitin like 7
ENSG00000261373	VPS9D1-AS1	-1.5	4.40E-14	VPS9D1 antisense RNA 1
ENSG00000051596	THOC3	-1.5	2.35E-35	THO complex 3
ENSG00000254165	-	-1.5	0.0145931	novel transcript
ENSG00000123473	STIL	-1.5	6.60E-35	STIL centriolar assembly protein
ENSG00000204564	C6orf136	-1.5	1.66E-30	chromosome 6 open reading frame 136
ENSG00000188807	TMEM201	-1.5	5.09E-32	transmembrane protein 201
ENSG00000116679	IVNS1ABP	-1.5	2.08E-34	influenza virus NS1A binding protein
ENSG00000138030	KHK	-1.5	6.48E-12	ketoheokinase
ENSG00000239887	C1orf226	-1.5	8.44E-45	chromosome 1 open reading frame 226
ENSG00000081791	DELE1	-1.5	2.92E-66	DAP3 binding cell death enhancer 1
ENSG00000156876	SASS6	-1.5	1.71E-11	SAS-6 centriolar assembly protein
ENSG00000197258	EIF4BP6	-1.5	2.30E-48	eukaryotic translation initiation factor 4B pseudogene 6
ENSG00000224837	GCSHP5	-1.5	2.25E-26	glycine cleavage system protein H pseudogene 5
ENSG00000170017	ALCAM	-1.5	1.07E-20	activated leukocyte cell adhesion molecule
ENSG00000204529	GUCY2EP	-1.5	7.32E-08	guanylate cyclase 2E 2C pseudogene
ENSG00000196497	IPO4	-1.5	3.15E-14	importin 4

ENSG00000149328	GLB1L2	-1.5	1.28E-23	galactosidase beta 1 like 2
ENSG00000130592	LSP1	-1.5	0.0190513	lymphocyte specific protein 1
ENSG00000128228	SDF2L1	-1.5	3.69E-17	stromal cell derived factor 2 like 1
ENSG00000234742	-	-1.5	0.0108512	ribosomal protein L17 (RPL17) pseudogene
ENSG00000120448	BRCA1	-1.5	1.31E-16	BRCA1 DNA repair associated
ENSG00000108883	EFTUD2	-1.5	2.39E-48	elongation factor Tu GTP binding domain containing 2
ENSG00000213599	SLX1A-SULT1A3	-1.5	0.0042108	SLX1A-SULT1A3 readthrough (NMD candidate)
ENSG00000123136	DDX39A	-1.5	1.60E-25	DEXD-box helicase 39A
ENSG00000205041	-	-1.5	0.0016537	novel transcript 2C sense intronic to AKT2
ENSG00000277837	-	-1.5	2.79E-12	novel transcript
ENSG00000176834	VSIG10	-1.5	2.36E-41	V-set and immunoglobulin domain containing 10
ENSG00000087191	PSMC5	-1.5	1.91E-83	proteasome 26S subunit 2C ATPase 5
ENSG00000270605	-	-1.5	0.0001449	novel transcript
ENSG00000134569	LRP4	-1.5	6.19E-36	LDL receptor related protein 4
ENSG00000076003	MCM6	-1.5	4.13E-121	minichromosome maintenance complex component 6
ENSG00000278540	ACACA	-1.5	6.95E-35	acetyl-CoA carboxylase alpha
ENSG00000167397	VKORC1	-1.5	1.02E-28	vitamin K epoxide reductase complex subunit 1
ENSG00000167619	TMEM145	-1.5	0.0105707	transmembrane protein 145
ENSG00000114378	HYAL1	-1.5	1.75E-38	hyaluronidase 1
ENSG00000278291	-	-1.5	1.36E-06	novel transcript 2C antisense to IL17D
ENSG00000070159	PTPN3	-1.5	2.18E-24	protein tyrosine phosphatase non-receptor type 3
ENSG00000189077	TMEM120A	-1.5	4.62E-27	transmembrane protein 120A
ENSG00000162174	ASRGL1	-1.5	8.41E-22	asparaginase and isoaspartyl peptidase 1
ENSG00000234264	DEPDC1-AS1	-1.5	0.0279245	DEPDC1 antisense RNA 1
ENSG00000251432	LINC02615	-1.5	0.0002439	long intergenic non-protein coding RNA 2615
ENSG00000176454	LPCAT4	-1.5	2.39E-43	lysophosphatidylcholine acyltransferase 4
ENSG00000279342	-	-1.5	0.0105709	novel transcript 2C sense intronic to MSANTD2
ENSG00000116161	CACYBP	-1.5	6.10E-110	calcyclin binding protein
ENSG00000074582	BCS1L	-1.5	1.44E-33	BCS1 homolog 2C ubiquinol-cytochrome c reductase complex chaperone
ENSG00000269888	-	-1.5	0.0213846	novel transcript
ENSG00000174327	SLC16A13	-1.5	1.05E-23	solute carrier family 16 member 13
ENSG00000180098	TRNAU1AP	-1.5	6.01E-49	tRNA selenocysteine 1 associated protein 1
ENSG00000163832	ELP6	-1.5	2.33E-32	elongator acetyltransferase complex subunit 6
ENSG00000103089	FA2H	-1.5	3.86E-37	fatty acid 2-hydroxylase
ENSG00000105866	SP4	-1.5	1.53E-19	Sp4 transcription factor
ENSG00000004660	CAMKK1	-1.5	6.60E-54	calcium/calmodulin dependent protein kinase kinase 1
ENSG00000160949	TONSL	-1.5	1.41E-39	tonsoku like 2C DNA repair protein
ENSG00000203995	ZYG11A	-1.5	1.14E-39	zyg-11 family member A 2C cell cycle regulator
ENSG00000205084	TMEM231	-1.5	2.66E-40	transmembrane protein 231
ENSG00000166704	ZNF606	-1.5	0.0003833	zinc finger protein 606
ENSG00000137807	KIF23	-1.5	3.67E-31	kinesin family member 23
ENSG00000155229	MMS19	-1.5	5.97E-32	MMS19 homolog 2C cytosolic iron-sulfur assembly component
ENSG00000148459	PDSS1	-1.5	1.77E-22	decaprenyl diphosphate synthase subunit 1
ENSG00000245213	-	-1.5	0.0001838	novel transcript 2C antisense to GALNT7
ENSG00000134824	FADS2	-1.5	1.02E-38	fatty acid desaturase 2

ENSG00000198805	PNP	-1.5	1.50E-33	purine nucleoside phosphorylase
ENSG00000129347	KRI1	-1.5	8.64E-97	KRI1 homolog
ENSG00000085063	CD59	-1.5	6.34E-104	CD59 molecule (CD59 blood group)
ENSG00000278987	-	-1.5	0.0176085	TEC
ENSG00000164199	ADGRV1	-1.5	0.0007202	adhesion G protein-coupled receptor V1
ENSG00000116649	SRM	-1.5	1.47E-31	spermidine synthase
ENSG00000124193	SRSF6	-1.5	8.51E-29	serine and arginine rich splicing factor 6
ENSG00000143476	DTL	-1.5	2.72E-88	denticleless E3 ubiquitin protein ligase homolog
ENSG00000170430	MGMT	-1.5	2.68E-23	O-6-methylguanine-DNA methyltransferase
ENSG00000114942	EEF1B2	-1.5	1.67E-45	eukaryotic translation elongation factor 1 beta 2
ENSG00000185813	PCYT2	-1.5	1.11E-33	phosphate cytidylyltransferase 2C ethanolamine
ENSG00000234327	ZNF232-AS1	-1.5	3.11E-20	ZNF232 antisense RNA 1
ENSG00000272468	-	-1.5	0.0002026	novel transcript
ENSG00000283041	-	-1.5	1.43E-22	eukaryotic translation elongation factor 1 gamma (
ENSG00000107938	EDRF1	-1.5	1.67E-29	erythroid differentiation regulatory factor 1
ENSG00000107331	ABCA2	-1.5	1.10E-39	ATP binding cassette subfamily A member 2
ENSG00000205871	RPS3AP47	-1.5	5.26E-06	RPS3A pseudogene 47
ENSG00000155792	DEPTOR	-1.5	5.29E-41	DEP domain containing MTOR interacting protein
ENSG00000278619	MRM1	-1.5	2.69E-20	mitochondrial rRNA methyltransferase 1
ENSG00000006625	GGCT	-1.5	5.84E-98	gamma-glutamylcyclotransferase
ENSG00000130024	PHF10	-1.5	4.59E-39	PHD finger protein 10
ENSG00000225506	CYP4A22-AS1	-1.5	0.0431012	CYP4A22 antisense RNA 1
ENSG00000168453	HR	-1.5	1.27E-33	HR lysine demethylase and nuclear receptor corepressor
ENSG00000104881	PPP1R13L	-1.5	3.58E-30	protein phosphatase 1 regulatory subunit 13 like
ENSG00000143590	EFNA3	-1.5	2.56E-13	ephrin A3
ENSG00000285053	TBCE	-1.5	3.00E-12	tubulin folding cofactor E
ENSG00000138744	NAAA	-1.5	8.19E-44	N-acylethanolamine acid amidase
ENSG00000125637	PSD4	-1.5	4.32E-28	pleckstrin and Sec7 domain containing 4
ENSG00000172053	QARS1	-1.5	8.88E-35	glutaminyl-tRNA synthetase 1
ENSG00000141295	SCRN2	-1.5	9.76E-25	secernin 2
ENSG00000067992	PDK3	-1.5	1.88E-22	pyruvate dehydrogenase kinase 3
ENSG00000107984	DKK1	-1.5	2.54E-34	dickkopf WNT signaling pathway inhibitor 1
ENSG00000261096	-	-1.5	0.0083353	novel transcript
ENSG00000090889	KIF4A	-1.4	2.04E-60	kinesin family member 4A
ENSG00000146530	VWDE	-1.4	1.05E-05	von Willebrand factor D and EGF domains
ENSG00000072042	RDH11	-1.4	6.88E-82	retinol dehydrogenase 11
ENSG00000165572	KBTBD6	-1.4	5.19E-34	kelch repeat and BTB domain containing 6
ENSG00000076928	ARHGEF1	-1.4	1.62E-25	Rho guanine nucleotide exchange factor 1
ENSG00000107833	NPM3	-1.4	1.63E-21	nucleophosmin/nucleoplasmin 3
ENSG00000249471	ZNF324B	-1.4	2.02E-19	zinc finger protein 324B
ENSG00000154328	NEIL2	-1.4	3.35E-22	nei like DNA glycosylase 2
ENSG00000160345	C9orf116	-1.4	2.36E-18	chromosome 9 open reading frame 116
ENSG00000242338	BMS1P4	-1.4	0.0216775	BMS1 pseudogene 4
ENSG00000228519	RANBP1P1	-1.4	0.0190132	RANBP1 pseudogene 1
ENSG00000133069	TMCC2	-1.4	0.0001937	transmembrane and coiled-coil domain family 2
ENSG00000198727	MT-CYB	-1.4	1.00E-37	mitochondrially encoded cytochrome b



ENSG00000185829	ARL17A	-1.4	2.38E-05	ADP ribosylation factor like GTPase 17A
ENSG00000247092	SNHG10	-1.4	8.92E-16	small nucleolar RNA host gene 10
ENSG00000248905	FMN1	-1.4	5.01E-05	formin 1
ENSG00000094914	AAAS	-1.4	5.64E-35	aladin WD repeat nucleoporin
ENSG00000223784	LINP1	-1.4	2.67E-06	lncRNA in non-homologous end joining pathway 1
ENSG00000189343	RPS2P46	-1.4	6.72E-14	ribosomal protein S2 pseudogene 46
ENSG00000267152	-	-1.4	0.0016946	novel transcript
ENSG00000149308	NPAT	-1.4	1.61E-11	nuclear protein 2C coactivator of histone transcription
ENSG00000130175	PRKCSH	-1.4	1.07E-26	protein kinase C substrate 80K-H
ENSG00000204308	RNF5	-1.4	1.98E-23	ring finger protein 5
ENSG00000160284	SPATC1L	-1.4	1.00E-11	spermatogenesis and centriole associated 1 like
ENSG00000084774	CAD	-1.4	3.51E-27	carbamoyl-phosphate synthetase 2 2C aspartate transcarbamylase 2C and dihydroorotase
ENSG00000115641	FHL2	-1.4	6.99E-37	four and a half LIM domains 2
ENSG00000148362	PAXX	-1.4	1.82E-18	PAXX non-homologous end joining factor
ENSG00000182518	FAM104B	-1.4	8.96E-24	family with sequence similarity 104 member B
ENSG00000083720	OXCT1	-1.4	3.16E-54	3-oxoacid CoA-transferase 1
ENSG00000103145	HCFC1R1	-1.4	9.00E-19	host cell factor C1 regulator 1
ENSG00000182481	KPNA2	-1.4	5.91E-87	karyopherin subunit alpha 2
ENSG00000160285	LSS	-1.4	4.61E-39	lanosterol synthase
ENSG00000236088	COX10-AS1	-1.4	4.64E-12	COX10 antisense RNA 1
ENSG00000105552	BCAT2	-1.4	4.06E-23	branched chain amino acid transaminase 2
ENSG00000187630	DHRS4L2	-1.4	8.78E-21	dehydrogenase/reductase 4 like 2
ENSG00000111490	TBC1D30	-1.4	1.37E-16	TBC1 domain family member 30
ENSG00000280417	-	-1.4	3.47E-05	TEC
ENSG00000197744	PTMAP2	-1.4	2.44E-09	prothymosin alpha pseudogene 2
ENSG00000063601	MTMR1	-1.4	8.23E-43	myotubularin related protein 1
ENSG00000167840	ZNF232	-1.4	7.96E-33	zinc finger protein 232
ENSG00000251602	-	-1.4	3.07E-07	novel transcript 2C antisense to MTA1
ENSG00000102054	RBBP7	-1.4	2.66E-133	RB binding protein 7 2C chromatin remodeling factor
ENSG00000249485	RBBP4P1	-1.4	8.08E-10	RBBP4 pseudogene 1
ENSG00000172469	MANEA	-1.4	3.23E-19	mannosidase endo-alpha
ENSG00000005156	LIG3	-1.4	8.00E-38	DNA ligase 3
ENSG00000123416	TUBA1B	-1.4	1.28E-21	tubulin alpha 1b
ENSG00000244187	TMEM141	-1.4	1.98E-19	transmembrane protein 141
ENSG00000081052	COL4A4	-1.4	2.99E-36	collagen type IV alpha 4 chain
ENSG00000266967	AARSD1	-1.4	1.01E-15	alanyl-tRNA synthetase domain containing 1
ENSG00000229953	-	-1.4	3.26E-40	novel transcript
ENSG00000085276	MECOM	-1.4	9.98E-17	MDS1 and EVI1 complex locus
ENSG00000173083	HPSE	-1.4	4.99E-15	heparanase
ENSG00000159921	GNE	-1.4	8.97E-22	glucosamine (UDP-N-acetyl)-2-epimerase/N-acetylmannosamine kinase
ENSG00000031081	ARHGAP31	-1.4	0.0292439	Rho GTPase activating protein 31
ENSG00000099899	TRMT2A	-1.4	6.28E-28	tRNA methyltransferase 2 homolog A
ENSG00000246859	STARD4-AS1	-1.4	0.0022229	STARD4 antisense RNA 1
ENSG00000244625	MIATNB	-1.4	0.0002177	MIAT neighbor

