

DEG Analysis of Post-vs-Pre-Transplant biopsies in Kidney Transplantation

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Background

Introduction

Kidney transplantation is a critical therapeutic option for patients with end-stage renal disease. While it significantly improves the quality of life and survival rates, the success of kidney transplants can be hindered by various factors including acute rejection, chronic allograft nephropathy, and other post-transplant complications. Therefore, understanding the molecular mechanisms underlying these processes is essential for improving transplant outcomes.

Objective

This study aims to perform a differential gene expression analysis to identify key genes and pathways involved in the post-transplant response compared to the pre-transplant state. By analyzing publicly available datasets, we seek to uncover molecular signatures that could provide insights into the biological processes associated with kidney transplantation and potentially identify biomarkers for transplant success and rejection.

Datasets

GSE261240 (Pre-Transplant)

The GSE261240 dataset consists of gene expression profiles of kidney biopsy samples taken from patients before undergoing transplantation. This dataset serves as the baseline for our comparative analysis.

- **Source:** Gene Expression Omnibus (GEO)
- **Platform:** GPL24676 Illumina NovaSeq 6000 (Homo sapiens)
- **Number of Samples:** 136 samples (98 Immediate | 38 Delayed)
- **Sample Type:** Pre-transplant kidney biopsy (renal allograft back table biopsy)

GSE261892 (Post-Transplant)

The GSE261892 dataset includes gene expression profiles of kidney biopsy samples collected from patients after kidney transplantation. This dataset will be compared against the pre-transplant samples to identify differentially expressed genes.

- **Source:** Gene Expression Omnibus (GEO)
- **Platform:** GPL24676 Illumina NovaSeq 6000 (Homo sapiens)
- **Number of Samples:** 123 samples (88 No_Rejection | 35 Rejection)
- **Sample Type:** Post-transplant kidney biopsy (renal allograft biopsy)

```
## Load required packages
library(GEOquery)
library(DESeq2)
```

```

library(pheatmap)
library(ggplot2)
library(RColorBrewer)
library(biomart)
library(ggrepel)
library(clusterProfiler)
library(org.Hs.eg.db)
library(msigdbr)
library(fgsea)
library(stringr)
library(tibble)
library(dplyr)
invisible(library(tidyverse))
library(tidyr)
library(UpSetR)
library(ComplexHeatmap)
library(RColorBrewer)
library(circlize)

## Define Functions
filter_unique_columns <- function(df) {
  unique_value_columns <- sapply(df, function(col) length(unique(col)) > 1)
  filtered_df <- df[, unique_value_columns]
  return(filtered_df)
}

```

Methodology

Data Preprocessing

- Data Acquisition:** Download and load the raw data files and the associated metadata from the GEO database for both datasets.
- Metadata Processing:** Process the metadata to retain only the important information.
- Mapping gene symbols:** Using the biomart, map the ensembl gene ids to gene symbols (keep only the non-duplicated transcripts with proper gene symbols)
- Combine the datasets:** Combine the Pre- and Post-transplant datasets for combined analysis

```

## Load the GEO dataset
pre.counts <- read.csv(gzfile(file.path(getwd(),"data","GSE261240_raw_counts.csv.gz")), header = T, row.names = 1)
post.counts <- read.csv(gzfile(file.path(getwd(),"data","GSE261892_raw_counts.csv.gz")), header = T, row.names = 1)

## Load the metadata (After cleaning up the downloaded Series Matrix Files)
pre.metadata <- read.table(file.path(getwd(),"data","GSE261240_series_matrix.txt"), header = T, row.names = 1)
post.metadata <- read.table(file.path(getwd(),"data","GSE261892_series_matrix.txt"), header = T, row.names = 1)

## Pre-process the metadata
# Alter the rownames of metadata to match the colnames of counts data
rownames(pre.metadata) <- sapply(rownames(pre.metadata),
                                 function(x){return(str_replace(x,"Renal Allograft Biopsy_",""))})
rownames(post.metadata) <- sapply(post.metadata$Sample_description,
                                 function(x){return(str_replace(x,"processed data column: ",""))})

```

```

## Sanity checks for gene names and metadata
all.equal(rownames(pre.counts), rownames(post.counts))
all.equal(rownames(pre.metadata), colnames(pre.counts))
all.equal(rownames(post.metadata), colnames(post.counts))

pre.metadata2 <- filter_unique_columns(pre.metadata)
post.metadata2 <- filter_unique_columns(post.metadata)

## Pre-process the data
# # Use biomaRt to map Ensembl gene IDs to gene symbols and transcript IDs
# mart <- useDataset("hsapiens_gene_ensembl", useMart("ensembl"))
#
# # Get the mapping of Ensembl IDs to gene symbols and transcript IDs
genes <- rownames(pre.counts)
# gene_mapping <- getBM(
#   filters = "ensembl_gene_id",
#   attributes = c("ensembl_gene_id", "hgnc_symbol"),
#   values = genes,
#   mart = mart,
#   verbose = TRUE
# )

# To save time, I read-in the pre-loaded gene mapping
gene_mapping <- readRDS(file.path(getwd(), "data", "gene_mapping.rds"))

# Merge the counts data with the mapping data
pre.counts2 <- merge(data.frame(ensembl_gene_id = genes, pre.counts),
                      gene_mapping,
                      by = "ensembl_gene_id")
post.counts2 <- merge(data.frame(ensembl_gene_id = genes, post.counts),
                      gene_mapping,
                      by = "ensembl_gene_id")

# Ensure there are no duplicates in gene symbols or transcript IDs
# Here we keep only the first occurrence for simplicity; we might also think about keeping only the Ref
pre.counts3 <- pre.counts2[!duplicated(pre.counts2$hgnc_symbol), ] %>%
  `rownames<-` (NULL) %>%
  column_to_rownames("hgnc_symbol")
post.counts3 <- post.counts2[!duplicated(post.counts2$hgnc_symbol), ] %>%
  `rownames<-` (NULL) %>%
  column_to_rownames("hgnc_symbol")

# Drop the extra columns used for mapping
pre.counts3$ensembl_gene_id <- NULL
post.counts3$ensembl_gene_id <- NULL

## Combine the datasets
# Add the Pre_ and Post_ labels to the patient numbers to avoid confusion
colnames(pre.counts3) <- paste0("Pre_", colnames(pre.counts3))
colnames(post.counts3) <- paste0("Post_", colnames(post.counts3))
rownames(pre.metadata2) <- paste0("Pre_", rownames(pre.metadata2))
rownames(post.metadata2) <- paste0("Post_", rownames(post.metadata2))

```

```

# Clean the condition and treatment labels for the pre- and post- transplant samples
temp1 <- data.frame(GEO_accession = pre.metadata2$Sample_geo_accession,
                     condition = sapply(pre.metadata2$Sample_characteristics_ch1.3, function(x) {return(s
temp1$treatment <- "Pre_transplant"
rownames(temp1) <- rownames(pre.metadata2)

temp2 <- data.frame(GEO_accession = post.metadata2$Sample_geo_accession,
                     condition = sapply(post.metadata2$Sample_characteristics_ch1.1, function(x) {return(
temp2$treatment <- "Post_transplant"
rownames(temp2) <- rownames(post.metadata2)

# Combine the datasets along with the metadata
comb.data <- list(counts = cbind(pre.counts3, post.counts3),
                  meta = rbind(temp1, temp2))

# Redefine the conditions
comb.data$meta$condition <- recode_factor(comb.data$meta$condition,
                                             'Immediate' = 'Immediate',
                                             'Delayed' = 'Delayed',
                                             'Nill' = 'No_Rejection',
                                             'Rej' = 'Rejection',
                                             .ordered = F)
comb.data$meta$treatment <- factor(comb.data$meta$treatment, levels = c("Pre_transplant", "Post_transpla

# Sample Check
all(rownames(pre.metadata) %in% colnames(pre.counts3))
all(colnames(pre.counts3) %in% rownames(pre.metadata))

## Create a DESeq2 dataset object
dds <- DESeqDataSetFromMatrix(countData = comb.data$counts,
                               colData = comb.data$meta,
                               design = ~ treatment)

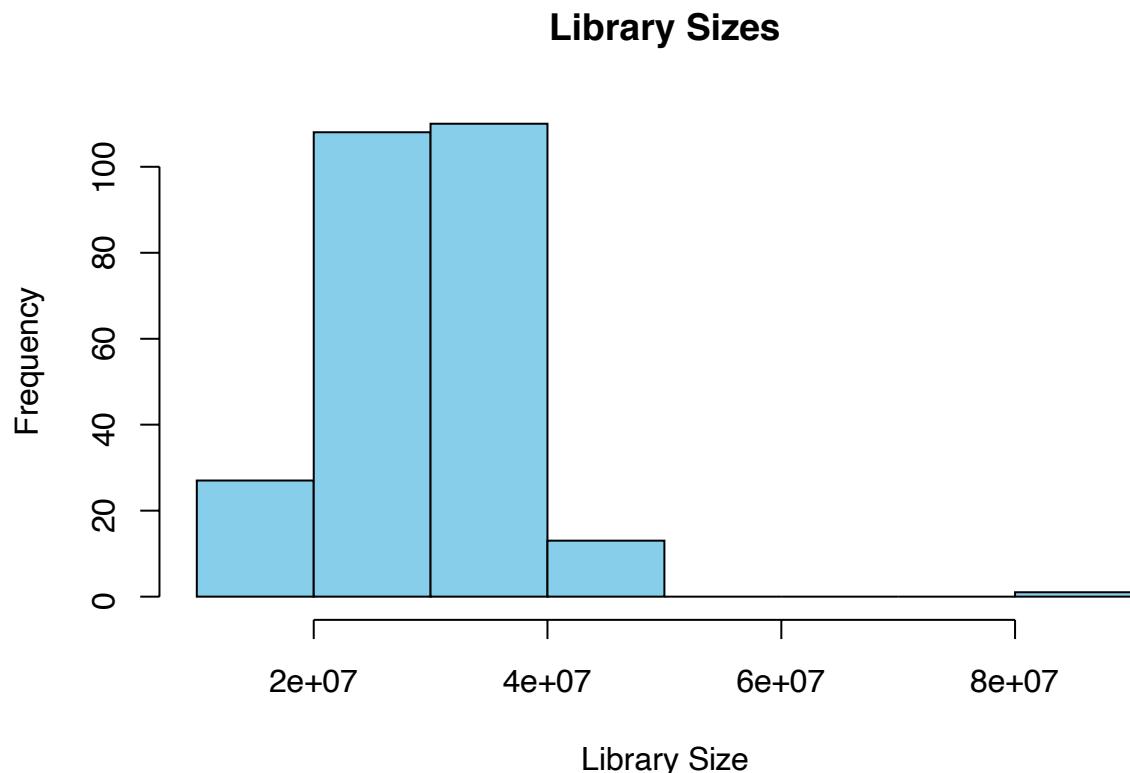
```

Exploratory Data Analysis

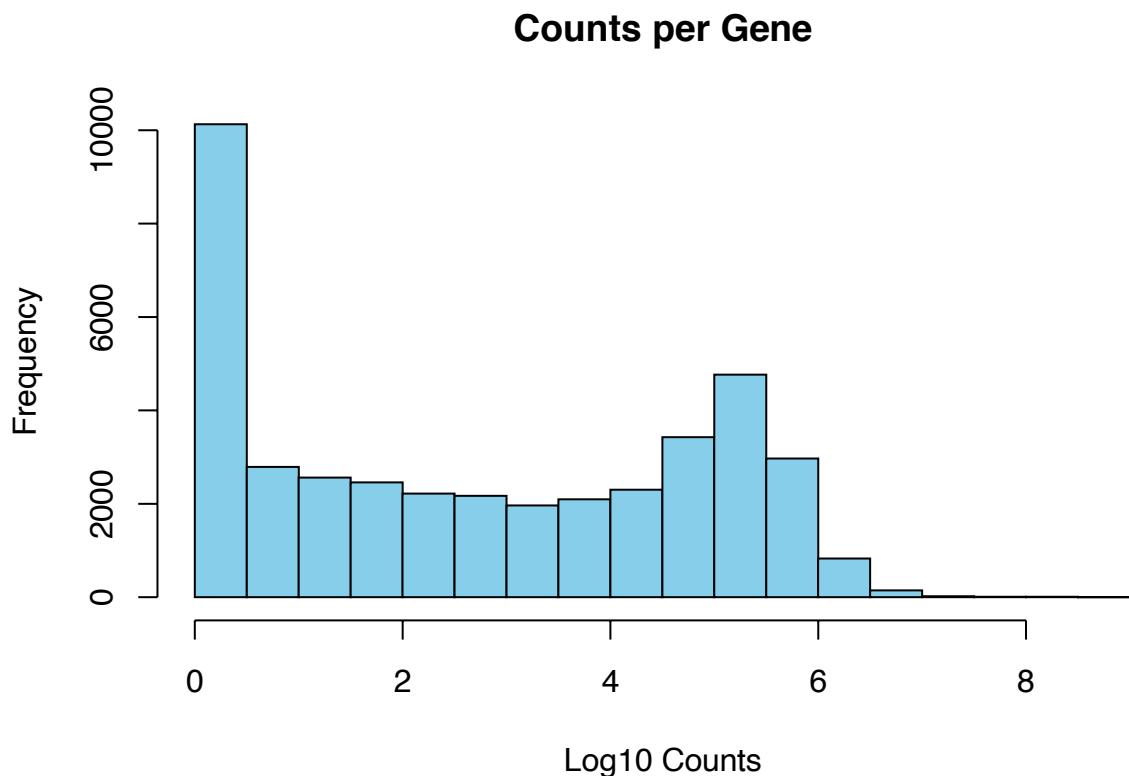
- 1. Library Size Distribution:** The library size distribution provides insight into the sequencing depth across samples. This is important to ensure that each sample has sufficient reads for accurate quantification and to identify any significant discrepancies in sequencing depth, which could indicate potential issues with sample preparation or sequencing quality.
- 2. Counts per Gene Distribution:** Examining the distribution of counts per gene helps identify genes that are consistently expressed across samples versus those that are rarely expressed. This step is crucial for understanding the overall expression landscape and for filtering out lowly expressed genes that might introduce noise into the analysis.
- 3. Sample-to-Sample Distance Heatmap:** A sample-to-sample distance heatmap visualizes the similarities and differences between samples based on their gene expression profiles. This is important for identifying outliers, batch effects, and potential technical or biological variations that could impact the analysis.
- 4. Principal Component Analysis (PCA):** PCA is a dimensionality reduction technique that helps to visualize the variation in the data by projecting it onto a few principal components. The PCA plot provides a quick overview of the data structure, highlighting clustering patterns, group separations, and potential outliers.

5. **Top Variable Genes:** A heatmap of the top variable genes highlights the most variably expressed genes across samples. This visualization is important for identifying key genes that contribute to the differences between conditions and for providing a focused view of the most biologically significant changes in the dataset.

```
## Exploratory Data Analysis (EDA)
# 1. Library size distribution
librarySizes <- colSums(comb.data$counts)
hist(librarySizes, main = "Library Sizes", xlab = "Library Size", ylab = "Frequency", col = "skyblue")
```

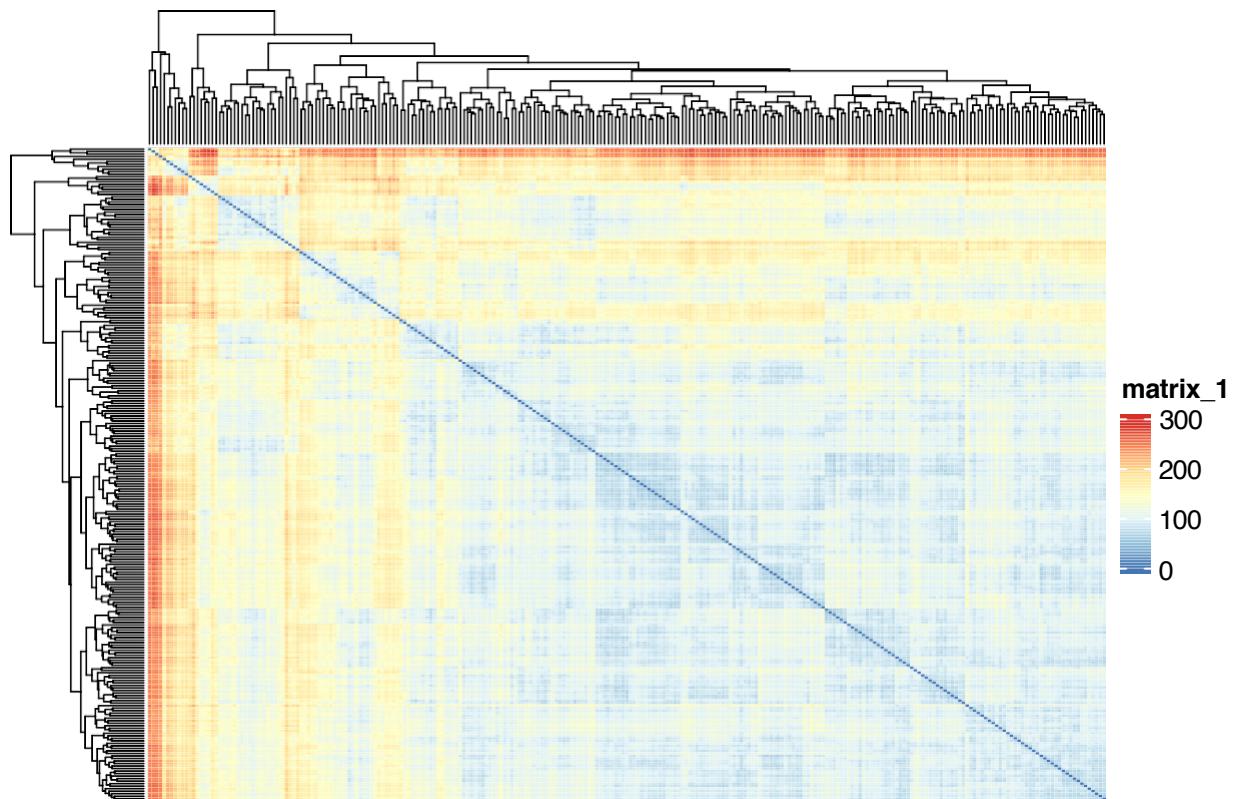


```
# 2. Counts per gene distribution
geneCounts <- rowSums(comb.data$counts)
hist(log10(geneCounts + 1), main = "Counts per Gene", xlab = "Log10 Counts", ylab = "Frequency", col =
```



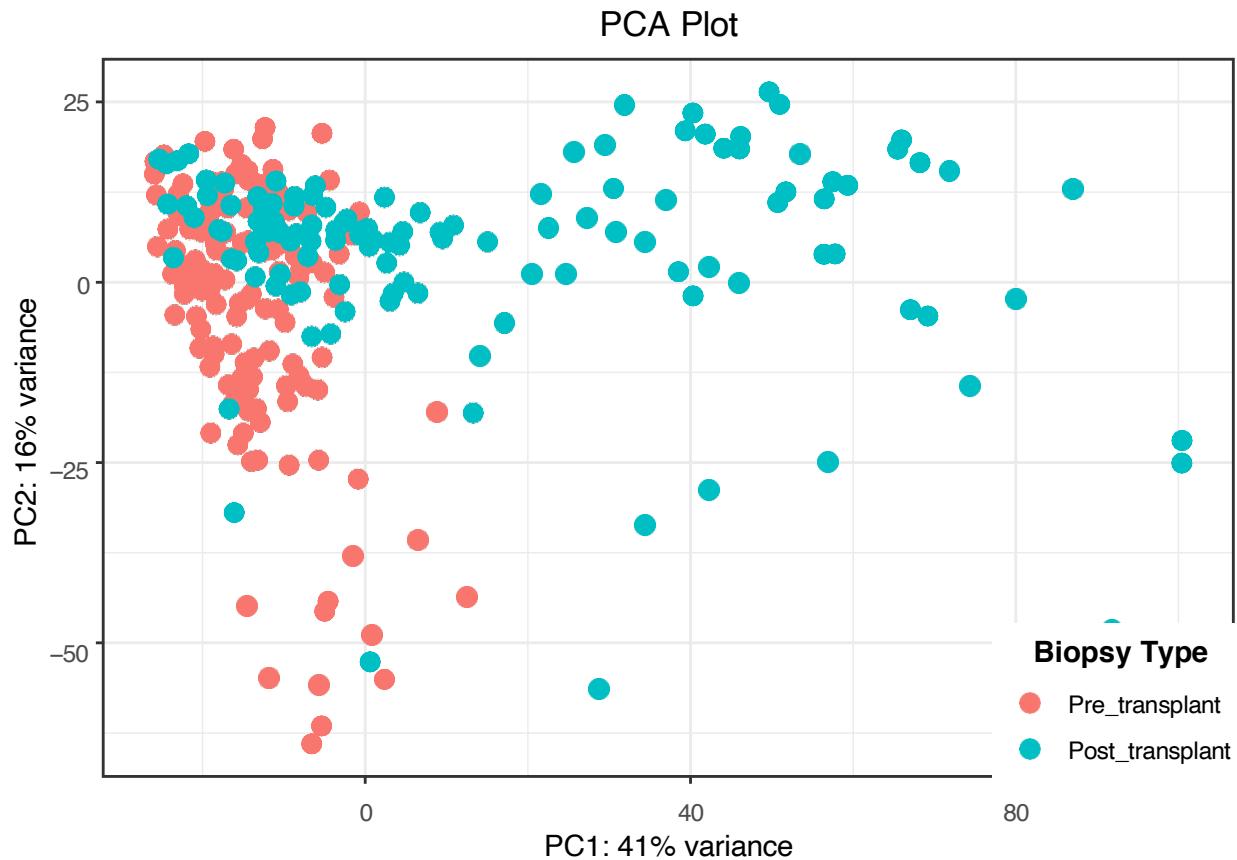
```
# 3. Sample-to-sample distance heatmap
rld <- vst(dds, blind = TRUE)  ## Use rlog if N < 50.
sampleDists <- dist(t(assay(rld)))
sampleDistMatrix <- as.matrix(sampleDists)
rownames(sampleDistMatrix) <- colnames(dds)
colnames(sampleDistMatrix) <- colnames(dds)
pheatmap(sampleDistMatrix, clustering_distance_rows = sampleDists, clustering_distance_cols = sampleDis
```

Sample-to-Sample Distances



```
# 4. PCA plot
pcaData <- plotPCA(rld, intgroup = "treatment", returnData = TRUE)
percentVar <- round(100 * attr(pcaData, "percentVar"))
pcaData <- unique(left_join(pcaData, comb.data$meta[,c("condition","treatment")], by = "treatment"))

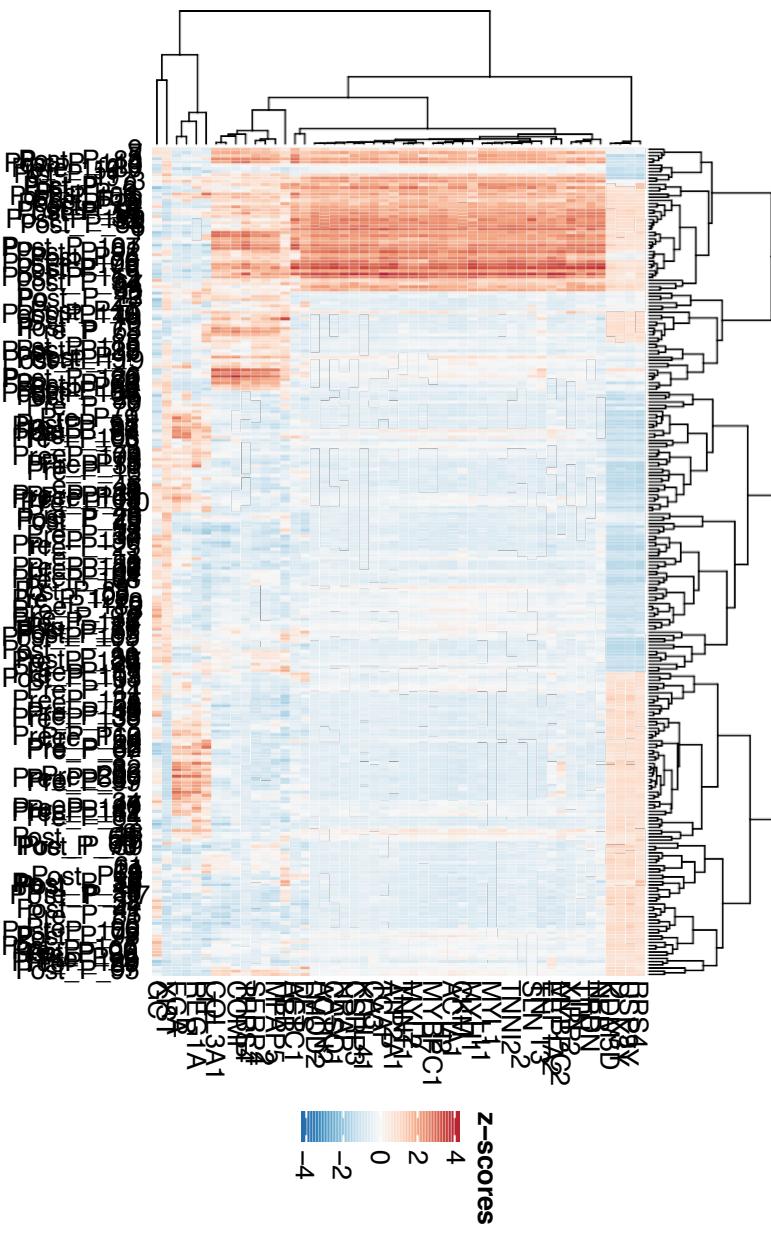
ggplot(pcaData, aes(PC1, PC2, color = treatment)) +
  geom_point(size = 3) +
  labs(title = "PCA Plot", color = "Biopsy Type",
       x = paste0("PC1: ", percentVar[1], "% variance"),
       y = paste0("PC2: ", percentVar[2], "% variance")) +
  theme_bw() +
  theme(plot.title = element_text(hjust = 0.5),
        legend.position = "inside",
        legend.position.inside = c(0.9,0.1),
        legend.box.background = element_rect(fill = "white", colour = "black"),
        legend.title = element_text(face = "bold", hjust = 0.5))
```



The PCA plot shows that many of the pre-transplant and post-transplant samples are close to each other indicating similarity in their gene expression profile. However, there are a few samples that seem to separate from the majority of samples, especially post-transplant samples on PC1 and pre-transplant samples on PC2. A pathway enrichment of PC1 loadings and PC2 loadings might indicate the source of these separations (Analysis to be followed).

```
# 5. Heatmap of the top 50 variable genes
topVarGenes <- head(order(rowVars(assay(rld), useNames = TRUE), decreasing = TRUE), 50, useNames = FALSE)
mat <- assay(rld)[topVarGenes, ]
mat <- mat - rowMeans(mat)
pheatmap(mat, scale = "row", name = "z-scores", show_rownames = TRUE, clustering_distance_rows = "corre
```

Heatmap of Top Variable Genes



The heatmap of the top variable genes clearly shows that the primary source of variation is not explicitly associated with the post-vs-pre transplant gene expression.

Differential Expression Analysis (EDA)

Identifying differentially expressed genes (DEGs) is a critical step in understanding the molecular differences between post-transplant and pre-transplant kidney tissues. DEGs provide insights into the genes and pathways that are actively regulated in response to biological stimuli or conditions. This information can:

- Reveal the underlying biological mechanisms and processes.
- Identify potential biomarkers for diagnosis, prognosis, or treatment response.
- Highlight therapeutic targets for drug development.

DESeq2 is a widely used tool for differential gene expression analysis that offers several advantages:

- **Normalization:** DESeq2 uses a robust method to normalize read counts, accounting for differences in sequencing depth and RNA composition across samples.
- **Statistical Modeling:** It employs a generalized linear model to estimate the variance-mean dependence in count data and tests for differential expression using the Wald test or likelihood ratio test.

```
# Normalize the data and perform QC using DESeq2 functions
if(file.exists("Kidney_Transplant_DESeq_Object.rds")){
  dds <- readRDS("Kidney_Transplant_DESeq_Object.rds")
} else{
  set.seed(123)
  dds <- DESeq(dds)
  saveRDS(dds, "Kidney_Transplant_DESeq_Object.rds")
}
normalized_counts <- counts(dds, normalized = TRUE)
# head(normalized_counts)

# results
res <- results(dds, contrast = c("treatment", "Post_transplant", "Pre_transplant"))
res_df <- as.data.frame(res) %>% arrange(padj)

## Save the normalized counts to a CSV file
# write.csv(normalized_counts, file = "normalized_counts.csv")

# Add a color label for volcano plot
res_df$col.label <- "n.s."
res_df$col.label[res_df$padj < 0.05 & abs(res_df$log2FoldChange) < 1] <- "small FC"
res_df$col.label[res_df$padj < 0.05 & res_df$log2FoldChange < -1] <- "downregulated"
res_df$col.label[res_df$padj < 0.05 & res_df$log2FoldChange > 1] <- "upregulated"

res_df$col.label <- factor(res_df$col.label,
                            levels = c("n.s.", "small FC", "downregulated", "upregulated"),
                            ordered = T)

res_df$gene <- rownames(res_df)

## Identify the top genes to label on the volcano plot
top_upregulated <- res_df %>%
  filter(padj < 0.05) %>%
  arrange(desc(log2FoldChange)) %>%
  head(10) %>%
  pull(gene)

top_downregulated <- res_df %>%
  filter(padj < 0.05) %>%
```

```

arrange(log2FoldChange) %>%
head(10) %>%
pull(gene)

top_significant <- res_df %>%
arrange(padj) %>%
head(10) %>%
pull(gene)

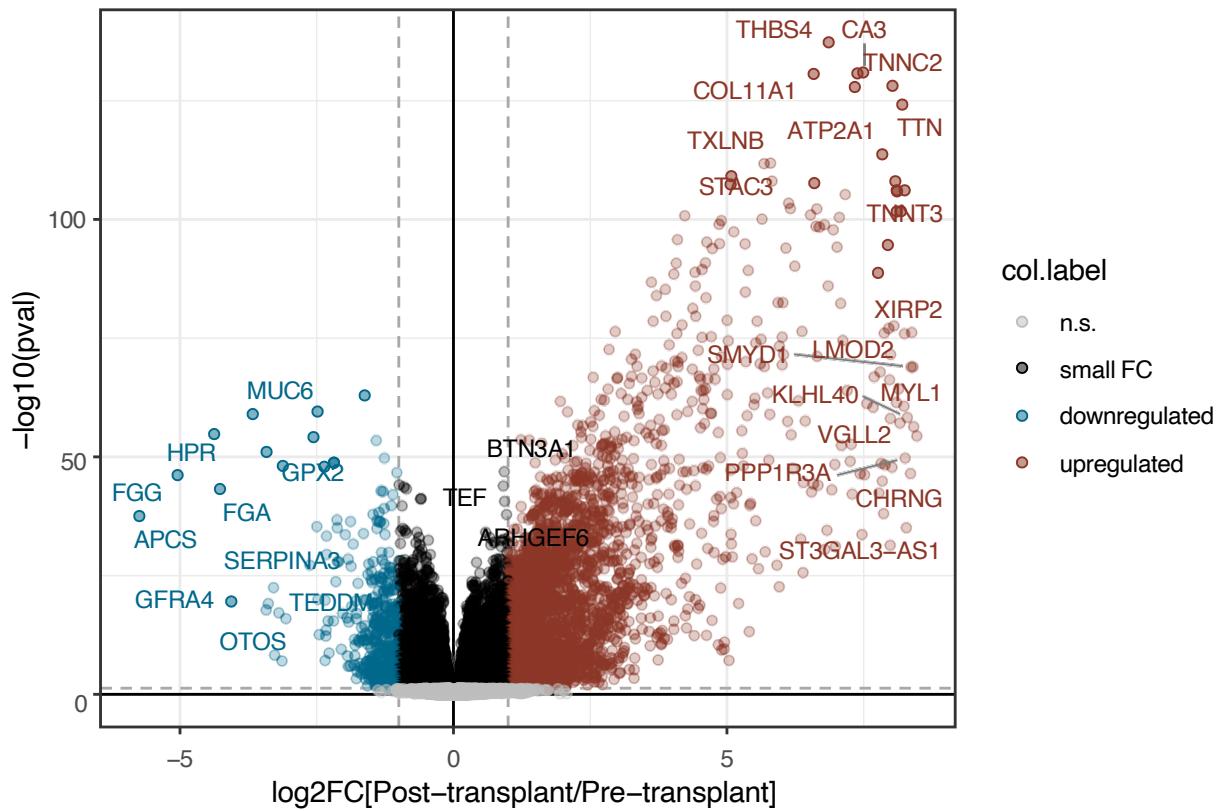
top_smallFC <- res_df %>%
filter(abs(log2FoldChange) < 1) %>%
arrange(padj) %>%
head(10) %>%
pull(gene)

genes_to_show <- c(top_upregulated, top_downregulated,
top_significant, top_smallFC)

# Volcano Plot
ggplot(res_df) +
aes(x = log2FoldChange, y = -log10(padj), col = col.label, label = gene) +
geom_hline(yintercept = -log10(0.05), lty = 2, col = "darkgray") +
geom_vline(xintercept = c(-1,1), lty = 2, col = "darkgray") +
geom_hline(yintercept = 0, lty = 1, col = "black") +
geom_vline(xintercept = 0, lty = 1, col = "black") +
geom_point(alpha = 0.5) +
scale_color_manual(values = c("gray","black","deepskyblue4","tomato4")) +
geom_text_repel(data = res_df %>% filter(gene %in% genes_to_show),
size = 3,
box.padding = 0.3,
point.padding = 0.3,
segment.color = 'grey50', show.legend = F) +
labs(x = "log2FC[Post-transplant/Pre-transplant]", y = "-log10(pval)",
title = "Volcano Plot of Differentially Expressed Genes") +
theme_bw() +
theme(plot.title = element_text(hjust = 0.5))

```

Volcano Plot of Differentially Expressed Genes



```
# res_df
```

The volcano plot shows that a majority of the genes are upregulated ($N = 2357$, red), while a few genes were downregulated ($N = 375$, blue). These upregulated and downregulated genes showed atleast a two-fold change in expression post-transplantation. An even higher number of genes showed significant change in gene expression, but that change was less than two-fold post-transplantation ($N = 9175$, black). Most of the genes, though, did not show a significant change in expression ($N = 28935$, gray). The clear dominance of upregulated genes here indicate an active biological response to the transplantation, most likely involving various processes such as tissue repair, immune response, and adaptation to the new environment or even stress response. A pathway enrichment analysis might indicate the enrichment of specific pathways among the differentially expressed genes.

Pathway Enrichment Analysis

While identifying differentially expressed genes (DEGs) provides valuable insights into specific genes involved in biological processes, it is equally important to understand how these genes function together within pathways. Pathway enrichment analysis helps to:

- **Contextualize DEGs:** It provides a broader biological context by linking DEGs to known biological pathways and processes.
- **Identify Key Biological Processes:** Highlighting enriched pathways helps identify key processes that are affected by the condition or treatment under study.
- **Uncover Mechanisms:** Understanding the pathways involved can reveal underlying mechanisms and interactions that contribute to the observed phenotype or condition.
- **Prioritize Targets:** Enriched pathways can guide the prioritization of potential therapeutic targets and biomarkers.

Hallmark Pathways Hallmark pathways are a collection of curated gene sets that represent well-defined biological states or processes. They reduce the complexity of the data and improve interpretability by focusing on core biological processes. This curated set is particularly useful for pathway analysis as it provides a comprehensive overview of critical cellular functions and processes.

Gene Set Enrichment Analysis (GSEA) using fgsea Gene Set Enrichment Analysis (GSEA) is a powerful method that considers the entire ranked list of genes, rather than focusing only on DEGs. This approach allows for the detection of subtle but coordinated changes in gene expression within pathways. The `fgsea` package in R implements an efficient algorithm for GSEA, enabling the analysis of large gene sets quickly and accurately.

Here is a list of the top 15 hallmark pathways by NES:

```
# Pathway enrichment analysis using clusterProfiler and Hallmark pathways
msigdb_hallmark <- msigdbr(species = "Homo sapiens", category = "H")
hallmark_genes <- split(msigdb_hallmark$entrez_gene, msigdb_hallmark$gs_name)

# Convert the list to a data frame
hallmark_df <- hallmark_genes %>%
  enframe(name = "pathway", value = "genes") %>%
  unnest(cols = c(genes))

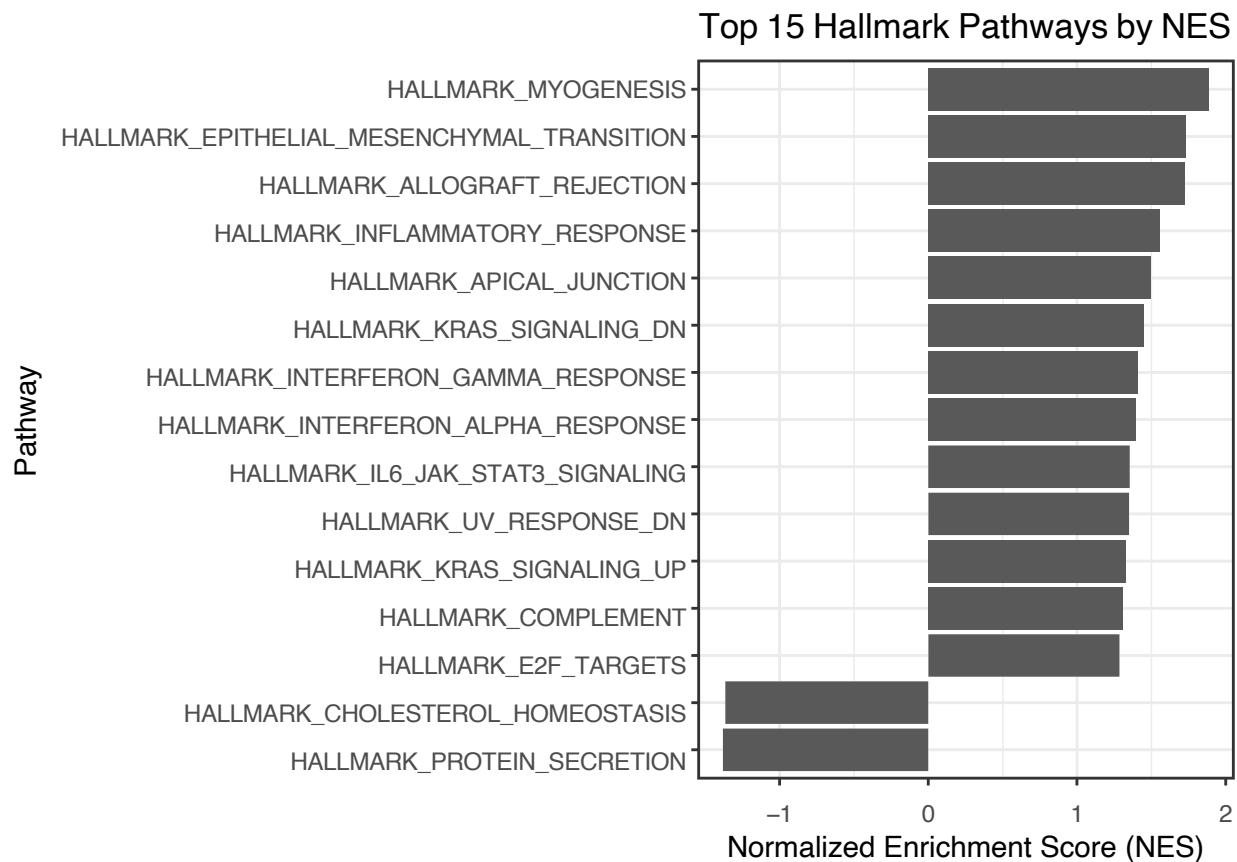
# Convert gene symbols to Entrez IDs
genes <- rownames(res_df)
entrez_ids <- mapIds(org.Hs.eg.db, keys=genes, column="ENTREZID", keytype="SYMBOL", multiVals="first")
res_df$ENTREZID <- entrez_ids

# Over-representation analysis
de_genes <- res_df[res_df$padj < 0.05 & abs(res_df$log2FoldChange) > 1, "ENTREZID"]
de_genes <- de_genes[!is.na(de_genes)] # Remove any NA values
de_genes <- unique(de_genes) # Remove duplicates

enriched <- enricher(as.numeric(de_genes), TERM2GENE = hallmark_df)
enrich_results <- as.data.frame(enriched)
# write.csv(enrich_results, "Enrichment_results_counts.csv")

# GSEA using fgsea
ranked_genes <- res_df$log2FoldChange
names(ranked_genes) <- res_df$ENTREZID
ranked_genes <- ranked_genes[!is.na(names(ranked_genes))]
ranked_genes <- sort(ranked_genes, decreasing = T)
fgsea_results <- fgsea(pathways = hallmark_genes, stats = ranked_genes, minSize = 5, maxSize = 500)
fgsea_results <- fgsea_results[order(fgsea_results$pval), ]
# write.csv(fgsea_results, "GSEA_results_counts.csv")

# Plot top pathways from GSEA
top_pathways <- fgsea_results[1:15, ]
ggplot(top_pathways, aes(reorder(pathway, NES), NES)) +
  geom_bar(stat="identity") +
  coord_flip() +
  labs(title="Top 15 Hallmark Pathways by NES", x="Pathway", y="Normalized Enrichment Score (NES)") +
  theme_bw()
```



Here is a list of the NES and adjusted p-values for all the pathways using GSEA (fgsea):

```

fgsea_results[,c("pathway", "NES", "padj")]

```

	pathway	NES	padj
	<char>	<num>	<num>
## 1:	HALLMARK_MYOGENESIS	1.8875277	1.904361e-24
## 2:	HALLMARK_EPITHELIAL_MESENCHYMAL_TRANSITION	1.7289497	1.708981e-13
## 3:	HALLMARK_ALLOGRAFT_REJECTION	1.7266977	1.708981e-13
## 4:	HALLMARK_INFLAMMATORY_RESPONSE	1.5544556	1.862720e-06
## 5:	HALLMARK_APICAL_JUNCTION	1.4939328	4.820976e-05
## 6:	HALLMARK_KRAS_SIGNALING_DN	1.4497531	4.656972e-04
## 7:	HALLMARK_INTERFERON_GAMMA_RESPONSE	1.4073561	1.472129e-03
## 8:	HALLMARK_KRAS_SIGNALING_UP	1.3288374	2.213209e-02
## 9:	HALLMARK_INTERFERON_ALPHA_RESPONSE	1.3957292	3.278105e-02
## 10:	HALLMARK_COMPLEMENT	1.3078107	3.415561e-02
## 11:	HALLMARK_UV_RESPONSE_DN	1.3492010	3.707063e-02
## 12:	HALLMARK_E2F_TARGETS	1.2849259	5.061789e-02
## 13:	HALLMARK_PROTEIN_SECRETION	-1.3810214	5.421203e-02
## 14:	HALLMARK_CHOLESTEROL_HOMEOSTASIS	-1.3649124	6.429542e-02
## 15:	HALLMARK_IL6_JAK_STAT3_SIGNALING	1.3551912	9.199179e-02
## 16:	HALLMARK_IL2_STAT5_SIGNALING	1.2547559	1.051051e-01
## 17:	HALLMARK_G2M_CHECKPOINT	1.2442068	1.130542e-01
## 18:	HALLMARK_ANGIOGENESIS	1.3995147	1.264241e-01
## 19:	HALLMARK_ANDROGEN_RESPONSE	-1.0954429	3.773709e-01
## 20:	HALLMARK_PANCREAS_BETA_CELLS	-1.1285141	3.941374e-01
## 21:	HALLMARK_COAGULATION	1.1266051	5.255307e-01
## 22:	HALLMARK_HEDGEHOG_SIGNALING	1.1681642	5.917611e-01
## 23:	HALLMARK_SPERMATOGENESIS	1.1029288	6.079944e-01
## 24:	HALLMARK_HYPOXIA	1.0750101	6.206206e-01
## 25:	HALLMARK_APOPTOSIS	1.0725415	6.547643e-01
## 26:	HALLMARK_MITOTIC_SPINDLE	1.0515503	6.794742e-01
## 27:	HALLMARK_PI3K_AKT_MTOR_SIGNALING	1.0713848	6.794742e-01
## 28:	HALLMARK_APICAL_SURFACE	1.0124043	7.957560e-01
## 29:	HALLMARK_NOTCH_SIGNALING	-0.9821126	7.957560e-01
## 30:	HALLMARKADIPOGENESIS	1.0000055	8.440440e-01
## 31:	HALLMARK_GLYCOLYSIS	0.9679557	9.361620e-01
## 32:	HALLMARKHEME_METABOLISM	0.9421009	9.989990e-01
## 33:	HALLMARK_UNFOLDED_PROTEIN_RESPONSE	-0.7898074	9.989990e-01
## 34:	HALLMARK_P53_PATHWAY	0.9222615	9.989990e-01
## 35:	HALLMARK_WNT_BETA_CATENIN_SIGNALING	0.8195922	9.989990e-01
## 36:	HALLMARK_PEROXISOME	0.8357999	9.989990e-01
## 37:	HALLMARK_REACTIVE_OXYGEN_SPECIES_PATHWAY	0.7785198	9.989990e-01
## 38:	HALLMARK_TNFA_SIGNALING_VIA_NFKB	0.8327543	9.989990e-01
## 39:	HALLMARK_TGF_BETA_SIGNALING	0.6892410	9.989990e-01
## 40:	HALLMARK_ESTROGEN_RESPONSE_LATE	0.8068628	9.989990e-01
## 41:	HALLMARK_FATTY_ACID_METABOLISM	0.7841738	9.989990e-01
## 42:	HALLMARK_UV_RESPONSE_UP	0.7722021	9.989990e-01
## 43:	HALLMARKBILE_ACID_METABOLISM	0.7076595	9.989990e-01
## 44:	HALLMARKDNA_REPAIR	0.7329056	9.989990e-01
## 45:	HALLMARKMYC_TARGETS_V2	0.5649339	9.989990e-01
## 46:	HALLMARK_XENOBIOTIC_METABOLISM	0.6772613	9.989990e-01
## 47:	HALLMARK_MTORC1_SIGNALING	0.6016453	9.989990e-01
## 48:	HALLMARKMYC_TARGETS_V1	0.5305301	9.989990e-01
## 49:	HALLMARKESTROGEN_RESPONSE_EARLY	NA	NA
## 50:	HALLMARK_OXIDATIVE_PHOSPHORYLATION	NA	NA

pathway NES padj

Looking at the top 5 enriched pathways, there is a concern that the genes involved in Inflammatory Response and Allograft Rejection could be the same. Similarly, genes involved in Myogenesis and EMT might be the same. So, we can look at the shared DEGs between these enriched pathways using an Upset Plot:

```
# Select specific Hallmark pathways for the analysis
selected_pathways <- c("HALLMARK_MYOGENESIS", "HALLMARK_EPITHELIAL_MESENCHYMAL_TRANSITION",
                      "HALLMARK_ALLOGRAFT_REJECTION", "HALLMARK_INFLAMMATORY_RESPONSE", "HALLMARK_APICAL_JUNCTION")

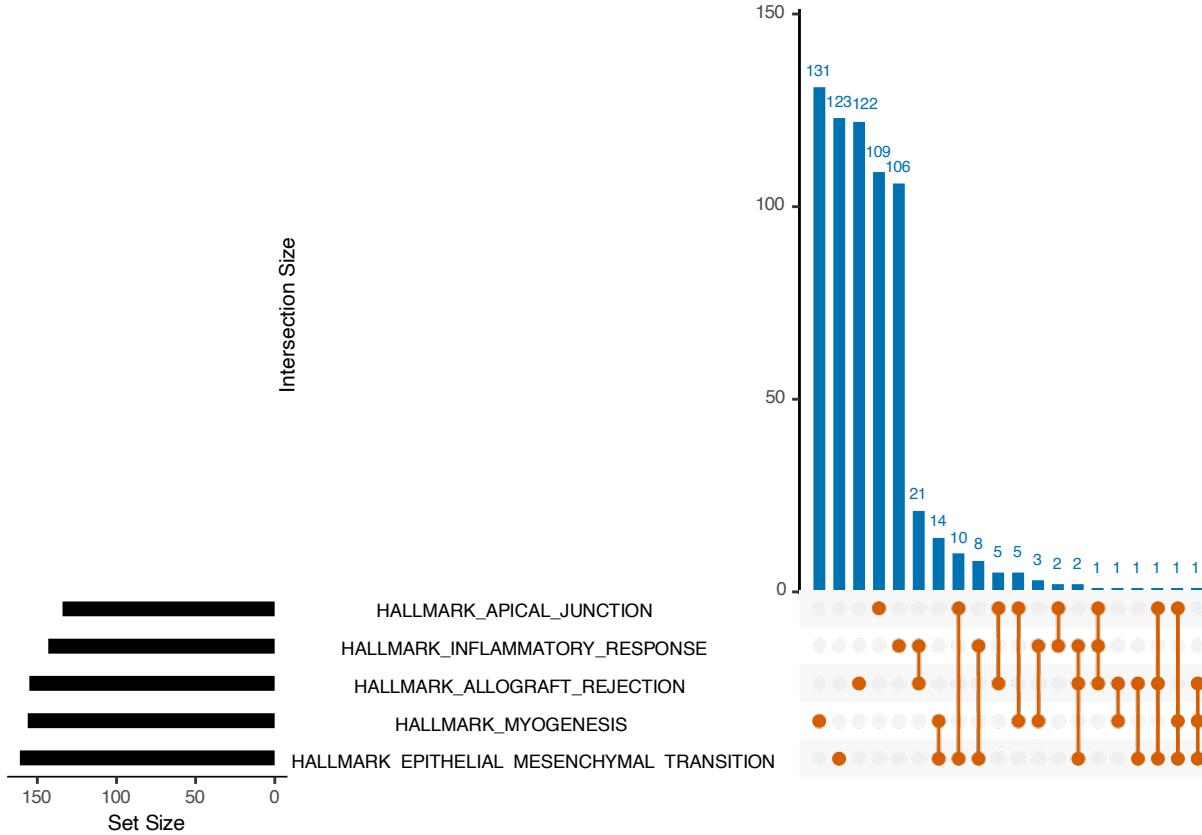
# Filter the Hallmark pathways to include only the selected ones
filtered_pathways <- hallmark_genes[selected_pathways]

# Create a binary matrix indicating the presence or absence of genes in each pathway
gene_list <- intersect(unique(unlist(filtered_pathways)), res_df$ENTREZID[res_df$padj < 0.05])
binary_matrix <- sapply(filtered_pathways, function(pathway) gene_list %in% pathway)
colnames(binary_matrix) <- selected_pathways
binary_matrix <- data.frame(as.matrix(binary_matrix))

binary_matrix <- binary_matrix %>%
  mutate(across(everything(), as.integer))

binary_matrix$Gene <- gene_list

# Generate the UpSet plot
upset(binary_matrix, sets = selected_pathways, sets.bar.color = "black", order.by = "freq",
      main.bar.color = "#0072B2", matrix.color = "#D55E00", text.scale = 1)
```



Now that we know that majority of the genes are not shared between these pathways, let's take a look at the heatmap of the gene expression for the genes in these 5 pathways, annotated by the pathways name across rows, and the condition and treatment across the columns:

```

gene_list2 <- intersect(unique(unlist(filtered_pathways)),
                        res_df$ENTREZID[res_df$padj < 0.05 & abs(res_df$log2FoldChange) > 1])
expr_data_subset <- normalized_counts[rownames(normalized_counts) %in% res_df$gene[res_df$ENTREZID %in%]

rowAnnot_df <- data.frame(gene = rownames(expr_data_subset))
rowAnnot_df$pathway <- NA
rowAnnot_df$pathway[rowAnnot_df$gene %in% res_df$gene[res_df$ENTREZID %in% hallmark_genes$HALLMARK_MYOG]] <- "HALLMARK_MYOG"
rowAnnot_df$pathway[rowAnnot_df$gene %in% res_df$gene[res_df$ENTREZID %in% hallmark_genes$HALLMARK_EPIT]] <- "HALLMARK_EPIT"
rowAnnot_df$pathway[rowAnnot_df$gene %in% res_df$gene[res_df$ENTREZID %in% hallmark_genes$HALLMARK_ALLO]] <- "HALLMARK_ALLO"
rowAnnot_df$pathway[rowAnnot_df$gene %in% res_df$gene[res_df$ENTREZID %in% hallmark_genes$HALLMARK_INFL]] <- "HALLMARK_INFL"
rowAnnot_df$pathway[rowAnnot_df$gene %in% res_df$gene[res_df$ENTREZID %in% hallmark_genes$HALLMARK_APIC]] <- "HALLMARK_APIC"

colAnnot_df <- comb.data$meta
colAnnot_df$treatment <- factor(colAnnot_df$treatment,
                                    levels = c("Pre_transplant", "Post_transplant"),
                                    ordered = T)

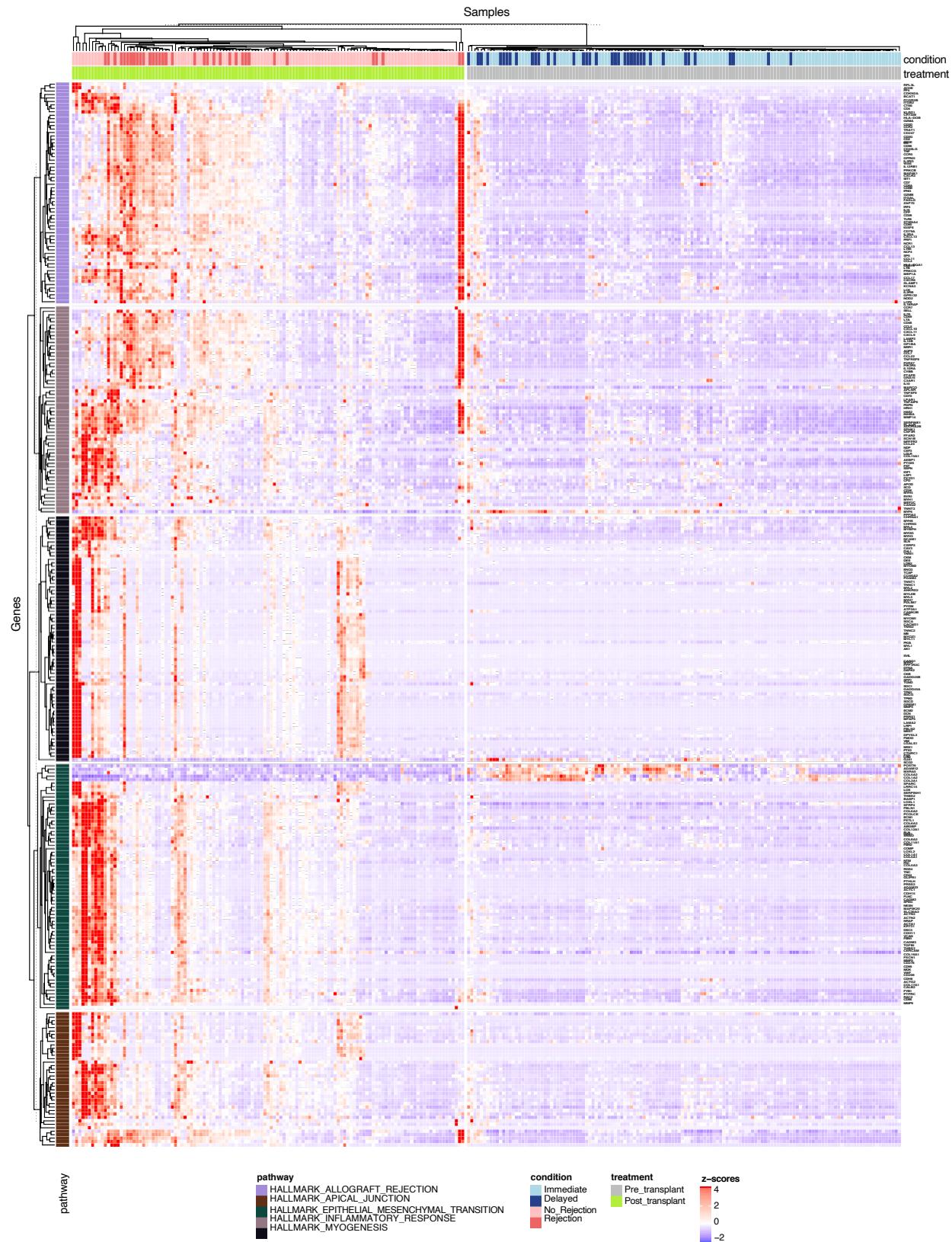
set.seed(369)
rowAnnot <- rowAnnotation(pathway = rowAnnot_df$pathway)
colAnnot <- HeatmapAnnotation(condition = colAnnot_df$condition,
                               treatment = colAnnot_df$treatment,
                               col = list(condition = c('Immediate' = "lightblue",
                                                       'Delayed' = "royalblue4",
                                                       'No Rejection' = "rosybrown1",
                                                       'Rejection' = "indianred2"),
                               treatment = c('Pre_transplant' = "gray",
                                             'Post_transplant' = "olivedrab2")))

# Calculate z-scores for each gene
z_scores <- t(apply(expr_data_subset, 1, scale))

col_hmap <- colorRamp2(c(-2, 0, 4), c("blue", "white", "red"))
hmap <- Heatmap(z_scores,
                 name = "z-scores",
                 col = col_hmap,
                 column_split = colAnnot_df$treatment,
                 row_split = rowAnnot_df$pathway,
                 show_row_names = TRUE,
                 show_column_names = FALSE,
                 cluster_rows = TRUE,
                 cluster_columns = TRUE,
                 left_annotation = rowAnnot,
                 top_annotation = colAnnot,
                 row_title = "Genes",
                 column_title = "Samples",
                 row_names_gp = gpar(fontsize = 4, fontface = "bold"))

draw(hmap, merge_legends = TRUE, heatmap_legend_side = "bottom")

```



Potential Ideas for Next Steps:

This analysis is only a preliminary analysis of the datasets to look for post-transplant vs pre-transplant gene expression. Given that we have more information in the metadata, here is a list of few things that can be considered for further analysis:

1. **Post_transplant (Rejection) vs Pre-transplant:** The idea is to look for gene changes specific to the rejected kidney transplants.
2. **Post_transplant (No_Rejection) vs Pre-transplant:** The idea is to look for gene changes specific to the not rejected kidney transplants.
3. **Post_transplant (Rejection) vs Post_transplant (No_Rejection):** To look for rejection specific changes in the post-transplant dataset only
4. **Pathway enrichment of PCA loadings:** To look for pathways leading to the diversity across the patient samples.
5. **Enrichment of KEGG/Immunologic Pathways:** To identify specific biomarkers or target molecules in the rejection-specific post_transplant cohort.

Here is a list of all the differentially expressed genes:

```
res_df[,c("ENTREZID","log2FoldChange","pvalue","padj","col.label")]
```

	ENTREZID	log2FoldChange	pvalue	padj
## THBS4	7060	6.85759501	2.187133e-142	5.314952e-138
## KLHL41	10324	7.49012427	9.271781e-136	1.126568e-131
## CA3	761	7.38252778	2.272200e-135	1.840558e-131
## COL11A1	1301	6.58292182	3.950002e-135	2.399725e-131
## TNNC2	7125	8.02358091	1.496142e-132	7.271552e-129
## ACTN2	88	7.33517672	3.203230e-132	1.297362e-128
## TTN	7273	8.20282364	1.992304e-128	6.916425e-125
## ATP2A1	487	7.83911951	6.732254e-118	2.045006e-114
## TXLNB	167838	5.78936213	6.096767e-116	1.646195e-112
## STAC3	246329	5.66879408	8.721323e-116	2.119369e-112
## COL3A1	1281	5.07818509	3.682059e-113	8.134337e-110
## MYL11	29895	8.07625749	4.753228e-112	9.625682e-109
## COL1A1	1277	5.81513220	5.236113e-112	9.787905e-109
## TCAP	8557	6.59433433	1.249465e-111	2.168803e-108
## CTHRC1	115908	5.06419158	2.778708e-111	4.501692e-108
## MYH7	4625	8.10088781	5.369744e-110	7.675891e-107
## TNNT3	7140	8.24741593	5.258133e-110	7.675891e-107
## CASQ1	844	8.10936801	9.663599e-110	1.304640e-106
## TRDN	10345	7.15331698	5.031536e-109	6.435335e-106
## NEB	4703	6.11867689	3.616033e-107	4.393661e-104
## MYOT	9499	6.15251101	5.113620e-106	5.917432e-103
## SFRP2	6423	6.63414892	6.166657e-106	6.811633e-103
## TNNI2	7136	8.17852683	1.785937e-105	1.886959e-102
## MB	4151	8.10110375	2.203196e-105	2.230828e-102
## CAVIN4	347273	6.51840271	1.322485e-104	1.285508e-101
## ASPN	54829	4.22167807	2.010944e-104	1.879536e-101
## ANKRD1	27063	7.04557506	4.652481e-104	4.187406e-101
## PYGM	5837	5.63319750	1.125067e-103	9.764376e-101
## SFRP4	6424	4.89202221	2.299028e-103	1.926507e-100
## ADAM12	8038	4.84883009	1.523185e-102	1.233831e-99
## CHIT1	1118	6.77397221	1.817290e-102	1.424580e-99
## LMOD3	56203	6.61731392	4.099212e-102	3.112967e-99
## CILP2	148113	6.68119689	6.426657e-102	4.732551e-99
## SYNPO2L	79933	6.93532425	2.435950e-101	1.741059e-98
## CILP	8483	5.11747790	6.438448e-101	4.470306e-98
## CTSK	1513	4.08907407	3.008404e-99	2.030756e-96
## COL1A2	1278	4.62514010	9.945039e-99	6.531740e-96
## FNDC1	84624	4.85767113	2.278551e-98	1.457133e-95
## MYOZ1	58529	5.32384435	2.504066e-98	1.560290e-95
## NRAP	4892	7.94140397	3.798008e-98	2.307385e-95
## PRG4	10216	7.00315480	1.251167e-97	7.415755e-95
## COMP	1311	6.06951107	2.122298e-97	1.227951e-94
## FAP	2191	4.72543233	2.696836e-97	1.524089e-94
## ENO3	2027	4.60054750	2.755575e-94	1.521891e-91
## COL5A2	1290	4.06657381	3.373759e-94	1.821905e-91
## CCL18	6362	6.23191254	1.446026e-93	7.639101e-91
## PRRX1	5396	4.53940967	7.916715e-93	4.093279e-90
## SIX1	6495	5.38190808	1.194050e-92	6.045127e-90
## PDGFRL	5157	4.40880262	3.001336e-92	1.488479e-89
## CKM	1158	7.75979313	3.826121e-92	1.859571e-89

## FABP4	2167	4.02208192	7.621652e-92	3.631642e-89
## LSP1	4046	3.61378005	3.904535e-90	1.824694e-87
## IGFN1	91156	6.84126771	2.392832e-89	1.097136e-86
## KLHL31	401265	4.41648601	2.494081e-89	1.122383e-86
## RAB7B	338382	3.86871029	1.339381e-88	5.917870e-86
## LRRC15	131578	5.32942219	4.932889e-88	2.140610e-85
## CCDC80	151887	3.70525063	2.766214e-87	1.179329e-84
## GALNT5	11227	4.61061595	7.853807e-87	3.290610e-84
## CCN5	8839	6.01385498	8.615112e-86	3.548404e-83
## CACNA1S	779	5.92469519	8.861390e-86	3.589010e-83
## XIRP1	165904	7.06960470	1.343773e-85	5.353281e-83
## COL5A1	1289	4.36730715	1.478735e-84	5.795927e-82
## PDLM3	27295	4.42197389	6.681299e-83	2.577178e-80
## COL6A3	1293	3.87848802	6.902757e-83	2.620998e-80
## LDB3	11155	4.99596972	4.891331e-82	1.828681e-79
## MYO18B	84700	5.54254463	7.659366e-82	2.820155e-79
## CRABP2	1382	3.64378101	7.837363e-82	2.842623e-79
## ELN	2006	4.17245999	4.648817e-81	1.661337e-78
## SLN	6588	8.04305937	7.477694e-81	2.633557e-78
## MYPN	84665	7.94638126	2.698081e-80	9.366582e-78
## APOBEC2	10930	6.36332988	1.152859e-79	3.945864e-77
## GXYLT2	727936	2.95240577	1.283999e-79	4.333673e-77
## XIRP2	129446	8.36787764	2.037724e-79	6.783387e-77
## SMPX	23676	7.86460587	2.810903e-79	9.230777e-77
## MEOX2	4223	4.07726380	3.599952e-79	1.166432e-76
## MYBPC1	4604	8.23492679	3.776200e-79	1.207440e-76
## MMP9	4318	4.70692748	1.626368e-78	5.132775e-76
## HHATL	57467	6.00239956	1.909079e-78	5.947761e-76
## MYOZ2	51778	4.53659943	2.279170e-78	7.010901e-76
## EEF1A2	1917	5.61605171	6.018847e-78	1.828300e-75
## MYOG	4656	7.10863088	1.075493e-77	3.226612e-75
## KCNQ5	56479	5.01699925	1.249889e-77	3.704090e-75
## SRPK3	26576	5.51670971	3.696496e-77	1.082272e-74
## ANK1	286	3.93876916	9.074971e-77	2.625368e-74
## STYXL2	92235	5.95095267	1.809417e-76	5.173017e-74
## IL2RB	3560	2.83934657	8.716554e-76	2.463035e-73
## DPT	1805	4.46950961	1.320749e-75	3.689140e-73
## CD52	1043	3.32057097	9.163074e-75	2.530362e-72
## CHRNA1	1134	7.98204271	1.076838e-74	2.940253e-72
## TRIM72	493829	6.02769610	1.089287e-74	2.941196e-72
## AMPD1	270	6.63995105	2.650713e-74	7.078569e-72
## UNC45B	146862	4.89256570	3.121476e-74	8.245108e-72
## MYOZ3	91977	4.16923752	4.846651e-74	1.266435e-71
## FHL1	2273	3.24813289	1.088303e-73	2.813495e-71
## P4HA3	283208	4.04247992	2.481973e-73	6.348887e-71
## ACTC1	70	5.33640141	3.706280e-73	9.381907e-71
## TNNC1	7134	4.09554010	4.440990e-73	1.112583e-70
## HJV	148738	5.59814727	9.981552e-73	2.475119e-70
## MFAP5	8076	5.00326231	1.289987e-72	3.166462e-70
## MYLK2	85366	6.00150135	1.769756e-72	4.300684e-70
## CACNB1	782	3.79884174	2.902094e-72	6.982553e-70
## TNFRSF9	3604	3.34992154	3.471227e-72	8.270029e-70
## MSS51	118490	4.10132338	4.053613e-72	9.563772e-70
## CALB2	794	5.67575595	4.275748e-72	9.990860e-70

## LMOD2	442721	8.39134385	4.954338e-72	1.146622e-69
## SMYD1	150572	8.35411452	5.091466e-72	1.167243e-69
## CXCL9	4283	3.88637637	8.815195e-72	2.002038e-69
## MEOX1	4222	4.75290480	1.346115e-71	3.028883e-69
## PHKG1	5260	4.36028899	1.483679e-71	3.307788e-69
## DHRS9	10170	3.64274826	3.717279e-71	8.212145e-69
## ACTA1	58	7.79151898	6.001158e-71	1.313821e-68
## HBA2	3040	4.48674484	4.848777e-70	1.052055e-67
## ZNF469	84627	3.24887276	4.919973e-70	1.058055e-67
## DUSP13B	51207	7.68187522	6.773461e-70	1.443876e-67
## ADAMTS12	81792	2.54951408	8.339551e-70	1.762256e-67
## GBP5	115362	2.99820770	9.542688e-70	1.999111e-67
## EBF3	253738	3.43804895	1.198403e-69	2.489093e-67
## FBN1	2200	2.98247682	1.571161e-69	3.235660e-67
## TNNT1	7135	4.64083684	1.807045e-69	3.690168e-67
## TNFAIP6	7130	4.50538552	2.050731e-69	4.152902e-67
## HS3ST2	9956	4.77780711	2.219549e-69	4.457624e-67
## PLA2G7	7941	3.93022951	2.546141e-69	5.071620e-67
## CHRND	1144	7.96251138	3.047943e-69	6.021793e-67
## XG	7499	4.08474814	7.771598e-69	1.523045e-66
## OGN	4969	3.67588338	9.956786e-69	1.935679e-66
## HBB	3043	4.02831658	1.674952e-68	3.230398e-66
## IGDCC4	57722	3.20917004	1.884653e-68	3.606217e-66
## IL17D	53342	3.86741276	1.590675e-67	3.019921e-65
## C10orf71	118461	4.60555254	2.564112e-67	4.830271e-65
## TNNT1	7138	8.12733445	2.701553e-67	5.024534e-65
## SYNC	81493	2.82240663	2.708588e-67	5.024534e-65
## PI16	221476	3.53717188	5.363026e-67	9.873249e-65
## MYBPH	4608	4.56198717	5.511361e-67	1.007004e-64
## ATP1B4	23439	7.18862078	5.829166e-67	1.052378e-64
## LRRC39	127495	4.51797897	5.846302e-67	1.052378e-64
## FSD2	123722	5.73464505	1.919962e-66	3.430662e-64
## GONLY	10578	3.06116918	2.602483e-66	4.616273e-64
## PODN	127435	3.73348979	3.139938e-66	5.529249e-64
## PLIN1	5346	3.97793176	3.549521e-66	6.205534e-64
## FBXO40	51725	5.00041769	4.693624e-66	8.147126e-64
## BMAL1	406	-1.62571201	6.494983e-66	1.119394e-63
## COL8A2	1296	3.43665163	1.703699e-65	2.915605e-63
## CIDEC	63924	5.50313442	2.553110e-65	4.338681e-63
## ADAMDEC1	27299	4.57092965	4.697519e-65	7.872718e-63
## VASH2	79805	2.69417022	4.676547e-65	7.872718e-63
## OLFML2B	25903	3.18122908	4.740944e-65	7.891074e-63
## NKG7	4818	2.75321493	7.026034e-65	1.161494e-62
## LEP	3952	6.29663585	9.333662e-65	1.532550e-62
## FAM78A	286336	1.950244690	1.275881e-64	2.070140e-62
## COX6A2	1339	4.35906900	1.277812e-64	2.070140e-62
## ADAMTS2	9509	3.34185876	1.502110e-64	2.417403e-62
## CSRP3	8048	8.08857465	2.281866e-64	3.648133e-62
## PPP1R27	116729	7.54594063	3.591025e-64	5.703627e-62
## MYF6	4618	5.48705311	6.785908e-64	1.070808e-61
## TRDC	28526	3.37475477	1.291482e-63	2.024793e-61
## MYH2	4620	8.22705921	1.327348e-63	2.067685e-61
## ACTN3	89	7.66286406	2.366550e-63	3.663027e-61
## TBX15	6913	4.54751310	4.735168e-63	7.282868e-61