ENSG00000273604	EPOP	-1.4	1.13E-30	elongin BC and polycomb repressive complex 2 associated protein
ENSG00000166263	STXBP4	-1.4	2.43E-08	syntaxin binding protein 4
ENSG00000230679	ENO1-AS1	-1.4	0.0132442	ENO1 antisense RNA 1
ENSG00000168237	GLYCTK	-1.4	1.03E-17	glycerate kinase
ENSG00000246465	-	-1.4	6.35E-05	novel transcript LOC100506705
ENSG00000239306	RBM14	-1.4	1.34E-25	RNA binding motif protein 14
ENSG00000182950	ODF3L1	-1.4	0.0063	outer dense fiber of sperm tails 3 like 1
ENSG00000123600	METTL8	-1.4	3.04E-37	methyltransferase like 8
ENSG00000198743	SLC5A3	-1.4	5.77E-05	solute carrier family 5 member 3
ENSG00000273230	-	-1.4	7.89E-14	novel transcript
ENSG00000243926	TIPARP-AS1	-1.4	4.90E-07	TIPARP antisense RNA 1
ENSG00000214595	EML6	-1.4	6.73E-11	EMAP like 6
ENSG00000174442	ZWILCH	-1.4	5.88E-36	zwilch kinetochore protein
ENSG00000108984	MAP2K6	-1.4	1.50E-27	mitogen-activated protein kinase kinase 6
ENSG00000143995	MEIS1	-1.4	5.38E-15	Meis homeobox 1
ENSG00000210196	MT-TP	-1.4	1.54E-05	mitochondrially encoded tRNA-Pro (CCN)
ENSG00000266507	MIR4479	-1.4	0.0441439	microRNA 4479
ENSG00000133739	LRRCC1	-1.4	4.74E-07	leucine rich repeat and coiled-coil centrosomal protein 1
ENSG00000132780	NASP	-1.4	3.37E-69	nuclear autoantigenic sperm protein
ENSG00000274276	CBSL	-1.4	4.70E-07	cystathionine beta-synthase like
ENSG00000272808	-	-1.4	5.16E-20	novel transcript
ENSG00000227963	RBM15-AS1	-1.4	2.33E-09	RBM15 antisense RNA 1
ENSG00000250802	ZBED3-AS1	-1.4	9.63E-06	ZBED3 antisense RNA 1
ENSG00000137804	NUSAP1	-1.4	5.32E-10	nucleolar and spindle associated protein 1
ENSG00000102780	DGKH	-1.4	0.000833	diacylglycerol kinase eta
ENSG00000111679	PTPN6	-1.4	2.85E-21	protein tyrosine phosphatase non-receptor type 6
ENSG00000235313	HM13-IT1	-1.4	0.0476268	HM13 intronic transcript 1
ENSG00000236992	RPL12P12	-1.4	0.0036757	ribosomal protein L12 pseudogene 12
ENSG00000089006	SNX5	-1.4	1.04E-74	sorting nexin 5
ENSG00000102977	ACD	-1.4	2.49E-25	ACD shelterin complex subunit and telomerase recruitment factor
ENSG00000130304	SLC27A1	-1.4	1.12E-07	solute carrier family 27 member 1
ENSG0000016391	CHDH	-1.4	6.11E-26	choline dehydrogenase
ENSG00000131269	ABCB7	-1.4	1.16E-46	ATP binding cassette subfamily B member 7
ENSG00000153406	NMRAL1	-1.4	1.29E-26	NmrA like redox sensor 1
ENSG00000156136	DCK	-1.4	2.34E-38	deoxycytidine kinase
ENSG00000204628	RACK1	-1.4	9.72E-27	receptor for activated C kinase 1
ENSG00000111602	TIMELESS	-1.4	1.89E-46	timeless circadian regulator
ENSG00000183386	FHL3	-1.4	4.78E-27	four and a half LIM domains 3
ENSG0000023041	ZDHHC6	-1.4	1.02E-23	zinc finger DHHC-type palmitoyltransferase 6
ENSG00000273568	-	-1.4	0.0015609	novel transcript 2C sense intronic to PUS1
ENSG00000266010	GATA6-AS1	-1.4	0.013245	GATA6 antisense RNA 1 (head to head)
ENSG00000133488	SEC14L4	-1.4	3.27E-10	SEC14 like lipid binding 4
ENSG00000175602	CCDC85B	-1.4	1.02E-11	coiled-coil domain containing 85B
ENSG00000170482	SLC23A1	-1.4	2.77E-06	solute carrier family 23 member 1
ENSG00000199753	SNORD104	-1.4	0.0001835	small nucleolar RNA 2C C/D box 104

ENSG00000058804	NDC1	-1.4	1.79E-93	NDC1 transmembrane nucleoporin
ENSG00000189144	ZNF573	-1.4	5.35E-06	zinc finger protein 573
ENSG00000236364	-	-1.4	0.0006736	novel transcript 2C antisense to UCK2
ENSG00000109674	NEIL3	-1.4	2.34E-17	nei like DNA glycosylase 3
ENSG00000268061	NAPA-AS1	-1.4	1.40E-06	NAPA antisense RNA 1
ENSG00000198804	MT-CO1	-1.4	1.17E-41	mitochondrially encoded cytochrome c oxidase I
ENSG00000214706	IFRD2	-1.4	2.00E-23	interferon related developmental regulator 2
ENSG00000267374	MIR924HG	-1.4	2.18E-05	MIR924 host gene
ENSG00000165264	NDUFB6	-1.4	1.51E-32	NADH:ubiquinone oxidoreductase subunit B6
ENSG00000079819	EPB41L2	-1.4	7.01E-52	erythrocyte membrane protein band 4.1 like 2
ENSG00000183647	ZNF530	-1.4	2.22E-10	zinc finger protein 530
ENSG00000165181	SHOC1	-1.4	0.0042633	shortage in chiasmata 1
ENSG00000139239	RPL14P1	-1.4	3.31E-35	ribosomal protein L14 pseudogene 1
ENSG00000224546	EIF4BP3	-1.4	1.19E-23	eukaryotic translation initiation factor 4B pseudogene 3
ENSG00000140988	RPS2	-1.4	1.84E-15	ribosomal protein S2
ENSG00000159063	ALG8	-1.4	1.09E-84	ALG8 alpha-1 2C3-glycosyltransferase
ENSG00000265917	MIR3685	-1.4	0.0044851	microRNA 3685
ENSG00000205639	MFSD2B	-1.4	0.0001586	major facilitator superfamily domain containing 2B
ENSG00000100350	FOXRED2	-1.4	3.00E-30	FAD dependent oxidoreductase domain containing 2
ENSG00000267432	DNAH17-AS1	-1.4	4.15E-26	DNAH17 antisense RNA 1
ENSG00000125459	MSTO1	-1.4	2.36E-28	misato mitochondrial distribution and morphology regulator 1
ENSG00000130193	THEM6	-1.4	8.71E-21	thioesterase superfamily member 6
ENSG00000187325	TAF9B	-1.4	3.85E-35	TATA-box binding protein associated factor 9b
ENSG00000133433	GSTT2B	-1.4	5.29E-22	glutathione S-transferase theta 2B
ENSG00000128973	CLN6	-1.4	2.13E-23	CLN6 transmembrane ER protein
ENSG00000243207	PPAN-P2RY11	-1.4	3.61E-05	PPAN-P2RY11 readthrough
ENSG00000164985	PSIP1	-1.4	3.30E-45	PC4 and SFRS1 interacting protein 1
ENSG00000122873	CISD1	-1.4	3.50E-66	CDGSH iron sulfur domain 1
ENSG00000100979	PLTP	-1.4	3.85E-05	phospholipid transfer protein
ENSG00000001630	CYP51A1	-1.4	8.06E-56	cytochrome P450 family 51 subfamily A member 1
ENSG00000205810	KLRC3	-1.4	1.26E-05	killer cell lectin like receptor C3
ENSG00000187098	MITF	-1.4	6.89E-24	melanocyte inducing transcription factor
ENSG00000101974	ATP11C	-1.4	4.23E-07	ATPase phospholipid transporting 11C
ENSG00000120697	ALG5	-1.4	7.59E-55	ALG5 dolichyl-phosphate beta-glycosyltransferase
ENSG00000100151	PICK1	-1.4	2.39E-28	protein interacting with PRKCA 1
ENSG00000286385	-	-1.4	9.95E-13	novel transcript
ENSG00000238105	GOLGA2P5	-1.4	0.0023694	GOLGA2 pseudogene 5
ENSG00000132199	ENOSF1	-1.4	7.99E-22	enolase superfamily member 1
ENSG00000147394	ZNF185	-1.4	3.68E-36	zinc finger protein 185 with LIM domain
ENSG00000234160	-	-1.4	3.07E-16	novel transcript
ENSG00000163468	CCT3	-1.4	1.64E-31	chaperonin containing TCP1 subunit 3
ENSG00000171307	ZDHHC16	-1.4	2.31E-32	zinc finger DHHC-type palmitoyltransferase 16
ENSG00000099901	RANBP1	-1.4	1.08E-36	RAN binding protein 1
ENSG00000148840	PPRC1	-1.4	1.86E-52	PPARG related coactivator 1
ENSG00000253729	PRKDC	-1.4	9.60E-23	protein kinase 2C DNA-activated 2C catalytic subunit
ENSG00000100129	EIF3L	-1.4	1.10E-52	eukaryotic translation initiation factor 3 subunit L

ENSG00000198589	LRBA	-1.4	5.70E-07	LPS responsive beige-like anchor protein
ENSG00000258725	PRC1-AS1	-1.4	1.85E-07	PRC1 antisense RNA 1
ENSG00000138668	HNRNPD	-1.4	7.89E-105	heterogeneous nuclear ribonucleoprotein D
ENSG00000076248	UNG	-1.4	2.43E-28	uracil DNA glycosylase
ENSG00000136824	SMC2	-1.4	1.08E-12	structural maintenance of chromosomes 2
ENSG00000100353	EIF3D	-1.4	2.11E-42	eukaryotic translation initiation factor 3 subunit D
ENSG00000138180	CEP55	-1.4	1.12E-29	centrosomal protein 55
ENSG00000063046	EIF4B	-1.4	2.58E-87	eukaryotic translation initiation factor 4B
ENSG00000144677	CTDSPL	-1.4	7.90E-49	CTD small phosphatase like
ENSG00000231369	-	-1.4	0.0001516	ribosomal protein L15 (RPL15) pseudogene
ENSG00000254389	RHPN1-AS1	-1.4	2.08E-06	RHPN1 antisense RNA 1 (head to head)
ENSG00000181192	DHTKD1	-1.4	1.01E-47	dehydrogenase E1 and transketolase domain containing 1
ENSG00000255277	ABCC6P2	-1.4	0.0152126	ATP binding cassette subfamily C member 6 pseudogene 2
ENSG00000173599	PC	-1.4	2.55E-38	pyruvate carboxylase
ENSG00000147274	RBMX	-1.4	2.02E-125	RNA binding motif protein X-linked
ENSG00000104368	PLAT	-1.4	2.32E-23	plasminogen activator 2C tissue type
ENSG00000165105	RASEF	-1.4	4.94E-24	RAS and EF-hand domain containing
ENSG00000137106	GRHPR	-1.4	1.79E-30	glyoxylate and hydroxypyruvate reductase
ENSG00000088325	TPX2	-1.4	1.47E-73	TPX2 microtubule nucleation factor
ENSG00000125450	NUP85	-1.4	5.02E-31	nucleoporin 85
ENSG00000245322	H2AZ1-DT	-1.4	5.27E-12	H2AZ1 divergent transcript
ENSG00000213385	-	-1.4	0.0006642	ribosomal protein L7a (RPL7A) pseudogene
ENSG00000102743	SLC25A15	-1.4	1.10E-33	solute carrier family 25 member 15
ENSG00000171163	ZNF692	-1.4	2.52E-44	zinc finger protein 692
ENSG00000081026	MAGI3	-1.4	2.57E-13	membrane associated guanylate kinase 2C WW and PDZ domain containing 3
ENSG00000182141	ZNF708	-1.4	2.97E-05	zinc finger protein 708
ENSG00000060140	STYK1	-1.4	6.72E-10	serine/threonine/tyrosine kinase 1
ENSG00000204860	FAM201A	-1.4	0.0042722	family with sequence similarity 201 member A
ENSG00000214026	MRPL23	-1.4	0.0035378	mitochondrial ribosomal protein L23
ENSG00000197959	DNM3	-1.4	4.59E-06	dynamamin 3
ENSG00000108641	B9D1	-1.4	1.92E-23	B9 domain containing 1
ENSG00000100802	C14orf93	-1.4	3.92E-18	chromosome 14 open reading frame 93
ENSG00000283689	-	-1.4	0.0002319	novel transcript 2C antisense to IRX3
ENSG00000183684	ALYREF	-1.4	2.14E-16	Aly/REF export factor
ENSG00000261326	LINC01355	-1.4	0.0156091	long intergenic non-protein coding RNA 1355
ENSG00000213654	GPSM3	-1.4	0.008998	G protein signaling modulator 3
ENSG00000230524	COL6A4P1	-1.4	0.0316695	collagen type VI alpha 4 pseudogene 1
ENSG00000111319	SCNN1A	-1.4	2.18E-17	sodium channel epithelial 1 subunit alpha
ENSG00000140854	KATNB1	-1.4	3.15E-28	katanin regulatory subunit B1
ENSG00000141480	ARRB2	-1.4	4.39E-22	arrestin beta 2
ENSG00000146410	MTFR2	-1.4	1.70E-15	mitochondrial fission regulator 2
ENSG00000264350	SNRPGP2	-1.4	0.0003715	small nuclear ribonucleoprotein polypeptide G pseudogene 2
ENSG00000142694	EVA1B	-1.4	1.82E-12	eva-1 homolog B
ENSG00000196843	ARID5A	-1.4	8.74E-14	AT-rich interaction domain 5A
ENSG00000258366	RTEL1	-1.3	7.96E-05	regulator of telomere elongation helicase 1

ENSG00000177738	-	-1.3	8.05E-31	novel transcript 2C sense overlapping to ANXA2R
ENSG00000091428	RAPGEF4	-1.3	0.0263506	Rap guanine nucleotide exchange factor 4
ENSG00000233483	EFCAB15P	-1.3	0.0002926	EF-hand calcium binding domain 15 2C pseudogene
ENSG00000260879	-	-1.3	0.0116751	novel transcript 2C antisense to SLC25A24
ENSG00000127399	LRRC61	-1.3	1.96E-19	leucine rich repeat containing 61
ENSG00000110063	DCPS	-1.3	1.10E-25	decapping enzyme 2C scavenger
ENSG00000102981	PARD6A	-1.3	9.81E-13	par-6 family cell polarity regulator alpha
ENSG00000105220	GPI	-1.3	3.68E-26	glucose-6-phosphate isomerase
ENSG00000142676	RPL11	-1.3	4.63E-32	ribosomal protein L11
ENSG00000026036	RTEL1-TNFRSF6B	-1.3	0.001429	RTEL1-TNFRSF6B readthrough (NMD candidate)
ENSG00000159905	ZNF221	-1.3	0.0107666	zinc finger protein 221
ENSG00000073111	MCM2	-1.3	4.82E-18	minichromosome maintenance complex component 2
ENSG00000255819	KLRC4-KLRK1	-1.3	0.0381148	KLRC4-KLRK1 readthrough
ENSG00000141569	TRIM65	-1.3	1.68E-30	tripartite motif containing 65
ENSG00000220472	-	-1.3	9.76E-10	ribosomal protein S3 (RPS3) pseudogene
ENSG00000198826	ARHGAP11A	-1.3	7.09E-15	Rho GTPase activating protein 11A
ENSG00000164104	HMGB2	-1.3	7.30E-44	high mobility group box 2
ENSG00000002746	HECW1	-1.3	0.0003588	HECT 2C C2 and WW domain containing E3 ubiquitin protein ligase 1
ENSG00000103995	CEP152	-1.3	0.0022666	centrosomal protein 152
ENSG00000135763	URB2	-1.3	1.80E-30	URB2 ribosome biogenesis homolog
ENSG00000165526	RPUSD4	-1.3	2.27E-22	RNA pseudouridine synthase D4
ENSG00000112996	MRPS30	-1.3	4.86E-78	mitochondrial ribosomal protein S30
ENSG00000229852	-	-1.3	3.07E-05	novel transcript 2C antisense to KHDC1
ENSG00000152795	HNRNPD	-1.3	5.69E-43	heterogeneous nuclear ribonucleoprotein D like
ENSG00000258655	ARHGAP5-AS1	-1.3	1.08E-05	ARHGAP5 antisense RNA 1 (head to head)
ENSG00000172340	SUCLG2	-1.3	2.28E-48	succinate-CoA ligase GDP-forming subunit beta
ENSG00000171606	ZNF274	-1.3	3.90E-28	zinc finger protein 274
ENSG00000142347	MYO1F	-1.3	0.0180982	myosin IF
ENSG00000124334	IL9R	-1.3	0.0225685	interleukin 9 receptor
ENSG00000167747	C19orf48	-1.3	1.37E-13	chromosome 19 open reading frame 48
ENSG00000172159	FRMD3	-1.3	6.47E-18	FERM domain containing 3
ENSG00000155463	OXA1L	-1.3	9.82E-33	OXA1L mitochondrial inner membrane protein
ENSG00000272405	-	-1.3	1.54E-44	novel transcript 2C antisense to BCAN
ENSG00000214160	ALG3	-1.3	2.83E-21	ALG3 alpha-1 2C3- mannosyltransferase
ENSG00000224505	-	-1.3	0.0048741	novel transcript 2C antisense to HEXIM1 and HEXIM2
ENSG00000277283	-	-1.3	2.97E-12	novel transcript 2C antisense to RAB35
ENSG00000021762	OSBPL5	-1.3	5.66E-24	oxysterol binding protein like 5
ENSG00000227896	-	-1.3	2.52E-05	novel transcript
ENSG00000196436	NPIP15	-1.3	0.0013259	nuclear pore complex interacting protein family member B15
ENSG00000184207	PGP	-1.3	1.15E-16	phosphoglycolate phosphatase
ENSG00000250479	CHCHD10	-1.3	3.06E-13	coiled-coil-helix-coiled-coil-helix domain containing 10
ENSG00000108468	CBX1	-1.3	2.16E-55	chromobox 1
ENSG00000174444	RPL4	-1.3	2.24E-25	ribosomal protein L4
ENSG00000197969	VPS13A	-1.3	0.0103482	vacuolar protein sorting 13 homolog A



ENSG00000103037	SETD6	-1.3	3.86E-27	SET domain containing 6 2C protein lysine methyltransferase
ENSG00000244558	KCNK15-AS1	-1.3	0.0024612	KCNK15 and WISP2 antisense RNA 1
ENSG00000268093	-	-1.3	1.48E-06	novel transcript 2C antisense to SPHK2
ENSG00000123095	BHLHE41	-1.3	3.39E-05	basic helix-loop-helix family member e41
ENSG00000197070	ARRDC1	-1.3	6.44E-25	arrestin domain containing 1
ENSG00000231527	FAM27C	-1.3	7.86E-07	family with sequence similarity 27 member C
ENSG00000140395	WDR61	-1.3	8.48E-32	WD repeat domain 61
ENSG00000152082	MZT2B	-1.3	2.56E-06	mitotic spindle organizing protein 2B
ENSG00000156802	ATAD2	-1.3	2.21E-18	ATPase family AAA domain containing 2
ENSG00000138777	PPA2	-1.3	1.58E-57	inorganic pyrophosphatase 2
ENSG00000154822	PLCL2	-1.3	2.03E-15	phospholipase C like 2
ENSG00000271576	PRKACB-DT	-1.3	0.0005814	PRKACB divergent transcript
ENSG00000224081	SLC44A3-AS1	-1.3	0.0340168	SLC44A3 antisense RNA 1
ENSG00000213390	ARHGAP19	-1.3	1.15E-17	Rho GTPase activating protein 19
ENSG00000164649	CDCA7L	-1.3	2.34E-46	cell division cycle associated 7 like
ENSG00000197385	ZNF860	-1.3	8.08E-08	zinc finger protein 860
ENSG00000235194	PPP1R3E	-1.3	4.75E-15	protein phosphatase 1 regulatory subunit 3E
ENSG00000111206	FOXM1	-1.3	6.32E-22	forkhead box M1
ENSG00000136877	FPGS	-1.3	2.15E-33	folylpolyglutamate synthase
ENSG00000103091	WDR59	-1.3	1.07E-38	WD repeat domain 59
ENSG00000231584	FAHD2CP	-1.3	4.73E-13	fumarylacetoacetate hydrolase domain containing 2C 2C pseudogene
ENSG00000176225	RTTN	-1.3	4.88E-21	rotatin
ENSG00000170298	LGALS9B	-1.3	0.0013539	galectin 9B
ENSG00000258017	-	-1.3	3.95E-11	novel transcript 2C antisense to TUBA1B
ENSG00000254469	-	-1.3	0.0001199	novel protein similar to transient receptor potential cation channel 2C subfamily C 2C member 2 TRPC2
ENSG00000216866	RPS2P55	-1.3	0.0002395	ribosomal protein S2 pseudogene 55
ENSG00000105875	WDR91	-1.3	4.38E-18	WD repeat domain 91
ENSG00000172500	FIBP	-1.3	2.98E-16	FGF1 intracellular binding protein
ENSG00000100445	SDR39U1	-1.3	1.28E-33	short chain dehydrogenase/reductase family 39U member 1
ENSG00000243517	-	-1.3	0.0113109	ribosomal protein L13a (RPL13A) pseudogene
ENSG00000164880	INTS1	-1.3	3.99E-34	integrator complex subunit 1
ENSG00000125375	DMAC2L	-1.3	1.62E-16	distal membrane arm assembly complex 2 like
ENSG00000162076	FLYWCH2	-1.3	3.50E-14	FLYWCH family member 2
ENSG00000101076	HNF4A	-1.3	5.36E-09	hepatocyte nuclear factor 4 alpha
ENSG00000240342	RPS2P5	-1.3	1.95E-14	ribosomal protein S2 pseudogene 5
ENSG00000133627	ACTR3B	-1.3	3.84E-26	actin related protein 3B
ENSG00000166965	RCCD1	-1.3	2.14E-25	RCC1 domain containing 1
ENSG00000258122	-	-1.3	0.0231522	novel transcript 2C antisense to CA7
ENSG00000237054	PRMT5-AS1	-1.3	0.0001625	PRMT5 antisense RNA 1
ENSG00000053501	USE1	-1.3	1.88E-21	unconventional SNARE in the ER 1
ENSG00000101473	ACOT8	-1.3	6.24E-24	acyl-CoA thioesterase 8
ENSG00000138771	SHROOM3	-1.3	2.48E-27	shroom family member 3
ENSG00000161036	LRWD1	-1.3	5.40E-24	leucine rich repeats and WD repeat domain containing 1
ENSG00000169031	COL4A3	-1.3	5.06E-30	collagen type IV alpha 3 chain

ENSG00000271870	-	-1.3	0.0160968	novel transcript 2C antisense to CRBN
ENSG00000104884	ERCC2	-1.3	1.37E-17	ERCC excision repair 2 2C TFIIH core complex helicase sub-unit
ENSG00000185305	ARL15	-1.3	2.72E-22	ADP ribosylation factor like GTPase 15
ENSG00000178057	NDUFAF3	-1.3	1.68E-26	NADH:ubiquinone oxidoreductase complex assembly factor 3
ENSG00000145088	EAF2	-1.3	1.08E-07	ELL associated factor 2
ENSG00000120833	SOCS2	-1.3	9.30E-14	suppressor of cytokine signaling 2
ENSG00000257718	CPNE8-AS1	-1.3	3.47E-05	CPNE8 antisense RNA 1
ENSG00000277182	-	-1.3	0.0048593	novel transcript 2C antisense to PCGF2
ENSG00000286219	NOTCH2NLC	-1.3	0.0028311	notch 2 N-terminal like C
ENSG00000101224	CDC25B	-1.3	8.05E-31	cell division cycle 25B
ENSG00000099812	MISP	-1.3	1.92E-16	mitotic spindle positioning
ENSG00000090273	NUDC	-1.3	1.60E-36	nuclear distribution C 2C dynein complex regulator
ENSG00000183605	SFXN4	-1.3	5.53E-21	sideroflexin 4
ENSG00000222011	FAM185A	-1.3	1.23E-14	family with sequence similarity 185 member A
ENSG00000120162	MOB3B	-1.3	4.88E-20	MOB kinase activator 3B
ENSG00000112379	ARFGEF3	-1.3	5.76E-13	ARFGEF family member 3
ENSG00000013573	DDX11	-1.3	3.39E-39	DEAD/H-box helicase 11
ENSG00000130413	STK33	-1.3	0.0010089	serine/threonine kinase 33
ENSG00000203667	COX20	-1.3	1.46E-37	cytochrome c oxidase assembly factor COX20
ENSG00000158062	UBXN11	-1.3	1.45E-33	UBX domain protein 11
ENSG00000237232	ZNF295-AS1	-1.3	2.89E-05	ZNF295 antisense RNA 1
ENSG00000100316	RPL3	-1.3	1.51E-23	ribosomal protein L3
ENSG00000286019	NOTCH2NLB	-1.3	1.45E-10	notch 2 N-terminal like B
ENSG00000146677	RPL32P18	-1.3	2.46E-06	ribosomal protein L32 pseudogene 18
ENSG00000148019	CEP78	-1.3	2.48E-12	centrosomal protein 78
ENSG00000228205	-	-1.3	0.0106068	ribosomal protein S3 (RPS3) pseudogene
ENSG00000198130	HIBCH	-1.3	2.56E-23	3-hydroxyisobutyryl-CoA hydrolase
ENSG00000116793	PHTF1	-1.3	6.40E-29	putative homeodomain transcription factor 1
ENSG00000243335	KCTD7	-1.3	4.14E-11	potassium channel tetramerization domain containing 7
ENSG00000241361	SLC25A24P1	-1.3	1.50E-07	SLC25A24 pseudogene 1
ENSG00000180884	ZNF792	-1.3	4.35E-18	zinc finger protein 792
ENSG00000007038	PRSS21	-1.3	3.55E-28	serine protease 21
ENSG00000204576	PRR3	-1.3	8.86E-25	proline rich 3
ENSG00000200879	SNORD14E	-1.3	0.0099501	small nucleolar RNA 2C C/D box 14E
ENSG00000130312	MRPL34	-1.3	4.71E-27	mitochondrial ribosomal protein L34
ENSG00000234335	RPS4XP11	-1.3	0.0406006	ribosomal protein S4X pseudogene 11
ENSG00000280670	CCDC163	-1.3	1.59E-12	coiled-coil domain containing 163
ENSG00000120802	TMPO	-1.3	8.43E-87	thymopoietin
ENSG00000140740	UQCRC2	-1.3	6.97E-79	ubiquinol-cytochrome c reductase core protein 2
ENSG00000198435	NRARP	-1.3	3.29E-09	NOTCH regulated ankyrin repeat protein
ENSG00000214784	RPS3AP21	-1.3	0.0038596	RPS3A pseudogene 21
ENSG00000182134	TDRKH	-1.3	3.17E-09	tudor and KH domain containing
ENSG00000134602	STK26	-1.3	2.70E-37	serine/threonine kinase 26
ENSG00000211454	AKR7L	-1.3	0.0016491	aldo-keto reductase family 7 like (gene/pseudogene)
ENSG00000182795	C1orf116	-1.3	0.0001435	chromosome 1 open reading frame 116

ENSG00000241945	PWP2	-1.3	6.51E-16	PWP2 small subunit processome component
ENSG00000264070	DND1P1	-1.3	0.0329781	DND microRNA-mediated repression inhibitor 1 pseudogene 1
ENSG00000244363	RPL7P23	-1.3	3.53E-05	ribosomal protein L7 pseudogene 23
ENSG00000155368	DBI	-1.3	7.60E-45	diazepam binding inhibitor 2C acyl-CoA binding protein
ENSG00000158169	FANCC	-1.3	3.42E-42	FA complementation group C
ENSG00000155755	TMEM237	-1.3	5.15E-28	transmembrane protein 237
ENSG00000272948	-	-1.3	0.0300662	novel transcript 2C antisense to DSCR3
ENSG00000123975	CKS2	-1.3	6.20E-25	CDC28 protein kinase regulatory subunit 2
ENSG00000184381	PLA2G6	-1.3	1.68E-26	phospholipase A2 group VI
ENSG00000065150	IPO5	-1.3	1.77E-84	importin 5
ENSG00000249790	-	-1.3	0.0459002	novel transcript
ENSG00000064205	CCN5	-1.3	2.90E-08	cellular communication network factor 5
ENSG00000064545	TMEM161A	-1.3	1.44E-23	transmembrane protein 161A
ENSG00000214425	LRRC37A4P	-1.3	2.90E-08	leucine rich repeat containing 37 member A4 2C pseudogene
ENSG00000141959	PFKL	-1.3	2.50E-19	phosphofructokinase 2C liver type
ENSG00000235180	LINC00601	-1.3	0.0384569	long intergenic non-protein coding RNA 601
ENSG00000160446	ZDHHC12	-1.3	3.56E-14	zinc finger DHHC-type palmitoyltransferase 12
ENSG00000084092	NOA1	-1.3	2.43E-41	nitric oxide associated 1
ENSG00000110002	VWA5A	-1.3	3.18E-53	von Willebrand factor A domain containing 5A
ENSG00000156787	TBC1D31	-1.3	2.47E-23	TBC1 domain family member 31
ENSG00000173905	GOLIM4	-1.3	5.90E-25	golgi integral membrane protein 4
ENSG00000105254	TBCB	-1.3	1.59E-21	tubulin folding cofactor B
ENSG00000159147	DONSON	-1.3	7.97E-52	DNA replication fork stabilization factor DONSON
ENSG00000233901	LINC01503	-1.3	7.43E-18	long intergenic non-protein coding RNA 1503
ENSG00000243477	NAA80	-1.3	1.26E-21	N-alpha-acetyltransferase 80 2C NatH catalytic subunit
ENSG00000161999	JMJD8	-1.3	1.48E-24	jumonji domain containing 8
ENSG00000184661	CDCA2	-1.3	8.09E-35	cell division cycle associated 2
ENSG00000176124	DLEU1	-1.3	7.28E-24	deleted in lymphocytic leukemia 1
ENSG00000101210	EEF1A2	-1.3	2.03E-14	eukaryotic translation elongation factor 1 alpha 2
ENSG00000153904	DDAH1	-1.3	3.80E-68	dimethylarginine dimethylaminohydrolase 1
ENSG00000131188	PRR7	-1.3	2.67E-18	proline rich 7 2C synaptic
ENSG00000010278	CD9	-1.3	4.50E-43	CD9 molecule
ENSG00000187778	MCRS1	-1.3	8.76E-25	microspherule protein 1
ENSG00000106603	COA1	-1.3	3.45E-64	cytochrome c oxidase assembly factor 1 homolog
ENSG00000162194	LBHD1	-1.3	7.24E-22	LBH domain containing 1
ENSG00000171962	DRC3	-1.3	0.0375142	dynein regulatory complex subunit 3
ENSG00000232573	RPL3P4	-1.3	8.30E-28	ribosomal protein L3 pseudogene 4
ENSG00000132640	BTBD3	-1.3	9.55E-39	BTB domain containing 3
ENSG00000189159	JPT1	-1.3	3.06E-19	Jupiter microtubule associated homolog 1
ENSG00000184436	THAP7	-1.3	1.85E-26	THAP domain containing 7
ENSG00000242498	ARPIN	-1.3	2.84E-51	actin related protein 2/3 complex inhibitor
ENSG00000132436	FIGNL1	-1.3	6.37E-26	fidgetin like 1
ENSG00000197361	FBXL22	-1.3	0.0026922	F-box and leucine rich repeat protein 22
ENSG00000128891	CCDC32	-1.3	6.88E-25	coiled-coil domain containing 32
ENSG00000081913	PHLPP1	-1.3	3.68E-36	PH domain and leucine rich repeat protein phosphatase 1

ENSG00000158887	MPZ	-1.3	9.74E-05	myelin protein zero
ENSG00000204348	DXO	-1.3	1.09E-28	decapping exoribonuclease
ENSG00000156509	FBXO43	-1.3	4.39E-07	F-box protein 43
ENSG00000258759	-	-1.3	0.000237	DnaJ (Hsp40) homolog 2C subfamily C 2C member 9 (DNA-JC9) pseudogene
ENSG00000106263	EIF3B	-1.3	1.11E-35	eukaryotic translation initiation factor 3 subunit B
ENSG00000101361	NOP56	-1.3	3.12E-38	NOP56 ribonucleoprotein
ENSG00000143320	CRABP2	-1.3	1.56E-08	cellular retinoic acid binding protein 2
ENSG00000178814	OPLAH	-1.3	7.59E-15	5-oxoprolinase 2C ATP-hydrolysing
ENSG00000088727	KIF9	-1.3	1.87E-13	kinesin family member 9
ENSG00000180198	RCC1	-1.3	4.80E-37	regulator of chromosome condensation 1
ENSG00000263513	FAM72C	-1.3	5.21E-06	family with sequence similarity 72 member C
ENSG00000110074	FOXRED1	-1.3	6.22E-20	FAD dependent oxidoreductase domain containing 1
ENSG00000168298	H1-4	-1.3	8.05E-07	H1.4 linker histone 2C cluster member
ENSG00000189280	GJB5	-1.3	9.96E-15	gap junction protein beta 5
ENSG00000249572	-	-1.3	1.26E-07	novel transcript
ENSG00000170906	NDUFA3	-1.3	6.62E-32	NADH:ubiquinone oxidoreductase subunit A3
ENSG00000144199	FAHD2B	-1.3	2.86E-19	fumarylacetoacetate hydrolase domain containing 2B
ENSG00000178038	ALS2CL	-1.3	1.83E-22	ALS2 C-terminal like
ENSG00000162777	DENND2D	-1.3	5.50E-28	DENN domain containing 2D
ENSG00000263432	RN7SL689P	-1.3	0.0126298	RNA 2C 7SL 2C cytoplasmic 689 2C pseudogene
ENSG00000257489	-	-1.3	0.0010099	TBC1 domain family 2C member 2B (TBC1D2B) pseudogene
ENSG00000170779	CDCA4	-1.3	1.36E-26	cell division cycle associated 4
ENSG00000111669	TPI1	-1.3	2.41E-18	triosephosphate isomerase 1
ENSG00000248468	-	-1.3	0.0009821	novel transcript
ENSG00000164099	PRSS12	-1.3	8.14E-15	serine protease 12
ENSG00000273749	CYFIP1	-1.3	5.78E-80	cytoplasmic FMR1 interacting protein 1
ENSG00000118162	KPTN	-1.3	2.96E-16	kaptin 2C actin binding protein
ENSG00000198618	PPIAP22	-1.3	1.60E-25	peptidylprolyl isomerase A pseudogene 22
ENSG00000211591	MIR762	-1.3	0.0005579	microRNA 762
ENSG00000231752	EMBP1	-1.3	0.0099939	embigin pseudogene 1
ENSG00000284922	-	-1.3	0.0001384	leucine rich transmembrane and O-methyltransferase domain containing
ENSG00000170089	-	-1.3	7.47E-20	THO complex 3 (THOC3) pseudogene
ENSG00000164032	H2AZ1	-1.3	8.60E-30	H2A.Z variant histone 1
ENSG00000176974	SHMT1	-1.3	2.51E-38	serine hydroxymethyltransferase 1
ENSG00000204588	LINC01123	-1.3	5.31E-20	long intergenic non-protein coding RNA 1123
ENSG00000065361	ERBB3	-1.3	1.55E-27	erb-b2 receptor tyrosine kinase 3
ENSG00000186792	HYAL3	-1.3	5.03E-21	hyaluronidase 3
ENSG00000105520	PLPPR2	-1.3	2.64E-23	phospholipid phosphatase related 2
ENSG00000168234	TTC39C	-1.3	2.72E-33	tetratricopeptide repeat domain 39C
ENSG00000129968	ABHD17A	-1.3	5.90E-36	abhydrolase domain containing 17A 2C depalmitoylase
ENSG00000144895	EIF2A	-1.3	1.47E-31	eukaryotic translation initiation factor 2A
ENSG00000179115	FARSA	-1.3	1.90E-20	phenylalanyl-tRNA synthetase subunit alpha
ENSG00000268573	-	-1.3	0.0004182	novel transcript
ENSG00000131788	PIAS3	-1.3	2.33E-33	protein inhibitor of activated STAT 3
ENSG00000115282	TTC31	-1.3	1.15E-22	tetratricopeptide repeat domain 31