## MYOM1	8736	3.35647616	5.728775e-63	8.755658e-61
## TBX21	30009	2.57155305	1.203067e-62	1.827233e-60
## SERPINA1	5265	-2.48736762	1.863185e-62	2.812252e-60
## MYH3	4621	4.27515899	1.875959e-62	2.814055e-60
## ADCY7	113	2.08141616	2.173265e-62	3.240032e-60
## SGCG	6445	4.69479337	3.993883e-62	5.918010e-60
## FLNC	2318	3.38754982	5.099831e-62	7.510970e-60
## RAPSN	5913	4.71048182	5.262113e-62	7.703290e-60
## MUC6	4588	-3.67201061	6.557344e-62	9.541918e-60
## MYBPC2	4606	5.77475165	7.237342e-62	1.046873e-59
## JSRP1	126306	4.07672971	9.264470e-62	1.332165e-59
## OSR1	130497	2.66334941	1.138481e-61	1.627425e-59
## TRARG1	286753	5.36244107	1.481924e-61	2.105978e-59
## IGF1	3479	3.11447468	1.862538e-61	2.631485e-59
## KLHL40	131377	8.28760645	3.629204e-61	5.097878e-59
## CACNG1	786	7.97720978	5.693957e-61	7.952233e-59
## CEMIP	57214	3.75678405	9.208920e-61	1.278777e-58
## POPDC3	64208	6.42296238	1.933360e-60	2.669464e-58
## PITX1	5307	6.10111152	2.255262e-60	3.096335e-58
## CCL5	6352	2.50238931	2.872097e-60	3.921058e-58
## MYL2	4633	8.15248382	5.381856e-60	7.306396e-58
## CORO6	84940	4.58479930	6.990513e-60	9.437582e-58
## PRF1	5551	2.26722289	1.411113e-59	1.894555e-57
## MLIP	90523	3.59705612	1.655535e-59	2.210503e-57
## LUM	4060	2.36103045	2.126147e-59	2.823361e-57
## CD247	919	2.54653764	2.904691e-59	3.836244e-57
## MYL1	4632	8.40334021	3.300908e-59	4.335966e-57
## MYL4	4635	4.50909946	5.583903e-59	7.295399e-57
## RBM24	221662	3.39434930	7.939359e-59	1.031735e-56
## FITM1	161247	3.85016454	1.442513e-58	1.864601e-56
## TRIM54	57159	3.80724252	2.356650e-58	3.030103e-56
## HSPB3	8988	5.26419517	2.434448e-58	3.113659e-56
## LRRN1	57633	2.94374324	3.974046e-58	5.056193e-56
## SCUBE2	57758	2.32607692	4.220163e-58	5.341363e-56
## DES	1674	4.83607505	5.964711e-58	7.510282e-56
## ADD2	119	3.51628730	7.173885e-58	8.986215e-56
## HPR	3250	-4.37701969	1.239045e-57	1.544105e-55
## CXCL11	6373	3.66381010	1.664285e-57	2.063459e-55
## ADIPOQ	9370	6.16551826	1.751971e-57	2.161149e-55
## ANGPTL2	23452	2.77531864	2.945287e-57	3.614820e-55
## VGLL2	245806	8.46003290	3.109618e-57	3.797328e-55
## ITGBL1	9358	3.15874943	5.535777e-57	6.726246e-55
## TESPA1	9840	2.33545139	5.857187e-57	7.081368e-55
## CHGB	1114	-2.56122682	5.936658e-57	7.141918e-55
## ADAMTS14	140766	3.56948867	6.588116e-57	7.886592e-55
## CD6	923	2.50660258	1.482817e-56	1.766370e-54
## TWIST1	7291	3.07746344	1.708115e-56	2.024824e-54
## MEST	4232	1.22891772	2.136803e-56	2.520701e-54
## CIART	148523	1.38251662	2.350928e-56	2.759898e-54
## FGFR2	2263	-1.41214153	2.851934e-56	3.331964e-54
## CD36	948	3.29536283	3.298327e-56	3.835054e-54
## ZFHX4	79776	2.86636472	6.115385e-56	7.076665e-54
## TRBC1	28639	2.97946119	1.003983e-55	1.156294e-53
## IL16	3603	1.61043501	1.122575e-55	1.286778e-53

## ASB5	140458	3.70235814	1.285326e-55	1.466418e-53
## BMPER	168667	2.76346877	1.291829e-55	1.466951e-53
## MIR133A1HG	102723167	7.26400746	1.861962e-55	2.104536e-53
## CIMIP2B	730112	2.72930694	1.952303e-55	2.196431e-53
## ITGAX	3687	2.71075660	2.419923e-55	2.709980e-53
## CFD	1675	3.79811984	2.919255e-55	3.254166e-53
## MYH6	4624	7.08369953	3.355469e-55	3.723345e-53
## LAMA4	3910	2.17930150	3.526612e-55	3.895463e-53
## LOXL2	4017	2.87267069	5.830359e-55	6.411020e-53
## CD2	914	2.70010832	6.233708e-55	6.823664e-53
## HMCN1	83872	2.87328053	7.154451e-55	7.796426e-53
## EBF2	64641	3.00960758	1.699466e-54	1.843693e-52
## MFAP2	4237	2.85282704	1.761787e-54	1.902809e-52
## TBC1D10C	374403	2.48795998	3.768731e-54	4.052386e-52
## GPX2	2877	-3.41797255	8.611388e-54	9.218738e-52
## DCLK1	9201	2.64045404	1.350754e-53	1.439679e-51
## LINC01133	100505633	5.27370014	1.633688e-53	1.733635e-51
## TRAC	28755	1.98250645	1.826443e-53	1.929756e-51
## CARNS1	57571	2.93965958	3.677701e-53	3.868909e-51
## TRBC2	28638	2.72018065	4.799535e-53	5.027306e-51
## LRRN3	54674	2.80102331	1.174055e-52	1.224494e-50
## YIPF7	285525	4.87316622	1.354933e-52	1.407103e-50
## MAOA	4128	-1.26348340	1.632749e-52	1.688401e-50
## PPP1R3A	5506	8.24820071	1.651952e-52	1.701021e-50
## TSHZ2	128553	2.03540980	1.692332e-52	1.735247e-50
## SCG2	7857	3.28543163	2.041678e-52	2.084656e-50
## THBS2	7058	2.86629587	2.323230e-52	2.362210e-50
## RYR1	6261	4.11930877	2.882185e-52	2.918332e-50
## SSC5D	284297	3.07875414	4.240819e-52	4.276188e-50
## DCN	1634	1.85859841	4.276468e-52	4.294316e-50
## SHOX2	6474	5.75723471	4.423396e-52	4.423578e-50
## SCARA5	286133	3.83855789	6.067981e-52	6.043361e-50
## KERA	11081	7.24454506	7.802537e-52	7.739162e-50
## SGCD	6444	2.25249126	7.882080e-52	7.786278e-50
## PIEZO2	63895	2.21101439	1.251516e-51	1.231300e-49
## BHLHE41	79365	1.49036280	1.629304e-51	1.596521e-49
## NR4A1	3164	-2.18617894	1.661224e-51	1.621261e-49
## PCP4	5121	-2.18825314	1.820465e-51	1.769565e-49
## KCNA7	3743	7.80828611	2.096442e-51	2.029707e-49
## SLA2	84174	2.42002962	2.189851e-51	2.111729e-49
## CD3G	917	2.64598342	3.181328e-51	3.055709e-49
## CACNG6	59285	6.96379220	3.691472e-51	3.531751e-49
## CXCR2P1	3580	3.61364890	3.734954e-51	3.559338e-49
## MYH1	4619	7.87776369	4.811665e-51	4.567511e-49
## PYHIN1	149628	2.82004983	7.284127e-51	6.887609e-49
## FBP2	8789	5.29432373	7.599905e-51	7.158345e-49
## ADCYAP1R1	117	4.65787013	8.107087e-51	7.606576e-49
## LBP	3929	-3.12205079	8.743003e-51	8.171682e-49
## RASGRF1	5923	-2.36418775	1.250435e-50	1.164246e-48
## PRKAG3	53632	8.00576772	1.529110e-50	1.418278e-48
## C1QTNF6	114904	2.40908811	2.038529e-50	1.883585e-48
## PLA2G2D	26279	4.55298885	2.190285e-50	2.016140e-48
## HBA1	3039	3.94367140	2.583048e-50	2.368704e-48
## CCDC141	285025	3.03776377	2.796672e-50	2.554959e-48

## CAV3	859	6.19171757	3.193081e-50	2.906182e-48
## LINC00861	100130231	3.19008529	3.309958e-50	3.001317e-48
## UPK3B	105375355	4.61683935	4.115778e-50	3.718124e-48
## TIFAB	497189	3.85283918	4.270834e-50	3.843909e-48
## GLIPR2	152007	2.09370675	6.017786e-50	5.396244e-48
## LINC02541	101927686	5.06155360	6.184771e-50	5.525593e-48
## PRRT4	401399	4.38878577	8.186581e-50	7.287257e-48
## ADPRHL1	113622	2.91817119	8.500837e-50	7.539373e-48
## CD70	970	4.25162910	1.303713e-49	1.152056e-47
## BTN3A1	11119	0.92694020	1.397538e-49	1.230492e-47
## CPB1	1360	4.18872368	1.630938e-49	1.430809e-47
## TIGIT	201633	3.14052595	1.705466e-49	1.490810e-47
## LRRN4CL	221091	2.82196272	1.736484e-49	1.512483e-47
## SMOC2	64094	2.57117165	1.779412e-49	1.544339e-47
## CST7	8530	2.33633994	1.973785e-49	1.706938e-47
## SLAMF7	57823	2.85339039	2.082729e-49	1.794766e-47
## SYP	6855	-1.03645788	2.147300e-49	1.843870e-47
## CTSW	1521	2.34210053	2.952867e-49	2.526676e-47
## CHRNG	1146	8.34506591	3.556362e-49	3.032391e-47
## MIR1-1HG	128826	7.42597727	4.004009e-49	3.402148e-47
## NCF1C	654817	2.18820970	4.920271e-49	4.166115e-47
## HMCN2	256158	2.48616732	5.003379e-49	4.221775e-47
## SLC37A2	219855	2.24755110	5.157721e-49	4.336947e-47
## RPL3L	6123	7.50630221	6.574536e-49	5.509235e-47
## VIT	5212	3.78133223	6.952000e-49	5.805517e-47
## FGG	2266	-5.04399694	8.542738e-49	7.109489e-47
## LILRB5	10990	2.28793650	9.608922e-49	7.969502e-47
## CD3D	915	2.70802609	1.270287e-48	1.049975e-46
## RBFOX1	54715	3.26519438	1.340258e-48	1.104054e-46
## SPARC	6678	2.33966706	1.638891e-48	1.345496e-46
## IL33	90865	1.87833191	1.748366e-48	1.430540e-46
## LRRC20	55222	1.58729202	1.767922e-48	1.441687e-46
## SIRPG	55423	3.21758831	1.783711e-48	1.449698e-46
## WNT10B	7480	3.70966501	1.803652e-48	1.461018e-46
## SERPINF1	5176	2.51444906	1.829310e-48	1.476879e-46
## SPN	6693	1.97211105	1.985931e-48	1.598017e-46
## PODNL1	79883	3.38954709	2.129302e-48	1.707728e-46
## CXCL10	3627	2.92092670	2.180017e-48	1.742651e-46
## CD28	940	2.24300305	3.424398e-48	2.728403e-46
## COL10A1	1300	3.10310087	3.554158e-48	2.822536e-46
## CDH15	1013	3.70713610	3.766686e-48	2.981572e-46
## ZAP70	7535	2.52106460	4.209495e-48	3.321264e-46
## CDON	50937	1.79592061	5.543178e-48	4.359378e-46
## MMP16	4325	2.85654084	6.628777e-48	5.196320e-46
## FLRT2	23768	1.70552298	7.773972e-48	6.074446e-46
## CHAD	1101	3.57216691	7.912313e-48	6.162728e-46
## COL12A1	1303	2.26702312	8.199239e-48	6.365805e-46
## CADM3	57863	2.75092447	9.596604e-48	7.426977e-46
## WNT9A	7483	2.25886263	9.812739e-48	7.570139e-46
## CD96	10225	2.45174989	1.047702e-47	8.057030e-46
## ACAP1	9744	2.07034803	1.084631e-47	8.314706e-46
## VCAN	1462	2.72773926	1.157511e-47	8.843936e-46
## GZMA	3001	2.24428770	1.160946e-47	8.843936e-46
## CD3E	916	2.41446821	1.192008e-47	9.052184e-46

## LILRB4	11006	2.20884447	1.522401e-47	1.152519e-45
## PRR33	102724536	7.82987508	1.565460e-47	1.181436e-45
## HAPLN3	145864	2.31478548	1.800106e-47	1.354315e-45
## LOX	4015	2.35519223	1.888566e-47	1.416483e-45
## MPEG1	219972	1.73671171	2.364372e-47	1.767896e-45
## DMRT3	58524	6.38914253	3.131939e-47	2.334640e-45
## IDO1	3620	2.96378870	3.471817e-47	2.580080e-45
## CXCR3	2833	2.46330735	3.534282e-47	2.618494e-45
## ABRA	137735	6.57113740	5.797931e-47	4.282539e-45
## SLC05A1	81796	3.25432274	6.199580e-47	4.565333e-45
## FBLN2	2199	3.07916213	8.624863e-47	6.332108e-45
## NFIL3	4783	-0.99459377	9.406514e-47	6.885172e-45
## JPH1	56704	2.63524519	1.009920e-46	7.369988e-45
## CACNA1G	8913	4.12732775	1.076317e-46	7.831015e-45
## SMTNL1	219537	6.65656553	1.159608e-46	8.411831e-45
## KLRD1	3824	1.90126812	1.193524e-46	8.632089e-45
## ART3	419	4.41812002	1.611453e-46	1.162016e-44
## NR1D2	9975	0.90921367	1.656590e-46	1.191029e-44
## MMP2	4313	2.61081335	2.052699e-46	1.471464e-44
## MEGF10	84466	3.35923691	2.743841e-46	1.957293e-44
## FAM107A	11170	-0.90454856	2.746540e-46	1.957293e-44
## CD84	8832	2.03562972	2.965363e-46	2.107055e-44
## LRRC17	10234	2.23087099	5.576890e-46	3.951137e-44
## GPR174	84636	2.93111711	6.960336e-46	4.916951e-44
## CSRNP1	64651	-0.86035402	7.304769e-46	5.145310e-44
## FGA	2243	-4.26921242	8.147383e-46	5.722241e-44
## SLC28A3	64078	4.25543705	8.215804e-46	5.753667e-44
## CD5	921	2.72467397	1.117462e-45	7.803288e-44
## EPYC	1833	6.90681180	1.137283e-45	7.918943e-44
## P2RX7	5027	1.50592172	1.202211e-45	8.347122e-44
## CD48	962	2.38770635	1.456765e-45	1.008571e-43
## SCNN1A	6337	-1.32516088	1.926314e-45	1.329868e-43
## GADD45A	1647	-1.28756876	2.532065e-45	1.743108e-43
## BIN2	51411	1.47194797	2.680102e-45	1.839806e-43
## AGBL1	123624	6.53732351	3.355583e-45	2.297015e-43
## ALOX15	246	5.16984136	4.398911e-45	3.002751e-43
## ARHGAP30	257106	1.76799551	5.112937e-45	3.480378e-43
## DHRS7C	201140	7.76727017	5.541823e-45	3.761783e-43
## TCF7	6932	1.63453492	5.876445e-45	3.977813e-43
## RUNX3	864	1.87487788	6.303191e-45	4.254829e-43
## CMYA5	202333	2.83009907	6.566896e-45	4.420558e-43
## GOLGA7B	401647	3.06467202	6.628773e-45	4.449884e-43
## TMEM119	338773	2.37542982	7.440518e-45	4.981047e-43
## GGT1	2681	1.53127356	8.221304e-45	5.488624e-43
## MYOC	4653	3.93310472	9.362346e-45	6.233270e-43
## MYOD1	4654	7.28003875	9.392730e-45	6.236414e-43
## ARHGAP20	57569	1.93545628	1.048893e-44	6.945269e-43
## IL10RA	3587	1.59308878	1.149107e-44	7.588168e-43
## STRIT1	100507537	3.72354468	1.172494e-44	7.721618e-43
## CTSS	1520	1.77494973	1.212898e-44	7.966120e-43
## ATP1A1	476	-1.10680432	1.222926e-44	8.010328e-43
## MAP1LC3C	440738	2.72670340	1.246091e-44	8.140120e-43
## CD8A	925	2.23536272	1.670913e-44	1.088602e-42
## PARP15	165631	2.50070301	1.975624e-44	1.283680e-42

## COL6A2	1292	2.76858110	2.061282e-44	1.335766e-42
## RXRG	6258	2.83655764	2.710588e-44	1.751862e-42
## GZMH	2999	2.17072763	2.851837e-44	1.838262e-42
## PLA2G2A	5320	4.86433824	3.020770e-44	1.942004e-42
## GAS7	8522	2.08974167	3.558410e-44	2.281608e-42
## CD300LB	124599	3.26882393	4.112008e-44	2.629629e-42
## NCF2	4688	1.77202259	4.641131e-44	2.960213e-42
## EN1	2019	5.06109847	4.963382e-44	3.157465e-42
## SSPN	8082	1.48269674	5.934578e-44	3.765436e-42
## IGSF6	10261	2.05751028	7.352663e-44	4.653048e-42
## COL5A3	50509	2.90159575	8.641910e-44	5.454729e-42
## AHCYL1	10768	-0.59016251	8.978239e-44	5.652337e-42
## IKZF1	10320	1.81516668	1.014236e-43	6.368720e-42
## SP140	11262	2.13953187	1.035899e-43	6.487986e-42
## IDH3A	3419	-0.60548952	1.065448e-43	6.655901e-42
## AHNAK2	113146	2.57271943	1.141196e-43	7.110822e-42
## ABCB5	340273	4.80291172	1.193119e-43	7.415340e-42
## CD8B	926	2.51753588	1.220801e-43	7.568030e-42
## PTPRC	5788	1.78055972	2.184609e-43	1.350844e-41
## PELATON	100506115	2.78102475	2.240457e-43	1.381861e-41
## TPM2	7169	2.89870039	2.536021e-43	1.560199e-41
## MATK	4145	2.03386494	2.957793e-43	1.815084e-41
## TEF	7008	0.93186261	3.335274e-43	2.041574e-41
## FSTL1	11167	1.97024056	4.791143e-43	2.925366e-41
## FOLR2	2350	1.81115313	4.933635e-43	3.004819e-41
## CYTH4	27128	1.71665072	5.547124e-43	3.370017e-41
## AGAP2	116986	1.94328003	6.150634e-43	3.727345e-41
## ITGAL	3683	1.99748953	6.449872e-43	3.898964e-41
## DOCK2	1794	1.68169556	7.054594e-43	4.253938e-41
## ANXA1	301	1.58631312	7.705232e-43	4.634773e-41
## DCSTAMP	81501	5.42712890	8.821934e-43	5.293378e-41
## CCR7	1236	3.08857281	8.944553e-43	5.353734e-41
## RAC2	5880	1.98792040	9.303653e-43	5.554989e-41
## MAFA	389692	3.65453503	9.719915e-43	5.789305e-41
## CPXM1	56265	2.54634707	9.982767e-43	5.931325e-41
## NCF1	653361	2.03034056	1.073803e-42	6.364507e-41
## MYREM	128266840	5.11293301	1.176657e-42	6.957162e-41
## SLAMF6	114836	2.25663773	1.198368e-42	7.068332e-41
## PLA2G5	5322	3.54684923	1.331454e-42	7.834301e-41
## EDA2R	60401	1.70791639	1.336681e-42	7.846061e-41
## MCUB	55013	1.67808637	1.617960e-42	9.474226e-41
## SELPLG	6404	1.68342188	1.681761e-42	9.824151e-41
## SLC8A3	6547	4.10847310	2.003074e-42	1.167307e-40
## MRAP	56246	5.40852490	2.429387e-42	1.412357e-40
## RETREG1	54463	-1.13795820	2.894652e-42	1.678829e-40
## CAVIN2	8436	-0.94040783	3.265067e-42	1.889152e-40
## CRTAM	56253	2.32106548	3.640691e-42	2.101483e-40
## CYRIA	81553	1.64302251	3.695037e-42	2.127799e-40
## PRICKLE1	144165	1.23337530	4.174044e-42	2.397953e-40
## C16orf54	283897	1.81394734	4.295038e-42	2.461644e-40
## DPYSL3	1809	2.19939479	4.673459e-42	2.672229e-40
## PTPN22	26191	2.11864107	5.274727e-42	3.008947e-40
## IKZF3	22806	2.39953865	5.321162e-42	3.028327e-40
## SYNPO2	171024	2.16354612	5.598225e-42	3.178562e-40

## CDH11	1009	1.76600988	8.158248e-42	4.621295e-40
## ICOS	29851	3.35017199	9.172327e-42	5.183644e-40
## CASQ2	845	3.09997129	9.831261e-42	5.543143e-40
## NFAM1	150372	1.58511380	1.125624e-41	6.331895e-40
## GADD45B	4616	-1.26904411	1.160384e-41	6.512353e-40
## FGF16	8823	4.89183511	1.193819e-41	6.684561e-40
## ALDH1L2	160428	2.36065424	1.305084e-41	7.290772e-40
## FNDC5	252995	2.23661778	1.318375e-41	7.348128e-40
## SCRG1	11341	3.83305868	1.574143e-41	8.753607e-40
## SIGLEC1	6614	2.10441179	1.659738e-41	9.208514e-40
## RUBCNL	80183	1.79826449	2.372849e-41	1.313499e-39
## UCP3	7352	2.67361187	2.486754e-41	1.373423e-39
## SCN4A	6329	2.81523371	2.713738e-41	1.495387e-39
## DBP	1628	1.48226955	2.770462e-41	1.523190e-39
## ADCY2	108	2.55843302	3.043269e-41	1.669401e-39
## LTBP2	4053	2.04902251	3.198969e-41	1.750859e-39
## ZNF831	128611	2.54868819	3.221723e-41	1.759350e-39
## OLFML1	283298	1.53896991	3.491022e-41	1.902137e-39
## MDFI	4188	2.06677034	3.692574e-41	2.007455e-39
## EMILIN2	84034	2.05641725	4.793980e-41	2.600413e-39
## E2F8	79733	2.84571371	4.871574e-41	2.636617e-39
## DKK2	27123	2.68263855	4.965259e-41	2.681350e-39
## TAGAP	117289	1.67224474	4.985780e-41	2.686462e-39
## COL16A1	1307	2.18536302	5.002927e-41	2.689737e-39
## RUNX1	861	1.95516692	5.176553e-41	2.776941e-39
## UBASH3A	53347	2.71491050	6.218217e-41	3.328390e-39
## KCNA1	3736	3.91320152	6.813777e-41	3.639156e-39
## DUSP1	1843	-1.36326638	8.114725e-41	4.324472e-39
## BCL2A1	597	2.57460261	8.700314e-41	4.626397e-39
## SNX20	124460	2.02649438	9.743125e-41	5.169600e-39
## FPR3	2359	1.88523292	1.086666e-40	5.753176e-39
## RTN2	6253	2.39920776	1.102542e-40	5.824536e-39
## LINC01405	100131138	7.85378612	1.490623e-40	7.857618e-39
## GPX8	493869	1.47535751	1.585764e-40	8.341050e-39
## TMEM273	170371	1.46762009	1.934494e-40	1.015338e-38
## PLEK	5341	2.01683393	2.055909e-40	1.076738e-38
## APOLD1	81575	-1.47318614	2.181000e-40	1.139795e-38
## PLAC8	51316	2.43244435	2.281613e-40	1.189817e-38
## ARHGEF6	9459	0.96821522	2.373209e-40	1.234933e-38
## GLT8D2	83468	1.71889638	2.948302e-40	1.530912e-38
## RASSF2	9770	1.58931637	3.078591e-40	1.595157e-38
## CMTM3	123920	1.43652365	3.288762e-40	1.700430e-38
## LY9	4063	2.49484873	3.733631e-40	1.926347e-38
## ASB11	140456	4.75328144	4.083844e-40	2.102574e-38
## CAMK1D	57118	1.43222216	4.746298e-40	2.438473e-38
## DNASE2B	58511	3.91517094	4.874667e-40	2.499141e-38
## CDKN2A	1029	3.33375221	5.067173e-40	2.592366e-38
## APCS	325	-5.74312134	5.833380e-40	2.978088e-38
## SH2D1A	4068	2.57186597	6.678628e-40	3.402460e-38
## TP63	8626	2.31125421	7.095609e-40	3.607330e-38
## ISLR	3671	2.27486907	7.377746e-40	3.742935e-38
## MIAT	440823	2.72286732	8.016252e-40	4.058394e-38
## SIT1	27240	2.67767878	9.264961e-40	4.680828e-38
## DOK2	9046	1.87876581	1.218739e-39	6.144518e-38

## RCSD1	92241	1.25995735	1.280738e-39	6.443730e-38
## GSC	145258	3.99612381	1.866578e-39	9.371843e-38
## CRACR2A	84766	1.44533790	2.025229e-39	1.014744e-37
## DUSP10	11221	1.37289472	2.728243e-39	1.364177e-37
## DPEP2	64174	1.57733863	2.768510e-39	1.381469e-37
## FOS	2353	-2.13027325	3.228527e-39	1.607714e-37
## TNMD	64102	2.65875922	3.256061e-39	1.618109e-37
## NINJ2	4815	2.25715471	3.501927e-39	1.736742e-37
## PRND	23627	3.79245782	4.954989e-39	2.452366e-37
## MEDAG	84935	2.53371967	5.097308e-39	2.517677e-37
## CIDEA	1149	5.51862432	5.140869e-39	2.534042e-37
## CKB	1152	-1.39690008	5.183578e-39	2.549922e-37
## NMRK2	27231	3.38401740	5.819091e-39	2.856762e-37
## FGF18	8817	2.39606753	6.369308e-39	3.120576e-37
## LINC01969	101927230	4.74828730	6.993562e-39	3.419528e-37
## C9	735	-1.88163403	7.203328e-39	3.515022e-37
## SPAG4	6676	-1.33683377	8.293406e-39	4.038839e-37
## SLC6A12	6539	-1.35482753	8.640281e-39	4.199350e-37
## MYB	4602	2.92038355	8.698642e-39	4.219275e-37
## SH3RF2	153769	1.59749299	9.809753e-39	4.748741e-37
## ANOS1	3730	1.84098668	1.112540e-38	5.374917e-37
## COL14A1	7373	2.46132288	1.423392e-38	6.863064e-37
## COL6A6	131873	3.98093010	1.753048e-38	8.435804e-37
## BNC1	646	2.73476105	1.937047e-38	9.302802e-37
## AQP3	360	-1.27255524	1.959131e-38	9.390305e-37
## TNFSF8	944	1.71433375	2.081665e-38	9.957982e-37
## SGCA	6442	2.71535954	2.113941e-38	1.009251e-36
## GPR18	2841	3.21945904	2.428505e-38	1.157159e-36
## FAM180B	399888	4.31139879	2.566172e-38	1.220363e-36
## CARD11	84433	1.74537133	2.742946e-38	1.301881e-36
## BEND6	221336	2.09184652	2.825378e-38	1.338392e-36
## MIR193BHG	100129781	1.86362928	3.323841e-38	1.571452e-36
## SELL	6402	1.97497784	3.346214e-38	1.578958e-36
## BTLA	151888	2.67824700	3.669852e-38	1.728315e-36
## SRPX	8406	2.31249426	3.839913e-38	1.804907e-36
## PCOLCE	5118	2.20757307	4.314070e-38	2.023865e-36
## LINC00996	285972	2.82197383	4.467939e-38	2.092012e-36
## APOC1	341	2.19642030	4.583753e-38	2.142111e-36
## CCL24	6369	3.52215560	4.763764e-38	2.221962e-36
## MARCO	8685	3.21222925	4.889895e-38	2.276424e-36
## FN1	2335	2.32818609	5.648023e-38	2.624333e-36
## CD44	960	1.60297912	6.613407e-38	3.067030e-36
## ZCCHC12	170261	3.68603050	7.048281e-38	3.262482e-36
## GZMK	3003	2.25150430	7.064960e-38	3.263985e-36
## NAV3	89795	1.77846329	8.329537e-38	3.840912e-36
## DCX	1641	2.40724468	8.712493e-38	4.009892e-36
## MIR142HG	123466215	3.08608925	8.931076e-38	4.102723e-36
## MFSD2A	84879	-2.49733116	8.969778e-38	4.112728e-36
## CD37	951	1.87111234	9.531891e-38	4.362231e-36
## LINC02587	101927524	3.90754562	1.031786e-37	4.713049e-36
## LVRN	206338	2.99000000	1.157145e-37	5.275756e-36
## ST3GAL3-AS1	101929592	8.26931571	1.614071e-37	7.345234e-36
## IL1RL1	9173	-2.12398318	1.797871e-37	8.166365e-36
## C11orf21	29125	2.39026910	1.819802e-37	8.250561e-36

## HAND2-AS1	79804	3.97650589	1.849674e-37	8.370377e-36
## P3H2	55214	-0.93003138	2.128499e-37	9.614248e-36
## RNASE4	6038	-1.40074920	2.331596e-37	1.051208e-35
## NCF1B	654816	2.10024946	2.466241e-37	1.109854e-35
## MMP11	4320	1.53101627	2.580005e-37	1.158904e-35
## NREP	9315	1.16350117	2.688399e-37	1.203145e-35
## ANTXR1	84168	1.58404512	2.686800e-37	1.203145e-35
## ACHE	43	2.62446995	2.696711e-37	1.204647e-35
## FGFBP2	83888	2.48936469	2.927747e-37	1.305453e-35
## PER3	8863	1.10420334	3.315353e-37	1.475575e-35
## SIX2	10736	2.86965241	3.534302e-37	1.570148e-35
## ITGAD	3681	3.54892446	4.656727e-37	2.062069e-35
## PLIN4	729359	2.52780256	4.658557e-37	2.062069e-35
## RAB42	115273	1.75721633	5.483623e-37	2.422864e-35
## PPDPFL	492307	6.81853957	5.682138e-37	2.506019e-35
## PIM3	415116	-0.88328610	6.102436e-37	2.686509e-35
## ITK	3702	2.19733493	6.170766e-37	2.711678e-35
## LFNG	3955	1.54362560	6.340887e-37	2.781406e-35
## NCKAP1L	3071	1.63381220	7.996618e-37	3.501366e-35
## SLC45A4	57210	-0.96865388	8.718482e-37	3.810572e-35
## PYCR1	5831	2.12806617	9.795897e-37	4.273790e-35
## MAP4K1	11184	1.70030091	1.018376e-36	4.435047e-35
## FMNL1	752	1.55614852	1.057387e-36	4.596703e-35
## FCRL3	115352	2.96722597	1.280099e-36	5.554946e-35
## TMEM45A	55076	2.12453538	1.379534e-36	5.975768e-35
## MMP12	4321	3.40077492	1.386004e-36	5.993109e-35
## ETS2	2114	-0.66957376	1.399852e-36	6.042237e-35
## TREM2	54209	2.74728888	1.421679e-36	6.125570e-35
## PLXDC1	57125	1.94170863	1.448542e-36	6.230270e-35
## SLC40A1	30061	0.58615120	1.517739e-36	6.516354e-35
## KLHL30	377007	2.71974527	1.653473e-36	7.086606e-35
## KCND2	3751	3.15232264	1.685509e-36	7.211189e-35
## NXPH3	11248	1.91725688	1.962345e-36	8.380834e-35
## KBTBD11	9920	-0.86341896	2.263264e-36	9.649047e-35
## ZFHX4-AS1	100192378	4.53022009	2.504624e-36	1.065935e-34
## LINC03040	221416	-1.64519057	2.916384e-36	1.239004e-34
## FASLG	356	2.53490656	3.350686e-36	1.421030e-34
## GFPT2	9945	1.58739963	3.693853e-36	1.563839e-34
## CCL13	6357	2.80270750	3.701295e-36	1.564264e-34
## PENK	5179	5.06779497	3.902521e-36	1.646444e-34
## SDC1	6382	-1.25122873	4.587543e-36	1.932095e-34
## MYADML2	255275	7.45943422	4.598997e-36	1.933568e-34
## SCML4	256380	1.92200433	4.621445e-36	1.939650e-34
## SH3PXD2B	285590	1.74807455	4.959858e-36	2.078095e-34
## PDK4	5166	-1.97654289	5.058422e-36	2.115744e-34
## TMC8	147138	1.81112951	6.927168e-36	2.892390e-34
## ARHGAP22	58504	1.98429008	7.097862e-36	2.958579e-34
## CSF2RB	1439	1.58100423	7.177062e-36	2.986469e-34
## KLHL33	123103	2.37848277	7.745810e-36	3.217623e-34
## IL21R	50615	1.95455981	8.577964e-36	3.557220e-34
## EGR1	1958	-2.32056748	9.959058e-36	4.122914e-34
## GRAP2	9402	1.59200726	1.112852e-35	4.599221e-34
## LIMD2	80774	1.59824397	1.330807e-35	5.490652e-34
## EEIG2	284611	1.01526534	1.348345e-35	5.553582e-34

## KLRB1	3820	2.06217354	1.472485e-35	6.044404e-34
## PSTPIP1	9051	1.78628107	1.470182e-35	6.044404e-34
## CD7	924	2.26843529	1.475571e-35	6.046855e-34
## PDCD1LG2	80380	1.32521081	1.668927e-35	6.827711e-34
## TWIST2	117581	2.62094324	1.920423e-35	7.843394e-34
## AOAH	313	1.56674362	1.986214e-35	8.098487e-34
## EPB41L5	57669	-0.63253541	2.029492e-35	8.261086e-34
## TLR6	10333	1.41617158	2.036028e-35	8.273833e-34
## GZMM	3004	2.44623377	2.095146e-35	8.499857e-34
## RASSF1	11186	0.66297877	2.235208e-35	9.052964e-34
## CMA1	1215	3.62401682	2.362535e-35	9.552739e-34
## HTRA3	94031	2.23578935	2.404126e-35	9.704763e-34
## CYBRD1	79901	1.29532322	2.510435e-35	1.011709e-33
## SH3PXD2A	9644	1.47387971	2.539279e-35	1.021639e-33
## PTHLH	5744	2.42999147	2.862473e-35	1.149768e-33
## FRMD6	122786	1.48021375	3.207412e-35	1.286193e-33
## COL8A1	1295	1.88783000	3.935015e-35	1.575367e-33
## ADGRG2	10149	2.30256317	4.207490e-35	1.681681e-33
## KLRG1	10219	0.92918242	4.282186e-35	1.708726e-33
## TECRL	253017	6.34112260	4.421940e-35	1.761599e-33
## PXDN	7837	1.63618779	4.723732e-35	1.878746e-33
## PIK3R5	23533	1.53985885	4.905827e-35	1.947982e-33
## HTR7	3363	2.66025601	5.306973e-35	2.103830e-33
## PKIA	5569	2.02330261	6.263126e-35	2.478831e-33
## SASH3	54440	1.66971174	6.576040e-35	2.598445e-33
## JDP2	122953	0.86538430	7.508611e-35	2.962123e-33
## DSC3	1825	3.60306737	7.624488e-35	3.002961e-33
## B3GNT2	10678	-0.45942989	7.669709e-35	3.015883e-33
## SVEP1	79987	1.58272345	9.350854e-35	3.665082e-33
## SCX	642658	3.02404277	9.344455e-35	3.665082e-33
## MAP3K20	51776	1.56004848	1.027041e-34	4.019020e-33
## ZBP1	81030	2.60531132	1.101223e-34	4.302383e-33
## CD86	942	1.58773952	1.218695e-34	4.753693e-33
## GRIN2D	2906	2.54417558	1.266312e-34	4.931513e-33
## CD200R1	131450	1.79439238	1.490525e-34	5.795401e-33
## PIK3R6	146850	2.11154312	1.570010e-34	6.094698e-33
## EOMES	8320	2.17321600	1.811089e-34	7.019340e-33
## CERCAM	51148	1.92391741	1.946518e-34	7.532220e-33
## FBN2	2201	2.32277181	2.087803e-34	8.066087e-33
## BTN3A3	10384	0.74341399	2.251506e-34	8.684737e-33
## SRL	6345	2.58661633	2.337900e-34	9.003693e-33
## CASP4LP	643733	1.56738676	2.407542e-34	9.257226e-33
## GZMB	3002	2.49022677	2.423371e-34	9.303371e-33
## CD27	939	2.51658815	2.703745e-34	1.036336e-32
## CAMKK1	84254	1.07661560	2.779863e-34	1.063834e-32
## TP53INP2	58476	-0.68886596	2.788880e-34	1.065606e-32
## GPR132	29933	1.69449116	2.933454e-34	1.119087e-32
## VAV1	7409	1.56146204	3.351024e-34	1.276383e-32
## SAMD3	154075	1.91933486	3.469570e-34	1.319468e-32
## KLHL38	340359	3.34610174	3.502014e-34	1.329726e-32
## TNFSF13B	10673	1.59888062	3.540553e-34	1.342262e-32
## NPAS2	4862	-0.96959210	3.889099e-34	1.472103e-32
## GCNT1	2650	0.99004792	4.415277e-34	1.668673e-32
## KIF21B	23046	1.38233694	4.472167e-34	1.687549e-32

## MMP3	4314	5.07507492	5.166096e-34	1.946377e-32
## OLAH	55301	-1.83320020	5.311428e-34	1.998034e-32
## CLEC10A	10462	1.89267841	5.618000e-34	2.110093e-32
## MX2	4600	1.32926294	7.664289e-34	2.874227e-32
## ZNRF3	84133	-0.61955689	7.701628e-34	2.883779e-32
## FYN	2534	0.67890531	7.998146e-34	2.990199e-32
## LCK	3932	2.14701097	8.064413e-34	3.010343e-32
## LYZ	4069	2.25154812	8.141410e-34	3.034423e-32
## GDF10	2662	3.00502686	8.440556e-34	3.141102e-32
## FNDC1-AS1	101929122	4.09929473	8.522474e-34	3.166738e-32
## FHL3	2275	1.95233033	8.724080e-34	3.236700e-32
## PAX7	5081	7.97410523	9.671305e-34	3.582658e-32
## ANGPTL5	253935	4.03502073	9.842966e-34	3.640699e-32
## THBS3	7059	1.49194931	1.238140e-33	4.572650e-32
## OTOF	9381	4.09253562	1.266470e-33	4.670181e-32
## LCP1	3936	1.74907698	1.352177e-33	4.978676e-32
## GFRA1	2674	1.19320387	1.376402e-33	5.060205e-32
## BEST3	144453	2.18482414	1.394843e-33	5.120255e-32
## ASB2	51676	2.57710638	1.434425e-33	5.257612e-32
## CD40LG	959	2.27462031	1.640186e-33	6.002735e-32
## COL6A1	1291	2.00057514	1.669746e-33	6.101728e-32
## SMCO1	255798	6.97447635	1.687866e-33	6.158684e-32
## PRRX2	51450	2.17800161	1.735114e-33	6.321588e-32
## INKA2	55924	0.86928615	1.885453e-33	6.859039e-32
## DEF6	50619	1.46963382	2.161932e-33	7.843373e-32
## P2RX5	5026	2.92577868	2.162487e-33	7.843373e-32
## MUSK	4593	3.60291465	2.665010e-33	9.637263e-32
## LINC01638	105372978	4.04195481	2.663095e-33	9.637263e-32
## TMEM182	130827	1.48537549	2.771832e-33	1.000866e-31
## ARPP21	10777	2.36300762	2.948324e-33	1.063015e-31
## OIP5	11339	1.91707940	3.323982e-33	1.196683e-31
## P2RY10	27334	2.40366272	3.966459e-33	1.425272e-31
## XCL2	6846	2.73931354	3.970656e-33	1.425272e-31
## P2RY13	53829	1.36510051	4.198160e-33	1.504712e-31
## LINP1	108570035	3.08888098	4.239950e-33	1.517453e-31
## TPO	7173	4.64002065	4.502812e-33	1.609159e-31
## CARMIL2	146206	2.25754818	4.741948e-33	1.692130e-31
## SHISAL1	85352	2.00032894	5.748796e-33	2.048409e-31
## ZFPM2	23414	1.52538079	6.051787e-33	2.153213e-31
## CD160	11126	2.23253820	6.496049e-33	2.307902e-31
## ITGAM	3684	1.58375832	6.610876e-33	2.345268e-31
## IDI2	91734	6.77964856	7.215693e-33	2.556102e-31
## WDFY4	57705	1.37821338	7.653251e-33	2.707157e-31
## AMFR	267	-0.58088005	7.910882e-33	2.794220e-31
## NDC80	10403	1.34486468	8.490308e-33	2.994528e-31
## GALNT8	26290	2.15638343	9.135224e-33	3.217320e-31
## JAML	120425	1.58810932	9.235860e-33	3.248056e-31
## CHST6	4166	3.30358972	1.035065e-32	3.634845e-31
## SVIL	6840	1.28928466	1.086160e-32	3.808770e-31
## TRG-AS1	100506776	1.81027897	1.279910e-32	4.481715e-31
## BTK	695	1.56047079	1.327580e-32	4.641947e-31
## WDR62	284403	1.92323568	1.425522e-32	4.977241e-31
## PCED1B-AS1	100233209	1.68747426	1.460443e-32	5.091854e-31
## PDPN	10630	1.88818333	1.486490e-32	5.175241e-31

## OMG	4974	4.11178716	1.751985e-32	6.090842e-31
## SCG5	6447	2.07286274	1.901530e-32	6.601297e-31
## EVI2B	2124	1.47287318	1.948522e-32	6.754784e-31
## KLHL6	89857	1.38612395	2.027021e-32	7.016901e-31
## KCNK1	3775	-0.62604013	2.265225e-32	7.830331e-31
## TM4SF19	116211	5.69089942	2.448653e-32	8.452373e-31
## TRAF1	7185	0.98037390	2.638491e-32	9.094746e-31
## HTR2A	3356	2.73896304	2.774492e-32	9.549989e-31
## RGMA	56963	1.90488106	3.072886e-32	1.056212e-30
## MAMSTR	284358	1.98335820	3.126540e-32	1.073136e-30
## SCUBE1	80274	-1.18126224	3.135575e-32	1.074719e-30
## ADRA2C	152	-1.31605317	3.328704e-32	1.139307e-30
## LANCL1-AS1	102724820	4.75855582	3.365201e-32	1.150179e-30
## TRIM22	10346	1.03679900	4.090610e-32	1.396150e-30
## MYO1G	64005	1.78310463	4.300565e-32	1.465751e-30
## ELAPOR1	57535	1.58302966	4.360981e-32	1.484261e-30
## CCL22	6367	2.855569672	4.377784e-32	1.487896e-30
## TYROBP	7305	1.70078300	4.698554e-32	1.594687e-30
## ATP1A2	477	2.19863118	4.873343e-32	1.651703e-30
## PHEX	5251	1.46971661	5.000817e-32	1.692547e-30
## CD209	30835	2.01620288	5.216751e-32	1.763175e-30
## NFIX	4784	1.57457464	6.704458e-32	2.262848e-30
## MS4A1	931	3.16076736	7.300660e-32	2.460656e-30
## PTGES3L	100885848	2.49494294	7.359840e-32	2.477167e-30
## FCER2	2208	2.90747911	8.476421e-32	2.849039e-30
## LINC00887	100131551	-2.31733249	8.745827e-32	2.935529e-30
## CYCS	54205	-0.65346817	8.983414e-32	3.011117e-30
## LGALS9	3965	1.39888344	9.047807e-32	3.028523e-30
## AKNA	80709	1.07905405	9.256408e-32	3.094085e-30
## PPP1R15B	84919	-0.42325719	9.408211e-32	3.140507e-30
## DAPP1	27071	1.70968464	9.476173e-32	3.158412e-30
## TNXB	7148	1.99851350	9.487843e-32	3.158412e-30
## GCSAM	257144	2.70469965	1.103375e-31	3.668006e-30
## TSPOAP1-AS1	100506779	1.22530289	1.121318e-31	3.722561e-30
## MN1	4330	1.84565288	1.135004e-31	3.762857e-30
## LRP1	4035	1.58969357	1.354047e-31	4.482930e-30
## FBLN7	129804	1.73939886	1.737838e-31	5.745742e-30
## TRAT1	50852	2.72962760	1.774690e-31	5.859612e-30
## ITGB2-AS1	100505746	2.35245619	1.877547e-31	6.190809e-30
## TMEM108	66000	2.01170906	2.147034e-31	7.069791e-30
## KIAA0040	9674	-0.58842846	2.165726e-31	7.121691e-30
## THEMIS	387357	2.14162263	2.492397e-31	8.184830e-30
## MYO1F	4542	1.41453543	2.570411e-31	8.429628e-30
## LINC02461	105369740	4.96943197	2.826605e-31	9.257321e-30
## RGS4	5999	1.69678339	2.920095e-31	9.550637e-30
## BASP1	10409	1.68675567	2.934596e-31	9.585165e-30
## HAS1	3036	5.09247439	2.961784e-31	9.660981e-30
## HRC	3270	1.99646171	3.303880e-31	1.076241e-29
## RIMS4	140730	2.63476782	3.382371e-31	1.100335e-29
## HAND2	9464	3.42875656	3.605606e-31	1.171388e-29
## PPP1R3C	5507	1.26807216	3.625451e-31	1.176263e-29
## ARHGAP6	395	-0.50175770	3.697500e-31	1.198039e-29
## LRRC38	126755	4.09705305	3.846971e-31	1.244810e-29
## CAV1	857	1.76257660	4.661546e-31	1.506386e-29

## EMB	133418	1.33157692	5.432199e-31	1.753092e-29
## COLEC12	81035	1.70177929	5.562552e-31	1.792780e-29
## MEF2C	4208	1.63538614	5.633987e-31	1.813398e-29
## LAIR2	3904	3.74421098	5.824399e-31	1.872205e-29
## AIM2	9447	2.66410190	5.862676e-31	1.882020e-29
## NEXN	91624	1.65602030	6.503593e-31	2.085011e-29
## ADAM19	8728	1.55130362	6.925350e-31	2.217298e-29
## MLC1	23209	2.41349247	7.234870e-31	2.313350e-29
## ARHGAP25	9938	0.83971040	7.319414e-31	2.337307e-29
## RSPO2	340419	5.44981799	7.924496e-31	2.527207e-29
## CD226	10666	1.26347898	8.109987e-31	2.582972e-29
## PTPRH	5794	2.37257486	8.614543e-31	2.740079e-29
## NR4A2	4929	-1.92461450	8.680681e-31	2.757506e-29
## ADA	100	1.34883637	9.090787e-31	2.884011e-29
## EPB41L2	2037	0.78336524	9.197501e-31	2.914061e-29
## PVT1	5820	1.50219838	9.821634e-31	3.107754e-29
## BMAL2	56938	1.58073386	1.022662e-30	3.231692e-29
## LINC01121	400952	4.91445629	1.024125e-30	3.232112e-29
## TGFB3	7043	1.75998370	1.056421e-30	3.329711e-29
## EVI2A	2123	1.62216713	1.070130e-30	3.368555e-29
## DOCK10	55619	1.01316077	1.113089e-30	3.499246e-29
## HCST	10870	1.78636613	1.161713e-30	3.647390e-29
## SMPD1	6609	-0.89607539	1.164031e-30	3.649951e-29
## POSTN	10631	2.55263593	1.269010e-30	3.973998e-29
## TRBV19	28568	3.06620403	1.277457e-30	3.995301e-29
## ITPRIP	85450	-0.74348531	1.305118e-30	4.076566e-29
## TMEM61	199964	-1.30582738	1.406135e-30	4.386456e-29
## TENT5A	55603	0.86934469	1.450123e-30	4.517878e-29
## GPSM3	63940	1.31107922	1.547238e-30	4.814269e-29
## MXRA5	25878	1.82426637	1.616475e-30	5.023267e-29
## TMEM233	387890	1.80184688	1.678383e-30	5.208990e-29
## PLEKHO1	51177	1.13766576	1.709405e-30	5.298501e-29
## C1orf127	148345	2.98245823	1.720589e-30	5.326374e-29
## LCP2	3937	1.21148133	1.765049e-30	5.457054e-29
## FMNL1-DT	339192	2.75502922	1.768737e-30	5.461509e-29
## SIGLEC17P	284367	2.23641285	1.824022e-30	5.625070e-29
## ZNF683	257101	2.93798712	1.905273e-30	5.868191e-29
## GRAMD2A	196996	-1.00259393	1.960879e-30	6.031813e-29
## CISH	1154	-0.97045078	1.975032e-30	6.067668e-29
## SLFN12	55106	0.72752297	2.012769e-30	6.175797e-29
## TSPAN32	10077	2.15341558	2.015676e-30	6.176916e-29
## LINC01871	101929531	2.84241213	2.256191e-30	6.905250e-29
## TDO2	6999	2.33317844	2.340271e-30	7.153577e-29
## VWCE	220001	1.27925894	2.424959e-30	7.403132e-29
## LGALS1	3956	1.85135925	2.556316e-30	7.794360e-29
## NCR3	259197	2.46826707	2.597943e-30	7.911355e-29
## SLC9A9	285195	1.06874034	2.876952e-30	8.750039e-29
## SNAI2	6591	1.01329969	3.036939e-30	9.225082e-29
## FAM131C	348487	-2.09783479	3.219274e-30	9.766738e-29
## PRODH	5625	-1.46263559	3.283669e-30	9.949681e-29
## TRBV7-9	28589	2.90667056	3.362860e-30	1.017694e-28
## CREB3L1	90993	1.91281317	3.384103e-30	1.022849e-28
## PKD1L2	114780	1.97703562	3.554499e-30	1.073017e-28
## TRIM80P	106480328	-2.12421925	3.577012e-30	1.078474e-28

## LINC00968	100507632	3.66319886	3.645455e-30	1.097747e-28
## RERE	473	-0.49842037	3.872220e-30	1.164589e-28
## ST8SIA4	7903	1.21657979	4.236544e-30	1.272587e-28
## JUP	3728	-0.74797166	4.429677e-30	1.328958e-28
## MOB3C	148932	0.41911537	4.669342e-30	1.399133e-28
## IL7R	3575	2.09862738	5.025829e-30	1.504097e-28
## EXTL1	2134	2.50716725	5.241967e-30	1.566852e-28
## CGN	57530	-0.89828676	5.727380e-30	1.709841e-28
## CFH	3075	1.17741998	5.776477e-30	1.722382e-28
## ZFAND5	7763	-0.78285657	6.161384e-30	1.834899e-28
## PTGDR	5729	1.89383571	6.407399e-30	1.905829e-28
## BACH2	60468	0.96240072	6.895128e-30	2.048393e-28
## FBLN1	2192	1.79859731	6.933330e-30	2.057227e-28
## RASSF5	83593	1.14965072	7.036144e-30	2.085187e-28
## RASA3	22821	1.04014151	7.235571e-30	2.141676e-28
## BOC	91653	1.46876663	7.886729e-30	2.331574e-28
## CDCA2	157313	1.29516213	8.475000e-30	2.502442e-28
## LINC02446	101060038	3.58263055	8.853877e-30	2.611141e-28
## CTNNA3	29119	2.22102551	8.884721e-30	2.617062e-28
## LINC01232	102725509	0.77665587	9.270607e-30	2.727421e-28
## DNAJC5B	85479	2.45538257	9.598841e-30	2.820574e-28
## FMOD	2331	2.09723923	9.706172e-30	2.848668e-28
## IHH	3549	-1.25705536	9.979344e-30	2.925308e-28
## RASD1	51655	-1.55066630	1.051417e-29	3.078371e-28
## SHD	56961	4.43947372	1.098179e-29	3.211414e-28
## TRBV2	28620	3.32030292	1.118737e-29	3.267598e-28
## CD248	57124	1.97354500	1.249612e-29	3.645478e-28
## RARG	5916	1.14337353	1.304006e-29	3.799599e-28
## C1QTNF3	114899	2.07757698	1.401498e-29	4.078778e-28
## IRF4	3662	2.23059800	1.416945e-29	4.118801e-28
## FCGR2B	2213	1.99525922	1.455201e-29	4.224950e-28
## VIM	7431	1.39575119	1.475170e-29	4.277817e-28
## KCNA3	3738	2.03170474	1.564277e-29	4.530809e-28
## PRECSIT	283487	1.71520547	1.752615e-29	5.070275e-28
## WNT2B	7482	1.34193744	1.786868e-29	5.163221e-28
## ZIC1	7545	5.90505356	1.881214e-29	5.429381e-28
## SULT2B1	6820	-2.62522027	1.902252e-29	5.483586e-28
## PTGER3	5733	-0.79762723	2.220240e-29	6.392659e-28
## ARHGEF4	50649	1.47560400	2.325665e-29	6.688281e-28
## TRAF3IP3	80342	1.43664074	2.415738e-29	6.939107e-28
## CLEC2B	9976	1.15308725	2.681034e-29	7.692067e-28
## CELF2	10659	1.20848009	2.753752e-29	7.891384e-28
## FILIP1	27145	1.37167248	2.839713e-29	8.128134e-28
## DAPK2	23604	1.31117114	3.165834e-29	9.050934e-28
## ECM1	1893	1.72165955	3.223227e-29	9.204188e-28
## C6	729	-1.87241393	3.244413e-29	9.253813e-28
## TRGC2	6967	1.60750074	3.363293e-29	9.581640e-28
## TBX18	9096	2.45164859	3.456568e-29	9.835839e-28
## LINC00426	100188949	2.10796543	3.575862e-29	1.016339e-27
## CAMK2A	815	2.07533751	3.619477e-29	1.027534e-27
## SDC4	6385	-0.61757775	3.640472e-29	1.032288e-27
## ADSS1	122622	1.36155373	3.846338e-29	1.089392e-27
## LOXL1	4016	1.55004525	3.907740e-29	1.105495e-27
## LEFTY2	7044	2.53513783	3.935976e-29	1.112188e-27

## FABP5	2171	2.04083744	4.466994e-29	1.260771e-27
## ITGB2	3689	1.56676636	5.092018e-29	1.435512e-27
## TMEM171	134285	-1.16502713	5.116395e-29	1.440713e-27
## AKR1B15	441282	3.72289129	5.652286e-29	1.589771e-27
## MRC2	9902	1.73171348	5.715805e-29	1.605778e-27
## PLXNC1	10154	0.98645007	5.869657e-29	1.647096e-27
## DLAT	1737	-0.44744826	5.962107e-29	1.671109e-27
## MILR1	284021	1.43600938	6.335651e-29	1.773763e-27
## BSND	7809	-1.14211266	6.838751e-29	1.912411e-27
## ABCA9	10350	1.38002324	6.987101e-29	1.951650e-27
## PTAFR	5724	1.24149441	7.921195e-29	2.210023e-27
## CD244	51744	1.67805639	8.367663e-29	2.331910e-27
## SLC24A4	123041	1.67510229	9.569010e-29	2.662248e-27
## KCNMA1	3778	1.62883658	9.574934e-29	2.662248e-27
## ARHGAP15	55843	1.24709840	9.824026e-29	2.728385e-27
## RASAL3	64926	1.39463082	1.051799e-28	2.917782e-27
## ANXA8	653145	5.56892983	1.089474e-28	3.018849e-27
## MISP3	113230	-0.98929559	1.095196e-28	3.031249e-27
## LTA	4049	2.75145727	1.108899e-28	3.065682e-27
## ROR1-AS1	101927034	3.01930018	1.167654e-28	3.224450e-27
## PALM3	342979	-0.87720737	1.179546e-28	3.253593e-27
## SEMA4B	10509	-0.91652490	1.193703e-28	3.288908e-27
## DTHD1	401124	2.62546422	1.333278e-28	3.669307e-27
## ABCD2	225	1.44554883	1.338367e-28	3.679146e-27
## SETD7	80854	1.03519624	1.416554e-28	3.889681e-27
## CTSG	1511	2.49900054	1.484206e-28	4.070845e-27
## TRBV5-1	28614	3.22263125	1.555270e-28	4.260950e-27
## VEGFD	2277	1.71449678	1.559746e-28	4.268400e-27
## LHFPL2	10184	1.41556039	1.621500e-28	4.432403e-27
## CCDC102B	79839	0.78187254	1.632954e-28	4.458697e-27
## RGS10	6001	1.10359824	1.668062e-28	4.549446e-27
## NCF4	4689	1.33274771	1.743857e-28	4.750838e-27
## PBK	55872	1.86611984	1.751795e-28	4.767117e-27
## LINC02980	123706533	-0.49729799	1.848641e-28	5.025036e-27
## TMEM154	201799	1.34188016	1.946692e-28	5.285650e-27
## GM2A	2760	0.73963941	2.030711e-28	5.507623e-27
## GLIPR1	11010	1.39379067	2.120768e-28	5.745460e-27
## ACTR3C	653857	-0.75920216	2.155685e-28	5.833553e-27
## CCDC144NL-AS1	440416	1.77401605	2.164517e-28	5.850939e-27
## TMIGD3	57413	1.91086506	2.314700e-28	6.249946e-27
## PAMR1	25891	1.80982799	2.359560e-28	6.364003e-27
## RFTN1	23180	0.79710997	2.404301e-28	6.477485e-27
## BCR	613	-0.47638915	2.479654e-28	6.673099e-27
## STAMBPL1	57559	0.85802243	2.516767e-28	6.765481e-27
## FKBP10	60681	1.70726497	2.550245e-28	6.847901e-27
## OBSCN	84033	1.69407742	2.684185e-28	7.199601e-27
## SACS	26278	1.26424266	2.835314e-28	7.596579e-27
## IL2RG	3561	1.91770293	2.952184e-28	7.900993e-27
## ALDH1A3	220	1.48326166	3.250757e-28	8.690499e-27
## RRM2	6241	1.34318175	3.346176e-28	8.935761e-27
## APOBEC3A	200315	2.59490892	3.351339e-28	8.939724e-27
## PRRG3	79057	2.11445200	3.394011e-28	9.043626e-27
## SCN5A	6331	2.34494523	4.069895e-28	1.083270e-26
## AQP6	363	-1.49734543	4.676395e-28	1.243338e-26

## LRRK4	64101	-1.11447838	4.873445e-28	1.294312e-26
## GPR65	8477	1.32032244	5.290712e-28	1.403598e-26
## TBC1D2B	23102	0.74158143	5.312847e-28	1.407933e-26
## SLAMF8	56833	1.56523904	5.434361e-28	1.438567e-26
## ESRP2	80004	-0.90965125	5.789299e-28	1.530857e-26
## SCN4B	6330	1.51582912	5.896326e-28	1.557463e-26
## DDB2	1643	0.64603031	6.103747e-28	1.610501e-26
## LINC02802	100996732	3.05284312	6.538526e-28	1.723348e-26
## PHC2	1912	-0.47813176	6.552835e-28	1.725249e-26
## DUSP29	338599	6.38221144	7.477301e-28	1.966514e-26
## MFAP4	4239	1.76751621	7.825858e-28	2.055959e-26
## BCAM	4059	-0.96550153	8.072577e-28	2.118485e-26
## MARVELD1	83742	1.44396064	8.417526e-28	2.206627e-26
## MMP19	4327	1.84949338	8.735269e-28	2.287454e-26
## KCNQ1	3784	-0.79937453	9.060698e-28	2.370119e-26
## TRBV6-5	28602	3.20110859	9.330415e-28	2.438047e-26
## SCIMP	388325	1.31117441	9.725091e-28	2.538447e-26
## ST6GAL1	6480	-1.17596932	9.802611e-28	2.553197e-26
## LMBRD1	55788	-0.43867168	9.797995e-28	2.553197e-26
## NLN	57486	0.47780933	9.854690e-28	2.564013e-26
## BCAT1	586	1.49003341	9.868584e-28	2.564882e-26
## FOXF2	2295	2.18364776	1.002302e-27	2.602237e-26
## CA8	767	-1.27145361	1.026004e-27	2.660931e-26
## ABCA6	23460	1.01287345	1.112091e-27	2.881121e-26
## RUNX2	860	1.09667971	1.118186e-27	2.893827e-26
## TRBV9	28586	3.03744235	1.262552e-27	3.263966e-26
## APOBEC3C	27350	1.01477926	1.277248e-27	3.298449e-26
## DYRK2	8445	0.69633675	1.317461e-27	3.398687e-26
## PDCD1	5133	1.77082010	1.339408e-27	3.451639e-26
## DHRS13	147015	-0.81363466	1.341692e-27	3.453862e-26
## PHLDA3	23612	1.30966554	1.394014e-27	3.584755e-26
## CALML6	163688	3.19103035	1.397816e-27	3.590731e-26
## GAL3ST4	79690	1.63211211	1.474980e-27	3.784952e-26
## SIGLEC6	946	2.40090539	1.493454e-27	3.828315e-26
## KDELR3	11015	1.47796105	1.551946e-27	3.974061e-26
## TLR8	51311	1.62646324	1.627701e-27	4.163659e-26
## TLR7	51284	1.58566227	1.737997e-27	4.441121e-26
## FYB1	2533	1.02043598	1.818499e-27	4.641948e-26
## APOBEC3G	60489	1.03009593	1.865112e-27	4.755937e-26
## SPP1	6696	-1.56655783	1.906206e-27	4.855629e-26
## CSF1R	1436	1.28203136	1.941181e-27	4.939544e-26
## PLAC9	219348	1.98053095	2.154686e-27	5.477094e-26
## SLC16A12	387700	-1.17068476	2.207105e-27	5.604479e-26
## ENAH	55740	1.01086862	2.241924e-27	5.686952e-26
## FCMR	9214	1.63995396	2.291932e-27	5.807741e-26
## ATP2B2	491	2.29424077	2.455813e-27	6.216532e-26
## FGGY-DT	105378756	2.44456653	2.515879e-27	6.361953e-26
## SH3BP4	23677	-0.59098190	2.565577e-27	6.480882e-26
## TMEM37	140738	-0.74259772	2.623007e-27	6.619076e-26
## ECM2	1842	1.15318524	2.787726e-27	7.027440e-26
## C1QTNF2	114898	1.81390064	2.859929e-27	7.201983e-26
## OAT	4942	0.83476101	3.023001e-27	7.604756e-26
## PCDH18	54510	1.37766638	3.056299e-27	7.680571e-26
## CD33	945	1.36152797	3.137070e-27	7.875408e-26

## GAS6-AS1	650669	1.98067911	3.267868e-27	8.195301e-26
## ATAD2	29028	0.75155618	3.526745e-27	8.835406e-26
## LPXN	9404	0.73415034	3.651544e-27	9.138637e-26
## PLAT	5327	-0.83857743	3.676191e-27	9.190857e-26
## KAZALD1	81621	1.59536184	3.725096e-27	9.303553e-26
## GPA33	10223	2.38857621	3.865768e-27	9.644972e-26
## FLT1	2321	-0.75283750	3.967295e-27	9.888126e-26
## SLC36A4	120103	-0.57925010	4.008571e-27	9.980766e-26
## LINC02984	100507516	1.51973702	4.060308e-27	1.009924e-25
## SYNE3	161176	1.20240165	4.154120e-27	1.032201e-25
## ZNF106	64397	1.01530370	4.819509e-27	1.196311e-25
## TTC39A	22996	-1.35738844	4.855064e-27	1.203907e-25
## OAS2	4939	1.16688508	4.866010e-27	1.205392e-25
## CCDC47	57003	-0.39699405	5.096898e-27	1.261301e-25
## GBP1	2633	1.07913836	5.239588e-27	1.295292e-25
## MSC-AS1	100132891	1.12781679	5.363066e-27	1.324470e-25
## ERVMER34-1	100288413	-0.93002288	5.464529e-27	1.348158e-25
## CD99	4267	1.19036958	5.683300e-27	1.400709e-25
## HSPB6	126393	2.23097358	5.703801e-27	1.404337e-25
## STK32B	55351	-0.79733598	6.156200e-27	1.514188e-25
## CREB5	9586	1.01345548	6.387473e-27	1.569484e-25
## P2RY14	9934	1.16334583	6.495220e-27	1.594347e-25
## RAB23	51715	0.85530094	7.147473e-27	1.752682e-25
## MSC	9242	1.48795480	7.811275e-27	1.913526e-25
## TNS2-AS1	283335	-0.57963267	7.852274e-27	1.921633e-25
## IQGAP3	128239	1.24798557	8.685875e-27	2.123495e-25
## LAIR1	3903	1.38246366	9.020442e-27	2.203073e-25
## SPCS3	60559	-0.36156937	9.094701e-27	2.218979e-25
## RGS3	5998	-0.89464199	9.279269e-27	2.259474e-25
## LINC00900	283143	1.81849973	9.275906e-27	2.259474e-25
## HHIPL1	84439	1.72711255	9.922006e-27	2.413560e-25
## CPA3	1359	2.11661176	1.018801e-26	2.475788e-25
## RNASE1	6035	1.07550912	1.030381e-26	2.501427e-25
## CD300A	11314	1.46451296	1.033309e-26	2.506032e-25
## KIF5C	3800	-1.33238945	1.055076e-26	2.556271e-25
## C1orf105	92346	2.36333720	1.095129e-26	2.650670e-25
## IGFL2	147920	4.23532988	1.263276e-26	3.054613e-25
## SLC25A25	114789	-0.83235067	1.302857e-26	3.147189e-25
## LINC01091	285419	1.18162311	1.314754e-26	3.172773e-25
## IL12RB1	3594	1.29999261	1.351459e-26	3.258114e-25
## SYNM	23336	1.68749677	1.398848e-26	3.369020e-25
## CXCR5	643	2.99303017	1.409024e-26	3.390167e-25
## PRRT3-AS1	100874032	1.62915593	1.460337e-26	3.510152e-25
## PPP1R18	170954	1.13422671	1.593547e-26	3.826560e-25
## FAM20A	54757	-1.30878490	1.604743e-26	3.849642e-25
## LAX1	54900	1.96968522	1.788497e-26	4.286218e-25
## TNFRSF13C	115650	2.07945192	1.825038e-26	4.369483e-25
## CSRP2	1466	-0.79579958	1.902450e-26	4.550337e-25
## MS4A2	2206	2.06806701	2.088709e-26	4.990926e-25
## TNFRSF18	8784	2.53651922	2.158608e-26	5.152881e-25
## ABTB3	121551	-0.69310599	2.197064e-26	5.239535e-25
## NNAT	4826	2.99233211	2.203612e-26	5.249997e-25
## FCHO1	23149	1.57085397	2.227661e-26	5.302096e-25
## RBPMs	11030	-0.55857486	2.254509e-26	5.360746e-25

## GFRA2	2675	1.25759345	2.335102e-26	5.546950e-25
## SLC7A5	8140	-1.43009257	2.377457e-26	5.642048e-25
## LINC01894	105372030	3.43125293	2.497537e-26	5.921234e-25
## MAP1A	4130	1.47682581	2.608166e-26	6.177490e-25
## JPH2	57158	2.04418340	2.694595e-26	6.375984e-25
## SYT7	9066	-1.50099626	2.717544e-26	6.424031e-25
## CHSY3	337876	1.73578808	2.847899e-26	6.725637e-25
## PNRC1	10957	-0.55180733	3.145458e-26	7.421143e-25
## FA2H	79152	-0.99895469	3.431496e-26	8.088147e-25
## CDH16	1014	-0.96829042	3.485818e-26	8.208223e-25
## NIBAN3	199786	2.54600843	3.845610e-26	9.046676e-25
## CLEC12A	160364	1.89240662	4.080931e-26	9.590976e-25
## MBNL1-AS1	401093	1.50904234	4.719314e-26	1.108058e-24
## PEBP4	157310	1.86284349	4.828903e-26	1.132695e-24
## CARD16	114769	0.99542398	4.911622e-26	1.150987e-24
## BTN3A2	11118	0.77432851	5.008806e-26	1.172630e-24
## CBLN4	140689	1.85213630	5.199082e-26	1.216005e-24
## WWTR1-AS1	100128025	-0.86161440	5.350222e-26	1.250151e-24
## CASP1	834	0.99180569	5.879887e-26	1.372595e-24
## FERMT3	83706	1.32640450	6.158343e-26	1.436218e-24
## FAM210B	116151	0.33478450	6.194289e-26	1.443216e-24
## VIPR2	7434	1.49159942	6.309820e-26	1.468725e-24
## FOSB	2354	-2.15119720	6.749527e-26	1.569572e-24
## LGALS12	85329	2.44884969	6.966215e-26	1.618413e-24
## ADGRB2	576	1.14196525	7.177050e-26	1.665802e-24
## LINC02606	100506022	-1.32491707	7.447964e-26	1.727032e-24
## ARHGAP9	64333	1.46857854	7.625624e-26	1.766542e-24
## HLA-DQA1	3117	1.21147347	8.006626e-26	1.853038e-24
## CCR5	1234	1.58500179	8.017184e-26	1.853716e-24
## ZNRF2	223082	-0.62271848	8.383031e-26	1.936464e-24
## PIP4K2B	8396	0.40556308	9.492437e-26	2.190652e-24
## CD163L1	283316	1.53397186	9.611233e-26	2.215964e-24
## EPHA3	2042	1.83064979	9.688436e-26	2.231646e-24
## NLRP6	171389	-1.48943531	9.833366e-26	2.262885e-24
## GABARAPL1	23710	-0.68657408	9.847874e-26	2.264079e-24
## VWF	7450	1.91969318	1.000100e-25	2.297111e-24
## ASB12	142689	1.80977911	1.064778e-25	2.443359e-24
## FOXCUT	101927703	-1.20031259	1.095642e-25	2.511811e-24
## P2RX6	9127	1.65761901	1.225412e-25	2.806667e-24
## CD180	4064	1.64669322	1.255804e-25	2.873568e-24
## TRAV26-1	28657	3.21848172	1.258389e-25	2.876775e-24
## RCN3	57333	1.86920543	1.381235e-25	3.154642e-24
## ARRB2	409	0.63087893	1.417474e-25	3.234369e-24
## TLR10	81793	2.39739840	1.473778e-25	3.359688e-24
## CLCNKA	1187	-1.74549782	1.574591e-25	3.586143e-24
## MUC16	94025	4.16232739	1.604101e-25	3.649931e-24
## CCR4	1233	2.13675587	1.641505e-25	3.731544e-24
## IFI16	3428	1.00740624	1.645521e-25	3.737178e-24
## CFP	5199	1.75648589	1.691464e-25	3.837934e-24
## CALCR	799	-1.02851381	1.708876e-25	3.873825e-24
## MYOM2	9172	1.37180041	1.725227e-25	3.907244e-24
## TRPV3	162514	1.76496790	1.903104e-25	4.306083e-24
## LINC01132	100506810	-0.95846914	2.001033e-25	4.523450e-24
## CDKN2B	1030	1.73338971	2.009444e-25	4.538243e-24