ENSG00000163171	CDC42EP3	-1.3	1.27E-11	CDC42 effector protein 3
ENSG00000149273	RPS3	-1.3	6.92E-20	ribosomal protein S3
ENSG00000061656	SPAG4	-1.3	2.13E-10	sperm associated antigen 4
ENSG00000171346	KRT15	-1.3	2.54E-11	keratin 15
ENSG00000151470	C4orf33	-1.3	4.73E-11	chromosome 4 open reading frame 33
ENSG00000177054	ZDHHC13	-1.2	3.66E-24	zinc finger DHHC-type palmitoyltransferase 13
ENSG00000228486	C2orf92	-1.2	0.003902	chromosome 2 open reading frame 92
ENSG00000077684	JADE1	-1.2	8.75E-33	jade family PHD finger 1
ENSG00000143850	PLEKHA6	-1.2	1.67E-24	pleckstrin homology domain containing A6
ENSG00000159423	ALDH4A1	-1.2	2.66E-15	aldehyde dehydrogenase 4 family member A1
ENSG00000103966	EHD4	-1.2	1.13E-35	EH domain containing 4
ENSG00000144120	TMEM177	-1.2	4.12E-14	transmembrane protein 177
ENSG00000124787	RPP40	-1.2	1.86E-15	ribonuclease P/MRP subunit p40
ENSG00000247596	TWF2	-1.2	5.78E-12	twinfilin actin binding protein 2
ENSG00000044459	CNTLN	-1.2	7.07E-08	centlein
ENSG00000287724	-	-1.2	0.0005458	novel transcript 2C antisense to DHCR24
ENSG00000122547	EEPD1	-1.2	0.0033273	endonuclease/exonuclease/phosphatase family domain containing 1
ENSG00000144645	OSBPL10	-1.2	3.66E-37	oxysterol binding protein like 10
ENSG00000232346	-	-1.2	0.0204413	ribosomal protein S17 (RPS17) pseudogene
ENSG00000121774	KHDRBS1	-1.2	4.22E-84	KH RNA binding domain containing 2C signal transduction associated 1
ENSG00000169855	ROBO1	-1.2	1.81E-14	roundabout guidance receptor 1
ENSG00000139985	ADAM21	-1.2	0.0024362	ADAM metallopeptidase domain 21
ENSG00000196408	NOXO1	-1.2	9.10E-05	NADPH oxidase organizer 1
ENSG00000203760	CENPW	-1.2	1.37E-16	centromere protein W
ENSG00000146054	TRIM7	-1.2	1.60E-15	tripartite motif containing 7
ENSG00000178605	GTPBP6	-1.2	1.13E-25	GTP binding protein 6 (putative)
ENSG00000169418	NPR1	-1.2	3.48E-23	natriuretic peptide receptor 1
ENSG00000147437	GNRH1	-1.2	0.0213095	gonadotropin releasing hormone 1
ENSG00000279504	-	-1.2	0.0084573	TEC
ENSG00000123178	SPRYD7	-1.2	1.84E-19	SPRY domain containing 7
ENSG00000272764	-	-1.2	0.0078758	novel transcript
ENSG00000174306	ZHX3	-1.2	1.71E-28	zinc fingers and homeoboxes 3
ENSG00000186765	FSCN2	-1.2	0.000369	fascin actin-bundling protein 2 2C retinal
ENSG00000213553	RPLP0P6	-1.2	5.81E-12	ribosomal protein lateral stalk subunit P0 pseudogene 6
ENSG00000184068	SREBF2-AS1	-1.2	0.0127379	SREBF2 antisense RNA 1
ENSG00000108590	MED31	-1.2	2.88E-26	mediator complex subunit 31
ENSG00000241935	HOGA1	-1.2	0.0018627	4-hydroxy-2-oxoglutarate aldolase 1
ENSG00000143369	ECM1	-1.2	4.55E-22	extracellular matrix protein 1
ENSG00000229638	RPL4P4	-1.2	1.59E-15	ribosomal protein L4 pseudogene 4
ENSG00000166997	CNPY4	-1.2	5.47E-19	canopy FGF signaling regulator 4
ENSG00000139832	RAB20	-1.2	1.67E-07	RAB20 2C member RAS oncogene family
ENSG00000136159	NUDT15	-1.2	8.08E-38	nudix hydrolase 15
ENSG00000075303	SLC25A40	-1.2	6.02E-19	solute carrier family 25 member 40
ENSG00000171872	KLF17	-1.2	0.0153092	Kruppel like factor 17
ENSG00000264577	-	-1.2	8.81E-06	novel transcript 2C antisense to RPL23A



ENSG00000214653	HNRNPA3P3	-1.2	0.0041669	heterogeneous nuclear ribonucleoprotein A3 pseudogene 3
ENSG00000286909	-	-1.2	0.0115324	novel transcript
ENSG00000243678	NME2	-1.2	2.16E-14	NME/NM23 nucleoside diphosphate kinase 2
ENSG00000232070	TMEM253	-1.2	0.000544	transmembrane protein 253
ENSG00000116521	SCAMP3	-1.2	5.07E-18	secretory carrier membrane protein 3
ENSG00000213983	AP1G2	-1.2	5.79E-16	adaptor related protein complex 1 subunit gamma 2
ENSG00000249353	NPM1P27	-1.2	5.44E-24	nucleophosmin 1 pseudogene 27
ENSG00000177700	POLR2L	-1.2	1.72E-18	RNA polymerase II 2C I and III subunit L
ENSG00000161016	RPL8	-1.2	1.36E-12	ribosomal protein L8
ENSG00000134769	DTNA	-1.2	0.001799	dystrobrevin alpha
ENSG00000144320	LNPBK	-1.2	4.75E-15	lunapark 2C ER junction formation factor
ENSG00000130299	GTPBP3	-1.2	3.67E-19	GTP binding protein 3 2C mitochondrial
ENSG00000183077	AFMID	-1.2	3.91E-18	arylformamidase
ENSG00000118640	VAMP8	-1.2	7.37E-18	vesicle associated membrane protein 8
ENSG00000163781	TOPBP1	-1.2	2.59E-15	DNA topoisomerase II binding protein 1
ENSG00000183496	MEX3B	-1.2	4.97E-08	mex-3 RNA binding family member B
ENSG00000213185	FAM24B	-1.2	1.62E-11	family with sequence similarity 24 member B
ENSG00000170515	PA2G4	-1.2	5.26E-31	proliferation-associated 2G4
ENSG00000164048	ZNF589	-1.2	1.09E-17	zinc finger protein 589
ENSG00000215883	CYB5RL	-1.2	1.04E-21	cytochrome b5 reductase like
ENSG00000188846	RPL14	-1.2	7.24E-35	ribosomal protein L14
ENSG00000198003	ODAD3	-1.2	0.0001767	outer dynein arm docking complex subunit 3
ENSG00000229119	-	-1.2	1.16E-08	60S acidic ribosomal protein (RPLP0) pseudogene
ENSG00000171421	MRPL36	-1.2	9.33E-23	mitochondrial ribosomal protein L36
ENSG00000170190	SLC16A5	-1.2	2.96E-21	solute carrier family 16 member 5
ENSG00000273723	SUGT1-DT	-1.2	0.0008994	SUGT1 divergent transcript
ENSG00000187790	FANCM	-1.2	0.0256735	FA complementation group M
ENSG00000075618	FSCN1	-1.2	1.57E-14	fascin actin-bundling protein 1
ENSG00000175414	ARL10	-1.2	1.06E-05	ADP ribosylation factor like GTPase 10
ENSG00000167107	ACSF2	-1.2	1.23E-19	acyl-CoA synthetase family member 2
ENSG00000184500	PROS1	-1.2	1.61E-21	protein S
ENSG00000166333	ILK	-1.2	1.69E-20	integrin linked kinase
ENSG00000197451	HNRNPAB	-1.2	5.17E-37	heterogeneous nuclear ribonucleoprotein A/B
ENSG00000170734	POLH	-1.2	2.86E-20	DNA polymerase eta
ENSG00000087269	NOP14	-1.2	5.40E-53	NOP14 nucleolar protein
ENSG00000163950	SLBP	-1.2	1.63E-44	stem-loop binding protein
ENSG00000092445	TYRO3	-1.2	5.85E-18	TYRO3 protein tyrosine kinase
ENSG00000147224	PRPS1	-1.2	1.03E-41	phosphoribosyl pyrophosphate synthetase 1
ENSG00000270006	C16orf95-DT	-1.2	0.0116959	C16orf95 divergent transcript
ENSG00000137269	LRRRC1	-1.2	2.88E-24	leucine rich repeat containing 1
ENSG00000246228	CASC8	-1.2	0.0097442	cancer susceptibility 8
ENSG00000230076	RPL10P6	-1.2	0.0032545	ribosomal protein L10 pseudogene 6
ENSG00000155846	PPARGC1B	-1.2	1.24E-21	PPARG coactivator 1 beta
ENSG00000128536	CDHR3	-1.2	7.99E-05	cadherin related family member 3
ENSG00000084731	KIF3C	-1.2	7.29E-13	kinesin family member 3C
ENSG00000173894	CBX2	-1.2	1.53E-17	chromobox 2

ENSG00000231652	-	-1.2	0.0394532	novel transcript
ENSG00000119723	COQ6	-1.2	6.23E-18	coenzyme Q6 2C monooxygenase
ENSG00000214331	PDPR2P	-1.2	1.62E-08	pyruvate dehydrogenase phosphatase regulatory subunit 2 2C pseudogene
ENSG00000165490	DDIAS	-1.2	1.31E-19	DNA damage induced apoptosis suppressor
ENSG00000278126	-	-1.2	0.0012064	novel transcript
ENSG00000127589	TUBBP1	-1.2	0.0077216	tubulin beta pseudogene 1
ENSG00000162676	GFI1	-1.2	0.0001133	growth factor independent 1 transcriptional repressor
ENSG00000164548	TRA2A	-1.2	8.72E-23	transformer 2 alpha homolog
ENSG00000060762	MPC1	-1.2	5.60E-19	mitochondrial pyruvate carrier 1
ENSG00000182858	ALG12	-1.2	1.57E-19	ALG12 alpha-1 2C6-mannosyltransferase
ENSG00000163624	CDS1	-1.2	0.0021023	CDP-diacylglycerol synthase 1
ENSG00000111450	STX2	-1.2	1.21E-15	syntaxin 2
ENSG00000207547	MIR25	-1.2	8.56E-05	microRNA 25
ENSG00000217130	-	-1.2	0.0004475	ribosomal protein S10 (RPS10) pseudogene
ENSG00000087087	SRRT	-1.2	5.15E-32	serrate 2C RNA effector molecule
ENSG00000123154	WDR83	-1.2	2.36E-15	WD repeat domain 83
ENSG00000164078	MST1R	-1.2	1.47E-22	macrophage stimulating 1 receptor
ENSG00000260774	-	-1.2	0.0004976	novel transcript
ENSG00000128683	GAD1	-1.2	1.94E-07	glutamate decarboxylase 1
ENSG00000181264	TLCD5	-1.2	4.96E-14	TLC domain containing 5
ENSG00000243824	RPL12P6	-1.2	5.09E-07	ribosomal protein L12 pseudogene 6
ENSG00000146281	PM20D2	-1.2	5.20E-40	peptidase M20 domain containing 2
ENSG00000139344	AMDHD1	-1.2	1.56E-07	amidohydrolase domain containing 1
ENSG00000177917	ARL6IP6	-1.2	2.70E-38	ADP ribosylation factor like GTPase 6 interacting protein 6
ENSG00000140905	GCSH	-1.2	1.63E-11	glycine cleavage system protein H
ENSG00000108559	NUP88	-1.2	1.25E-67	nucleoporin 88
ENSG00000112149	CD83	-1.2	1.04E-15	CD83 molecule
ENSG00000100097	LGALS1	-1.2	1.18E-10	galectin 1
ENSG00000185519	FAM131C	-1.2	9.72E-05	family with sequence similarity 131 member C
ENSG00000231952	DPY19L1P2	-1.2	0.0419502	DPY19L1 pseudogene 2
ENSG00000145002	FAM86B2	-1.2	3.02E-05	family with sequence similarity 86 member B2
ENSG00000163714	U2SURP	-1.2	4.98E-06	U2 snRNP associated SURP domain containing
ENSG00000161800	RACGAP1	-1.2	2.71E-58	Rac GTPase activating protein 1
ENSG00000151500	THYN1	-1.2	1.01E-21	thymocyte nuclear protein 1
ENSG00000160767	FAM189B	-1.2	4.03E-23	family with sequence similarity 189 member B
ENSG00000118690	ARMC2	-1.2	1.75E-05	armadillo repeat containing 2
ENSG00000049192	ADAMTS6	-1.2	0.033839	ADAM metallopeptidase with thrombospondin type 1 motif 6
ENSG00000272149	-	-1.2	6.24E-07	novel transcript
ENSG00000156504	PABIR2	-1.2	3.17E-27	PABIR family member 2
ENSG00000100823	APEX1	-1.2	2.80E-21	apurinic/aprimidinic endodeoxyribonuclease 1
ENSG00000135972	MRPS9	-1.2	3.17E-33	mitochondrial ribosomal protein S9
ENSG00000092607	TBX15	-1.2	0.0079846	T-box transcription factor 15
ENSG00000065268	WDR18	-1.2	7.93E-19	WD repeat domain 18
ENSG00000164087	POC1A	-1.2	1.28E-16	POC1 centriolar protein A
ENSG00000141447	OSBPL1A	-1.2	1.58E-25	oxysterol binding protein like 1A
ENSG00000020181	ADGRA2	-1.2	9.73E-13	adhesion G protein-coupled receptor A2

ENSG00000175711	B3GNTL1	-1.2	3.52E-11	UDP-GlcNAc:betaGal beta-1 2C3-N-acetylglucosaminyltransferase like 1
ENSG00000162129	CLPB	-1.2	2.26E-49	caseinolytic mitochondrial matrix peptidase chaperone subunit B
ENSG00000141994	DUS3L	-1.2	1.07E-15	dihydrouridine synthase 3 like
ENSG00000116353	MECR	-1.2	2.03E-21	mitochondrial trans-2-enoyl-CoA reductase
ENSG00000256628	ZBTB11-AS1	-1.2	3.20E-11	ZBTB11 antisense RNA 1
ENSG00000075239	ACAT1	-1.2	4.24E-61	acetyl-CoA acetyltransferase 1
ENSG00000102362	SYTL4	-1.2	6.80E-16	synaptotagmin like 4
ENSG00000128266	GNAZ	-1.2	2.43E-28	G protein subunit alpha z
ENSG00000254682	-	-1.2	7.18E-05	novel transcript
ENSG00000213339	QRT1	-1.2	1.00E-21	queuine tRNA-ribosyltransferase catalytic subunit 1
ENSG00000171453	POLR1C	-1.2	1.23E-20	RNA polymerase I and III subunit C
ENSG00000089050	RBBP9	-1.2	1.12E-39	RB binding protein 9 2C serine hydrolase
ENSG00000128944	KNSTRN	-1.2	3.69E-35	kinetochore localized astrin (SPAG5) binding protein
ENSG00000198807	PAX9	-1.2	1.75E-05	paired box 9
ENSG00000004799	PDK4	-1.2	4.03E-24	pyruvate dehydrogenase kinase 4
ENSG00000198125	MB	-1.2	6.65E-07	myoglobin
ENSG00000136840	ST6GALNAC4	-1.2	9.56E-23	ST6 N-acetylgalactosaminide alpha-2 2C6-sialyltransferase 4
ENSG00000152270	PDE3B	-1.2	1.69E-19	phosphodiesterase 3B
ENSG00000122786	CALD1	-1.2	1.27E-27	caldesmon 1
ENSG00000150782	IL18	-1.2	1.47E-38	interleukin 18
ENSG00000105258	POLR2I	-1.2	2.82E-14	RNA polymerase II subunit I
ENSG00000197771	MCMBP	-1.2	1.81E-80	minichromosome maintenance complex binding protein
ENSG00000247595	SPTY2D1OS	-1.2	0.0090102	SPTY2D1 opposite strand
ENSG00000226415	TPI1P1	-1.2	3.75E-09	triosephosphate isomerase 1 pseudogene 1
ENSG00000130590	SAMD10	-1.2	2.01E-14	sterile alpha motif domain containing 10
ENSG00000234129	-	-1.2	0.0005863	novel transcript
ENSG00000243667	WDR92	-1.2	5.00E-10	WD repeat domain 92
ENSG00000006453	BAIAP2L1	-1.2	2.03E-50	BAR/IMD domain containing adaptor protein 2 like 1
ENSG00000198763	MT-ND2	-1.2	1.78E-31	mitochondrially encoded NADH:ubiquinone oxidoreductase core subunit 2
ENSG00000179409	GEMIN4	-1.2	2.69E-20	gem nuclear organelle associated protein 4
ENSG00000184785	SMIM10	-1.2	6.86E-24	small integral membrane protein 10
ENSG00000136936	XPA	-1.2	1.92E-20	XPA 2C DNA damage recognition and repair factor
ENSG00000176422	SPRYD4	-1.2	2.64E-23	SPRY domain containing 4
ENSG00000186523	FAM86B1	-1.2	5.16E-07	family with sequence similarity 86 member B1
ENSG00000268543	-	-1.2	0.0001694	novel transcript
ENSG00000232093	DCST1-AS1	-1.2	9.02E-16	DCST1 antisense RNA 1
ENSG00000164626	KCNK5	-1.2	3.54E-15	potassium two pore domain channel subfamily K member 5
ENSG00000100003	SEC14L2	-1.2	5.08E-12	SEC14 like lipid binding 2
ENSG00000132341	RAN	-1.2	1.23E-28	RAN 2C member RAS oncogene family
ENSG00000162227	TAF6L	-1.2	2.14E-14	TATA-box binding protein associated factor 6 like
ENSG00000144395	CCDC150	-1.2	7.63E-05	coiled-coil domain containing 150
ENSG00000149636	DSN1	-1.2	6.84E-44	DSN1 component of MIS12 kinetochore complex
ENSG00000146670	CDCA5	-1.2	2.45E-17	cell division cycle associated 5
ENSG00000171608	PIK3CD	-1.2	5.82E-09	phosphatidylinositol-4 2C5-bisphosphate 3-kinase catalytic subunit delta

ENSG00000131652	THOC6	-1.2	9.64E-17	THO complex 6
ENSG00000255152	MSH5-SAPCD1	-1.2	0.020326	MSH5-SAPCD1 readthrough (NMD candidate)
ENSG0000011028	MRC2	-1.2	1.69E-29	mannose receptor C type 2
ENSG00000181163	NPM1	-1.2	1.00E-37	nucleophosmin 1
ENSG00000285644	-	-1.2	0.0006161	novel transcript 2C antisense to CARS
ENSG00000128609	NDUFA5	-1.2	5.00E-29	NADH:ubiquinone oxidoreductase subunit A5
ENSG00000134779	TPGS2	-1.2	3.96E-38	tubulin polyglutamylase complex subunit 2
ENSG00000029639	TFB1M	-1.2	7.15E-23	transcription factor B1 2C mitochondrial
ENSG00000275180	-	-1.2	0.0005468	novel transcript
ENSG00000114395	CYB561D2	-1.2	4.25E-17	cytochrome b561 family member D2
ENSG00000250722	SELENOP	-1.2	9.64E-05	selenoprotein P
ENSG00000227495	KIF1C-AS1	-1.2	0.003902	KIF1C antisense RNA 1
ENSG00000214193	SH3D21	-1.2	1.01E-07	SH3 domain containing 21
ENSG00000285077	ARHGAP11B	-1.2	0.0033154	Rho GTPase activating protein 11B
ENSG00000163006	CCDC138	-1.2	4.02E-15	coiled-coil domain containing 138
ENSG00000165288	BRWD3	-1.2	2.79E-09	bromodomain and WD repeat domain containing 3
ENSG00000187123	LYPD6	-1.2	9.47E-06	LY6/PLAUR domain containing 6
ENSG00000280239	-	-1.2	7.46E-10	TEC
ENSG00000264343	NOTCH2NLA	-1.2	1.55E-05	notch 2 N-terminal like A
ENSG00000274630	-	-1.2	3.14E-05	novel transcript 2C antisense to ACLY
ENSG00000129691	ASH2L	-1.2	7.64E-47	ASH2 like 2C histone lysine methyltransferase complex subunit
ENSG00000213261	EEF1B2P6	-1.2	0.0033483	eukaryotic translation elongation factor 1 beta 2 pseudogene 6
ENSG00000088992	TESC	-1.2	6.50E-15	tescalcin
ENSG00000107798	LIPA	-1.2	1.06E-74	lipase A 2C lysosomal acid type
ENSG00000265817	FSBP	-1.2	0.0006841	fibrinogen silencer binding protein
ENSG00000141002	TCF25	-1.2	7.29E-33	transcription factor 25
ENSG00000100348	TXN2	-1.2	1.56E-21	thioredoxin 2
ENSG00000167306	MYO5B	-1.2	3.67E-19	myosin VB
ENSG00000133247	KMT5C	-1.2	1.53E-20	lysine methyltransferase 5C
ENSG00000143971	ETAA1	-1.2	2.33E-09	ETAA1 activator of ATR kinase
ENSG00000213889	PPM1N	-1.2	6.36E-09	protein phosphatase 2C Mg <sup>2+</sup> /Mn <sup>2+</sup> dependent 1N (putative)
ENSG00000262814	MRPL12	-1.2	4.39E-14	mitochondrial ribosomal protein L12
ENSG00000163882	POLR2H	-1.2	3.21E-22	RNA polymerase II 2C I and III subunit H
ENSG00000165591	FAAH2	-1.2	1.39E-20	fatty acid amide hydrolase 2
ENSG00000114686	MRPL3	-1.2	1.61E-46	mitochondrial ribosomal protein L3
ENSG00000268670	-	-1.2	0.0081246	novel transcript 2C sense intronic to ZBTB7A
ENSG00000128309	MPST	-1.2	2.83E-17	mercaptopyruvate sulfurtransferase
ENSG00000131037	EPS8L1	-1.2	4.14E-11	EPS8 like 1
ENSG00000079150	FKBP7	-1.2	7.36E-10	FKBP prolyl isomerase 7
ENSG00000259895	-	-1.2	0.0219567	novel transcript 2C antisense to C16orf59
ENSG00000188092	GPR89B	-1.2	0.0257996	G protein-coupled receptor 89B
ENSG00000100814	CCNB1IP1	-1.2	3.35E-26	cyclin B1 interacting protein 1
ENSG00000120318	ARAP3	-1.2	3.93E-26	ArfGAP with RhoGAP domain 2C ankyrin repeat and PH domain 3
ENSG00000135314	KHDC1	-1.2	1.27E-12	KH domain containing 1
ENSG00000162521	RBBP4	-1.2	1.94E-48	RB binding protein 4 2C chromatin remodeling factor

ENSG00000205683	DPF3	-1.2	0.0120571	double PHD fingers 3
ENSG00000186326	RGS9BP	-1.2	0.0011326	regulator of G protein signaling 9 binding protein
ENSG00000228232	GAPDHP1	-1.2	1.01E-05	glyceraldehyde-3-phosphate dehydrogenase pseudogene 1
ENSG00000123009	NME2P1	-1.2	3.84E-05	NME2 pseudogene 1
ENSG00000259291	ZNF710-AS1	-1.2	0.0021638	ZNF710 antisense RNA 1
ENSG00000104408	EIF3E	-1.2	3.89E-23	eukaryotic translation initiation factor 3 subunit E
ENSG00000115204	MPV17	-1.2	5.46E-23	mitochondrial inner membrane protein MPV17
ENSG00000132383	RPA1	-1.2	5.98E-90	replication protein A1
ENSG00000154511	DIPK1A	-1.2	5.48E-13	divergent protein kinase domain 1A
ENSG00000198039	ZNF273	-1.2	9.25E-09	zinc finger protein 273
ENSG00000125630	POLR1B	-1.2	1.40E-47	RNA polymerase I subunit B
ENSG00000214253	FIS1	-1.2	7.23E-23	fission 2C mitochondrial 1
ENSG00000214182	PTMAP5	-1.2	1.86E-17	prothymosin alpha pseudogene 5
ENSG00000263001	GTF2I	-1.2	1.37E-35	general transcription factor Iii
ENSG00000101158	NELFCD	-1.2	2.55E-39	negative elongation factor complex member C/D
ENSG00000165271	NOL6	-1.2	4.92E-25	nucleolar protein 6
ENSG0000012223	LTF	-1.2	0.0347463	lactotransferrin
ENSG00000143179	UCK2	-1.2	1.09E-27	uridine-cytidine kinase 2
ENSG00000102007	PLP2	-1.2	4.14E-21	proteolipid protein 2
ENSG00000164024	METAP1	-1.2	1.39E-63	methionyl aminopeptidase 1
ENSG00000100462	PRMT5	-1.1	9.84E-14	protein arginine methyltransferase 5
ENSG00000183763	TRAIIP	-1.1	1.54E-12	TRAF interacting protein
ENSG00000213866	YBX1P10	-1.1	1.93E-14	Y-box binding protein 1 pseudogene 10
ENSG00000162688	AGL	-1.1	1.76E-07	amylo-alpha-1 2C 6-glucosidase 2C 4-alpha-glucanotransferase
ENSG00000186806	VSIG10L	-1.1	3.15E-06	V-set and immunoglobulin domain containing 10 like
ENSG00000187514	PTMA	-1.1	8.83E-39	prothymosin alpha
ENSG00000125354	SEPTIN6	-1.1	1.62E-34	septin 6
ENSG00000103253	HAGHL	-1.1	1.63E-19	hydroxyacylglutathione hydrolase like
ENSG00000115255	REEP6	-1.1	2.06E-11	receptor accessory protein 6
ENSG00000100941	PNN	-1.1	1.62E-09	pinin 2C desmosome associated protein
ENSG00000171865	RNASEH1	-1.1	1.19E-17	ribonuclease H1
ENSG00000214485	RPL7P1	-1.1	5.18E-21	ribosomal protein L7 pseudogene 1
ENSG00000212802	RPL15P3	-1.1	9.13E-13	ribosomal protein L15 pseudogene 3
ENSG00000169607	CKAP2L	-1.1	1.54E-10	cytoskeleton associated protein 2 like
ENSG00000083642	PDS5B	-1.1	5.99E-10	PDS5 cohesin associated factor B
ENSG00000116560	SFPQ	-1.1	2.67E-47	splicing factor proline and glutamine rich
ENSG00000171295	ZNF440	-1.1	1.79E-09	zinc finger protein 440
ENSG00000235374	SSR4P1	-1.1	1.28E-05	signal sequence receptor subunit 4 pseudogene 1
ENSG00000138080	EMILIN1	-1.1	0.0001827	elastin microfibril interfacier 1
ENSG00000278864	-	-1.1	0.0017684	novel transcript
ENSG00000196550	FAM72A	-1.1	1.86E-07	family with sequence similarity 72 member A
ENSG00000125319	HROB	-1.1	7.17E-13	homologous recombination factor with OB-fold
ENSG00000280088	-	-1.1	0.0061194	TEC
ENSG00000185504	FAAP100	-1.1	5.61E-16	FA core complex associated protein 100
ENSG00000210107	MT-TQ	-1.1	3.79E-06	mitochondrially encoded tRNA-Gln (CAA/G)
ENSG00000245571	FAM111A-DT	-1.1	1.25E-06	FAM111A divergent transcript



ENSG00000149782	PLCB3	-1.1	2.77E-19	phospholipase C beta 3
ENSG00000178773	CPNE7	-1.1	2.48E-21	copine 7
ENSG00000122483	CCDC18	-1.1	9.05E-09	coiled-coil domain containing 18
ENSG00000242242	NECTIN3-AS1	-1.1	0.0002745	NECTIN3 antisense RNA 1
ENSG00000225630	MTND2P28	-1.1	2.71E-17	MT-ND2 pseudogene 28
ENSG00000162924	REL	-1.1	0.0154393	REL proto-oncogene 2C NF-kB subunit
ENSG00000233954	UQCRHL	-1.1	1.47E-22	ubiquinol-cytochrome c reductase hinge protein like
ENSG00000266036	SLC9A3R1-AS1	-1.1	0.0475073	SLC9A3R1 antisense RNA 1
ENSG00000174915	PTDSS2	-1.1	1.07E-18	phosphatidylserine synthase 2
ENSG00000135390	ATP5MC2	-1.1	3.46E-15	ATP synthase membrane subunit c locus 2
ENSG00000178425	NT5DC1	-1.1	1.47E-26	5'-nucleotidase domain containing 1
ENSG00000125611	CHCHD5	-1.1	1.22E-12	coiled-coil-helix-coiled-coil-helix domain containing 5
ENSG00000132749	TESMIN	-1.1	0.0016004	testis expressed metallothionein like protein
ENSG00000167112	TRUB2	-1.1	1.42E-22	TruB pseudouridine synthase family member 2
ENSG00000037042	TUBG2	-1.1	2.61E-08	tubulin gamma 2
ENSG00000004777	ARHGAP33	-1.1	0.0041049	Rho GTPase activating protein 33
ENSG00000197472	ZNF695	-1.1	6.94E-07	zinc finger protein 695
ENSG00000185585	OLFML2A	-1.1	8.85E-14	olfactomedin like 2A
ENSG00000169752	NRG4	-1.1	9.80E-11	neuregulin 4
ENSG00000138468	SEN7	-1.1	4.54E-06	SUMO specific peptidase 7
ENSG00000198890	PRMT6	-1.1	7.78E-21	protein arginine methyltransferase 6
ENSG00000121988	ZRANB3	-1.1	6.36E-09	zinc finger RANBP2-type containing 3
ENSG0000010803	SCMH1	-1.1	2.80E-18	Scm polycomb group protein homolog 1
ENSG00000127990	SGCE	-1.1	6.33E-27	sarcoglycan epsilon
ENSG00000234118	RPL13AP6	-1.1	0.0013697	ribosomal protein L13a pseudogene 6
ENSG00000143409	MINDY1	-1.1	2.83E-17	MINDY lysine 48 deubiquitinase 1
ENSG00000105373	NOP53	-1.1	2.27E-12	NOP53 ribosome biogenesis factor
ENSG00000235408	SNORA71B	-1.1	0.0071823	small nucleolar RNA 2C H/ACA box 71B
ENSG00000144426	NBEAL1	-1.1	2.20E-21	neurobeachin like 1
ENSG00000112514	CUTA	-1.1	2.13E-14	cutA divalent cation tolerance homolog
ENSG00000128951	DUT	-1.1	6.42E-44	deoxyuridine triphosphatase
ENSG00000127804	METTL16	-1.1	2.86E-30	methyltransferase like 16
ENSG00000099974	DDTL	-1.1	8.71E-08	D-dopachrome tautomerase like
ENSG00000152240	HAUS1	-1.1	2.39E-17	HAUS augmin like complex subunit 1
ENSG00000157593	SLC35B2	-1.1	1.12E-15	solute carrier family 35 member B2
ENSG00000116874	WARS2	-1.1	3.52E-35	tryptophanyl tRNA synthetase 2 2C mitochondrial
ENSG00000163686	ABHD6	-1.1	1.87E-35	abhydrolase domain containing 6 2C acylglycerol lipase
ENSG00000132773	TOE1	-1.1	2.37E-19	target of EGR1 2C exonuclease
ENSG00000228175	GEMIN8P4	-1.1	0.0007612	gem nuclear organelle associated protein 8 pseudogene 4
ENSG00000170448	NFXL1	-1.1	3.83E-13	nuclear transcription factor 2C X-box binding like 1
ENSG00000242265	PEG10	-1.1	0.0017066	paternally expressed 10
ENSG00000122566	HNRNPA2B1	-1.1	1.10E-34	heterogeneous nuclear ribonucleoprotein A2/B1
ENSG00000160072	ATAD3B	-1.1	4.66E-12	ATPase family AAA domain containing 3B
ENSG00000137124	ALDH1B1	-1.1	7.16E-26	aldehyde dehydrogenase 1 family member B1
ENSG00000109911	ELP4	-1.1	1.62E-24	elongator acetyltransferase complex subunit 4
ENSG00000185379	RAD51D	-1.1	1.48E-35	RAD51 paralog D