## ASF1B	55723	1.23714868	2.040587e-25	4.604299e-24
## MIR223HG	115891964	1.67198680	2.096366e-25	4.725768e-24
## TPM1	7168	1.22596636	2.102269e-25	4.734684e-24
## LINC03070	101928228	1.62311844	2.189040e-25	4.925542e-24
## SREBF2	6721	-0.55427237	2.199916e-25	4.945435e-24
## PAX5	5079	3.18102582	2.253669e-25	5.061591e-24
## WIPF1	7456	0.66414527	2.276391e-25	5.107901e-24
## FAS	355	0.73215706	2.422831e-25	5.431478e-24
## TPX2	22974	1.35755350	2.475537e-25	5.544517e-24
## LDLR	3949	-1.07177242	2.633898e-25	5.893771e-24
## HK2	3099	1.51191517	2.643299e-25	5.909365e-24
## CLCN1	1180	3.27951156	2.779568e-25	6.208299e-24
## ZNF79	7633	0.35087120	3.546542e-25	7.914098e-24
## STK38	11329	0.40284184	3.910809e-25	8.718951e-24
## CHRNB4	1143	1.42400606	3.990771e-25	8.889068e-24
## KCNC3	3748	-0.97620787	4.170963e-25	9.281920e-24
## SPTA1	6708	2.57894090	4.330945e-25	9.629122e-24
## CASP3	836	0.58119696	4.451182e-25	9.887401e-24
## CNR2	1269	2.66776082	4.518315e-25	1.002736e-23
## TRANK1	9881	0.85796171	4.651684e-25	1.031392e-23
## LRRC14B	389257	3.10476603	4.674443e-25	1.035494e-23
## PTGFRN	5738	1.33173280	4.773503e-25	1.056475e-23
## YPEL4	219539	1.70892276	4.880270e-25	1.079121e-23
## SLCO2A1	6578	-0.85034944	4.886289e-25	1.079470e-23
## KIF4A	24137	1.36579311	5.013802e-25	1.106634e-23
## CPZ	8532	3.09416572	5.195120e-25	1.145613e-23
## ZNF496	84838	0.33731767	5.565468e-25	1.226169e-23
## PPP2R3A	5523	-0.62520459	5.696584e-25	1.253919e-23
## LINC01320	104355288	-1.23193949	6.449147e-25	1.418287e-23
## CDKN3	1033	1.16979229	6.520751e-25	1.432738e-23
## POPDC2	64091	1.29418747	7.316758e-25	1.606184e-23
## CORO1A	11151	1.50134817	7.515158e-25	1.648182e-23
## PRKAB1	5564	-0.47405661	7.521642e-25	1.648182e-23
## KCNK2	3776	2.79522222	7.729842e-25	1.692278e-23
## CAAP1	79886	-0.41903522	7.877729e-25	1.723102e-23
## SPTB	6710	1.75730724	8.020328e-25	1.752716e-23
## RIPOR2	9750	0.86566939	8.289896e-25	1.809998e-23
## NR1D1	9572	1.13011322	8.381175e-25	1.828285e-23
## ARHGAP36	158763	5.94799011	8.639941e-25	1.883042e-23
## CD276	80381	1.11851722	8.943852e-25	1.947532e-23
## UBTD2	92181	0.36965775	9.163500e-25	1.993574e-23
## LINC02600	107986251	-0.96339180	9.225994e-25	2.005374e-23
## NOD2	64127	1.47291386	9.308479e-25	2.021496e-23
## CD4	920	1.11865075	9.730492e-25	2.111256e-23
## SNX10	29887	-0.84985882	1.026288e-24	2.224784e-23
## IL34	146433	1.16229635	1.072089e-24	2.321998e-23
## TRPM2	7226	1.20475070	1.122089e-24	2.428130e-23
## SPIB	6689	2.75184967	1.140783e-24	2.466385e-23
## KRT31	3881	3.60638237	1.160037e-24	2.505784e-23
## ITGB1BP2	26548	2.00615598	1.190137e-24	2.568519e-23
## TRBV20-1	28567	2.59988330	1.197691e-24	2.582528e-23
## ADAMTS7	11173	1.42077611	1.210302e-24	2.607406e-23
## TMEM245	23731	-0.55028516	1.231896e-24	2.651578e-23
## SERPINA3	12	-3.28785258	1.307293e-24	2.811373e-23

## ARX	170302	3.49255545	1.337209e-24	2.873166e-23
## ZCCHC24	219654	1.06173832	1.342149e-24	2.881234e-23
## CALHM2	51063	1.39077614	1.379758e-24	2.959356e-23
## CENPF	1063	1.41965939	1.408450e-24	3.018232e-23
## CSMD2	114784	1.67371237	1.425454e-24	3.051979e-23
## CKAP2	26586	0.55807136	1.451997e-24	3.106073e-23
## CCNB2	9133	1.50260948	1.467438e-24	3.136342e-23
## P3H3	10536	1.45549968	1.474988e-24	3.149709e-23
## DIPK1C	125704	1.89184947	1.483162e-24	3.164383e-23
## PABPC1	26986	0.39743956	1.557784e-24	3.320677e-23
## TRBV18	28569	3.21707639	1.580758e-24	3.366696e-23
## P2RY1	5028	0.81302689	1.617708e-24	3.442376e-23
## SLFN5	162394	0.90503665	1.638869e-24	3.484353e-23
## LINCADL	107986443	4.87809622	1.642272e-24	3.488536e-23
## TRBV4-1	28617	3.36080908	1.814493e-24	3.851005e-23
## OASL	8638	1.38703344	1.920152e-24	4.071694e-23
## AQP9	366	2.09088204	1.965689e-24	4.164622e-23
## IGF2	3481	2.17721418	2.018854e-24	4.273534e-23
## LPCAT3	10162	-0.64524498	2.110020e-24	4.462627e-23
## SPEG	10290	2.09047599	2.139915e-24	4.521920e-23
## STK3	6788	-0.36535749	2.317739e-24	4.893430e-23
## PTCH2	8643	1.45459628	2.341158e-24	4.938582e-23
## MS4A6A	64231	1.18840646	2.434725e-24	5.131506e-23
## BHLHE22	27319	2.16382178	2.445442e-24	5.149627e-23
## APOBEC3H	164668	1.92814088	2.631040e-24	5.535662e-23
## CENPU	79682	0.98930611	2.740953e-24	5.761929e-23
## ZNF521	25925	0.93229031	2.764123e-24	5.805615e-23
## CHRD	8646	-1.20784908	2.776658e-24	5.826906e-23
## IGFBP3	3486	0.90880604	2.843398e-24	5.961812e-23
## MYL6B	140465	1.24448401	2.956204e-24	6.192994e-23
## PRR15	222171	-0.80974590	3.043584e-24	6.370553e-23
## ETV1	2115	0.75980984	3.093158e-24	6.468747e-23
## GPAM	57678	1.15941582	3.181855e-24	6.648517e-23
## LILRA4	23547	3.53715102	3.203215e-24	6.687398e-23
## LRRK1	79705	1.05692312	3.302647e-24	6.889067e-23
## ASB10	136371	3.17307214	3.424687e-24	7.137506e-23
## TRBV29-1	28558	2.69891879	3.473595e-24	7.233234e-23
## IHO1	339834	1.75014246	3.576492e-24	7.441124e-23
## ABHD3	171586	-0.38643848	3.739934e-24	7.774519e-23
## GNG2	54331	0.87318579	3.774281e-24	7.839214e-23
## GASK1B	51313	1.11788658	3.853632e-24	7.997192e-23
## CCDC88B	283234	1.24034805	3.869227e-24	8.022704e-23
## MUC1	4582	-1.11069264	3.993005e-24	8.272295e-23
## NFATC2	4773	1.07417452	4.004312e-24	8.288653e-23
## MYEOV	26579	2.57038910	4.201081e-24	8.688551e-23
## HNRNPA2B1	3181	-0.28299379	4.473108e-24	9.243282e-23
## SCTR-AS1	107105282	-1.07492954	4.539731e-24	9.372983e-23
## KIF20A	10112	1.67486192	4.575950e-24	9.439742e-23
## ZBED3	84327	-0.48229579	4.688425e-24	9.663564e-23
## PLPP7	84814	1.31637419	4.739100e-24	9.759736e-23
## DISP1	84976	-0.39993854	4.884620e-24	1.005090e-22
## KCNN4	3783	1.74597576	4.889588e-24	1.005261e-22
## DMTN	2039	-0.50341085	5.131546e-24	1.054114e-22
## GALNT1	2589	0.54053983	5.174530e-24	1.062046e-22

## MS4A7	58475	1.13019185	5.248252e-24	1.076268e-22
## LINC01215	101929623	2.75809344	5.805505e-24	1.189541e-22
## GLI2	2736	1.30488007	6.059138e-24	1.240464e-22
## EZH2	2146	0.92760436	6.321576e-24	1.293103e-22
## CRMA	253868	2.54891852	6.438121e-24	1.315835e-22
## F2RL3	9002	-1.27657804	6.823846e-24	1.393498e-22
## CERS2	29956	-0.54964912	7.097477e-24	1.448159e-22
## MXRA8	54587	1.45751859	7.541510e-24	1.537468e-22
## CRY1	1407	-0.51032187	7.718430e-24	1.572218e-22
## FGF7	2252	1.36708353	7.840251e-24	1.595695e-22
## ZNF684	127396	-0.63791479	7.941802e-24	1.615010e-22
## GPR55	9290	2.20412520	8.012944e-24	1.628115e-22
## CEBPD	1052	-1.19805699	8.134860e-24	1.651506e-22
## SCGN	10590	-1.37296409	8.394826e-24	1.702860e-22
## NIM1K	167359	1.01307095	8.812217e-24	1.786036e-22
## CLC	1178	3.44305598	9.132772e-24	1.849463e-22
## ELOVL7	79993	-0.57471291	9.679306e-24	1.958508e-22
## FBXO2	26232	-1.17044783	1.032213e-23	2.086838e-22
## GREM1	26585	2.85448024	1.049248e-23	2.119515e-22
## DSCC1	79075	0.84623350	1.058234e-23	2.135892e-22
## LINC01857	102724714	3.30396265	1.126749e-23	2.272292e-22
## SERPINH1	871	1.27594942	1.244997e-23	2.508679e-22
## PITPNM2	57605	-0.61796127	1.283284e-23	2.583685e-22
## TRBV6-1	28606	3.01595470	1.339481e-23	2.694596e-22
## CSF2RA	1438	1.14987683	1.366923e-23	2.747526e-22
## GDF15	9518	-1.26985496	1.437264e-23	2.886525e-22
## TRAV19	28664	3.02192358	1.468738e-23	2.947301e-22
## SESN3	143686	0.58066758	1.607560e-23	3.223211e-22
## ARL4C	10123	1.28682505	1.654893e-23	3.315380e-22
## PLCB2	5330	1.23837699	1.724907e-23	3.452798e-22
## PIK3IP1	113791	0.58778427	1.800827e-23	3.601802e-22
## TRBV4-2	28616	3.13572113	1.819887e-23	3.636931e-22
## FEZ1	9638	1.02397405	1.847618e-23	3.689314e-22
## ARHGAP45	23526	1.09270815	1.878272e-23	3.747446e-22
## INPP5D	3635	0.91982319	2.027369e-23	4.041600e-22
## ATP8B2	57198	0.94123895	2.037887e-23	4.059236e-22
## HVCN1	84329	0.83509092	2.200048e-23	4.378653e-22
## RPL26P6	100131526	1.47157826	2.211039e-23	4.396928e-22
## KLRK1	22914	3.10319812	2.236319e-23	4.443564e-22
## PRDM6-AS1	105379152	3.03880887	2.251968e-23	4.471003e-22
## IFNG	3458	3.88301617	2.384387e-23	4.730039e-22
## PARVG	64098	1.40392036	2.396705e-23	4.750598e-22
## STK10	6793	0.68311709	2.473305e-23	4.898434e-22
## PTPN1	5770	-0.74627696	2.496699e-23	4.940739e-22
## C6orf47	57827	-0.28967022	2.500923e-23	4.945071e-22
## RORC	6097	-0.87217400	2.512852e-23	4.964619e-22
## VGLL3	389136	1.49164874	2.647065e-23	5.225534e-22
## NGFR	4804	1.34831233	2.721976e-23	5.369053e-22
## MAP4K4	9448	0.77247012	2.844978e-23	5.607122e-22
## SAMHD1	25939	1.01956901	2.908191e-23	5.727063e-22
## NIBAN1	116496	1.36994411	2.924425e-23	5.754369e-22
## TPRN	286262	-0.75787240	3.237708e-23	6.365659e-22
## COPZ2	51226	1.10371019	3.395926e-23	6.665944e-22
## Clorf216	127703	0.93221336	3.395128e-23	6.665944e-22

## TBC1D8B	54885	-0.92746565	3.563284e-23	6.988811e-22
## INHBA	3624	1.60521185	3.781968e-23	7.411742e-22
## OSCAR	126014	1.62128172	3.810984e-23	7.462589e-22
## DNASE1L3	1776	-0.76688127	4.035614e-23	7.896091e-22
## RFX2	5990	0.78172273	4.109108e-23	8.033422e-22
## PTPN7	5778	1.28785574	4.176456e-23	8.154455e-22
## FAM111B	374393	1.61580083	4.177728e-23	8.154455e-22
## HIF1A	3091	-0.85154249	4.318705e-23	8.422861e-22
## MEX3B	84206	1.44861001	4.360574e-23	8.497699e-22
## LINC00607	646324	2.36509619	4.390132e-23	8.548445e-22
## MARCKS	4082	1.02650342	4.439908e-23	8.638447e-22
## TRBV3-1	28619	2.95220436	4.534745e-23	8.815907e-22
## TRAF3	7187	0.40113006	4.633911e-23	9.001493e-22
## KIAA1671-AS1	100128531	2.19702477	4.664767e-23	9.054193e-22
## HIVEP3	59269	0.59448303	4.694315e-23	9.104273e-22
## CBR3	874	1.31924255	4.861220e-23	9.420454e-22
## CSTA	1475	1.83301502	5.062808e-23	9.803291e-22
## TRBV10-3	28583	3.25154365	5.155695e-23	9.975203e-22
## IFFO1	25900	0.75979582	5.207899e-23	1.006019e-21
## PTGIS	5740	1.80900977	5.207224e-23	1.006019e-21
## PCDH19	57526	1.31548958	5.227660e-23	1.009034e-21
## CPA4	51200	2.23406222	5.415198e-23	1.044403e-21
## CLCA2	9635	3.48297560	6.193453e-23	1.192608e-21
## GAP43	2596	2.52333289	6.193425e-23	1.192608e-21
## MYHAS	100128560	3.48242771	6.314925e-23	1.215036e-21
## PHOSPHO1	162466	1.84416561	6.454363e-23	1.240882e-21
## RGS20	8601	2.88214809	6.513204e-23	1.251204e-21
## NSMAF	8439	0.43665028	6.774739e-23	1.300418e-21
## ENDOD1	23052	-0.43156284	7.181947e-23	1.377494e-21
## CD79A	973	2.30209715	7.229286e-23	1.385480e-21
## SLAMF1	6504	1.60612342	7.527806e-23	1.441554e-21
## KCNT1	57582	3.66877654	7.594306e-23	1.453144e-21
## MAP3K7CL	56911	1.06787833	8.067556e-23	1.542484e-21
## SOCS2	8835	-0.65724548	8.185300e-23	1.563765e-21
## SLC2A1	6513	-0.82105470	8.373173e-23	1.598401e-21
## TPSAB1	7177	2.18427767	8.628650e-23	1.645878e-21
## LAG3	3902	2.04072096	8.724985e-23	1.662260e-21
## NRP2	8828	1.03552015	8.728218e-23	1.662260e-21
## MS4A4A	51338	1.27543746	8.924378e-23	1.698287e-21
## MSL3	10943	0.42751505	8.995670e-23	1.710515e-21
## MARCHF1	55016	1.28139946	9.367320e-23	1.779791e-21
## CCNA2	890	1.25480538	9.508630e-23	1.805228e-21
## PPP2R3B	28227	1.15624656	9.878184e-23	1.873925e-21
## PRRG4	79056	-0.76733812	9.889794e-23	1.874664e-21
## RNF175	285533	3.11103222	1.002839e-22	1.899453e-21
## FRMPD3	84443	1.68339911	1.007706e-22	1.907186e-21
## CDHR4	389118	3.09072610	1.107050e-22	2.093575e-21
## CDH23	64072	1.48436448	1.131187e-22	2.137557e-21
## FAM107B	83641	-0.57552449	1.157431e-22	2.185181e-21
## STMN2	11075	4.30655838	1.158188e-22	2.185181e-21
## TPRG1	285386	1.36444136	1.176967e-22	2.218888e-21
## TIMP2	7077	1.05571981	1.188452e-22	2.238803e-21
## ASPM	259266	1.58073104	1.190165e-22	2.240295e-21
## CIT	11113	-0.76927077	1.194732e-22	2.247151e-21

## RTL9	57529	1.26874821	1.197755e-22	2.251094e-21
## TCF4	6925	0.92022230	1.204375e-22	2.261787e-21
## TTYH2	94015	0.76867715	1.208450e-22	2.267686e-21
## TOP2A	7153	1.45464667	1.404345e-22	2.633256e-21
## MARCHF3	115123	1.14856778	1.468809e-22	2.752006e-21
## TNC	3371	1.64394796	1.580889e-22	2.959722e-21
## ADGRD1	283383	1.57731742	1.591787e-22	2.977830e-21
## B3GNT3	10331	-1.46495395	1.627855e-22	3.042962e-21
## TBC1D30	23329	-0.49292806	1.675300e-22	3.129245e-21
## RHOH	399	1.74713332	1.710129e-22	3.191846e-21
## ZSCAN26	7741	0.38458474	1.717542e-22	3.203222e-21
## NLRC5	84166	0.93184858	1.792505e-22	3.340465e-21
## BMX	660	1.89117429	1.804933e-22	3.361049e-21
## CD38	952	1.28853414	1.830426e-22	3.405910e-21
## TRGV9	6983	2.40085664	1.858309e-22	3.455148e-21
## CYBB	1536	1.27944343	1.923612e-22	3.573830e-21
## TARDBP	23435	-0.19728786	1.993522e-22	3.700884e-21
## ABI3BP	25890	1.14971982	2.003393e-22	3.716371e-21
## GORASP1	64689	-0.22854150	2.017164e-22	3.739063e-21
## LRRC8D-DT	118568809	-0.90154963	2.055118e-22	3.806512e-21
## TNFAIP2	7127	1.04985915	2.089897e-22	3.867981e-21
## MSR1	4481	1.28037539	2.315340e-22	4.281969e-21
## CDC6	990	1.09372512	2.323521e-22	4.293831e-21
## TRAV3	28690	2.89598471	2.337263e-22	4.315945e-21
## SMPD3	55512	1.80644266	2.342054e-22	4.321508e-21
## TMIGD2	126259	2.65308406	2.661933e-22	4.908014e-21
## CD300LF	146722	1.72840098	2.879568e-22	5.305261e-21
## TPSB2	64499	2.13442550	2.882600e-22	5.306823e-21
## WAS	7454	1.01330393	2.905552e-22	5.345028e-21
## SPAAR	158376	-0.81402529	3.102641e-22	5.703275e-21
## KBTBD12	166348	1.63232026	3.217691e-22	5.910289e-21
## PHYHIPL	84457	-0.74837687	3.235491e-22	5.938495e-21
## CMKLR2	2825	1.29926196	3.270677e-22	5.998544e-21
## TRAV13-1	28671	2.93489055	3.314770e-22	6.074828e-21
## GPSM2	29899	1.06683732	3.428301e-22	6.278156e-21
## CCDC136	64753	1.31272072	3.440135e-22	6.295084e-21
## MMP17	4326	1.85934758	3.469134e-22	6.343373e-21
## SEMA3A	10371	1.60687840	3.584630e-22	6.549631e-21
## ATP1B1	481	-0.72416418	3.665092e-22	6.691616e-21
## ANKRD13B	124930	1.31966128	3.894593e-22	7.105294e-21
## AK1	203	1.50098926	3.967069e-22	7.232090e-21
## SESTD1	91404	0.45926261	3.998646e-22	7.284190e-21
## KCNE5	23630	2.87989389	4.027251e-22	7.330803e-21
## RAB3C	115827	1.64246388	4.038388e-22	7.345574e-21
## TRAV8-6	28680	3.15078194	4.410993e-22	8.017317e-21
## HYCC1	84668	0.67695656	4.527642e-22	8.223186e-21
## E2F7	144455	1.70582978	4.788845e-22	8.691091e-21
## LINC01093	100506229	-2.47859542	4.954467e-22	8.984964e-21
## P2RX6P	440799	4.42086368	5.045746e-22	9.143675e-21
## TRPV2	51393	1.09317017	5.061017e-22	9.164513e-21
## TRAV12-1	28674	2.95385698	5.166318e-22	9.348227e-21
## SEC24D	9871	0.95660935	5.349614e-22	9.672692e-21
## TRBV7-2	28596	2.34268086	5.436020e-22	9.821615e-21
## MCM7	4176	0.42379491	5.454862e-22	9.848336e-21

## TSPO2	222642	-1.59609145	5.479923e-22	9.878902e-21
## FAM216B	144809	3.97654457	5.479075e-22	9.878902e-21
## ESRRB	2103	-1.29499195	5.507213e-22	9.920739e-21
## SSTR2	6752	-0.94356448	5.744693e-22	1.034087e-20
## RAP2B	5912	0.66249209	5.836350e-22	1.049809e-20
## STEAP1B	256227	2.35251588	5.991311e-22	1.076885e-20
## DNM2	1785	-0.39844930	6.070593e-22	1.090329e-20
## TNFAIP8L2	79626	1.30266751	6.099755e-22	1.094757e-20
## LINC01426	100506385	2.04151543	6.274776e-22	1.125338e-20
## ABTB2	25841	-0.58964796	6.406368e-22	1.148091e-20
## THRSP	7069	1.73390551	6.428513e-22	1.151211e-20
## NPR1	4881	-0.81003970	6.546422e-22	1.171463e-20
## UMOD	7369	-1.64326119	6.675372e-22	1.193659e-20
## HAS2-AS1	594842	2.32913622	6.721789e-22	1.201075e-20
## LST1	7940	1.35589665	6.875848e-22	1.227700e-20
## OTOAP1	653786	1.97714467	7.084997e-22	1.264115e-20
## DOK3	79930	1.10651925	7.135276e-22	1.272152e-20
## TTC24	164118	3.36032888	7.154179e-22	1.274587e-20
## GJD2	57369	-2.34700284	7.176480e-22	1.276688e-20
## XCR1	2829	2.50838785	7.174674e-22	1.276688e-20
## LINC01789	105373536	2.15525702	7.338672e-22	1.304587e-20
## MDK	4192	1.23661845	7.359161e-22	1.307273e-20
## GAS1	2619	1.17674441	7.448622e-22	1.322198e-20
## DNAH5	1767	1.52761498	7.807305e-22	1.384856e-20
## GOLPH3	64083	-0.27208582	7.948000e-22	1.408784e-20
## APOD	347	1.63972079	7.959589e-22	1.409810e-20
## TRAV29DV5	28653	2.76152619	8.332323e-22	1.474754e-20
## RYR3	6263	1.83229310	9.104275e-22	1.610211e-20
## LPAR4	2846	2.06509199	9.388098e-22	1.659201e-20
## S1PR4	8698	1.50013999	9.618512e-22	1.698688e-20
## SDC3	9672	0.83769604	9.649799e-22	1.702976e-20
## CPA1	1357	1.16805551	9.819363e-22	1.731642e-20
## UBN1	29855	0.31892295	1.009212e-21	1.778452e-20
## FAM131C2P	440568	-1.78216931	1.009950e-21	1.778464e-20
## POLE3	54107	0.34513021	1.023121e-21	1.800352e-20
## CYTL1	54360	1.53391905	1.034618e-21	1.819267e-20
## TNFRSF8	943	1.27786250	1.061245e-21	1.864737e-20
## E2F1	1869	1.01611719	1.103837e-21	1.938175e-20
## CD72	971	1.26151910	1.130950e-21	1.984348e-20
## CSNK2A1	1457	-0.18004366	1.154896e-21	2.024900e-20
## SIGLEC8	27181	2.02579563	1.183107e-21	2.071894e-20
## REXO4	57109	0.36810835	1.183404e-21	2.071894e-20
## NAGK	55577	0.39975682	1.196265e-21	2.092904e-20
## EGFLAM	133584	1.12155179	1.221568e-21	2.135635e-20
## LINC02273	100996286	2.46302852	1.222672e-21	2.136028e-20
## LINC00578	100505566	1.65080643	1.225987e-21	2.140282e-20
## SPPL2A	84888	-0.34508321	1.245488e-21	2.172764e-20
## XYLT1	64131	1.10469071	1.265507e-21	2.204724e-20
## SPX	80763	-0.61536317	1.265623e-21	2.204724e-20
## ARL11	115761	1.30405422	1.282160e-21	2.231931e-20
## SLFN12L	100506736	2.13442867	1.302710e-21	2.266082e-20
## MAP3K5-AS2	101928429	1.70200230	1.305942e-21	2.270078e-20
## H19	283120	1.90930372	1.339363e-21	2.326509e-20
## COL4A6	1288	-0.83225204	1.367996e-21	2.374547e-20

## SYPL1	6856	-0.33428991	1.384362e-21	2.401240e-20
## RPIA	22934	0.36635248	1.449654e-21	2.512699e-20
## PER2	8864	0.70591711	1.499011e-21	2.596398e-20
## CLTCL1	8218	1.00314882	1.541243e-21	2.667646e-20
## TMOD1	7111	1.44853805	1.554828e-21	2.689244e-20
## GFRA4	64096	-4.06451020	1.570970e-21	2.715230e-20
## CEBPA	1050	0.91082691	1.614248e-21	2.788048e-20
## COL21A1	81578	1.44122406	1.617760e-21	2.792130e-20
## LILRB1	10859	1.31988549	1.635887e-21	2.821411e-20
## NEDD9	4739	-0.57981001	1.654507e-21	2.851501e-20
## TNF	7124	1.56895951	1.846876e-21	3.180789e-20
## OSBP2	23762	-0.45979457	1.933035e-21	3.326819e-20
## JPH4	84502	-0.67685384	1.941235e-21	3.338567e-20
## KCNIP2	30819	1.70827430	1.944381e-21	3.341613e-20
## WWP2	11060	-0.32514025	2.111045e-21	3.625478e-20
## TRBV5-4	28611	3.06175767	2.152496e-21	3.694054e-20
## ELMOD1	55531	-1.00067206	2.217199e-21	3.802411e-20
## FLI1	2313	0.74054495	2.247279e-21	3.851278e-20
## SNX33	257364	0.44875537	2.326271e-21	3.983842e-20
## TRIM7	81786	1.51674458	2.470421e-21	4.227725e-20
## LGI3	203190	-1.43788517	2.538719e-21	4.341549e-20
## BUB1	699	1.38216951	2.551095e-21	4.359646e-20
## NLRC3	197358	1.03570513	2.629411e-21	4.490324e-20
## LAPTM5	7805	1.29417202	2.647638e-21	4.518277e-20
## CRISPLD1	83690	1.16332232	2.661095e-21	4.538055e-20
## ZKSCAN4	387032	0.32447390	2.667134e-21	4.545163e-20
## LINC02343	105370158	-1.22111277	2.669988e-21	4.546838e-20
## ANG	283	-0.83927828	2.695586e-21	4.587215e-20
## DOK1	1796	0.82776755	2.724260e-21	4.632767e-20
## SAMD4A	23034	0.82182296	2.738576e-21	4.653856e-20
## SKA3	221150	1.13548318	2.754830e-21	4.678205e-20
## GPR176	11245	0.69882625	2.828875e-21	4.800593e-20
## TMEM33	55161	-0.37523364	2.978501e-21	5.050981e-20
## MFAP3L	9848	-0.68084434	2.982626e-21	5.054449e-20
## TNFSF14	8740	1.91378309	3.132421e-21	5.304597e-20
## ZFYVE27	118813	-0.34161967	3.291621e-21	5.570312e-20
## CLDN23	137075	-0.60695615	3.306406e-21	5.591439e-20
## DNAJC14	85406	-0.18927770	3.397447e-21	5.741402e-20
## CAMK2B	816	1.50299238	3.535217e-21	5.970070e-20
## LINC01303	101927780	-1.45192476	3.554185e-21	5.997935e-20
## LBX1	10660	5.20569479	3.607189e-21	6.083158e-20
## JUNB	3726	-1.39100501	3.610851e-21	6.085110e-20
## RASGRP4	115727	1.25113975	3.672717e-21	6.185080e-20
## TEDDM1	127670	-3.38361436	3.685857e-21	6.202909e-20
## EYA1	2138	1.56348042	3.856533e-21	6.485648e-20
## HCAR2	338442	2.01352893	3.863459e-21	6.492802e-20
## ZNF423	23090	1.13041553	3.958743e-21	6.648335e-20
## VASH1	22846	0.87905841	4.032770e-21	6.767980e-20
## SLC44A4	80736	-0.90380091	4.121920e-21	6.912822e-20
## TUBB2B	347733	-0.80324985	4.228001e-21	7.085838e-20
## SPRN	503542	3.16819153	4.263107e-21	7.139749e-20
## LGI1	9211	3.18363257	4.268141e-21	7.143257e-20
## RP1	6101	-1.47524621	4.322350e-21	7.229004e-20
## MMP14	4323	1.17622525	4.382299e-21	7.324226e-20

## PKDCC	91461	0.82197886	4.400570e-21	7.349708e-20
## CNRIP1	25927	0.94480510	4.698359e-21	7.841677e-20
## ADARB2	105	-1.11795906	4.793749e-21	7.995394e-20
## PGAM2	5224	1.86685549	4.907774e-21	8.179960e-20
## CD19	930	2.04249872	5.285023e-21	8.802697e-20
## SLC24A3	57419	1.16417770	5.339179e-21	8.886808e-20
## XCL1	6375	1.97556748	5.378563e-21	8.946233e-20
## IFI44L	10964	1.30838963	5.397935e-21	8.972314e-20
## C1QTNF9	338872	2.11144658	5.430383e-21	9.020077e-20
## LTB	4050	1.63117373	5.525503e-21	9.171806e-20
## ANKRD39	51239	0.89778177	5.673800e-21	9.411537e-20
## SPOCD1	90853	2.11242091	5.845029e-21	9.688953e-20
## PTCRA	171558	2.92784913	5.910904e-21	9.791470e-20
## BLK	640	1.97632891	6.008209e-21	9.945879e-20
## ME1	4199	0.82144725	6.043484e-21	9.997460e-20
## FAM199X	139231	-0.49701359	6.113208e-21	1.010592e-19
## NUS1	116150	-0.28646424	6.173045e-21	1.019790e-19
## DACT1	51339	1.05884669	6.210695e-21	1.025313e-19
## OMD	4958	1.48195674	6.321234e-21	1.042853e-19
## CD53	963	1.26584468	6.861641e-21	1.131240e-19
## CCDC127	133957	0.33107130	7.005517e-21	1.154177e-19
## EHBP1L1	254102	1.31455870	7.249415e-21	1.193550e-19
## DGAT2	84649	1.18829556	7.342138e-21	1.207998e-19
## IL1RN	3557	1.94750679	7.411152e-21	1.218528e-19
## CD79B	974	1.12376335	7.567458e-21	1.243386e-19
## ZBTB32	27033	3.43774042	7.677864e-21	1.260674e-19
## LINC01915	729950	1.78790272	7.766647e-21	1.274391e-19
## FGFBP1	9982	-1.48936807	8.068798e-21	1.323076e-19
## FMNL3	91010	0.64278668	8.101502e-21	1.327543e-19
## RAB27B	5874	0.99720374	8.119153e-21	1.329539e-19
## POU2F2	5452	1.19901546	8.141890e-21	1.332364e-19
## C10orf71-AS1	100506769	2.73721642	8.247156e-21	1.348682e-19
## CCL19	6363	2.28098181	8.261114e-21	1.350056e-19
## SLC9B2	133308	0.93044326	8.287825e-21	1.353511e-19
## SIRPB1	10326	1.63682121	8.376177e-21	1.367021e-19
## MYF5	4617	4.49716467	8.702919e-21	1.419394e-19
## UCK2	7371	0.39936714	8.891619e-21	1.449197e-19
## TMC3-AS1	101929655	1.61909594	9.112232e-21	1.484158e-19
## ESCO2	157570	1.41917539	9.256769e-21	1.506689e-19
## HOXA10-AS	100874323	-0.62096943	9.615470e-21	1.564026e-19
## MAP3K4-AS1	117981787	1.30464018	9.687579e-21	1.574701e-19
## FAM225A	286333	1.65797700	1.018695e-20	1.654767e-19
## NAV1	89796	0.96261977	1.046406e-20	1.698645e-19
## RGS17	26575	2.14478819	1.077850e-20	1.748519e-19
## CTLA4	1493	2.29988127	1.103725e-20	1.789300e-19
## ATP6AP1	537	-0.46615490	1.140509e-20	1.847700e-19
## HMGCS1	3157	-0.52129072	1.165640e-20	1.885899e-19
## CCL4	6351	1.64954077	1.165241e-20	1.885899e-19
## CD22	933	1.39604732	1.191635e-20	1.926674e-19
## PIGM	93183	-0.28094941	1.192656e-20	1.927044e-19
## AGT	183	-1.24013382	1.193675e-20	1.927409e-19
## VIPAS39	63894	0.23606087	1.212931e-20	1.957200e-19
## SLC4A2	6522	-0.49038081	1.240688e-20	2.000661e-19
## ACKR1	2532	2.07519577	1.249601e-20	2.013697e-19