ENSG00000254230	-	-1.1	0.0341484	novel transcript
ENSG00000229563	LINC01204	-1.1	0.0078218	long intergenic non-protein coding RNA 1204
ENSG00000233237	LINC00472	-1.1	0.0338928	long intergenic non-protein coding RNA 472
ENSG00000089053	ANAPC5	-1.1	2.19E-29	anaphase promoting complex subunit 5
ENSG00000260751	-	-1.1	0.0096527	novel transcript
ENSG00000151338	MIPOL1	-1.1	6.60E-06	mirror-image polydactyly 1
ENSG00000132423	COQ3	-1.1	5.58E-27	coenzyme Q3 2C methyltransferase
ENSG00000274925	ZKSCAN2-DT	-1.1	0.0011671	ZKSCAN2 divergent transcript
ENSG00000091651	ORC6	-1.1	1.70E-29	origin recognition complex subunit 6
ENSG00000141449	GREB1L	-1.1	1.37E-12	GREB1 like retinoic acid receptor coactivator
ENSG00000162236	STX5	-1.1	5.52E-24	syntaxin 5
ENSG00000124207	CSE1L	-1.1	1.40E-26	chromosome segregation 1 like
ENSG00000173207	CKS1B	-1.1	1.54E-13	CDC28 protein kinase regulatory subunit 1B
ENSG00000166483	WEE1	-1.1	4.72E-42	WEE1 G2 checkpoint kinase
ENSG00000233223	-	-1.1	1.04E-08	novel transcript 2C antisense to MPDU1 and CD68
ENSG00000276603	-	-1.1	0.0008587	novel transcript 2C sense intronic to BLCAP
ENSG00000175768	TOMM5	-1.1	3.61E-16	translocase of outer mitochondrial membrane 5
ENSG00000162825	NBPF20	-1.1	9.52E-11	NBPF member 20
ENSG00000267147	LINC01842	-1.1	5.16E-07	long intergenic non-protein coding RNA 1842
ENSG00000233532	LINC00460	-1.1	0.0189463	long intergenic non-protein coding RNA 460
ENSG00000127337	YEATS4	-1.1	1.14E-30	YEATS domain containing 4
ENSG00000076555	ACACB	-1.1	4.53E-12	acetyl-CoA carboxylase beta
ENSG00000229589	ACVR2B-AS1	-1.1	3.45E-06	ACVR2B antisense RNA 1
ENSG00000239900	ADSL	-1.1	5.93E-21	adenylosuccinate lyase
ENSG00000165661	QSOX2	-1.1	1.35E-37	quiescin sulfhydryl oxidase 2
ENSG00000234797	RPS3AP6	-1.1	2.67E-12	RPS3A pseudogene 6
ENSG00000261780	LINC02582	-1.1	4.28E-24	long intergenic non-protein coding RNA 2582
ENSG00000124702	KLHDC3	-1.1	1.89E-14	kelch domain containing 3
ENSG00000116120	FARSB	-1.1	1.92E-55	phenylalanyl-tRNA synthetase subunit beta
ENSG00000197958	RPL12	-1.1	1.40E-14	ribosomal protein L12
ENSG00000152455	SUV39H2	-1.1	1.33E-21	suppressor of variegation 3-9 homolog 2
ENSG00000154734	ADAMTS1	-1.1	1.21E-22	ADAM metalloproteinase with thrombospondin type 1 motif 1
ENSG00000182870	GALNT9	-1.1	2.12E-24	polypeptide N-acetylgalactosaminyltransferase 9
ENSG00000186166	CENATAC	-1.1	8.47E-13	centrosomal AT-AC splicing factor
ENSG00000247735	-	-1.1	0.000512	novel transcript 2C antisense to KCTD13
ENSG00000158050	DUSP2	-1.1	0.003509	dual specificity phosphatase 2
ENSG00000089157	RPLP0	-1.1	1.51E-10	ribosomal protein lateral stalk subunit P0
ENSG00000223802	CERS1	-1.1	0.0001659	ceramide synthase 1
ENSG00000224043	CCNT2-AS1	-1.1	0.001034	CCNT2 antisense RNA 1
ENSG00000108055	SMC3	-1.1	0.0002629	structural maintenance of chromosomes 3
ENSG0000027869	SH2D2A	-1.1	9.36E-13	SH2 domain containing 2A
ENSG00000101213	PTK6	-1.1	1.94E-22	protein tyrosine kinase 6
ENSG00000264920	SP2-DT	-1.1	7.06E-07	SP2 divergent transcript
ENSG00000141076	UTP4	-1.1	4.23E-32	UTP4 small subunit processome component
ENSG00000185324	CDK10	-1.1	4.27E-38	cyclin dependent kinase 10
ENSG00000224281	SLC25A5-AS1	-1.1	2.87E-06	SLC25A5 antisense RNA 1

ENSG00000168078	PBK	-1.1	7.27E-33	PDZ binding kinase
ENSG00000150990	DHX37	-1.1	4.43E-14	DEAH-box helicase 37
ENSG00000166197	NOLC1	-1.1	1.65E-69	nucleolar and coiled-body phosphoprotein 1
ENSG00000164828	SUN1	-1.1	2.58E-32	Sad1 and UNC84 domain containing 1
ENSG00000172009	THOP1	-1.1	1.18E-11	thimet oligopeptidase 1
ENSG00000168090	COPS6	-1.1	7.01E-19	COP9 signalosome subunit 6
ENSG00000066322	ELOVL1	-1.1	3.43E-17	ELOVL fatty acid elongase 1
ENSG00000127946	HIP1	-1.1	9.08E-36	huntingtin interacting protein 1
ENSG00000109062	SLC9A3R1	-1.1	1.66E-13	SLC9A3 regulator 1
ENSG00000070950	RAD18	-1.1	4.28E-15	RAD18 E3 ubiquitin protein ligase
ENSG00000112297	CRYBG1	-1.1	4.54E-19	crystallin beta-gamma domain containing 1
ENSG00000245149	RNF139-AS1	-1.1	0.00144	RNF139 antisense RNA 1 (head to head)
ENSG00000132382	MYBBP1A	-1.1	1.78E-19	MYB binding protein 1a
ENSG00000105136	ZNF419	-1.1	6.90E-08	zinc finger protein 419
ENSG00000000460	C1orf112	-1.1	6.96E-21	chromosome 1 open reading frame 112
ENSG00000175581	MRPL48	-1.1	2.25E-21	mitochondrial ribosomal protein L48
ENSG00000165152	PGAP4	-1.1	3.71E-23	post-GPI attachment to proteins GalNAc transferase 4
ENSG00000279069	-	-1.1	4.01E-06	novel transcript
ENSG00000128159	TUBGCP6	-1.1	8.97E-18	tubulin gamma complex associated protein 6
ENSG00000226237	GAS1RR	-1.1	0.0002417	GAS1 adjacent regulatory RNA
ENSG00000233461	-	-1.1	2.33E-17	novel transcript
ENSG00000198131	ZNF544	-1.1	1.83E-19	zinc finger protein 544
ENSG00000114054	PCCB	-1.1	1.77E-22	propionyl-CoA carboxylase subunit beta
ENSG00000183723	CMTM4	-1.1	2.83E-22	CKLF like MARVEL transmembrane domain containing 4
ENSG00000198276	UCKL1	-1.1	5.61E-19	uridine-cytidine kinase 1 like 1
ENSG00000198836	OPA1	-1.1	1.84E-09	OPA1 mitochondrial dynamin like GTPase
ENSG00000125871	MGME1	-1.1	2.31E-28	mitochondrial genome maintenance exonuclease 1
ENSG00000158220	ESYT3	-1.1	0.0068268	extended synaptotagmin 3
ENSG00000139154	AEBP2	-1.1	1.25E-19	AE binding protein 2
ENSG00000272677	HNRNPD-DT	-1.1	0.0077775	HNRNPD divergent transcript
ENSG00000259781	HMGB1P6	-1.1	7.51E-23	high mobility group box 1 pseudogene 6
ENSG00000197587	DMBX1	-1.1	0.003812	diencephalon/mesencephalon homeobox 1
ENSG00000151240	DIP2C	-1.1	0.0221502	disco interacting protein 2 homolog C
ENSG00000176273	SLC35G1	-1.1	2.49E-25	solute carrier family 35 member G1
ENSG00000102898	NUTF2	-1.1	3.75E-20	nuclear transport factor 2
ENSG00000103319	EEF2K	-1.1	1.60E-33	eukaryotic elongation factor 2 kinase
ENSG00000280206	-	-1.1	2.84E-12	novel transcript
ENSG00000157193	LRP8	-1.1	1.16E-21	LDL receptor related protein 8
ENSG00000142102	PGGHG	-1.1	8.57E-07	protein-glucosylgalactosylhydroxylysine glucosidase
ENSG00000013810	TACC3	-1.1	2.10E-21	transforming acidic coiled-coil containing protein 3
ENSG00000118412	CASP8AP2	-1.1	0.0120513	caspase 8 associated protein 2
ENSG00000178467	P4HTM	-1.1	2.16E-18	prolyl 4-hydroxylase 2C transmembrane
ENSG00000263142	LRRRC37A17P	-1.1	0.0012332	leucine rich repeat containing 37 member A17 2C pseudogene
ENSG00000224877	NDUFAF8	-1.1	1.13E-16	NADH:ubiquinone oxidoreductase complex assembly factor 8
ENSG00000105926	MPP6	-1.1	3.01E-16	membrane palmitoylated protein 6
ENSG00000163507	CIP2A	-1.1	2.14E-12	cellular inhibitor of PP2A

ENSG00000167642	SPINT2	-1.1	1.31E-08	serine peptidase inhibitor 2C Kunitz type 2
ENSG00000236565	HNRNPA3P5	-1.1	3.81E-18	heterogeneous nuclear ribonucleoprotein A3 pseudogene 5
ENSG00000132692	BCAN	-1.1	0.0016045	brevican
ENSG00000081692	JMJD4	-1.1	3.08E-15	jumonji domain containing 4
ENSG00000185834	RPL12P4	-1.1	3.77E-10	ribosomal protein L12 pseudogene 4
ENSG00000186787	SPIN2B	-1.1	2.66E-14	spindlin family member 2B
ENSG00000166762	CATSPER2	-1.1	0.0019038	cation channel sperm associated 2
ENSG00000163644	PPM1K	-1.1	1.59E-09	protein phosphatase 2C Mg2+/Mn2+ dependent 1K
ENSG00000256196	-	-1.1	0.0290223	novel transcript
ENSG00000198887	SMC5	-1.1	0.0039673	structural maintenance of chromosomes 5
ENSG00000138801	PAPSS1	-1.1	7.23E-37	3'-phosphoadenosine 5'-phosphosulfate synthase 1
ENSG00000185414	MRPL30	-1.1	1.49E-57	mitochondrial ribosomal protein L30
ENSG00000024526	DEPDC1	-1.1	3.66E-14	DEP domain containing 1
ENSG00000101306	MYLK2	-1.1	0.023666	myosin light chain kinase 2
ENSG00000268403	-	-1.1	4.51E-09	novel transcript 2C antisense to ZNF143
ENSG00000279738	-	-1.1	1.80E-05	novel transcript 2C sense overlapping to EIF3L
ENSG00000104450	SPAG1	-1.1	9.01E-19	sperm associated antigen 1
ENSG00000179271	GADD45GIP1	-1.1	7.10E-13	GADD45G interacting protein 1
ENSG00000136699	SMPD4	-1.1	2.00E-29	sphingomyelin phosphodiesterase 4
ENSG00000171960	PPIH	-1.1	9.97E-20	peptidylprolyl isomerase H
ENSG00000257553	-	-1.1	1.69E-06	novel transcript 2C antisense to PA2G4
ENSG00000161847	RAVER1	-1.1	5.86E-25	ribonucleoprotein 2C PTB binding 1
ENSG00000151498	ACAD8	-1.1	4.40E-11	acyl-CoA dehydrogenase family member 8
ENSG00000242612	DECR2	-1.1	1.70E-27	2 2C4-dienoyl-CoA reductase 2
ENSG00000054148	PHPT1	-1.1	7.05E-12	phosphohistidine phosphatase 1
ENSG00000115840	SLC25A12	-1.1	7.83E-40	solute carrier family 25 member 12
ENSG00000100865	CINP	-1.1	2.98E-26	cyclin dependent kinase 2 interacting protein
ENSG00000149489	ROM1	-1.1	9.15E-11	retinal outer segment membrane protein 1
ENSG00000242798	-	-1.1	0.0368173	novel transcript
ENSG00000176894	PXMP2	-1.1	5.33E-12	peroxisomal membrane protein 2
ENSG00000148700	ADD3	-1.1	2.69E-13	adducin 3
ENSG00000164934	DCAF13	-1.1	1.39E-29	DDB1 and CUL4 associated factor 13
ENSG00000112561	TFEB	-1.1	2.19E-10	transcription factor EB
ENSG00000116221	MRPL37	-1.1	4.25E-21	mitochondrial ribosomal protein L37
ENSG00000106351	AGFG2	-1.1	5.17E-14	ArfGAP with FG repeats 2
ENSG00000118418	HMGN3	-1.1	5.15E-31	high mobility group nucleosomal binding domain 3
ENSG00000256673	-	-1.1	0.0055771	ovostatin (OVOS) pseudogene
ENSG00000204514	ZNF814	-1.1	0.0124372	zinc finger protein 814
ENSG00000267288	-	-1.1	8.43E-08	novel transcript 2C antisense to HEXIM2
ENSG00000232499	-	-1.1	1.72E-05	heterogeneous nuclear ribonucleoprotein A3 (hnRNPA3) pseudogene
ENSG00000106009	BRAT1	-1.1	5.52E-15	BRCA1 associated ATM activator 1
ENSG00000139613	SMARCC2	-1.1	2.11E-29	SWI/SNF related 2C matrix associated 2C actin dependent regulator of chromatin subfamily c member 2
ENSG00000275854	-	-1.1	0.0235151	novel transcript 2C sense intronic to YARS2
ENSG00000070371	CLTCL1	-1.1	2.47E-13	clathrin heavy chain like 1
ENSG00000112159	MDN1	-1.1	2.75E-05	midasin AAA ATPase 1
ENSG00000198911	SREBF2	-1.1	1.60E-24	sterol regulatory element binding transcription factor 2