## C1QA	712	1.27898156	1.268900e-20	2.043442e-19
## LY96	23643	1.29539037	1.271531e-20	2.046322e-19
## SAMD5	389432	-0.84562075	1.319044e-20	2.121382e-19
## PRR15L	79170	-1.01402651	1.322262e-20	2.125152e-19
## TRAV4	28689	2.93512154	1.343307e-20	2.157548e-19
## FZD5	7855	-0.65610793	1.371291e-20	2.201040e-19
## MED9	55090	-0.34238044	1.382078e-20	2.216890e-19
## FFAR2	2867	2.07129406	1.389516e-20	2.227351e-19
## FLRT2-AS1	100506731	1.75122895	1.535421e-20	2.459609e-19
## SEMG2	6407	-1.86245697	1.547231e-20	2.476895e-19
## MXRA5Y	286544	2.38234023	1.552377e-20	2.483497e-19
## ARHGAP11A	9824	0.71614955	1.580661e-20	2.527083e-19
## APOBR	55911	1.28957055	1.655537e-20	2.645049e-19
## C21orf62	<NA>	-1.03887524	1.662513e-20	2.654450e-19
## PRR11	55771	0.98756400	1.718585e-20	2.742175e-19
## ST14	6768	-0.68402508	1.732846e-20	2.763116e-19
## NCAPG	64151	1.45384857	1.737743e-20	2.769107e-19
## TGM2	7052	-1.25015452	1.742415e-20	2.774733e-19
## LINC01618	152578	-0.97717934	1.768507e-20	2.814439e-19
## ODAD3	115948	-0.85821963	1.769911e-20	2.814830e-19
## TTC39C	125488	0.67898832	1.779473e-20	2.828187e-19
## PDHA1	5160	-0.32514186	1.802750e-20	2.863309e-19
## ACKR4	51554	1.41040006	1.808391e-20	2.870392e-19
## PCDH1	5097	-0.62304471	1.825065e-20	2.894968e-19
## GASK1A	729085	1.03524821	1.849628e-20	2.932017e-19
## ZNF473	25888	0.31476862	1.895347e-20	3.002530e-19
## PDCD6IP	10015	-0.23220459	1.965525e-20	3.111675e-19
## CYTOR	112597	1.12242758	1.980483e-20	3.133316e-19
## OAS3	4940	0.98434838	1.993684e-20	3.152147e-19
## PLAAT1	57110	1.50939188	2.145859e-20	3.390540e-19
## CPED1	79974	0.80914410	2.192294e-20	3.461659e-19
## PPP5C	5536	-0.29481541	2.201763e-20	3.474354e-19
## TNIP3	79931	2.21707834	2.206018e-20	3.478809e-19
## ABCA8	10351	1.05181837	2.214752e-20	3.490317e-19
## TLCD3A	79850	0.95554444	2.223689e-20	3.502129e-19
## TRAV12-3	28672	2.89798805	2.249961e-20	3.541211e-19
## ZBTB10	65986	-0.43476673	2.259809e-20	3.554409e-19
## GRIN2A	2903	1.20589975	2.263070e-20	3.557235e-19
## CD80	941	2.01460853	2.356067e-20	3.701021e-19
## MEIS3	56917	1.35341327	2.359518e-20	3.704047e-19
## RET	5979	0.88446490	2.454936e-20	3.851349e-19
## LINC02511	105377441	2.38172226	2.520714e-20	3.951992e-19
## ATP2C2	9914	-1.10398947	2.551445e-20	3.997593e-19
## MASP1	5648	0.88176241	2.668366e-20	4.178090e-19
## ADAP2	55803	0.60807975	2.757955e-20	4.315587e-19
## GBP1P1	400759	1.06122598	2.819190e-20	4.408567e-19
## CSF3R	1441	1.16969516	2.852225e-20	4.454493e-19
## LHFPL6	10186	1.00351172	2.851049e-20	4.454493e-19
## GFI1	2672	1.43179811	2.908049e-20	4.538761e-19
## CCIN	881	2.68213513	2.958371e-20	4.614337e-19
## SLFN11	91607	0.88292199	3.023991e-20	4.713663e-19
## ENPP4	22875	-0.54047322	3.096672e-20	4.823861e-19
## FAM13C	220965	0.89988814	3.134913e-20	4.880303e-19
## PPARGC1A	10891	-0.61841010	3.139802e-20	4.884784e-19

## ZFP82	284406	0.34427429	3.155312e-20	4.905773e-19
## MIR155HG	114614	1.44320743	3.174276e-20	4.932103e-19
## PLB1	151056	1.03020010	3.228123e-20	5.012563e-19
## MTURN	222166	-0.67780576	3.234449e-20	5.019179e-19
## ADAM8	101	1.28423823	3.452098e-20	5.353506e-19
## GLI3	2737	0.85917685	3.549371e-20	5.500845e-19
## SPINT2	10653	-0.62380166	3.656631e-20	5.663467e-19
## S1PR3	1903	-0.85334598	3.876070e-20	5.999515e-19
## TRBV12-3	28577	3.02725725	3.958300e-20	6.122893e-19
## MAD2L1	4085	0.59231256	4.006509e-20	6.193523e-19
## ZFP69B	65243	0.75602406	4.025964e-20	6.219641e-19
## FXYD5	53827	1.13914112	4.089327e-20	6.313516e-19
## ZNF2	7549	0.25212814	4.187740e-20	6.461350e-19
## SLC2A10	81031	0.95022849	4.230375e-20	6.522991e-19
## FCRLA	84824	2.50078892	4.289368e-20	6.605572e-19
## APLF	200558	0.41626180	4.288200e-20	6.605572e-19
## POGLUT2	79070	0.61926109	4.329964e-20	6.663866e-19
## CLINT1	9685	-0.30651642	4.348658e-20	6.688402e-19
## SFTA1P	207107	4.46976490	4.423805e-20	6.799677e-19
## PIP4K2C	79837	-0.38407227	4.442129e-20	6.823526e-19
## PPARD	5467	-0.53917248	4.507165e-20	6.919054e-19
## ADGRE3	84658	2.15146156	4.740276e-20	7.272313e-19
## FCRL1	115350	3.02224578	4.755643e-20	7.291285e-19
## SLCO1C1	53919	1.28964640	4.785468e-20	7.332386e-19
## STARD5	80765	0.73627292	4.798915e-20	7.348358e-19
## S100B	6285	1.61731794	4.957141e-20	7.585862e-19
## RAD51	5888	0.97624613	5.017838e-20	7.673913e-19
## PRSS8	5652	-0.87934069	5.063520e-20	7.734042e-19
## LSMEM2	132228	1.64682047	5.060913e-20	7.734042e-19
## DGKD	8527	0.74445676	5.131139e-20	7.832401e-19
## CYLD-AS1	102724907	1.93842808	5.275673e-20	8.047968e-19
## GIMAP2	26157	0.70127526	5.337703e-20	8.137485e-19
## TMCC1-DT	100507032	0.68523471	5.367828e-20	8.178281e-19
## ITGA4	3676	1.01093656	5.488023e-20	8.356168e-19
## ZNF18	7566	0.28219631	5.626158e-20	8.561132e-19
## AADAC	13	4.27687540	5.798536e-20	8.816289e-19
## KBTBD13	390594	2.56173496	5.801097e-20	8.816289e-19
## KCTD7	154881	0.42034764	6.015224e-20	9.135997e-19
## LINC02669	101927880	3.01943849	6.207903e-20	9.422751e-19
## CCL17	6361	2.14270604	6.386328e-20	9.687525e-19
## TPD52	7163	-0.61201763	6.874371e-20	1.042074e-18
## TRIM9	114088	0.76919111	6.878261e-20	1.042074e-18
## CENPP	401541	0.68605737	6.943995e-20	1.051377e-18
## LINC01140	339524	1.24172236	6.969724e-20	1.054616e-18
## TP73	7161	1.46995402	7.162408e-20	1.083097e-18
## PIK3CG	5294	1.00829109	7.432901e-20	1.123302e-18
## CCNF	899	0.62100478	7.440968e-20	1.123822e-18
## SNAI3	333929	1.28635759	7.686234e-20	1.159435e-18
## TRAV23DV6	28660	2.84653246	7.686310e-20	1.159435e-18
## COL15A1	1306	1.40871203	7.785347e-20	1.173646e-18
## SLC25A35	399512	-0.56877362	7.893372e-20	1.189193e-18
## HSH2D	84941	1.63838260	7.956585e-20	1.197974e-18
## MS4A14	84689	1.47743412	8.168084e-20	1.229056e-18
## HRH1	3269	1.02386578	8.526366e-20	1.282173e-18

## GRK3	157	0.62058091	8.599288e-20	1.292339e-18
## FCGR3B	2215	1.65952197	8.713886e-20	1.308752e-18
## SLC43A1	8501	-1.16293887	8.806667e-20	1.321870e-18
## LINC00702	100652988	1.80204013	8.905544e-20	1.335887e-18
## CXCR6	10663	1.56211357	9.283916e-20	1.391786e-18
## MYBL2	4605	1.75667858	9.576662e-20	1.434787e-18
## OTOS	150677	-3.42292551	9.780676e-20	1.464450e-18
## TMEM116	89894	-0.60085612	9.817180e-20	1.469010e-18
## GRAMD2B	65983	-0.33292865	1.001606e-19	1.497847e-18
## DPP4-DT	100131604	1.33978473	1.036925e-19	1.549712e-18
## GTSE1	51512	1.21174554	1.040067e-19	1.553453e-18
## LINC02609	105378853	1.03291958	1.052364e-19	1.570854e-18
## TENM3	55714	1.06729748	1.067891e-19	1.593053e-18
## PTPRB	5787	-0.66932923	1.069366e-19	1.594273e-18
## CP	1356	1.32502089	1.072159e-19	1.597457e-18
## IL1R2	7850	-1.08735433	1.110040e-19	1.652885e-18
## COTL1	23406	0.95211688	1.114030e-19	1.657811e-18
## PPP1R1A	5502	-1.37095412	1.118559e-19	1.663531e-18
## KHDC1-AS1	122539212	0.84646104	1.124612e-19	1.671511e-18
## B3GNTL1	146712	0.64338362	1.130587e-19	1.679364e-18
## TMPO	7112	-0.38913956	1.160739e-19	1.723098e-18
## ENC1	8507	0.79606014	1.221636e-19	1.812392e-18
## CADM2	253559	1.80482435	1.241456e-19	1.840672e-18
## SEPTIN4	5414	0.57392469	1.262385e-19	1.870563e-18
## NKD1	85407	-0.78361063	1.265151e-19	1.873518e-18
## PCED1B	91523	0.74514408	1.291001e-19	1.910635e-18
## KCTD21	283219	0.37760458	1.306296e-19	1.932094e-18
## LCMT2	9836	-0.29357131	1.319803e-19	1.950885e-18
## C3orf80	401097	2.06338308	1.344010e-19	1.985459e-18
## CDH19	28513	-1.46541748	1.422500e-19	2.100132e-18
## ANLN	54443	1.28790572	1.435836e-19	2.118534e-18
## GAPLINC	100505592	2.79327456	1.455720e-19	2.146569e-18
## C11orf24	53838	0.64011401	1.482819e-19	2.185203e-18
## MNDA	4332	1.19138615	1.553245e-19	2.287600e-18
## SH2B3	10019	0.62050202	1.601235e-19	2.356852e-18
## LIMK1	3984	0.73803412	1.603286e-19	2.358441e-18
## TSPAN14	81619	-0.39021307	1.621889e-19	2.384363e-18
## NTM	50863	1.66333479	1.652824e-19	2.428372e-18
## CRLF3	51379	0.48998718	1.795936e-19	2.637041e-18
## DAXX	1616	0.29204803	1.816192e-19	2.665173e-18
## CDCA7	83879	1.22297002	1.866268e-19	2.737006e-18
## NEIL3	55247	1.69394316	1.877646e-19	2.752031e-18
## SMARCAL1	50485	0.29361797	1.915682e-19	2.806087e-18
## SCD5	79966	-0.66027008	1.941416e-19	2.842070e-18
## MIR34AHG	106614088	1.22727197	2.002751e-19	2.930093e-18
## TRAV8-4	28682	2.87062247	2.015919e-19	2.947585e-18
## CGAS	115004	0.93981544	2.042579e-19	2.984770e-18
## PILRA	29992	0.91600577	2.095985e-19	3.060969e-18
## STARD8	9754	-0.54680698	2.193750e-19	3.201821e-18
## EXO1	9156	1.08110921	2.205162e-19	3.216546e-18
## SKP2	6502	0.59553104	2.252063e-19	3.282986e-18
## CDO1	1036	1.17324382	2.300021e-19	3.350888e-18
## MTHFD2L	441024	-0.54991259	2.301686e-19	3.351305e-18
## TRGV10	6984	2.29378037	2.448746e-19	3.563292e-18

## SLC43A3	29015	1.34345363	2.456936e-19	3.573070e-18
## STAP1	26228	-1.12507159	2.527503e-19	3.673496e-18
## ZNF385A	25946	1.06677751	2.685781e-19	3.901206e-18
## LZTS3	9762	-0.51515232	2.769870e-19	4.020944e-18
## AKAP8	10270	-0.35729002	2.772010e-19	4.021648e-18
## TRAF2	7186	0.39753133	2.812026e-19	4.077271e-18
## TRIM63	84676	1.87614670	2.915171e-19	4.224303e-18
## AQP2	359	-1.14754102	2.932593e-19	4.247017e-18
## PSMB9	5698	0.90765692	2.942706e-19	4.259125e-18
## PRPH2	5961	1.32594344	2.974233e-19	4.302192e-18
## GTDC1	79712	0.24872092	3.000913e-19	4.335623e-18
## SEMA6C	10500	1.11489873	3.000643e-19	4.335623e-18
## MIRLET7BHG	400931	1.02149989	3.043465e-19	4.394489e-18
## NCR1	9437	2.56374656	3.052321e-19	4.404659e-18
## H1-0	3005	-0.69575889	3.121686e-19	4.502083e-18
## CAP2	10486	0.99723000	3.175216e-19	4.576568e-18
## MUC12	10071	2.69208902	3.381914e-19	4.871600e-18
## GVINP1	387751	0.99525041	3.433431e-19	4.942879e-18
## GNG7	2788	-0.72471162	3.475697e-19	5.000764e-18
## LILRA6	79168	1.58150590	3.500611e-19	5.033630e-18
## CASKIN2	57513	-0.63339433	3.614000e-19	5.193602e-18
## FAM222A	84915	-0.87393716	3.797429e-19	5.453978e-18
## UBE2K	3093	-0.23114305	3.806213e-19	5.463366e-18
## DCLK3	85443	2.29353782	3.897606e-19	5.591247e-18
## HPGDS	27306	1.40218920	3.911117e-19	5.607319e-18
## MAPK8IP2	23542	-1.07931917	3.930857e-19	5.632298e-18
## REG3G	130120	-3.19183681	3.945828e-19	5.650416e-18
## GASK1B-AS1	285505	1.05108675	3.955254e-19	5.660579e-18
## SPHK1	8877	1.35819477	3.978048e-19	5.689849e-18
## SLC16A11	162515	-1.13124161	3.981543e-19	5.691499e-18
## PHETA2	150368	0.92522930	4.034932e-19	5.764426e-18
## SPC25	57405	1.60899948	4.326150e-19	6.176837e-18
## BMP3	651	1.98935383	4.409160e-19	6.291662e-18
## RHOB	388	-0.59826433	4.418195e-19	6.300855e-18
## SORT1	6272	-0.47049036	4.664182e-19	6.647758e-18
## TRBV27	28560	2.38434850	4.943215e-19	7.041329e-18
## LRG1	116844	-1.77046312	5.016612e-19	7.141692e-18
## ADAMTS4	9507	-2.02787166	5.059886e-19	7.199080e-18
## FBXO41	150726	0.94578807	5.106805e-19	7.261584e-18
## SLC1A3	6507	1.19971693	5.321948e-19	7.563079e-18
## IDI1	3422	-0.50284236	5.397156e-19	7.665475e-18
## TEKT1	83659	3.03956804	5.619206e-19	7.976187e-18
## GRID1	2894	1.23554163	5.660492e-19	8.030100e-18
## ST7-AS1	93653	-0.87443426	5.696505e-19	8.076474e-18
## FANCI	55215	0.63077814	5.815135e-19	8.239860e-18
## FCN1	2219	1.64477644	5.887122e-19	8.337001e-18
## TRAV21	28662	2.62123414	5.957178e-19	8.431298e-18
## GPNMB	10457	1.24059638	6.011466e-19	8.503180e-18
## TNK1	8711	-0.48026796	6.071837e-19	8.583578e-18
## HDC	3067	2.01607384	6.394017e-19	9.033780e-18
## PRKAG2	51422	-0.39255639	6.421559e-19	9.067420e-18
## TNN	63923	1.51462635	6.648864e-19	9.382930e-18
## BBC3	27113	0.97384845	6.735208e-19	9.499263e-18
## FGD2	221472	1.11133386	6.774668e-19	9.549375e-18

## ST8SIA1	6489	1.19581405	7.058329e-19	9.943447e-18
## VPREB3	29802	1.35100219	7.663234e-19	1.078935e-17
## BIRC5	332	1.32630280	7.886200e-19	1.109685e-17
## MAPK12	6300	0.91963366	7.924042e-19	1.114364e-17
## SALL1	6299	-0.71641108	7.975436e-19	1.120295e-17
## COQ7	10229	-0.23674922	7.975306e-19	1.120295e-17
## HJURP	55355	1.54118337	8.115501e-19	1.139311e-17
## LINC02762	283140	1.15629999	8.192842e-19	1.149505e-17
## ISG20	3669	1.09430117	8.279788e-19	1.161034e-17
## MSRB3	253827	0.79608976	9.015552e-19	1.263477e-17
## OCA2	4948	-1.31935538	9.485218e-19	1.328532e-17
## DCAF6	55827	0.57177758	9.585904e-19	1.341861e-17
## DDR1	780	-0.53831912	9.821988e-19	1.374117e-17
## KLF9	687	-0.64959297	1.003132e-18	1.402596e-17
## NEK2	4751	1.35547038	1.027309e-18	1.435575e-17
## HES1	3280	-0.56853501	1.040209e-18	1.452765e-17
## SIX4	51804	0.97617427	1.042882e-18	1.455661e-17
## IGSF8	93185	-0.53381025	1.069849e-18	1.492445e-17
## NCAM1	4684	1.68656039	1.075437e-18	1.499380e-17
## PIMREG	54478	1.43042471	1.086774e-18	1.514317e-17
## GJA5	2702	-0.65469030	1.104924e-18	1.538726e-17
## SAMD9L	219285	0.66551917	1.118776e-18	1.557123e-17
## CTBS	1486	-0.36865803	1.121181e-18	1.559577e-17
## MELK	9833	1.39760385	1.132878e-18	1.574947e-17
## TRAV9-2	28677	2.70064278	1.167248e-18	1.621801e-17
## PTTG1	9232	1.12324424	1.190238e-18	1.652798e-17
## GMFG	9535	0.77274819	1.218229e-18	1.690701e-17
## MIR4435-2HG	541471	0.80735502	1.235470e-18	1.713650e-17
## NLGN4X	57502	1.05690427	1.240933e-18	1.720246e-17
## LOXL3	84695	1.13178273	1.262388e-18	1.748991e-17
## MYCL	4610	0.92577200	1.264959e-18	1.751554e-17
## MAST2	23139	0.60533386	1.286307e-18	1.780099e-17
## PDGFD	80310	0.96342928	1.288954e-18	1.782747e-17
## PACSIN1	29993	-1.23854916	1.338468e-18	1.850178e-17
## RUNX1T1	862	0.92535410	1.340461e-18	1.851878e-17
## LINC01563	101060544	3.09792825	1.390204e-18	1.919509e-17
## DNM3OS	100628315	1.09818780	1.421069e-18	1.961011e-17
## GBP4	115361	0.72297152	1.597461e-18	2.203173e-17
## SIPA1L3	23094	-0.54909205	1.686590e-18	2.324778e-17
## TREML1	340205	2.30435202	1.689338e-18	2.327245e-17
## POU2F2-AS2	128071540	1.84478464	1.691316e-18	2.328649e-17
## CEACAM1	634	-0.64848865	1.729559e-18	2.379955e-17
## PAX1	5075	4.23343187	1.736655e-18	2.388367e-17
## ROR2	4920	1.08284280	1.746335e-18	2.400321e-17
## LINC00543	100132234	-0.92009275	1.753037e-18	2.408171e-17
## MAGEL2	54551	1.62742686	1.764093e-18	2.421990e-17
## FST	10468	1.38432800	1.884690e-18	2.586101e-17
## STAT4	6775	0.98798272	1.913115e-18	2.623623e-17
## XAF1	54739	1.09812090	1.967085e-18	2.696116e-17
## TGFB2	7042	0.96857026	2.009577e-18	2.752803e-17
## LMX1A	4009	3.73896109	2.018633e-18	2.763651e-17
## SMYD4	114826	0.28779803	2.152419e-18	2.945154e-17
## MAFB	9935	0.82507854	2.187990e-18	2.992141e-17
## OSR2	116039	2.25131673	2.231146e-18	3.047728e-17

## VAT1L	57687	-1.39707150	2.230821e-18	3.047728e-17
## ZFP64	55734	0.27702393	2.246675e-18	3.067216e-17
## FAM114A1	92689	0.65968908	2.378545e-18	3.245426e-17
## CLVS1	157807	2.39371722	2.474699e-18	3.374728e-17
## F8	2157	-0.53954535	2.569559e-18	3.502123e-17
## IL1RL2	8808	-0.70260194	2.575531e-18	3.508295e-17
## P3H1	64175	0.86199801	2.606571e-18	3.548587e-17
## COLGALT1	79709	0.75748689	2.702934e-18	3.677715e-17
## RAB30	27314	0.46929748	2.814791e-18	3.827770e-17
## SRD5A2	6716	1.55252558	2.894908e-18	3.934516e-17
## TASL	80231	1.09725496	2.926347e-18	3.975023e-17
## OLFML3	56944	1.15204256	2.962160e-18	4.021421e-17
## LINC02126	101927650	2.97976825	3.014255e-18	4.089861e-17
## CCR2	729230	1.43871279	3.056087e-18	4.144306e-17
## PRKAB2	5565	0.69067972	3.130065e-18	4.242259e-17
## RGS2	5997	-0.80993996	3.183223e-18	4.311901e-17
## RHPN2	85415	-0.67387989	3.205333e-18	4.339431e-17
## CDCA8	55143	0.79463498	3.346721e-18	4.528322e-17
## PDE1A	5136	-0.73069797	3.372226e-18	4.560293e-17
## PIGO	84720	-0.45924031	3.614916e-18	4.885766e-17
## DENND2C	163259	0.87743322	3.619944e-18	4.889843e-17
## SESN1	27244	0.49867149	3.998059e-18	5.397601e-17
## MYH8	4626	1.94044855	4.149674e-18	5.599180e-17
## TRAV1-2	28692	2.79384914	4.231949e-18	5.707025e-17
## NRXN1	9378	-1.26552636	4.401389e-18	5.932233e-17
## PTN	5764	0.99756029	4.494593e-18	6.054495e-17
## COL23A1	91522	-0.73793813	4.563818e-18	6.144340e-17
## DUSP26	78986	1.53788311	4.636134e-18	6.238245e-17
## TMEM229B	161145	0.65189156	4.640003e-18	6.239995e-17
## PRKAG2-AS2	644090	-1.47668173	4.652613e-18	6.253493e-17
## FAM240A	100132146	-1.94649490	4.693518e-18	6.304985e-17
## FAAP24	91442	0.57262169	4.718618e-18	6.335201e-17
## HMMR	3161	0.90375562	4.894666e-18	6.567934e-17
## RTL3	203430	3.59350336	5.005525e-18	6.712984e-17
## FKBP7	51661	0.81986966	5.010186e-18	6.715528e-17
## ATP1B3	483	-0.44226215	5.157124e-18	6.908670e-17
## LINC00892	100128420	2.14592973	5.183997e-18	6.940844e-17
## TICRR	90381	1.57851750	5.188575e-18	6.943148e-17
## PTGFR	5737	0.79903558	5.209953e-18	6.967917e-17
## LPAR1	1902	1.05164011	5.260093e-18	7.031107e-17
## NCS1	23413	-0.71687581	5.326231e-18	7.115599e-17
## CUTC	51076	0.80977681	5.342181e-18	7.132985e-17
## DHCR7	1717	-0.79188648	5.400809e-18	7.207308e-17
## BAG2	9532	0.49949228	5.500879e-18	7.336820e-17
## TLCD3B	83723	3.42661262	5.520032e-18	7.358326e-17
## ARL4A	10124	0.49741195	5.645270e-18	7.517025e-17
## ARAP1	116985	0.32143642	5.643886e-18	7.517025e-17
## SPINT1	6692	-0.70304159	5.651478e-18	7.521170e-17
## LYAR	55646	0.45459878	5.818098e-18	7.738675e-17
## LINC02289	102724190	-1.01466945	5.896707e-18	7.838943e-17
## LMTK3	114783	-1.27309613	5.957643e-18	7.915620e-17
## GRK6	2870	0.45571247	6.020335e-18	7.994545e-17
## MYL5	4636	0.86553738	6.218920e-18	8.253739e-17
## DAB2IP	153090	-0.37232054	6.566529e-18	8.710329e-17

## KIFC1	3833	1.06234090	6.577582e-18	8.720230e-17
## CXCL13	10563	2.87380177	6.634268e-18	8.790586e-17
## DEPDC1	55635	1.49467429	6.719479e-18	8.897482e-17
## CAPN3	825	1.35968390	6.722265e-18	8.897482e-17
## TCEAL7	56849	0.78875211	6.914852e-18	9.147404e-17
## DTL	51514	1.20308227	6.990375e-18	9.238739e-17
## LINC02397	100507616	2.83277611	6.991499e-18	9.238739e-17
## REG1A	5967	-3.06225650	7.053490e-18	9.315590e-17
## CACNA1B	774	2.54150572	7.101797e-18	9.374294e-17
## UNC5CL	222643	-1.10838343	7.185372e-18	9.479464e-17
## ADGRE4P	326342	2.23596711	7.196039e-18	9.488386e-17
## FAM78B	149297	0.66775494	7.387798e-18	9.735948e-17
## FCER1G	2207	1.21931368	7.461389e-18	9.827600e-17
## PID1	55022	0.86036825	7.518806e-18	9.897861e-17
## CLCNKB	1188	-0.87731057	7.572637e-18	9.963328e-17
## DGKA	1606	0.84211316	7.581025e-18	9.968966e-17
## ZBTB47	92999	0.87753476	7.644153e-18	1.004654e-16
## SLC25A45	283130	0.65496889	7.661261e-18	1.006358e-16
## ADRB2	154	1.09422047	7.807968e-18	1.025075e-16
## PDCD4-AS1	282997	0.67806331	7.829583e-18	1.027358e-16
## NAPSB	256236	-1.77498652	7.881887e-18	1.033663e-16
## DTNA	1837	1.00841845	7.964836e-18	1.043978e-16
## TEK	7010	-0.52561464	8.136818e-18	1.065945e-16
## SLC45A1	50651	-0.68702593	8.165325e-18	1.069103e-16
## RAB20	55647	-0.63787478	8.310272e-18	1.087496e-16
## BRSK2	9024	-1.39311761	8.600308e-18	1.124844e-16
## TRBV11-2	28581	2.68765632	8.736861e-18	1.142090e-16
## PRELID3B	51012	-0.33592698	8.762890e-18	1.144876e-16
## CXCR2	3579	1.38522095	8.948686e-18	1.168522e-16
## NBL1	4681	0.96429936	8.976584e-18	1.171484e-16
## NUDT4	11163	-0.63646549	8.981006e-18	1.171484e-16
## CD9	928	-0.46813204	9.403027e-18	1.225874e-16
## UNC5A	90249	1.83709042	9.411748e-18	1.226353e-16
## TXNDC11	51061	-0.23354816	9.524481e-18	1.240377e-16
## IL2RA	3559	1.30956406	9.879963e-18	1.285983e-16
## PLK2	10769	0.73654551	9.965944e-18	1.296480e-16
## MAX	4149	0.31631815	1.014712e-17	1.319342e-16
## SLC1A4	6509	0.94760326	1.022632e-17	1.328930e-16
## IGSF3	3321	-0.51747143	1.035307e-17	1.368320e-16
## MYBL1	4603	0.90310659	1.069174e-17	1.387927e-16
## FAM30A	9834	2.32090076	1.125136e-17	1.459793e-16
## DUSP9	1852	-1.11015267	1.140417e-17	1.478829e-16
## TRAV14DV4	28669	2.82402236	1.141882e-17	1.479940e-16
## GALNT18	374378	-0.55364512	1.165264e-17	1.509439e-16
## TRAV17	28666	2.64632541	1.221059e-17	1.580871e-16
## PTPN6	5777	0.45928901	1.226919e-17	1.586768e-16
## PEAK1	79834	0.64660459	1.226417e-17	1.586768e-16
## TVP23A	780776	0.98574528	1.244209e-17	1.608272e-16
## PKNOX1	5316	0.26563082	1.268326e-17	1.638574e-16
## AOC3	8639	1.10916342	1.281566e-17	1.654800e-16
## LILRB3	11025	1.29889387	1.292398e-17	1.667900e-16
## FOXJ2	55810	0.40972746	1.320065e-17	1.702702e-16
## MSTN	2660	1.55525270	1.331086e-17	1.716006e-16
## FXYD6-AS1	123706543	-0.63954372	1.332960e-17	1.717512e-16

## NPTN	27020	-0.25993521	1.352697e-17	1.742018e-16
## LINC00327	100506697	2.08866093	1.362716e-17	1.753991e-16
## TSPAN11	441631	1.05182060	1.430553e-17	1.840332e-16
## ZHX3	23051	-0.47602815	1.433270e-17	1.842852e-16
## ERO1B	56605	-0.47179323	1.472064e-17	1.891730e-16
## TMEM209	84928	-0.33886547	1.485577e-17	1.908087e-16
## SCN1B	6324	1.23779427	1.508270e-17	1.936211e-16
## LINC01579	283682	2.54915847	1.557727e-17	1.998644e-16
## CRY2	1408	0.45801799	1.593088e-17	2.042936e-16
## KLHL34	257240	2.81026029	1.632036e-17	2.091777e-16
## RAB9B	51209	1.19637632	1.657372e-17	2.123131e-16
## BOD1	91272	0.34286539	1.668535e-17	2.136305e-16
## RBM4B	83759	0.28068368	1.689057e-17	2.161441e-16
## PAX3	5077	4.72092081	1.703370e-17	2.178610e-16
## SGK1	6446	-0.57749032	1.707317e-17	2.182510e-16
## EML1	2009	0.51268608	1.735798e-17	2.217751e-16
## CNKSR2	22866	1.46429164	1.772315e-17	2.262976e-16
## BATF	10538	1.53880918	1.773057e-17	2.262976e-16
## GJA1	2697	1.16258333	1.841794e-17	2.349471e-16
## C3orf86P	102724231	-1.43598360	1.902357e-17	2.425455e-16
## PFKFB2	5208	-0.72108545	1.916116e-17	2.441716e-16
## OPTN	10133	0.45387375	1.932512e-17	2.461320e-16
## SLC16A1-AS1	100506392	0.90874580	2.078843e-17	2.646305e-16
## C6orf141	135398	1.98681566	2.099510e-17	2.671215e-16
## ITPRIPL2	162073	0.63310247	2.180933e-17	2.773358e-16
## TRIP13	9319	0.66583423	2.223828e-17	2.826425e-16
## CHIA	27159	-2.29316906	2.235832e-17	2.840197e-16
## HK3	3101	1.53038860	2.241460e-17	2.845858e-16
## MS4A6E	245802	4.02375080	2.258836e-17	2.866422e-16
## SMIM38	107984345	-2.19117701	2.264058e-17	2.871548e-16
## SPTLC1	10558	-0.27209539	2.288402e-17	2.900910e-16
## PF4	5196	2.26840849	2.289996e-17	2.901418e-16
## C3AR1	719	1.05353629	2.335363e-17	2.957355e-16
## STK4	6789	0.40858853	2.348647e-17	2.972628e-16
## SPI1	6688	1.23170777	2.360400e-17	2.985949e-16
## PIGA	5277	-0.43574748	2.393064e-17	3.025695e-16
## INTS3	65123	-0.41141956	2.412646e-17	3.048866e-16
## EFEMP1	2202	0.74796013	2.501612e-17	3.159651e-16
## LINC02823	105369897	2.69152293	2.529818e-17	3.193616e-16
## PPP2CB	5516	-0.27053501	2.559245e-17	3.229086e-16
## ZEB2	9839	0.62616708	2.581044e-17	3.254901e-16
## TCIM	56892	-0.89951452	2.621249e-17	3.303888e-16
## MICAL2	9645	0.91322739	2.661145e-17	3.352435e-16
## TRAV12-2	28673	2.40644766	2.678845e-17	3.372985e-16
## PXYLP1	92370	0.36304040	2.770570e-17	3.486671e-16
## ALKAL2	285016	-1.34587225	2.800796e-17	3.522885e-16
## CCR8	1237	3.20300312	2.841967e-17	3.572821e-16
## NUDT11	55190	1.10575459	2.970047e-17	3.731908e-16
## SLC25A18	83733	-1.14884402	3.001353e-17	3.769295e-16
## SLIT3	6586	0.87395965	3.045240e-17	3.822437e-16
## KLRC1	3821	2.17991076	3.062145e-17	3.841672e-16
## OIT3	170392	2.74679101	3.073886e-17	3.854412e-16
## SOX9	6662	-1.00458698	3.212450e-17	4.026083e-16
## PRSS21	10942	2.31315611	3.305382e-17	4.140417e-16

## GRM1	2911	-1.26629091	3.388453e-17	4.242287e-16
## AVEN	57099	0.58559922	3.533245e-17	4.421286e-16
## ACSL3	2181	-0.32691618	3.579549e-17	4.476923e-16
## GPR182	11318	-0.81479511	3.689914e-17	4.612583e-16
## BAG5	9529	-0.25266711	3.726849e-17	4.656357e-16
## FHOD1	29109	0.75445666	3.803632e-17	4.749849e-16
## LNX1	84708	-0.53121592	3.826492e-17	4.775941e-16
## LINC00632	286411	1.41989857	3.852013e-17	4.805327e-16
## NIPA1	123606	-0.40892642	3.897377e-17	4.859423e-16
## NKX3-2	579	2.09841295	3.908967e-17	4.870415e-16
## C6orf89	221477	-0.30244479	3.910201e-17	4.870415e-16
## ETV7	51513	1.05012229	3.960050e-17	4.929978e-16
## PMP2	5375	-1.91454788	4.007947e-17	4.987051e-16
## PLIN5	440503	-0.79914555	4.015128e-17	4.993430e-16
## COLQ	8292	1.00916321	4.022280e-17	4.999766e-16
## DUXAP8	503637	1.74347469	4.175200e-17	5.187196e-16
## ACSS1	84532	-0.46810984	4.252687e-17	5.280764e-16
## MARCHF6	10299	-0.34666035	4.285243e-17	5.318472e-16
## CKAP2L	150468	1.25916786	4.504516e-17	5.587761e-16
## TTK	7272	1.06128422	4.541715e-17	5.631032e-16
## INKA2-AS1	100506343	0.91832400	4.766909e-17	5.907224e-16
## TG	7038	-0.90709455	4.781531e-17	5.922323e-16
## HLA-DPB1	3115	0.92219796	4.869044e-17	6.027643e-16
## STAB2	55576	1.82881702	5.079969e-17	6.285556e-16
## HCK	3055	1.12344057	5.098555e-17	6.305342e-16
## TBCCD1	55171	0.26916175	5.105935e-17	6.311257e-16
## POLR1E	64425	0.43259883	5.173037e-17	6.390949e-16
## PRDM16	63976	-0.82749679	5.177639e-17	6.393385e-16
## PMEPA1	56937	0.70582612	5.232433e-17	6.457763e-16
## MYO9B	4650	0.59371362	5.402022e-17	6.663682e-16
## ART1	417	1.97913221	5.507908e-17	6.790851e-16
## PLPP3	8613	-0.43044755	5.556076e-17	6.846765e-16
## NFATC1	4772	0.78431232	5.764663e-17	7.100207e-16
## TTLL11	158135	0.55106325	5.780342e-17	7.115912e-16
## ARMC7	79637	-0.49490634	5.809826e-17	7.148587e-16
## PHF19	26147	0.66518984	6.011430e-17	7.389163e-16
## AMOTL1	154810	0.61582491	6.011337e-17	7.389163e-16
## CLCN3	1182	-0.35818312	6.144872e-17	7.549369e-16
## RAB31	11031	0.78038926	6.203214e-17	7.617196e-16
## ADAMTS5	11096	0.71892038	6.259792e-17	7.682788e-16
## CNPY4	245812	0.58266837	6.346667e-17	7.785480e-16
## ZNF416	55659	0.32014443	6.353562e-17	7.790006e-16
## HK2-DT	118568819	1.30119194	6.556830e-17	8.035175e-16
## CASR	846	-1.06295523	6.561581e-17	8.036944e-16
## ANXA2R	389289	1.02407759	6.776894e-17	8.296489e-16
## OPLAH	26873	-0.76903357	6.847579e-17	8.378802e-16
## ADAMTS8	11095	-1.36705952	6.860159e-17	8.389971e-16
## LY6S-AS1	286122	0.88720203	6.921087e-17	8.460228e-16
## NATD1	256302	0.51355479	7.207338e-17	8.805708e-16
## FAM234B	57613	-0.49911670	7.250453e-17	8.853933e-16
## LINC01013	100507254	2.48540338	7.454524e-17	9.098563e-16
## FKBP14	55033	0.75513701	7.657629e-17	9.341769e-16
## LINC00963	100506190	-0.58954843	7.692053e-17	9.379055e-16
## RBPMS-AS1	100128750	-0.71627039	7.890063e-17	9.615668e-16

## MEGF6	1953	1.15468155	8.427617e-17	1.026564e-15
## SERTM1	400120	1.80211449	8.528890e-17	1.038380e-15
## NR4A3	8013	-1.43730250	8.956784e-17	1.089929e-15
## DISC1	27185	0.63108439	9.067152e-17	1.102807e-15
## PPP2R5C	5527	0.17948941	9.218172e-17	1.120614e-15
## GNA15	2769	1.12826899	9.381558e-17	1.139906e-15
## CDCA5	113130	0.83274125	9.560211e-17	1.161033e-15
## CABYR	26256	1.21987413	9.611579e-17	1.166688e-15
## MFSD6L	162387	-0.74257901	9.635094e-17	1.168959e-15
## NR3C1	2908	0.41081426	9.660781e-17	1.171490e-15
## SOX11	6664	2.80232798	9.726302e-17	1.178847e-15
## RGS22	26166	1.21038690	9.801507e-17	1.187370e-15
## MAPK13	5603	-0.40822536	9.825169e-17	1.189643e-15
## PYGO1	26108	0.80370643	9.871675e-17	1.194679e-15
## CHRNB1	1140	0.85244993	9.987860e-17	1.208138e-15
## HCAR3	8843	1.50462376	1.035101e-16	1.251443e-15
## C10orf105	414152	1.86985812	1.057828e-16	1.278284e-15
## KCNB1	3745	1.11110267	1.081958e-16	1.306793e-15
## LINC01702	102724481	-1.42537542	1.089517e-16	1.315269e-15
## TK2	7084	0.33475420	1.106990e-16	1.335698e-15
## RNF34	80196	0.27045449	1.147405e-16	1.383776e-15
## HS3ST1	9957	-1.21872811	1.150956e-16	1.387371e-15
## HS6ST2	90161	-0.85859193	1.151815e-16	1.387717e-15
## EVPL	2125	-0.77393061	1.165343e-16	1.403320e-15
## CMKLR1	1240	0.81812880	1.170374e-16	1.408680e-15
## SPTSSA	171546	-0.36105930	1.173541e-16	1.411793e-15
## AK7	122481	-0.61978596	1.181472e-16	1.420631e-15
## GAB3	139716	0.69197301	1.191690e-16	1.432208e-15
## CFAP107	93190	3.07096871	1.202631e-16	1.444644e-15
## CD207	50489	1.99400887	1.262537e-16	1.515856e-15
## MTCO2P2	100873202	1.45444180	1.277112e-16	1.532597e-15
## LAMP2	3920	-0.37717952	1.302396e-16	1.562168e-15
## ELAPOR2	222223	0.81176508	1.315994e-16	1.577699e-15
## YBX3	8531	1.06590967	1.321625e-16	1.583670e-15
## PYCARD	29108	1.12179260	1.334758e-16	1.598617e-15
## AP5M1	55745	-0.31916677	1.349115e-16	1.615017e-15
## ARHGDIB	397	0.67817546	1.368247e-16	1.637113e-15
## ZNF438	220929	0.38819427	1.369949e-16	1.638343e-15
## ADAMTS16	170690	0.72267213	1.376879e-16	1.645821e-15
## HIF3A	64344	-1.22442673	1.433763e-16	1.712973e-15
## KLHL20	27252	0.37175093	1.467663e-16	1.752613e-15
## CD59	966	-0.30492510	1.490070e-16	1.778497e-15
## FCRL6	343413	1.23754229	1.500335e-16	1.789869e-15
## ZFP36	7538	-0.89030291	1.501796e-16	1.790733e-15
## PLEKHO2	80301	0.72589598	1.536897e-16	1.831689e-15
## UBQLN1	29979	-0.18578585	1.540447e-16	1.835020e-15
## GNB4	59345	0.66880703	1.550867e-16	1.846527e-15
## TRGV8	6982	2.15500698	1.554790e-16	1.850292e-15
## TRBV7-6	28592	2.65276698	1.563901e-16	1.860223e-15
## MYMK	389827	2.25794568	1.628034e-16	1.935127e-15
## NHSL2	340527	0.80261022	1.628465e-16	1.935127e-15
## ST18	9705	-1.43142603	1.646394e-16	1.955475e-15
## SH2D1B	117157	1.20259914	1.658562e-16	1.968965e-15
## FLOT2	2319	-0.44048287	1.665696e-16	1.976469e-15

## CEP170	9859	0.65980425	1.673406e-16	1.984649e-15
## CD24	100133941	-0.73706714	1.675659e-16	1.986351e-15
## FZD10-AS1	440119	1.74386940	1.679544e-16	1.989985e-15
## MKX	283078	1.58375997	1.697398e-16	2.010160e-15
## NOMO1	23420	-0.47612137	1.732019e-16	2.050160e-15
## MARCHF5	54708	-0.19382324	1.765249e-16	2.088476e-15
## C1S	716	1.11157487	1.768699e-16	2.091540e-15
## WDR41	55255	0.29631607	1.837398e-16	2.171722e-15
## MERTK	10461	-0.46532022	1.846402e-16	2.181303e-15
## CFB	629	-1.08868911	1.869410e-16	2.207412e-15
## LMNB1	4001	0.76959139	1.901417e-16	2.243585e-15
## ATG9B	285973	1.67735999	1.901891e-16	2.243585e-15
## NT5C1A	84618	1.41478817	1.950026e-16	2.299252e-15
## BCL2L1	598	-0.32036310	1.982241e-16	2.336103e-15
## CRIP1	1396	1.47015114	1.994170e-16	2.349022e-15
## PDLIM1	9124	0.73966804	2.023890e-16	2.382876e-15
## HNRNPD	3184	-0.23020418	2.034615e-16	2.394342e-15
## PLEKHM2	23207	0.45019474	2.076726e-16	2.442716e-15
## PSD3	23362	0.80879719	2.157320e-16	2.536286e-15
## AIF1L	83543	-0.53364782	2.168351e-16	2.548022e-15
## SPOP	8405	0.23198411	2.273413e-16	2.670173e-15
## MLLT11	10962	1.10411590	2.274498e-16	2.670173e-15
## NCAPH	23397	1.19686912	2.288030e-16	2.684761e-15
## CDS2	8760	-0.26934372	2.298471e-16	2.695711e-15
## LILRB2	10288	1.14636663	2.315487e-16	2.714359e-15
## FXYD1	5348	1.78270721	2.320667e-16	2.719118e-15
## CLUH	23277	-0.51328028	2.322325e-16	2.719750e-15
## PTGER1	5731	-1.62083109	2.335390e-16	2.733733e-15
## CES4A	283848	-1.02016892	2.354430e-16	2.754694e-15
## CCR1	1230	0.87395572	2.371784e-16	2.773664e-15
## NDE1	54820	0.41270680	2.388608e-16	2.791994e-15
## CCDC88A	55704	0.65495387	2.392212e-16	2.794862e-15
## GOT1	2805	-0.48915085	2.460802e-16	2.873616e-15
## TIAM2	26230	0.67792568	2.479064e-16	2.893551e-15
## ETV4	2118	1.08267153	2.568109e-16	2.996045e-15
## ARL4D	379	-0.56848198	2.630350e-16	3.067186e-15
## CLEC2D	29121	1.18512701	2.682996e-16	3.127074e-15
## DLGAP5	9787	1.52708464	2.708137e-16	3.154863e-15
## ZNF436	80818	0.45354231	2.725473e-16	3.173537e-15
## F11R	50848	-0.38905295	2.743048e-16	3.192472e-15
## FBXO32	114907	0.94626930	2.835033e-16	3.297948e-15
## ASTE1	28990	0.26007056	2.888663e-16	3.358728e-15
## PPP2CA-DT	118732304	-0.65490712	2.969133e-16	3.450641e-15
## GRK5	2869	0.63534246	2.994141e-16	3.478041e-15
## ZNF526	116115	0.34879092	3.053470e-16	3.545264e-15
## LINC00654	149837	0.86997227	3.107360e-16	3.606111e-15
## SC5D	6309	-0.38846129	3.148318e-16	3.651899e-15
## FAR2	55711	0.63008720	3.208928e-16	3.720427e-15
## AGRP	181	-1.33987272	3.259889e-16	3.777709e-15
## OSBP	5007	-0.27586682	3.263029e-16	3.779546e-15
## CLEC4G	339390	2.02545136	3.316410e-16	3.839546e-15
## PROM2	150696	-0.84925079	3.319045e-16	3.840767e-15
## TNFSF11	8600	1.76822284	3.333166e-16	3.855272e-15
## RAP1GAP	5909	-0.85566253	3.346781e-16	3.869178e-15

## MAMDC2	256691	1.15281271	3.358740e-16	3.881157e-15
## HIC1	3090	1.23926467	3.401347e-16	3.928524e-15
## MINDY1	55793	-0.33553477	3.495460e-16	4.035305e-15
## TJP3	27134	-0.68833235	3.540109e-16	4.084909e-15
## DUSP6	1848	-0.47676760	3.562925e-16	4.109285e-15
## FOXC1	2296	-0.73948249	3.653266e-16	4.211481e-15
## ITPRIPL1	150771	0.98462805	3.699314e-16	4.262543e-15
## LINC03113	107985715	2.98997481	3.712414e-16	4.275610e-15
## ANGPTL1	9068	1.03427682	3.723613e-16	4.286477e-15
## C1orf174	339448	0.35029955	3.925073e-16	4.516250e-15
## NUMBL	9253	0.84794876	3.934753e-16	4.525245e-15
## SLCO4A1	28231	-1.11982331	3.958487e-16	4.550387e-15
## LINC01480	101927931	1.58259648	4.053717e-16	4.657654e-15
## SEC14L1	6397	-0.39363538	4.190214e-16	4.812211e-15
## GGT7	2686	-0.34679890	4.207910e-16	4.830251e-15
## CD101	9398	1.07162786	4.300054e-16	4.933693e-15
## FCN3	8547	-1.25735640	4.318290e-16	4.952277e-15
## ACVR1B	91	-0.37915069	4.351933e-16	4.988506e-15
## GAS1RR	100506834	0.83862587	4.373485e-16	5.010847e-15
## GSDMC	56169	2.89367557	4.435239e-16	5.079206e-15
## USP43	124739	-0.63139595	4.493499e-16	5.143501e-15
## CD69	969	1.38733991	4.526006e-16	5.178271e-15
## CMTM7	112616	0.51821838	4.528987e-16	5.179243e-15
## ATAD1	84896	-0.25956407	4.537141e-16	5.186128e-15
## CDS1	1040	-0.54398987	4.566565e-16	5.217306e-15
## KLHL35	283212	1.25664299	4.574897e-16	5.224369e-15
## PPTC7	160760	-0.40561446	4.587147e-16	5.235898e-15
## NPFFR2	10886	2.27447547	4.697267e-16	5.359075e-15
## PDLM7	9260	1.16059325	4.884801e-16	5.570415e-15
## TRIAP1	51499	0.43958132	5.059161e-16	5.766541e-15
## PLXNB1	5364	-0.49406483	5.118707e-16	5.831678e-15
## IPPK	64768	-0.25293982	5.205355e-16	5.925167e-15
## LINC02202	101927740	1.11115914	5.205642e-16	5.925167e-15
## GCSAML	148823	1.71450679	5.248477e-16	5.971125e-15
## IRF8	3394	0.97486399	5.321789e-16	6.051698e-15
## HLA-DOB	3112	1.39326779	5.334717e-16	6.063562e-15
## ZC3H12D	340152	0.83778862	5.422824e-16	6.160825e-15
## TRIM32	22954	0.36759566	5.625551e-16	6.388155e-15
## CLEC3B	7123	0.78235860	5.655006e-16	6.418604e-15
## CREM	1390	-0.37722163	5.681510e-16	6.445676e-15
## GEMIN4	50628	0.29043375	5.709211e-16	6.474080e-15
## ZNRF1	84937	0.48688089	5.771452e-16	6.541607e-15
## CLIC2	1193	0.65369863	5.897357e-16	6.681197e-15
## ALG2	85365	-0.23868323	5.913667e-16	6.696553e-15
## GRIA1	2890	1.60735432	5.955457e-16	6.740734e-15
## CCDC28B	79140	0.88969666	6.074054e-16	6.871769e-15
## KIAA0930	23313	0.61257409	6.078642e-16	6.873759e-15
## GTF3A	2971	0.52070889	6.202693e-16	7.010774e-15
## DDIAS	220042	0.87543330	6.268348e-16	7.081689e-15
## CLSTN2-AS1	101927808	-1.68214634	6.272863e-16	7.083496e-15
## TBX1	6899	1.86619044	6.322512e-16	7.136245e-15
## APBB1IP	54518	1.00242230	6.337644e-16	7.150004e-15
## EMP3	2014	0.99120833	6.663868e-16	7.514555e-15
## ALAS2	212	1.84902631	6.680126e-16	7.529394e-15

## SAA2	6289	2.36395555	6.685972e-16	7.532490e-15
## DIAPH1	1729	-0.30233964	6.707462e-16	7.553199e-15
## RGS18	64407	0.99147506	6.717410e-16	7.560898e-15
## TBC1D20	128637	0.23259186	6.766822e-16	7.612988e-15
## PROCR	10544	0.78257457	6.871765e-16	7.727476e-15
## C19orf48P	84798	0.42996400	6.953884e-16	7.816204e-15
## SLC2A13	114134	-0.60679881	6.999502e-16	7.863842e-15
## LY6H	4062	2.13549280	7.060975e-16	7.929240e-15
## BCHE	590	1.10353358	7.076477e-16	7.942978e-15
## FARP1	10160	-0.36969916	7.090191e-16	7.954696e-15
## KY	339855	1.19049637	7.177263e-16	8.048670e-15
## LINC02544	101929504	3.02384633	7.231246e-16	8.105466e-15
## NECAP2	55707	0.35806312	7.330605e-16	8.213049e-15
## IL18RAP	8807	1.35537796	7.404881e-16	8.292443e-15
## BORCS5	118426	0.22321015	7.578018e-16	8.482423e-15
## NIN	51199	0.47920849	7.620188e-16	8.525700e-15
## TACC3	10460	0.68093100	7.627910e-16	8.530411e-15
## LBX1-AS1	399806	4.25427278	7.740713e-16	8.652579e-15
## SLC41A1	254428	-0.42990979	7.813590e-16	8.730026e-15
## AEN	64782	0.46909160	7.841460e-16	8.757138e-15
## LAT2	7462	0.93309412	7.983874e-16	8.912086e-15
## FXR1	8087	0.45570701	8.197429e-16	9.146268e-15
## FMN1	342184	-0.67259264	8.245762e-16	9.195973e-15
## CACNA1I	8911	2.29939459	8.272182e-16	9.221206e-15
## CNTD1	124817	-0.87468394	8.693606e-16	9.686535e-15
## PLCL1	5334	-0.58045829	9.304527e-16	1.036248e-14
## MKI67	4288	1.31038843	9.498089e-16	1.057321e-14
## ASB16	92591	1.38128402	9.513643e-16	1.058567e-14
## CYSLTR1	10800	0.92073957	9.604763e-16	1.068217e-14
## ASB14	142686	2.81973728	9.744478e-16	1.083260e-14
## DSEL	92126	0.78233387	9.769709e-16	1.085568e-14
## SLC38A5	92745	1.38226227	9.876812e-16	1.096967e-14
## CHEK1	1111	0.47660148	9.945915e-16	1.104137e-14
## EFNA2	1943	-1.37345362	1.005897e-15	1.116178e-14
## HDAC9	9734	0.72581868	1.030021e-15	1.142425e-14
## MIOS-DT	101927391	-0.67839136	1.031246e-15	1.143262e-14
## GAPT	202309	1.19725472	1.034602e-15	1.146460e-14
## KIF19	124602	1.52597019	1.042870e-15	1.155095e-14
## MYL3	4634	1.08470621	1.060956e-15	1.174592e-14
## STIMATE	375346	0.55540748	1.071216e-15	1.185411e-14
## ICAM3	3385	0.62069151	1.074208e-15	1.188181e-14
## PPM1M	132160	0.48163584	1.080979e-15	1.195127e-14
## C11orf96	387763	-1.19041559	1.089346e-15	1.203828e-14
## VSIR	64115	0.60458576	1.097421e-15	1.212201e-14
## CCDC69	26112	0.79082528	1.135210e-15	1.253372e-14
## S100A4	6275	1.30127725	1.140739e-15	1.258906e-14
## ALK	238	1.87655764	1.147830e-15	1.266157e-14
## ADRA2A	150	1.54470546	1.154887e-15	1.273362e-14
## LINC02303	105370479	1.65077638	1.177925e-15	1.298175e-14
## HTRA4	203100	1.87874770	1.181515e-15	1.301541e-14
## DNAH12	201625	1.11863520	1.185597e-15	1.305446e-14
## CDKL2	8999	-0.72837957	1.192119e-15	1.312033e-14
## MYO10	4651	-0.49869516	1.194612e-15	1.314088e-14
## TRBV5-6	28609	2.63101961	1.195068e-15	1.314088e-14

## CYP51A1	1595	-0.77153252	1.196623e-15	1.315203e-14
## CLDN7	1366	-0.69828924	1.247709e-15	1.370731e-14
## TMEM161B	153396	-0.44176079	1.259941e-15	1.383544e-14
## CRYBB1	1414	1.23007608	1.281917e-15	1.407040e-14
## TMX2	51075	-0.37983053	1.286803e-15	1.411765e-14
## ARHGEF17-AS1	100287837	-0.88814347	1.289116e-15	1.413665e-14
## GPR34	2857	0.78242118	1.303673e-15	1.428984e-14
## HCN1	348980	2.76294307	1.308429e-15	1.433549e-14
## ATXN1	6310	0.39895517	1.309283e-15	1.433839e-14
## SLC35A2	7355	-0.31541231	1.317073e-15	1.441531e-14
## ARSK	153642	-0.37193809	1.317494e-15	1.441531e-14
## TRMT2B	79979	-0.21708972	1.360393e-15	1.487800e-14
## TNFRSF1B	7133	0.88258730	1.366232e-15	1.493513e-14
## B4GALT2	8704	0.63584246	1.378552e-15	1.506304e-14
## GPR3	2827	-1.08443265	1.419588e-15	1.549749e-14
## CRIPTO	6997	-1.47604008	1.419217e-15	1.549749e-14
## PRSS56	646960	3.44446675	1.456969e-15	1.589843e-14
## WDCP	80304	0.27242832	1.467923e-15	1.601077e-14
## ULK2	9706	0.28640813	1.537401e-15	1.676105e-14
## NRROS	375387	0.93757594	1.567170e-15	1.707793e-14
## REPS1	85021	-0.18000616	1.584375e-15	1.725769e-14
## SILC1	150622	4.02193216	1.597540e-15	1.739329e-14
## DOP1B	9980	0.47523143	1.639533e-15	1.784249e-14
## SLC25A33	84275	-0.63919372	1.657727e-15	1.802435e-14
## CHEK2	11200	0.50527674	1.657674e-15	1.802435e-14
## ANKRD35	148741	1.26659915	1.668639e-15	1.813488e-14
## ENO1	2023	-0.47449212	1.673415e-15	1.817866e-14
## BEAN1	146227	1.40936279	1.678972e-15	1.823087e-14
## TRDV1	28518	2.44138751	1.708500e-15	1.854321e-14
## PIF1	80119	1.18949870	1.756091e-15	1.905123e-14
## DEGS2	123099	-1.32591670	1.781319e-15	1.931630e-14
## C1GALT1C1	29071	-0.27731874	1.796069e-15	1.946757e-14
## HASPIN	83903	1.17885911	1.807518e-15	1.958292e-14
## NXPE3	91775	0.55622683	1.821839e-15	1.972928e-14
## GPR161	23432	0.67262897	1.845080e-15	1.996317e-14
## DIRAS3	9077	-0.60769781	1.844617e-15	1.996317e-14
## EXOC3L2	90332	-0.67885269	1.867934e-15	2.020146e-14
## CCL3-AS1	102724850	2.71086892	1.896853e-15	2.050508e-14
## HUNK	30811	-0.61691349	1.943039e-15	2.099502e-14
## PICALM	8301	-0.25235532	1.962698e-15	2.119801e-14
## SAA1	6288	2.32855711	1.973010e-15	2.129992e-14
## ARL10	285598	0.60343415	1.992348e-15	2.149913e-14
## TGFB1	7045	1.18387440	1.995845e-15	2.152731e-14
## NMNAT2	23057	1.10974821	2.008519e-15	2.165440e-14
## ITM2A	9452	0.78979847	2.023529e-15	2.180656e-14
## ATP6V1A	523	-0.42457442	2.044878e-15	2.202686e-14
## SEMA6D	80031	-0.80760807	2.047834e-15	2.204892e-14
## PTPRG	5793	-0.41791161	2.091518e-15	2.250929e-14
## CD1E	913	1.97389687	2.098947e-15	2.257925e-14
## GPR108	56927	-0.32406387	2.103928e-15	2.261778e-14
## TRAV41	28640	2.56880675	2.104391e-15	2.261778e-14
## HIPK2	28996	-0.54912940	2.168646e-15	2.329809e-14
## TREML2	79865	1.74045621	2.194646e-15	2.356577e-14
## TMCO4	255104	-0.33809124	2.195502e-15	2.356577e-14

## FGB	2244	-2.32566638	2.246314e-15	2.410052e-14
## SVIL2P	645954	1.32220434	2.250496e-15	2.413473e-14
## DUSP23	54935	-0.90202690	2.256497e-15	2.418841e-14
## CD1C	911	1.58792533	2.261398e-15	2.423026e-14
## LINC02244	105371018	1.78278942	2.263733e-15	2.424459e-14
## SNX27	81609	-0.40046262	2.275833e-15	2.436344e-14
## C1QTNF9B	387911	2.11838651	2.279283e-15	2.438963e-14
## DNAJC3	5611	-0.36291633	2.290821e-15	2.450230e-14
## PAK6-AS1	644809	-0.91743868	2.332108e-15	2.493293e-14
## AEBP1	165	1.19037841	2.357324e-15	2.519144e-14
## ROBO1	6091	0.66820041	2.358801e-15	2.519615e-14
## EFEMP2	30008	0.74472222	2.399002e-15	2.561430e-14
## SH3D19	152503	0.40862490	2.410673e-15	2.572761e-14
## FERMT1	55612	0.91521731	2.433208e-15	2.595671e-14
## LINC01605	100507420	1.51940927	2.470544e-15	2.634343e-14
## REEP5	7905	-0.23304279	2.481453e-15	2.644815e-14
## C2CD4D	100191040	-1.23968205	2.499276e-15	2.662644e-14
## ENOPH1	58478	-0.19398468	2.514500e-15	2.677689e-14
## CXCL12	6387	0.72256499	2.516842e-15	2.679010e-14
## ST6GALNAC3	256435	-0.71093841	2.518704e-15	2.679817e-14
## FNBP1	23048	0.32836054	2.525052e-15	2.684221e-14
## IFRD2	7866	0.48676459	2.524248e-15	2.684221e-14
## IGSF10	285313	1.46859491	2.530512e-15	2.688849e-14
## ALG12	79087	-0.34657938	2.542967e-15	2.700902e-14
## MAB21L2	10586	3.14119920	2.558947e-15	2.716687e-14
## CAVIN1	284119	1.04489446	2.569655e-15	2.726864e-14
## SNTN	132203	3.80804368	2.585491e-15	2.742471e-14
## LURAP1	541468	-0.56678873	2.607740e-15	2.764864e-14
## CSGALNACT2	55454	0.51227576	2.678155e-15	2.838284e-14
## A4GALT	53947	-0.62412004	2.681520e-15	2.840611e-14
## CLEC17A	388512	2.41931396	2.699855e-15	2.858788e-14
## ANKRD2	26287	1.71063457	2.760094e-15	2.921300e-14
## ELFN1	392617	-0.89541031	2.771511e-15	2.932107e-14
## LNCTAM34A	102724571	1.03401997	2.787934e-15	2.948198e-14
## EFHD1	80303	-0.54842508	2.811015e-15	2.971313e-14
## MCTP1	79772	1.11301487	2.833772e-15	2.994065e-14
## NID2	22795	0.83475613	2.865353e-15	3.026116e-14
## AXIN2	8313	0.74488476	2.871155e-15	3.030927e-14
## HLA-DMB	3109	0.71238419	2.873102e-15	3.031665e-14
## SEC23B	10483	-0.34372999	2.884493e-15	3.042364e-14
## LAMA2	3908	1.00297648	2.891880e-15	3.048832e-14
## TRBV6-6	28601	2.61987727	2.902349e-15	3.058542e-14
## C4B	721	-1.17027534	2.918325e-15	3.074045e-14
## PATL2	197135	1.15800679	2.953189e-15	3.109421e-14
## LYRM4-AS1	100129461	0.38277811	2.956472e-15	3.111529e-14
## PPP1R10	5514	-0.30860860	3.001541e-15	3.157595e-14
## TRGV7	6981	2.01158738	3.008584e-15	3.163635e-14
## IFI44	10561	0.79060751	3.195956e-15	3.359210e-14
## CCDC120	90060	-0.48167478	3.242681e-15	3.406847e-14
## TMEM30B	161291	-0.57250368	3.293101e-15	3.458326e-14
## TMEM88	92162	-0.59804498	3.321617e-15	3.486765e-14
## GOLM1	51280	-0.48728754	3.348904e-15	3.513892e-14
## PIK3CD	5293	0.43034288	3.379187e-15	3.544136e-14
## PPIF	10105	-0.37164216	3.412263e-15	3.575740e-14

## LINC01762	101929023	-1.01867592	3.411378e-15	3.575740e-14
## PPP1R13B	23368	-0.31590417	3.540714e-15	3.708745e-14
## DMD	1756	0.84120782	3.565021e-15	3.732597e-14
## MAL2	114569	-0.65590231	3.570079e-15	3.734674e-14
## SHISA4	149345	1.06898283	3.568758e-15	3.734674e-14
## KCNB2	9312	2.02545973	3.602344e-15	3.766806e-14
## HNRNPH2	3188	-0.26066504	3.608160e-15	3.771265e-14
## CADM3-AS1	100131825	1.97729746	3.625623e-15	3.787888e-14
## KSR2	283455	-0.88897912	3.687586e-15	3.850968e-14
## FITM2	128486	-0.30511508	3.701595e-15	3.863937e-14
## PICK1	9463	-0.28362782	3.821982e-15	3.987891e-14
## ANP32E	81611	-0.34399788	3.867333e-15	4.033479e-14
## APP	351	-0.51948996	3.880242e-15	4.045206e-14
## OAS1	4938	0.64525237	3.885331e-15	4.048775e-14
## PLEKHF1	79156	1.18317940	3.968767e-15	4.133948e-14
## DRP2	1821	2.01769001	3.999547e-15	4.164224e-14
## RFFL	117584	-0.58162751	4.074770e-15	4.240727e-14
## SEMA4A	64218	-0.80943013	4.291503e-15	4.464375e-14
## MORC4	79710	0.36745846	4.415402e-15	4.591300e-14
## LINC02154	109729169	3.57401157	4.460992e-15	4.636722e-14
## LYPLA1	10434	-0.33505845	4.566596e-15	4.744457e-14
## DNAJB5	25822	0.60197780	4.691809e-15	4.872464e-14
## FGF6	2251	5.40051502	4.788685e-15	4.970945e-14
## TTLL1	25809	0.33333774	4.809562e-15	4.990485e-14
## SRSF12	135295	-0.69378026	4.828269e-15	5.007758e-14
## P4HTM	54681	-0.27876507	5.169347e-15	5.359228e-14
## SGO1	151648	0.91531801	5.220246e-15	5.409689e-14
## PAX8	7849	-0.61211808	5.252161e-15	5.440442e-14
## AIF1	199	0.75039511	5.382439e-15	5.573014e-14
## MCM10	55388	1.27248039	5.449201e-15	5.639737e-14
## PABPC4	8761	0.48029825	5.456765e-15	5.645161e-14
## PLA2G3	50487	-1.07894437	5.494762e-15	5.682051e-14
## CDK4	1019	0.40161803	5.613669e-15	5.802542e-14
## UNC13D	201294	0.92633323	5.623891e-15	5.810637e-14
## ETV5	2119	0.56022797	5.647194e-15	5.832234e-14
## PLPPR4	9890	1.31230002	5.677423e-15	5.860963e-14
## CPNE3	8895	-0.30158774	5.749442e-15	5.932789e-14
## CYP19A1	1588	2.03622191	5.850303e-15	6.034305e-14
## NAALADL1	10004	0.62088459	6.045574e-15	6.233071e-14
## METTL22	79091	0.46072303	6.081450e-15	6.267401e-14
## SDS	10993	1.72416629	6.087476e-15	6.270952e-14
## RELT	84957	0.85629706	6.204791e-15	6.389095e-14
## MSX2	4488	1.51687270	6.283641e-15	6.467546e-14
## ASH1L-AS1	645676	-0.53742274	6.396757e-15	6.581186e-14
## MINAR1	23251	1.29269807	6.463679e-15	6.647222e-14
## FUT7	2529	1.98983402	6.499416e-15	6.681147e-14
## SLC4A11	83959	-1.24778998	6.757669e-15	6.943684e-14
## GRIK5	2901	-0.64072722	6.769644e-15	6.953048e-14
## ALOX5	240	0.97946757	6.785012e-15	6.965888e-14
## ANXA6	309	0.49411469	6.807362e-15	6.985883e-14
## SLC35F6	54978	-0.57966781	6.893216e-15	7.071002e-14
## SCD	6319	1.12267963	6.979389e-15	7.156376e-14
## HYAL2	8692	-0.42710312	7.009546e-15	7.184268e-14
## LINC03080	124903562	-1.00819614	7.083244e-15	7.256742e-14

## TAMALIN	160622	-0.56552293	7.119808e-15	7.291127e-14
## TREM1	54210	1.70290789	7.135149e-15	7.303760e-14
## LINC00907	284260	1.19908447	7.235412e-15	7.403273e-14
## HLA-F	3134	0.63971805	7.239078e-15	7.403907e-14
## TRBV30	28557	2.57799434	7.278337e-15	7.440928e-14
## UBE2C	11065	1.31065995	7.360619e-15	7.521884e-14
## KCTD20	222658	0.35627709	7.397050e-15	7.555935e-14
## ZDHHC2	51201	-0.34317985	7.624989e-15	7.785498e-14
## CIMAP1C	161753	1.23560380	7.677519e-15	7.835841e-14
## ZMYND19	116225	0.36710321	7.712538e-15	7.868278e-14
## PGK1	5230	-0.24390236	7.853674e-15	8.008902e-14
## FAM83H	286077	-0.56439418	7.984501e-15	8.138899e-14
## KIF2C	11004	0.79387414	8.042484e-15	8.194566e-14
## ADGRA2	25960	0.96410796	8.054716e-15	8.203590e-14
## SIRPB2	284759	1.05596470	8.125896e-15	8.272618e-14
## ADAMTS18	170692	1.15654966	8.170140e-15	8.314178e-14
## CD1B	910	2.57259630	8.226177e-15	8.367699e-14
## CCNE1	898	0.72212783	8.384779e-15	8.525461e-14
## EPCAM	4072	-0.59398573	8.508093e-15	8.643611e-14
## CAMK2D	817	0.43946811	8.506043e-15	8.643611e-14
## LY86	9450	1.08640456	8.519687e-15	8.651773e-14
## SPON2	10417	1.40835412	8.537526e-15	8.666267e-14
## N6AMT1	29104	0.30147219	8.706969e-15	8.834574e-14
## SYT13	57586	-0.74740896	8.722612e-15	8.846752e-14
## HOXD8	3234	-0.43465901	8.882148e-15	9.004801e-14
## HNRNPU	3192	-0.19326419	8.936320e-15	9.055943e-14
## SLC30A1	7779	-0.39458004	9.013053e-15	9.129895e-14
## METTL21C	196541	3.77590367	9.090445e-15	9.204454e-14
## LRFN5	145581	0.87624816	9.150861e-15	9.261769e-14
## ITLN1	55600	1.77834240	9.535806e-15	9.647362e-14
## PRKCB	5579	1.14047126	9.682147e-15	9.791338e-14
## SLC12A5	57468	1.51007977	9.688467e-15	9.793653e-14
## RSL1D1	26156	0.30086969	9.826253e-15	9.928806e-14
## DKK3	27122	0.97339539	9.848759e-15	9.947410e-14
## CAND2	23066	0.96989832	9.882331e-15	9.977172e-14
## LINC01684	105372751	1.49882882	9.900538e-15	9.991403e-14
## NHSL3	57648	-0.41021516	9.932573e-15	1.001957e-13
## WAKMAR2	100130476	1.11175107	1.000629e-14	1.008975e-13
## JCAD	57608	0.59078094	1.005801e-14	1.013769e-13
## CCNJL	79616	-0.66082628	1.022391e-14	1.030063e-13
## RBM38-AS1	100291105	2.13277971	1.027917e-14	1.035201e-13
## ITFG1	81533	-0.22545357	1.036535e-14	1.043448e-13
## KCNK6	9424	0.68306057	1.057831e-14	1.064445e-13
## SPINK2	6691	2.06047045	1.063315e-14	1.069520e-13
## LINC01614	105373869	3.04547914	1.073934e-14	1.079754e-13
## TMEM268	203197	0.33041472	1.075876e-14	1.081260e-13
## FRMPD4	9758	1.18718727	1.092817e-14	1.097832e-13
## ANXA2	302	0.80325536	1.093736e-14	1.098301e-13
## ANTXR2	118429	0.60056883	1.095570e-14	1.099688e-13
## GPR141	353345	1.32242006	1.099661e-14	1.103338e-13
## C4A	720	-1.19158554	1.110514e-14	1.113769e-13
## KCNJ2	3759	0.70809023	1.113235e-14	1.116036e-13
## MRPS5	64969	-0.25115161	1.125666e-14	1.128033e-13
## PLEKHA8P1	51054	0.54019799	1.142094e-14	1.143553e-13