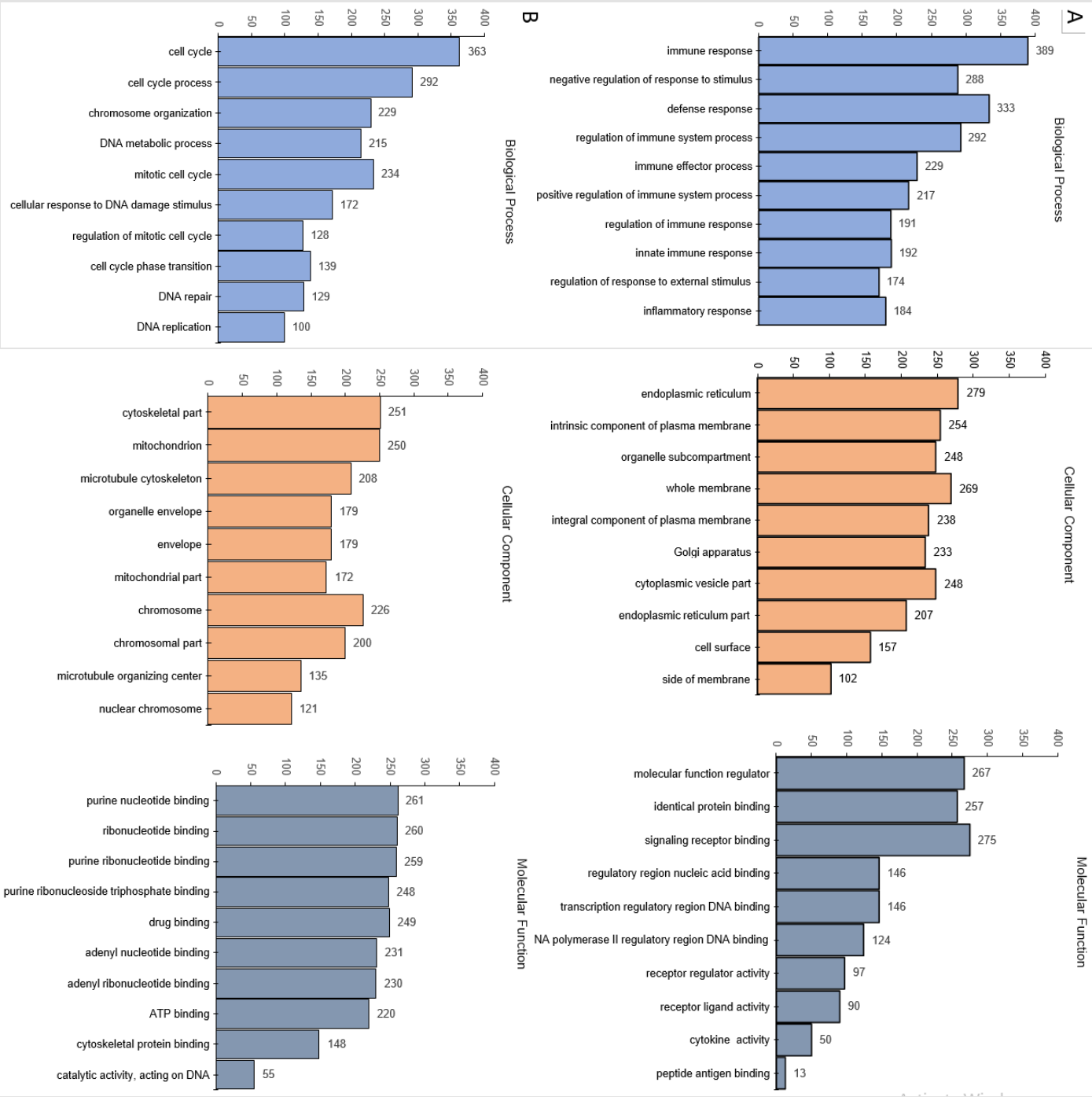
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ENSG00000198034	RPS4X	-1.1	1.02E-20	ribosomal protein S4 X-linked
ENSG00000075142	SRI	-1.1	2.70E-21	sorcin
ENSG00000168778	TCTN2	-1.1	2.98E-21	tectonic family member 2
ENSG00000176058	TPRN	-1.1	1.73E-13	taperin
ENSG00000185238	PRMT3	-1.1	3.09E-40	protein arginine methyltransferase 3
ENSG00000171793	CTPS1	-1.1	9.97E-53	CTP synthase 1
ENSG00000117054	ACADM	-1.1	7.06E-23	acyl-CoA dehydrogenase medium chain
ENSG00000239911	PRKAG2-AS1	-1.1	7.48E-06	PRKAG2 antisense RNA 1
ENSG00000108511	HOXB6	-1.1	1.11E-15	homeobox B6
ENSG00000271447	MMP28	-1.1	7.94E-14	matrix metalloproteinase 28
ENSG00000260924	LINC01311	-1.1	3.06E-05	long intergenic non-protein coding RNA 1311
ENSG00000136444	RSAD1	-1.1	1.18E-18	radical S-adenosyl methionine domain containing 1
ENSG00000125458	NT5C	-1.1	7.89E-18	5' 2C 3'-nucleotidase 2C cytosolic
ENSG00000260528	FAM157C	-1.1	0.0003417	family with sequence similarity 157 member C
ENSG00000197275	RAD54B	-1.1	5.79E-07	RAD54 homolog B
ENSG00000234028	EIF2AK3-DT	-1.1	0.002459	EIF2AK3 divergent transcript
ENSG00000145604	SKP2	-1.1	4.86E-42	S-phase kinase associated protein 2
ENSG00000182687	GALR2	-1.1	0.0019756	galanin receptor 2
ENSG00000133250	ZNF414	-1.1	8.49E-11	zinc finger protein 414
ENSG00000261713	SSTR5-AS1	-1.1	6.01E-05	SSTR5 antisense RNA 1
ENSG00000113569	NUP155	-1.1	1.35E-27	nucleoporin 155
ENSG00000275832	ARHGAP23	-1.1	9.14E-26	Rho GTPase activating protein 23
ENSG00000089123	TASP1	-1.1	7.43E-14	taspase 1
ENSG00000132967	HMGB1P5	-1.1	1.95E-45	high mobility group box 1 pseudogene 5
ENSG00000213551	DNAJC9	-1.1	3.01E-51	DnaJ heat shock protein family (Hsp40) member C9
ENSG00000257913	DDN-AS1	-1.1	0.0397499	DDN and PRKAG1 antisense RNA 1
ENSG00000188760	TMEM198	-1.1	1.45E-07	transmembrane protein 198
ENSG00000107672	NSMCE4A	-1.1	6.47E-33	NSE4 homolog A 2C SMC5-SMC6 complex component
ENSG00000227073	SDHDP2	-1.1	0.0019512	succinate dehydrogenase complex subunit D pseudogene 2
ENSG00000147684	NDUFB9	-1.1	5.20E-23	NADH:ubiquinone oxidoreductase subunit B9
ENSG00000225975	LINC01534	-1.1	1.35E-06	long intergenic non-protein coding RNA 1534
ENSG00000232284	GNG12-AS1	-1.1	0.0012218	GNG12 2C DIRAS3 and WLS antisense RNA 1
ENSG00000218358	RAET1K	-1.1	0.0283829	retinoic acid early transcript 1K pseudogene
ENSG00000176485	PLAAT3	-1.1	1.44E-22	phospholipase A and acyltransferase 3
ENSG00000227751	RCC2-AS1	-1.1	0.0220549	RCC2 antisense RNA 1
ENSG00000213740	SERBP1P1	-1.1	4.09E-31	SERPINE1 mRNA binding protein 1 pseudogene 1
ENSG0000028310	BRD9	-1.1	1.99E-10	bromodomain containing 9
ENSG00000141560	FN3KRP	-1.1	1.65E-30	fructosamine 3 kinase related protein
ENSG00000100867	DHRS2	-1.1	1.30E-07	dehydrogenase/reductase 2
ENSG00000272325	NUDT3	-1.1	7.74E-36	nudix hydrolase 3
ENSG00000090316	MAEA	-1.1	6.31E-28	macrophage erythroblast attachment 2C E3 ubiquitin ligase
ENSG00000163322	ABRAXAS1	-1.1	1.10E-08	abraxas 1 2C BRCA1 A complex subunit
ENSG00000074266	EED	-1.1	2.19E-36	embryonic ectoderm development
ENSG00000184669	OR7E14P	-1.1	0.0378479	olfactory receptor family 7 subfamily E member 14 pseudogene



ENSG00000116396	KCNC4	-1.1	3.80E-24	potassium voltage-gated channel subfamily C member 4
ENSG00000241990	PRR34-AS1	-1.1	1.08E-08	PRR34 antisense RNA 1
ENSG00000197763	TXNRD3	-1.1	2.00E-18	thioredoxin reductase 3
ENSG00000006015	REX1BD	-1.1	4.03E-13	required for excision 1-B domain containing
ENSG00000034693	PEX3	-1.1	9.13E-26	peroxisomal biogenesis factor 3
ENSG00000272269	NUP153-AS1	-1.1	9.85E-09	NUP153 antisense RNA 1
ENSG00000166582	CENPV	-1.1	3.69E-19	centromere protein V
ENSG00000103018	CYB5B	-1.1	6.20E-73	cytochrome b5 type B
ENSG00000221995	TIAF1	-1.1	0.0002	TGFB1-induced anti-apoptotic factor 1
ENSG00000269968	-	-1.1	5.82E-13	novel transcript 2C antisense to GAPDH
ENSG00000177595	PIDD1	-1.1	5.11E-12	p53-induced death domain protein 1
ENSG00000164663	USP49	-1.1	0.0091608	ubiquitin specific peptidase 49
ENSG00000184985	SORCS2	-1.1	1.33E-14	sortilin related VPS10 domain containing receptor 2
ENSG00000162650	ATXN7L2	-1.1	7.04E-19	ataxin 7 like 2
ENSG00000225151	GOLGA2P7	-1.1	0.0285501	GOLGA2 pseudogene 7
ENSG00000143578	CREB3L4	-1.1	7.15E-13	cAMP responsive element binding protein 3 like 4
ENSG00000183199	HSP90AB3P	-1.1	8.54E-06	heat shock protein 90 alpha family class B member 3 2C pseudogene
ENSG00000104852	SNRNP70	-1	1.36E-44	small nuclear ribonucleoprotein U1 subunit 70
ENSG00000114126	TFDP2	-1	2.10E-29	transcription factor Dp-2
ENSG00000115053	NCL	-1	5.10E-32	nucleolin
ENSG00000100413	POLR3H	-1	1.29E-23	RNA polymerase III subunit H
ENSG00000166681	BEX3	-1	4.21E-16	brain expressed X-linked 3
ENSG00000102144	PGK1	-1	1.12E-14	phosphoglycerate kinase 1
ENSG00000188910	GJB3	-1	1.06E-11	gap junction protein beta 3
ENSG00000226054	MEMO1P1	-1	1.38E-09	mediator of cell motility 1 pseudogene 1
ENSG00000164172	MOCS2	-1	1.63E-34	molybdenum cofactor synthesis 2
ENSG00000165688	PMPCA	-1	4.85E-17	peptidase 2C mitochondrial processing subunit alpha
ENSG00000079739	PGM1	-1	2.95E-17	phosphoglucomutase 1
ENSG00000260236	-	-1	0.002283	novel transcript 2C antisense to PTPN23
ENSG00000205758	CRYZL1	-1	7.86E-15	crystallin zeta like 1
ENSG00000205544	TMEM256	-1	2.04E-12	transmembrane protein 256
ENSG00000269609	C10orf95-AS1	-1	9.38E-19	C10orf95 antisense RNA 1
ENSG00000175643	RMI2	-1	4.20E-16	RecQ mediated genome instability 2
ENSG00000065154	OAT	-1	2.79E-31	ornithine aminotransferase
ENSG00000146243	IRAK1BP1	-1	3.50E-07	interleukin 1 receptor associated kinase 1 binding protein 1
ENSG00000108106	UBE2S	-1	2.48E-09	ubiquitin conjugating enzyme E2 S
ENSG00000176155	CCDC57	-1	6.82E-13	coiled-coil domain containing 57
ENSG00000096384	HSP90AB1	-1	1.02E-38	heat shock protein 90 alpha family class B member 1
ENSG00000180957	PITPNB	-1	1.05E-34	phosphatidylinositol transfer protein beta
ENSG00000170791	CHCHD7	-1	3.24E-28	coiled-coil-helix-coiled-coil-helix domain containing 7
ENSG00000131504	DIAPH1	-1	1.86E-36	diaphanous related formin 1
ENSG00000227097	RPS28P7	-1	5.87E-13	ribosomal protein S28 pseudogene 7
ENSG00000097096	SYDE2	-1	9.99E-05	synapse defective Rho GTPase homolog 2
ENSG00000169689	CENPX	-1	3.03E-10	centromere protein X
ENSG00000288534	-	-1	1.36E-05	TMX2-CTNND1 readthrough (NMD candidate)
ENSG00000196696	PDXDC2P-NPIPB14P	-1	0.0005297	nuclear pore complex-interacting protein

ENSG00000122882	ECD	-1	1.81E-29	ecdysoneless cell cycle regulator
ENSG00000119185	ITGB1BP1	-1	5.71E-49	integrin subunit beta 1 binding protein 1
ENSG00000183856	IQGAP3	-1	1.28E-16	IQ motif containing GTPase activating protein 3
ENSG00000189403	HMGB1	-1	4.75E-31	high mobility group box 1
ENSG00000124370	MCEE	-1	3.10E-16	methylmalonyl-CoA epimerase
ENSG00000217716	RPS10P3	-1	0.0010972	ribosomal protein S10 pseudogene 3
ENSG00000145425	RPS3A	-1	7.70E-14	ribosomal protein S3A
ENSG00000286177	-	-1	0.0013036	novel transcript 2C antisense to CCDC97 and HNRNPUL1
ENSG00000170469	SPATA24	-1	6.27E-07	spermatogenesis associated 24
ENSG00000011132	APBA3	-1	1.98E-14	amyloid beta precursor protein binding family A member 3
ENSG00000091986	CCDC80	-1	4.31E-06	coiled-coil domain containing 80
ENSG00000108424	KPNB1	-1	2.62E-27	karyopherin subunit beta 1
ENSG00000140323	DISP2	-1	0.0268251	dispatched RND transporter family member 2
ENSG00000139641	ESYT1	-1	9.23E-23	extended synaptotagmin 1
ENSG00000230291	-	-1	1.95E-14	ribosomal protein L26 (RPL26) pseudogene
ENSG00000105819	PMPCB	-1	2.43E-40	peptidase 2C mitochondrial processing subunit beta
ENSG00000099256	PRTFDC1	-1	1.60E-08	phosphoribosyl transferase domain containing 1
ENSG00000117697	NSL1	-1	6.82E-23	NSL1 component of MIS12 kinetochore complex
ENSG00000135372	NAT10	-1	2.54E-36	N-acetyltransferase 10
ENSG00000149743	TRPT1	-1	1.19E-07	tRNA phosphotransferase 1
ENSG00000181524	RPL24P4	-1	4.78E-15	RPL24 pseudogene 4
ENSG00000104728	ARHGEF10	-1	0.0182039	Rho guanine nucleotide exchange factor 10
ENSG00000077348	EXOSC5	-1	3.76E-11	exosome component 5
ENSG00000177225	GATD1	-1	3.23E-28	glutamine amidotransferase like class 1 domain containing 1
ENSG00000150764	DIXDC1	-1	5.37E-18	DIX domain containing 1
ENSG00000138646	HERC5	-1	5.27E-20	HECT and RLD domain containing E3 ubiquitin protein ligase 5
ENSG00000228305	PRELID1P6	-1	1.65E-11	PRELID1 pseudogene 6
ENSG00000153558	FBXL2	-1	0.0005704	F-box and leucine rich repeat protein 2
ENSG00000233849	-	-1	0.0013213	novel transcript
ENSG00000134291	TMEM106C	-1	3.84E-15	transmembrane protein 106C
ENSG00000197372	ZNF675	-1	1.95E-06	zinc finger protein 675
ENSG00000212907	MT-ND4L	-1	1.13E-18	mitochondrially encoded NADH:ubiquinone oxidoreductase core subunit 4L
ENSG00000182173	TSEN54	-1	7.87E-11	tRNA splicing endonuclease subunit 54
ENSG00000164687	FABP5	-1	1.84E-13	fatty acid binding protein 5
ENSG00000100028	SNRPD3	-1	2.73E-35	small nuclear ribonucleoprotein D3 polypeptide
ENSG00000215068	-	-1	0.0005682	novel transcript 2C antisense to ANXA2R
ENSG00000110200	ANAPC15	-1	6.53E-18	anaphase promoting complex subunit 15
ENSG00000164808	SPIDR	-1	1.14E-22	scaffold protein involved in DNA repair
ENSG00000152804	HHEX	-1	9.24E-21	hematopoietically expressed homeobox
ENSG00000286450	-	-1	1.51E-06	novel transcript
ENSG00000159685	CHCHD6	-1	2.01E-14	coiled-coil-helix-coiled-coil-helix domain containing 6
ENSG00000164818	DNAAF5	-1	6.21E-24	dynein axonemal assembly factor 5
ENSG00000196757	ZNF700	-1	5.03E-10	zinc finger protein 700
ENSG00000253540	FAM86HP	-1	0.0001258	family with sequence similarity 86 member H 2C pseudogene
ENSG00000125967	NECAB3	-1	8.54E-15	N-terminal EF-hand calcium binding protein 3

ENSG00000074201	CLNS1A	-1	9.33E-46	chloride nucleotide-sensitive channel 1A
ENSG00000101773	RBBP8	-1	1.84E-12	RB binding protein 8 2C endonuclease
ENSG00000174748	RPL15	-1	4.23E-17	ribosomal protein L15
ENSG00000124279	FASTKD3	-1	4.67E-20	FAST kinase domains 3
ENSG00000173349	SFT2D3	-1	5.90E-17	SFT2 domain containing 3
ENSG00000257242	LINC01619	-1	0.0184945	long intergenic non-protein coding RNA 1619
ENSG00000151743	AMN1	-1	2.90E-13	antagonist of mitotic exit network 1 homolog
ENSG00000225880	LINC00115	-1	0.0002668	long intergenic non-protein coding RNA 115
ENSG00000146263	MMS22L	-1	1.66E-14	MMS22 like 2C DNA repair protein
ENSG00000087338	GMCL1	-1	2.84E-17	germ cell-less 1 2C spermatogenesis associated
ENSG00000235978	-	-1	0.0286166	novel transcript 2C antisense to ITPR1
ENSG00000185000	DGAT1	-1	2.03E-19	diacylglycerol O-acyltransferase 1
ENSG00000125691	RPL23	-1	2.71E-18	ribosomal protein L23
ENSG00000171488	LRRC8C	-1	3.75E-16	leucine rich repeat containing 8 VRAC subunit C
ENSG00000117569	PTBP2	-1	2.90E-06	polypyrimidine tract binding protein 2
ENSG00000123213	NLN	-1	6.44E-30	neurolysin
ENSG00000184319	RPL23AP82	-1	2.52E-18	ribosomal protein L23a pseudogene 82
ENSG00000122507	BBS9	-1	3.91E-08	Bardet-Biedl syndrome 9
ENSG00000151835	SACS	-1	0.0038184	sacsin molecular chaperone
ENSG00000120800	UTP20	-1	1.09E-11	UTP20 small subunit processome component
ENSG00000197728	RPS26	-1	3.84E-21	ribosomal protein S26
ENSG00000155850	SLC26A2	-1	8.68E-10	solute carrier family 26 member 2
ENSG00000120334	CENPL	-1	8.60E-22	centromere protein L
ENSG00000128000	ZNF780B	-1	2.06E-05	zinc finger protein 780B
ENSG00000226360	RPL10AP6	-1	8.11E-05	ribosomal protein L10a pseudogene 6
ENSG00000278238	-	-1	0.0223961	novel transcript
ENSG00000111640	GAPDH	-1	1.17E-11	glyceraldehyde-3-phosphate dehydrogenase
ENSG00000130477	UNC13A	-1	2.41E-15	unc-13 homolog A
ENSG00000196502	SULT1A1	-1	2.43E-12	sulfotransferase family 1A member 1
ENSG00000197162	ZNF785	-1	1.61E-07	zinc finger protein 785
ENSG00000078070	MCCC1	-1	3.18E-20	methylcrotonoyl-CoA carboxylase 1
ENSG00000173156	RHOD	-1	8.19E-09	ras homolog family member D
ENSG00000004864	SLC25A13	-1	1.25E-39	solute carrier family 25 member 13
ENSG00000150672	DLG2	-1	0.0052167	discs large MAGUK scaffold protein 2
ENSG00000158292	GPR153	-1	1.30E-14	G protein-coupled receptor 153
ENSG00000103356	EARS2	-1	2.39E-35	glutamyl-tRNA synthetase 2 2C mitochondrial
ENSG00000189046	ALKBH2	-1	1.20E-09	alkB homolog 2 2C alpha-ketoglutarate dependent dioxygenase
ENSG00000101311	FERMT1	-1	4.35E-22	fermitin family member 1
ENSG00000242396	-	-1	0.0013626	novel transcript
ENSG00000112576	CCND3	-1	2.12E-09	cyclin D3
ENSG00000255521	-	-1	0.0189089	novel transcript
ENSG00000124608	AARS2	-1	1.23E-15	alanyl-tRNA synthetase 2 2C mitochondrial
ENSG00000142864	SERBP1	-1	8.78E-41	SERPINE1 mRNA binding protein 1
ENSG00000263620	-	-1	0.0164614	novel protein



**Figure 4:** The top 10 enriched GO terms in cells treated with IFN-ε and IFN-γ.

A. GO analysis results of the up-regulated DEGs.

B. GO analysis results of the down-regulated DEGs. Height of the bars: the number of DEGs that are enriched in corresponding GO terms.

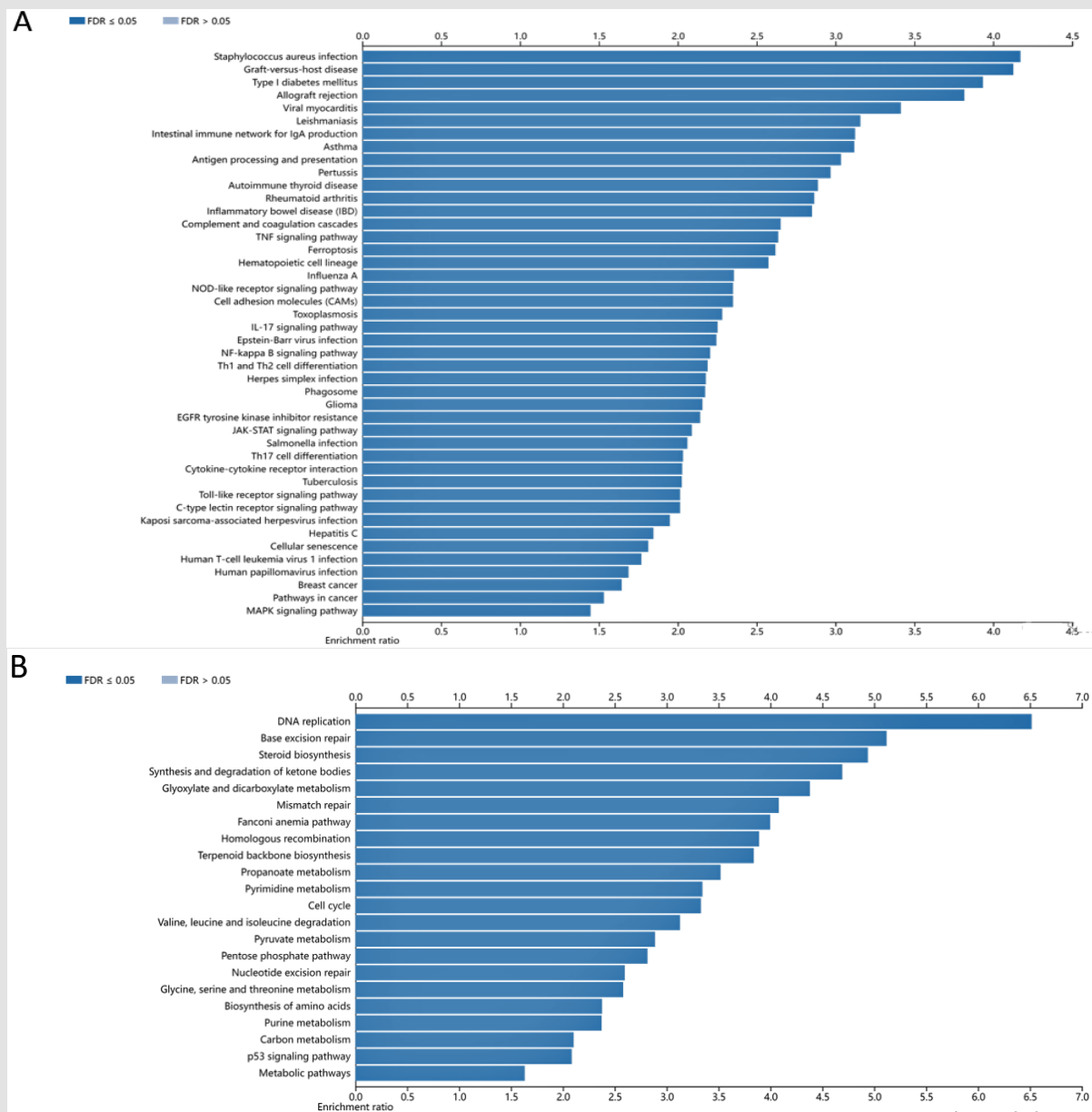
## Gene Ontology (GO) and KEGG Pathway Enrichment Analysis

To get better insights into the functions of the DEGs, we performed GO and KEGG pathway enrichment analyses. Our GO analysis of the upregulated DEGs showed that they were enriched in biological processes related to immune responses (389 genes) and were enriched in the inflammatory response (184 genes). The innate immune response, defense response, and immune effector process were among the most up-regulated GO categories, confirming the immune stimulation effects of IFN- $\epsilon$  and IFN- $\gamma$  on cervical cancer cells (Figure 4A). In comparison, the down-regulated genes were mostly enriched in biological processes related to the mitotic cell cycle, chromosome organization, DNA repair, and replication, implying that the treatment of combined interferons has an inhibitive effect on the malignant proliferation of cervical cancer cells (Figure 4B). For cellular components, the up-regulated genes were enriched in the plasma membrane, including the endoplasmic reticulum, Golgi apparatus, organelle sub-compartment, vesicle, and cell surface. Meanwhile, the downregulated DEGs were mainly enriched in the cytoskeleton, mitochondrion, envelope, and chromosome. The locations of DEGs were consistent with the biological functions mentioned above. Regarding

molecular functions, the up-regulated genes were mainly enriched in molecular function regulator, identical protein binding, regulatory region DNA binding, and receptor activity, participating in the signal transduction mediated by cytokines.

The downregulated DEGs were enriched in nucleotide binding, ribonucleotide binding, ATP binding, and cytoskeletal protein binding. Additionally, KEGG pathways analysis results of the up-regulated DEGs reveal the activation of multiple pathways associated with immune responses, including *Staphylococcus aureus* infection (29 genes), graft-versus-host disease (21 genes), Type I diabetes mellitus (21 genes), allograft rejection (18 genes) and viral infection-related pathways such as viral myocarditis, Influenza A, Epstein-Barr virus infection, Herpes simplex infection, Hepatitis C, and Human papilloma virus infection (Figure 5A). KEGG pathways of the downregulated DEGs are mostly related to cell cycle and cancer metabolism (Figure 5B). Twenty-five up-regulated DEGs were reported in the DNA replication pathway, and 18 up-regulated DEGs were enriched in the base excision repair pathway. Ten up-regulated DEGs were found in the steroid biosynthesis pathway. Detailed results of the KEGG analysis are shown in Figure 5 below.





**Figure 5:** KEGG pathway analysis of the DEGs in cells treated with interferon combination.

- A. Enriched KEGG pathways of the up-regulated genes.  
 B. Enriched KEGG pathways of the down-regulated genes.

## Discussion and Conclusion

In this study, a more potent anti-cancer effect was discovered in the group treated with IFN- $\epsilon$  and IFN- $\gamma$  combination than in the IFN- $\epsilon$  alone group and IFN- $\gamma$  alone group. This combination could reduce viability and inhibit the proliferation of HeLa S3 cells. The IFN- $\epsilon$  and IFN- $\gamma$  combination could also have significant morphological changes observed in HeLa S3 cells after 72h treatment. The combination of IFN- $\epsilon$  and IFN- $\gamma$  might be a possible medication for cervical cancer

based on *in vitro* results. It was worth carrying out future *in vivo* tests and developing a new therapy for cervical cancer. This result pointed out that the combination of two interferons could have more potent effects than a single interferon alone. The following research directions might exit more potential therapies by combining different interferons and other chemicals. Additionally, the IFN- $\epsilon$  and IFN- $\gamma$  combination might not only function on cervical cancer but also inhibit the development of other cancers, which deserves more studies in the future. Furthermore, we present the first study to explore the under-

lying mechanism of the combined IFN- $\epsilon$  and IFN- $\gamma$  in the cervical cancer cell line. We reported the identification of 6,265 DEGs in cancer cells treated with IFNs, including 3,363 up-regulated DEGs and 2,902 down-regulated DEGs. HLA-DRA, HLA-DRB1, and HLA-DQA1 were among the top up-regulated DEGs, which encode for major histocompatibility complex (MHC) class II proteins.

Consistent with our observations, the expression of MHC II molecules has been positively associated with levels of IFN- $\gamma$  through cell-type-specific CIITA gene transcription and the regulation of tumor-infiltrating lymphocytes (Axelrod [14]). In cervical adenocarcinoma, up-regulated HLA-DRA expression has been related to increased disease-free and disease-specific survival (Samuels, et al. [15]). It implies that HLA-DRA may represent a potential biomarker for predicting patients' response to immunotherapies but its exact role in cervical cancer needs further analysis due to the presence of contradictory results. Meanwhile, GBP1P1, GBP1, GBP5, and GBP4 from the Guanylate-binding proteins (GBPs) gene family were also significantly up-regulated. Previous research from Zhao, et al. [16] has reported a positive correlation between the expression level of GBP1 and immune cell infiltration in multiple tumor tissues. It implies that GBPs may play an important role in interferon-mediated antitumor immune responses in cervical cancer. Down-regulated DEGs represented by CA9, MAPK4, and AGR2 were mainly associated with the proliferation, differentiation, and migration of malignant cells (Guan, et al. [17-19]). Therefore, the combined IFN- $\epsilon$  and IFN- $\gamma$  treatment may inhibit the growth of the cervical cells by inhibiting the proliferation, differentiation, and migration of the malignant cells. GO and KEGG pathway enrichment analysis suggests that the up-regulated DEGs were mainly enriched in pathways related to immune and inflammatory responses.

Most of the DEGs are located on the cell surface and the plasma membrane, which is reasonable since the phosphorylation and activation of STATs at the plasma membrane is central to many of the biological processes mediated by IFNs (Platanias [20]). As expected, the classic JAK/STAT pathway and cytokine-cytokines receptor interactions were up-regulated in response to the combined IFN treatment. Additionally, the antigen processing and presentation process was among the most enriched pathways, with 15 genes encoding for MHC class I and class II molecules significantly upregulated. Previous research has associated type I IFNs and IFN- $\gamma$  exposure with antitumor M1 macrophage maturation and enhanced antigen presentation and migratory capabilities of dendritic cells inside the tumor microenvironment (TME) (Fenton [21]). Alternatively, IFNs have also been shown to induce MHC I expression in cancer cells, leading to increased antigenicity (Lorenzi, et al. [22]). It implies that antitumor

functions of IFN- $\epsilon$  and IFN- $\gamma$  may be achieved through the induction of immunity-related pathways or direct modulation of cancer cells. Interestingly, our data showed that many viral infection-related pathways including the human papillomavirus infection pathway were induced after the combined interferon treatment. This is consistent with the fact that interferons are known to exhibit antiviral activity (Samuel [23]). Moreover, HeLa cells have been shown to contain multiple human papillomavirus 18 (HPV-18) gene integration sites (Yu, et al. [24]).

The antiviral activity of the interferons may be important to inhibit or kill the HPV-18 in the cervical cell line. In other words, our combined interferon treatment is able to inhibit both HeLa S3 cancer cell growth and the virus since they have both anticancer and antiviral activities. The downregulated DEGs were mainly enriched in GO categories and KEGG pathways associated with the mitotic cell cycle, DNA replication, and cancer metabolism. A cluster of MCM genes, including MCM 2, 3, 4, 5, 6, and 7 were significantly downregulated in the DNA replication pathway. Elevated expression of minichromosome maintenance proteins (MCMs) has been observed in various malignancies, which contributes to tumor progression through the regulation of cell cycles (Wang, et al. [25]). Wu [26] reported a positive correlation between MCMs expression and the proliferation and differentiation of cervical cancer cells. It suggests that the combined IFN- $\epsilon$  and IFN- $\gamma$  treatment may play an important role in suppressing the replication of cervical cancer cells. Additionally, our analysis suggests the combined IFN treatment also led to a decrease in carbon metabolism and the biosynthesis of amino acids and steroids which fuel and support cancer cell proliferation. Recent studies suggest steroidogenesis mediated by type 2 T cells contributes to the formation of immunosuppressive TME (Mahata, et al. [27]). Inhibition of the corresponding pathway increases functional T cells, M1 macrophages and reduces M2 macrophages, providing an alternative approach for the development of cancer immunotherapies.

Overall, this study explored the underlying mechanisms of IFN- $\epsilon$  and IFN- $\gamma$  combination in cervical cancer. The results suggest that the antitumor properties of IFN- $\epsilon$  and IFN- $\gamma$  combination are conferred through both an up-regulation of immune and inflammatory responses and a negative regulation of cell cycle and cancer metabolism. It can be achieved through direct modulation of cancer cells or indirectly through components of the immune system. These results provide new insights into the complex molecular interactions and signaling pathways regulated by a combination of type I and II interferons, which may also contribute to the development of cancer immunotherapies.

## Author Contributions

X.T. and S.W.C. conceived this project. X.T., J.Z. and Y.D. contributed to the experiment design. Y.D., Y.F., M.X., J.Y. and J.Z. performed cell culture, cell viability assay, cell morphology examination. J.Z. and X.T. extracted RNA and performed RNA-sequencing data analysis. J.Z., Y.D., X.T., and S.W.C. contributed figures, tables and interpretations. J.Z. and X.T. performed most data analyses. J.Z. and X.T. wrote the manuscript. All authors proofread and approved the manuscript.

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## Competing Interests

No conflict of interest was declared.

## Data availability

The RNA sequencing data can be accessed at the National Center for Biotechnology Information (NCBI) Database (<https://www.ncbi.nlm.nih.gov/>) with the accession number for control group (SRX22856178, SRX22856179, SRX22856182, SRX22856183) and treatment group (SRX22856184, SRX22856185, SRX22856186, SRX22856187) in the article.

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