## PDE12	201626	-0.29666811	1.142034e-14	1.143553e-13
## HAPLN2	60484	-1.60142071	1.148237e-14	1.149230e-13
## KCTD1	284252	-0.42181980	1.175840e-14	1.176372e-13
## CCSAP	126731	0.54048536	1.177455e-14	1.177504e-13
## LDAF1	57146	0.49772289	1.183628e-14	1.183189e-13
## CDCA3	83461	0.64982834	1.196189e-14	1.195255e-13
## PPBP	5473	1.67921788	1.218678e-14	1.217225e-13
## TUBB6	84617	1.03860160	1.222590e-14	1.220631e-13
## GORAB-AS1	101928650	1.37142450	1.225883e-14	1.223416e-13
## OTOA	146183	1.66602681	1.229088e-14	1.226111e-13
## KBTBD8	84541	0.60137646	1.238614e-14	1.235107e-13
## AEBP2	121536	-0.27695172	1.249774e-14	1.245724e-13
## EIF4E	1977	-0.17376123	1.254993e-14	1.249901e-13
## YEATS2	55689	0.41218513	1.254782e-14	1.249901e-13
## LGALS3	3958	0.63083334	1.265958e-14	1.260305e-13
## LINC01711	79160	1.34713617	1.291825e-14	1.285529e-13
## PKP4	8502	-0.39401112	1.300464e-14	1.293597e-13
## STOML3	161003	2.65531340	1.301064e-14	1.293664e-13
## IGHM	3507	1.88988675	1.311285e-14	1.303294e-13
## KIF18B	146909	1.43302778	1.317465e-14	1.308901e-13
## CFAP61	26074	0.83051207	1.348985e-14	1.339669e-13
## ANGPT1	284	0.59029748	1.390645e-14	1.380476e-13
## RPUSD4	84881	0.43751354	1.400999e-14	1.390186e-13
## EVL	51466	0.54520406	1.403884e-14	1.392481e-13
## CYP4A22-AS1	105378701	-1.40567542	1.413177e-14	1.401127e-13
## SPATA17	128153	0.79442501	1.419612e-14	1.406932e-13
## TMED7	51014	-0.41637653	1.429238e-14	1.415895e-13
## TSKS	60385	1.76625332	1.440310e-14	1.426283e-13
## APOL3	80833	0.46025586	1.481539e-14	1.466512e-13
## IRF2	3660	0.21419241	1.482330e-14	1.466698e-13
## LPAR5	57121	0.83803744	1.484451e-14	1.468199e-13
## PRMT2	3275	0.24353883	1.509066e-14	1.491937e-13
## NT5E	4907	0.68529799	1.529550e-14	1.511574e-13
## KIF14	9928	1.31305649	1.561991e-14	1.543006e-13
## TMEM71	137835	0.87857652	1.614058e-14	1.593792e-13
## SP110	3431	0.38400323	1.615229e-14	1.594300e-13
## SHANK1	50944	1.03646328	1.646781e-14	1.624784e-13
## SULF1	23213	0.95762705	1.650602e-14	1.627893e-13
## DMBT1	1755	2.28271946	1.658389e-14	1.634909e-13
## HYOU1	10525	-0.54514812	1.672002e-14	1.647661e-13
## CIMIP1	128602	3.73283757	1.700832e-14	1.675392e-13
## FAM225B	100128385	1.67231973	1.704664e-14	1.678486e-13
## CLEC16A	23274	-0.28461963	1.717424e-14	1.690366e-13
## ST3GAL4	6484	-0.87929198	1.733574e-14	1.705570e-13
## FAM174A	345757	-0.32518295	1.750013e-14	1.721047e-13
## DCPS	28960	-0.51571348	1.755659e-14	1.725901e-13
## LMCD1	29995	0.70409120	1.763514e-14	1.732922e-13
## TP53	7157	0.43836378	1.776386e-14	1.744865e-13
## LRP10	26020	-0.46524335	1.830974e-14	1.797758e-13
## EGF	1950	-1.11567420	1.838053e-14	1.803979e-13
## MARCKSL1	65108	0.69869353	1.843018e-14	1.808122e-13
## HYLS1	219844	0.33933481	1.849931e-14	1.814172e-13
## ADGRF5	221395	-0.60098105	1.924866e-14	1.886897e-13
## LINC01479	101927922	3.29768982	1.930310e-14	1.891470e-13

## FSCN1	6624	1.09038064	1.936971e-14	1.897232e-13
## UTS2	10911	2.70165278	1.973152e-14	1.931892e-13
## ORC5	5001	0.25637748	1.981316e-14	1.939104e-13
## PRMT6	55170	-0.26241511	1.983874e-14	1.940826e-13
## TMC4	147798	-0.68781788	2.034521e-14	1.989573e-13
## PLEKHG3	26030	-0.34321926	2.045596e-14	1.999599e-13
## NAP1L1	4673	0.32651852	2.047900e-14	2.001046e-13
## C1orf226	400793	-0.41266223	2.077894e-14	2.029538e-13
## RHOV	171177	-0.85172978	2.096501e-14	2.046889e-13
## SHISA3	152573	-0.70374055	2.107144e-14	2.056454e-13
## FCN2	2220	-1.40885022	2.123427e-14	2.071513e-13
## ST3GAL2	6483	0.48463361	2.165417e-14	2.111629e-13
## CASP14	23581	-2.45443291	2.187146e-14	2.131963e-13
## C21orf58	54058	0.67258399	2.198143e-14	2.141823e-13
## MYADM	91663	1.02096966	2.213499e-14	2.155921e-13
## CENPE	1062	1.04053689	2.255078e-14	2.195539e-13
## RALGDS	5900	0.63172673	2.256854e-14	2.196388e-13
## PPID	5481	0.30259590	2.281039e-14	2.219037e-13
## GP1BA	2811	1.42791252	2.304477e-14	2.240940e-13
## PARP8	79668	0.43477607	2.346837e-14	2.281219e-13
## TNFSF9	8744	1.29718808	2.375185e-14	2.307852e-13
## MAGI2	9863	-0.35751884	2.397226e-14	2.328337e-13
## FCGR3A	2214	1.20172020	2.410095e-14	2.339901e-13
## SEMA3C	10512	0.92506683	2.469756e-14	2.396867e-13
## SLC6A17	388662	-0.79486468	2.518654e-14	2.443346e-13
## TPD52L2	7165	0.21677217	2.528390e-14	2.451812e-13
## IMPDH2	3615	0.42332208	2.531624e-14	2.453969e-13
## TSC22D1	8848	-0.27624096	2.543070e-14	2.464080e-13
## HENMT1	113802	0.55933467	2.597395e-14	2.515715e-13
## SMG1-DT	107984844	-0.99243919	2.602386e-14	2.519545e-13
## RAI14	26064	0.34456943	2.671846e-14	2.585764e-13
## PITX2	5308	1.34186286	2.680793e-14	2.593389e-13
## APEX2	27301	-0.42037452	2.754601e-14	2.663731e-13
## SLC6A7	6534	2.79438362	2.895270e-14	2.798646e-13
## TMED5	50999	-0.39819618	2.898083e-14	2.800251e-13
## EFNA5	1946	-0.43754213	3.090796e-14	2.985272e-13
## ANXA8L1	728113	4.61953978	3.172229e-14	3.062707e-13
## MOB4	25843	-0.30828732	3.175291e-14	3.064446e-13
## PLTP	5360	-1.54139114	3.225271e-14	3.111445e-13
## MSX1	4487	1.10838786	3.271695e-14	3.154978e-13
## EML2	24139	-0.30068166	3.338895e-14	3.218504e-13
## WFDC1	58189	-0.68821447	3.370331e-14	3.247518e-13
## RAD51AP1	10635	0.62428836	3.393802e-14	3.268838e-13
## TRIM65	201292	0.34402218	3.398717e-14	3.272275e-13
## LRRTM3	347731	2.43657948	3.405636e-14	3.277638e-13
## CYGB	114757	0.96302945	3.441643e-14	3.310981e-13
## ADAMTSL4	54507	1.20230145	3.482183e-14	3.348656e-13
## PLAUR	5329	1.21576705	3.491182e-14	3.355538e-13
## PPP3CB	5532	0.36376477	3.492102e-14	3.355538e-13
## CCDC117	150275	0.27356746	3.545721e-14	3.405714e-13
## GPC2	221914	1.48946793	3.606066e-14	3.462308e-13
## VPS8	23355	0.19396900	3.635945e-14	3.488240e-13
## RPL7P3	140857	4.39587836	3.635514e-14	3.488240e-13
## MSI2	124540	-0.36953184	3.646024e-14	3.496528e-13

## TRAV5	28688	2.59143980	3.666516e-14	3.514793e-13
## BMS1P8	653557	1.02828393	3.676392e-14	3.522871e-13
## NBPF1	55672	0.41803745	3.704776e-14	3.548670e-13
## SH3TC2	79628	0.85627438	3.745844e-14	3.586594e-13
## SASH1	23328	-0.54843207	3.763532e-14	3.602111e-13
## ZEB1	6935	0.70818878	3.784958e-14	3.621191e-13
## NELL1	4745	-0.91835242	3.801741e-14	3.634386e-13
## RUNDC1	146923	-0.19835957	3.801604e-14	3.634386e-13
## SMAD6	4091	-0.52119399	3.828021e-14	3.658071e-13
## SSH2	85464	0.36425020	3.860016e-14	3.687195e-13
## CFL2	1073	0.68018834	3.900894e-14	3.724779e-13
## TRBV28	28559	2.08950514	3.906535e-14	3.728700e-13
## POLQ	10721	1.18667803	3.910791e-14	3.731296e-13
## MIR924HG	647946	1.63443943	4.059351e-14	3.871518e-13
## KCNJ1	3758	-0.72236547	4.130031e-14	3.937382e-13
## HOXA-AS3	100133311	-0.53973688	4.150806e-14	3.955636e-13
## BUB1B	701	0.94775645	4.159819e-14	3.962672e-13
## CDT1	81620	0.87111762	4.167456e-14	3.968392e-13
## FTLPL3	284764	0.91634229	4.214787e-14	4.011890e-13
## CYP2J2	1573	0.83084404	4.217491e-14	4.012891e-13
## IL11RA	3590	0.73795743	4.230530e-14	4.023723e-13
## SOCS3	9021	-1.28388930	4.232752e-14	4.024261e-13
## AURKB	9212	1.30561809	4.280927e-14	4.068471e-13
## ZSWIM3	140831	0.25012750	4.514540e-14	4.288813e-13
## TMEM98	26022	0.47525693	4.645786e-14	4.411772e-13
## AKIRIN1	79647	-0.24124319	4.663233e-14	4.426610e-13
## CRYAA	1409	-2.33216187	4.684492e-14	4.445055e-13
## CHRD1	91851	0.99005233	4.691244e-14	4.449724e-13
## STAT2	6773	0.42266693	4.708692e-14	4.464531e-13
## ZNF532	55205	0.57889954	4.835864e-14	4.583321e-13
## SPIN2A	54466	1.64560151	4.877428e-14	4.620911e-13
## SLC16A5	9121	-0.78388858	4.915100e-14	4.654788e-13
## NELL2	4753	1.04907015	4.953000e-14	4.688853e-13
## PTX3	5806	1.60702963	5.063484e-14	4.791578e-13
## NR1H4	9971	-0.65011112	5.166486e-14	4.886207e-13
## NCKIPSD	51517	-0.37673035	5.167504e-14	4.886207e-13
## IFIT1	3434	0.63006449	5.241351e-14	4.954106e-13
## VPS26B	112936	0.23660177	5.265392e-14	4.974895e-13
## SERINC2	347735	-0.65539656	5.274298e-14	4.981372e-13
## SERPINB9P1	221756	1.25578701	5.509599e-14	5.201584e-13
## VNN2	8875	0.79447857	5.751161e-14	5.427533e-13
## YRDC	79693	-0.33703680	5.769899e-14	5.443102e-13
## MFNG	4242	0.70562903	5.840692e-14	5.507748e-13
## PRSS12	8492	0.91422215	5.886965e-14	5.549229e-13
## LHX9	56956	2.85043884	5.897821e-14	5.557307e-13
## ZNF552	79818	-0.35438957	5.902189e-14	5.559267e-13
## PLXDC2	84898	0.54936467	5.950833e-14	5.602913e-13
## LY6L	101928108	-1.66903613	5.967679e-14	5.616598e-13
## FCGR2C	9103	1.30357635	6.224792e-14	5.856317e-13
## AGK	55750	-0.21786058	6.263171e-14	5.890144e-13
## MGAT2	4247	0.25386087	6.377477e-14	5.995322e-13
## KAT7	11143	-0.24014885	6.388741e-14	6.003588e-13
## GAB2	9846	0.41356518	6.427199e-14	6.037394e-13
## GSTM3	2947	-0.74135679	6.680330e-14	6.272747e-13

## RHEBL1	121268	1.07647326	6.741049e-14	6.327317e-13
## PPFIA4	8497	1.14766333	6.858151e-14	6.434746e-13
## CTSH	1512	-0.65655322	7.017143e-14	6.581382e-13
## SLC17A7	57030	1.35296161	7.102720e-14	6.659022e-13
## GAREM2	150946	0.66355804	7.108145e-14	6.659022e-13
## UHRF1	29128	1.33975149	7.107949e-14	6.659022e-13
## LIX1L	128077	0.48569784	7.257670e-14	6.796479e-13
## RECK	8434	0.63809805	7.387079e-14	6.915000e-13
## R3HDM1	23518	0.20688927	7.555076e-14	7.069538e-13
## LY6G5C	80741	0.51158788	7.706017e-14	7.208003e-13
## LINC01281	286442	3.71090163	7.737897e-14	7.235038e-13
## MBOAT2	129642	-0.32570339	7.867301e-14	7.353203e-13
## HNRNPH3	3189	-0.25049757	7.878395e-14	7.360741e-13
## COL17A1	1308	1.53619138	7.914511e-14	7.391643e-13
## TNFRSF10A	8797	-0.48467675	8.067241e-14	7.531388e-13
## NLRC4	58484	0.86494685	8.216688e-14	7.667962e-13
## PGBD1	84547	0.36106230	8.262632e-14	7.707878e-13
## HAS2	3037	1.47848835	8.390358e-14	7.824025e-13
## CDC20P1	157956	1.17764189	8.423583e-14	7.851994e-13
## CTBP2	1488	-0.19242382	8.496067e-14	7.916523e-13
## NLE1	54475	0.31778534	8.724400e-14	8.126165e-13
## KIR3DL1	3811	2.13933866	8.803084e-14	8.196312e-13
## HNRNPA3	220988	-0.21901276	8.943297e-14	8.323671e-13
## TUBB1	81027	1.27315594	9.269738e-14	8.624193e-13
## TOMM20P2	101927540	1.98753099	9.310544e-14	8.658841e-13
## WNT1	7471	2.20647981	9.362309e-14	8.703653e-13
## SYTL1	84958	0.87475280	9.430483e-14	8.763678e-13
## C6orf136	221545	-0.36304436	9.493097e-14	8.818492e-13
## PIP4P2	55529	-0.34510585	9.649586e-14	8.960435e-13
## PARP14	54625	0.49970335	1.013560e-13	9.408140e-13
## YPEL1	29799	0.58592033	1.014989e-13	9.417815e-13
## GYPC	2995	0.75835830	1.070885e-13	9.932662e-13
## JAZF1	221895	0.60976115	1.113413e-13	1.032317e-12
## SLC16A6	9120	0.93009892	1.119690e-13	1.037742e-12
## RFPL4B	442247	1.84132956	1.120904e-13	1.038471e-12
## PALMD	54873	0.82241931	1.132154e-13	1.048494e-12
## LINC00944	387895	1.65837268	1.135369e-13	1.051070e-12
## ZNF474	133923	1.63024597	1.150963e-13	1.065101e-12
## TRABD2B	388630	-0.67017535	1.155700e-13	1.069078e-12
## TSPYL4	23270	-0.28795171	1.156481e-13	1.069392e-12
## LRRC3	81543	0.77068458	1.169024e-13	1.080580e-12
## NDUFA5	4698	-0.34858798	1.225659e-13	1.132500e-12
## GRID2IP	392862	-0.90988002	1.236783e-13	1.142344e-12
## CD300C	10871	1.11542187	1.275478e-13	1.177636e-12
## SH3BGR	6450	0.97404237	1.316918e-13	1.215436e-12
## JAK3	3718	1.02622759	1.334149e-13	1.230872e-12
## CMPK2	129607	0.67492139	1.336130e-13	1.232232e-12
## SCOC	60592	-0.33660164	1.345219e-13	1.240143e-12
## RNASE6	6039	0.84392323	1.367851e-13	1.260529e-12
## CCM2	83605	0.40953368	1.376435e-13	1.267959e-12
## ACYP2	98	0.54612721	1.377310e-13	1.268284e-12
## ACAT2	39	-0.49692520	1.399125e-13	1.287884e-12
## FBXL3	26224	-0.24609350	1.401628e-13	1.289700e-12
## LY6E-DT	100133669	-0.76250164	1.411375e-13	1.298177e-12

## VWFP1	7451	1.50119476	1.411983e-13	1.298245e-12
## HEXIM2	124790	0.56703206	1.418531e-13	1.303771e-12
## LINC01048	103695431	3.84779322	1.457400e-13	1.338990e-12
## LINC01874	727944	-1.42431882	1.494062e-13	1.372154e-12
## IRF2BPL	64207	-0.59848014	1.501847e-13	1.378783e-12
## E2F2	1870	1.28818244	1.504056e-13	1.380290e-12
## LINC00841	283033	2.23494802	1.533430e-13	1.406715e-12
## CLMP	79827	1.04458226	1.562863e-13	1.433175e-12
## NLRP1	22861	0.78868088	1.573147e-13	1.442061e-12
## TRAV8-3	28683	2.24397631	1.601995e-13	1.467951e-12
## FHAD1	114827	0.70488358	1.617819e-13	1.481893e-12
## CDC45	8318	1.18293470	1.654899e-13	1.515286e-12
## GPR39	2863	-0.47955831	1.678691e-13	1.536493e-12
## RNASEH2B	79621	0.40023087	1.688580e-13	1.544961e-12
## CENPA	1058	1.40335738	1.698602e-13	1.553546e-12
## LINC02908	401563	1.48450000	1.755793e-13	1.605249e-12
## MTMR10	54893	-0.34748219	1.825045e-13	1.667936e-12
## LBH	81606	0.37499758	1.882006e-13	1.719347e-12
## SUGCT-AS1	101928716	3.32224692	1.888122e-13	1.724286e-12
## ADAM23	8745	1.05522988	1.940781e-13	1.771710e-12
## MTHFD1L	25902	0.53764007	2.000531e-13	1.825569e-12
## COL2A1	1280	2.74789201	2.018199e-13	1.841001e-12
## PAX8-AS1	654433	1.00371917	2.040551e-13	1.860692e-12
## HLA-DPA1	3113	0.73735283	2.044032e-13	1.863167e-12
## RAB5A	5868	-0.18348969	2.057668e-13	1.874367e-12
## LINC02972	123706525	1.64978387	2.057863e-13	1.874367e-12
## NOP56	10528	0.21465958	2.084120e-13	1.897572e-12
## TROAP	10024	1.16925152	2.125339e-13	1.934377e-12
## ARMC9	80210	0.34283613	2.135102e-13	1.942535e-12
## TCL1A	8115	2.93979264	2.153357e-13	1.958411e-12
## CERS1	10715	1.58666105	2.194898e-13	1.995444e-12
## SKA1	220134	1.22990344	2.201442e-13	2.000645e-12
## AFAP1L1	134265	0.59714826	2.212140e-13	2.009616e-12
## GTF3C1	2975	-0.32035113	2.226914e-13	2.022281e-12
## MGARP	84709	0.87575482	2.246970e-13	2.039732e-12
## LINC02542	102724168	0.99512505	2.250091e-13	2.041802e-12
## PIGZ	80235	0.69854239	2.284617e-13	2.071585e-12
## TM9SF2	9375	-0.30090962	2.284250e-13	2.071585e-12
## VGF	7425	-1.80838645	2.302915e-13	2.087397e-12
## CLSPN	63967	1.05768610	2.306251e-13	2.089642e-12
## GDF6	392255	1.12303589	2.322932e-13	2.103972e-12
## GSPT1	2935	-0.16529469	2.344344e-13	2.122574e-12
## TMEM41B	440026	-0.29897333	2.347865e-13	2.124971e-12
## THEMIS2	9473	0.85251575	2.353505e-13	2.129283e-12
## STK17B	9262	0.58036892	2.372492e-13	2.145662e-12
## TMEM45B	120224	-0.77541449	2.392384e-13	2.162847e-12
## ZIC4	84107	3.90771390	2.405368e-13	2.173777e-12
## CCL23	6368	-1.56722264	2.433825e-13	2.198676e-12
## PCDH9	5101	-0.61357441	2.494515e-13	2.252665e-12
## PTPRN2-AS1	100506585	1.36478103	2.502880e-13	2.259379e-12
## AGFG2	3268	-0.54925739	2.542575e-13	2.294360e-12
## GMIP	51291	0.78220547	2.552676e-13	2.302620e-12
## LIPA	3988	0.61923208	2.574171e-13	2.321148e-12
## SH3BP5L	80851	0.26561677	2.622397e-13	2.363426e-12

## TCEAL3	85012	-0.38146650	2.623004e-13	2.363426e-12
## TDRP	157695	-0.45529969	2.629133e-13	2.368071e-12
## YWHAE	7531	-0.23042386	2.651848e-13	2.387646e-12
## ZFYVE28	57732	-0.39979074	2.699952e-13	2.430057e-12
## GPR4	2828	-0.72352270	2.726443e-13	2.452991e-12
## PRKX	5613	-0.72892678	2.734989e-13	2.459769e-12
## PTGDR2	11251	1.86307471	2.784784e-13	2.503627e-12
## HNRNPA1P21	344697	2.66413364	2.850137e-13	2.561434e-12
## TRBV24-1	28563	2.55867767	2.863140e-13	2.572169e-12
## IGFBP2	3485	-0.57869713	2.878570e-13	2.585075e-12
## DIAPH2	1730	0.36493903	2.902142e-13	2.605281e-12
## CBLC	23624	-0.62958498	2.955817e-13	2.652486e-12
## FLOT1	10211	-0.36660366	3.023841e-13	2.712527e-12
## PRR16	51334	1.09488345	3.066770e-13	2.750021e-12
## ELF4	2000	0.55909366	3.150541e-13	2.824098e-12
## USP28	57646	0.30754670	3.163022e-13	2.834144e-12
## CCDC87	55231	-0.58025287	3.164080e-13	2.834144e-12
## PRODHLP	440792	-1.64849041	3.202128e-13	2.867167e-12
## UBL3	5412	-0.27688459	3.271802e-13	2.928473e-12
## TOB1	10140	-0.46085266	3.285985e-13	2.940085e-12
## SOX2-OT	347689	-0.79284872	3.298715e-13	2.950389e-12
## THPO	7066	-0.82876895	3.343532e-13	2.989374e-12
## MAPRE2	10982	0.27840474	3.366093e-13	3.008438e-12
## RPN1	6184	-0.32260139	3.373051e-13	3.013548e-12
## MRPL42	28977	-0.26082087	3.386685e-13	3.024617e-12
## LINC01144	400752	-0.62555028	3.401781e-13	3.036983e-12
## LINC02481	339988	1.21428366	3.481316e-13	3.106848e-12
## PANX1	24145	0.41923237	3.563851e-13	3.179337e-12
## PAFAH1B2	5049	-0.21309466	3.611254e-13	3.220443e-12
## HIP1R	9026	-0.42224097	3.640284e-13	3.245141e-12
## NAPSA	9476	-0.83231178	3.663868e-13	3.264967e-12
## GCNT2	2651	-0.47380602	3.686223e-13	3.283684e-12
## BPIFA2	140683	-1.73334667	3.770374e-13	3.357415e-12
## MTCO3P13	107075224	-1.61783220	3.779027e-13	3.363888e-12
## C2CD4D-AS1	100132111	-0.46720315	3.857146e-13	3.432168e-12
## TADA2B	93624	-0.17956921	4.021299e-13	3.576925e-12
## RAB39A	54734	0.80101331	4.023272e-13	3.577370e-12
## MVK	4598	-0.49165348	4.096356e-13	3.641022e-12
## RNF180	285671	-0.40927825	4.120118e-13	3.660804e-12
## OVOL1	5017	-0.56889099	4.239456e-13	3.765461e-12
## LARGE2	120071	-0.52616782	4.279413e-13	3.799562e-12
## RGS19	10287	0.82233932	4.369370e-13	3.878015e-12
## SLC26A9	115019	-0.99032090	4.373147e-13	3.879950e-12
## ORC6	23594	0.73110889	4.387015e-13	3.890834e-12
## ETNK2	55224	-0.89312634	4.401336e-13	3.902111e-12
## CEACAM21	90273	1.03187019	4.410774e-13	3.909053e-12
## AP1S2	8905	0.49080035	4.431123e-13	3.925655e-12
## DUSP7	1849	0.40419670	4.455233e-13	3.945577e-12
## G6PC1	2538	-1.44422972	4.460695e-13	3.948974e-12
## LINC02432	100507639	-0.81362110	4.469766e-13	3.955564e-12
## FRMD3	257019	-0.46500768	4.487859e-13	3.970130e-12
## CALHM6	441168	1.90187726	4.526866e-13	4.003180e-12
## HSPA7	3311	1.36246810	4.528942e-13	4.003558e-12
## MLNR	2862	-1.46542940	4.574093e-13	4.042001e-12

## NAMPT	10135	-0.52327883	4.584196e-13	4.049456e-12
## TEKT3	64518	1.29116245	4.604414e-13	4.065838e-12
## IL31RA	133396	1.34182498	4.730963e-13	4.176067e-12
## SLC35F5	80255	-0.34216283	4.735275e-13	4.178356e-12
## HELT	391723	-1.40327368	4.811547e-13	4.244116e-12
## TPPP3	51673	0.88357733	4.837117e-13	4.265123e-12
## MEG3	55384	1.20034513	4.881639e-13	4.302819e-12
## DENR	8562	0.16974193	4.908499e-13	4.324925e-12
## RPS6KC1	26750	0.23916205	4.941673e-13	4.352576e-12
## SERINC1	57515	-0.29747062	5.014763e-13	4.415354e-12
## UPK3A	7380	2.47072067	5.074983e-13	4.466757e-12
## CLSTN2	64084	0.90909786	5.124837e-13	4.509003e-12
## POLR2D	5433	0.23934450	5.148672e-13	4.528334e-12
## HIGD1A	25994	-0.38893157	5.169930e-13	4.545386e-12
## ITPR1	3708	-0.44493792	5.180884e-13	4.553370e-12
## KCNK13	56659	-0.68880884	5.379544e-13	4.726258e-12
## PHTF2	57157	0.55396368	5.426101e-13	4.765438e-12
## CCDC150	284992	0.96340379	5.451446e-13	4.785968e-12
## HYAL1	3373	-0.50246983	5.493174e-13	4.819120e-12
## CFHR1	3078	1.55414508	5.491308e-13	4.819120e-12
## C1QC	714	1.04365416	5.512595e-13	4.834412e-12
## LINC03073	128071541	-0.66504998	5.545980e-13	4.861936e-12
## TRIM59	286827	0.63549528	5.607851e-13	4.914403e-12
## ST3GAL5	8869	0.54585441	5.722530e-13	5.013093e-12
## ARC	23237	-1.16600204	5.766990e-13	5.050221e-12
## NEBL	10529	-0.62363629	5.902364e-13	5.166907e-12
## UBE2D4	51619	0.39376761	5.914417e-13	5.175594e-12
## NLRP12	91662	1.24000383	5.948385e-13	5.203445e-12
## SLC11A2	4891	-0.31791633	5.963734e-13	5.214995e-12
## TPRG1-AS1	100874043	-0.95973813	6.012608e-13	5.255842e-12
## TMPRSS3	64699	-0.81117235	6.029417e-13	5.268639e-12
## ARPC2	10109	0.35796157	6.036881e-13	5.273266e-12
## EXO5	64789	0.26115418	6.045610e-13	5.278993e-12
## THYN1	29087	0.31014775	6.087457e-13	5.313624e-12
## C2orf42	54980	0.23468356	6.136157e-13	5.354210e-12
## SLC15A1	6564	-0.94893580	6.146068e-13	5.360933e-12
## INKA1	389119	0.72794639	6.201443e-13	5.407294e-12
## GNAI1	2770	-0.61064484	6.265793e-13	5.461443e-12
## APOL5	80831	2.98364509	6.304407e-13	5.493130e-12
## NRBF2	29982	0.31876107	6.321563e-13	5.506104e-12
## C2orf88	84281	-0.43415513	6.327048e-13	5.508907e-12
## IDH2	3418	-0.42003998	6.368828e-13	5.543299e-12
## KCNIP3	30818	-0.58274038	6.398202e-13	5.564879e-12
## BTC	685	-0.58338565	6.396144e-13	5.564879e-12
## FFAR4	338557	1.35985460	6.424765e-13	5.585983e-12
## TRBJ2-3	28626	2.25556177	6.439174e-13	5.596508e-12
## YIPF6	286451	-0.19850363	6.506923e-13	5.653369e-12
## TPTE2P3	220115	-1.22676226	6.543290e-13	5.682934e-12
## PDRG1	81572	0.30428281	6.555352e-13	5.691376e-12
## LINC01671	101928233	-0.63944586	6.698209e-13	5.813327e-12
## CD302	9936	0.48078255	6.749740e-13	5.855960e-12
## DYM	54808	0.20709094	6.785196e-13	5.884620e-12
## PHF24	23349	1.07862652	6.917240e-13	5.996998e-12
## UPRT	139596	-0.19574473	6.954359e-13	6.027029e-12

## CCND2	894	0.87965148	7.156045e-13	6.197401e-12
## STK35	140901	0.26015707	7.155229e-13	6.197401e-12
## ABCC9	10060	0.90900718	7.315595e-13	6.333319e-12
## USP18	11274	0.38687301	7.405471e-13	6.408844e-12
## CSF1	1435	0.67867724	7.447734e-13	6.443125e-12
## TACSTD2	4070	-0.95794620	7.511551e-13	6.496022e-12
## IER3	8870	-0.59107482	7.573510e-13	6.547273e-12
## MAT1A	4143	-0.93259282	7.590548e-13	6.559670e-12
## AP3S1	1176	0.39250527	7.748141e-13	6.693479e-12
## TINAGL1	64129	-0.49745818	7.761770e-13	6.702870e-12
## MAN1A1	4121	-0.36426077	7.848209e-13	6.775109e-12
## NRBP1	29959	0.26566151	8.010182e-13	6.912480e-12
## LINC02812	107984957	2.13942280	8.030231e-13	6.927322e-12
## BID	637	0.52430595	8.077525e-13	6.965647e-12
## HSD17B4	3295	-0.25527657	8.337548e-13	7.187327e-12
## TRAV2	28691	2.66410176	8.464403e-13	7.294095e-12
## SCN2B	6327	0.96599903	8.523845e-13	7.342713e-12
## NUDT16	131870	-0.50154791	8.655886e-13	7.453816e-12
## PSPC1	55269	-0.21983977	8.749705e-13	7.531937e-12
## ISOC1	51015	-0.32867393	8.850897e-13	7.616347e-12
## TMEM164	84187	-0.36879991	8.958159e-13	7.705919e-12
## SSTR5	6755	-1.71715285	8.975788e-13	7.718352e-12
## ELMOD3	84173	0.34370136	9.322794e-13	8.013909e-12
## TRIM25	7706	0.26344141	9.388769e-13	8.067768e-12
## FABP7	2173	4.94814114	9.437890e-13	8.107111e-12
## RESF1	55196	0.51235911	9.503818e-13	8.160858e-12
## MAP7-AS1	123706512	-0.56920680	9.547952e-13	8.195859e-12
## NRTN	4902	-0.87770836	9.719516e-13	8.340182e-12
## FILIP1L	11259	0.85076227	9.813671e-13	8.418003e-12
## RGP1	9827	-0.20897459	9.834113e-13	8.431505e-12
## ENTPD8	377841	-0.83526870	9.836351e-13	8.431505e-12
## ATP1B2	482	-0.55246970	9.887454e-13	8.472321e-12
## MUC15	143662	-1.01350118	9.897094e-13	8.477592e-12
## RASGEF1A	221002	-0.55911836	9.970925e-13	8.537824e-12
## NEURL1	9148	1.06621716	1.009523e-12	8.638174e-12
## GIMAP5	55340	0.82661207	1.009516e-12	8.638174e-12
## GALNT13	114805	1.17241897	1.015300e-12	8.684554e-12
## RGL4	266747	1.41616154	1.029612e-12	8.803868e-12
## TDP1	55775	0.25248057	1.033288e-12	8.832199e-12
## P2RY12	64805	0.91605810	1.047232e-12	8.948236e-12
## CD40	958	0.45013376	1.053147e-12	8.995616e-12
## LXN	56925	0.51919165	1.081301e-12	9.232853e-12
## DACT2	168002	-0.84667346	1.082983e-12	9.243962e-12
## IFI6	2537	1.07476846	1.114379e-12	9.508615e-12
## IL20RB	53833	1.04376563	1.115311e-12	9.513225e-12
## NLRP3	114548	0.91450164	1.118685e-12	9.538650e-12
## CADM1	23705	-0.52481311	1.132128e-12	9.649890e-12
## PHF8	23133	-0.33662565	1.138775e-12	9.703148e-12
## C2orf72	257407	-0.68068255	1.151185e-12	9.805451e-12
## HOXA7	3204	-0.40840914	1.189533e-12	1.012854e-11
## CAMKMT	79823	-0.29569594	1.195620e-12	1.017680e-11
## KPNA3	3839	0.37819970	1.210496e-12	1.029981e-11
## JKAMP	51528	-0.24528188	1.247674e-12	1.061243e-11
## ABHD17C	58489	-0.46966514	1.261009e-12	1.072210e-11

## ADH1B	125	0.89517755	1.271569e-12	1.080811e-11
## RPGRIP1L	23322	0.31848910	1.274327e-12	1.082416e-11
## FBXW4P1	26226	-0.75466095	1.274348e-12	1.082416e-11
## BAIAP3	8938	-0.58170768	1.277819e-12	1.084985e-11
## NNT	23530	-0.34237461	1.285767e-12	1.091352e-11
## AP1G1	164	-0.26702062	1.288136e-12	1.092982e-11
## MAB21L1	4081	1.36963224	1.295012e-12	1.098432e-11
## SRPX2	27286	1.19732995	1.298119e-12	1.100684e-11
## RSAD2	91543	0.89776701	1.301314e-12	1.103008e-11
## WNT4	54361	1.00445025	1.312679e-12	1.112253e-11
## ARMH1	339541	0.96355718	1.343655e-12	1.138102e-11
## TRAV6	6956	2.49360959	1.381686e-12	1.169907e-11
## AAC8	65985	-0.45347832	1.389972e-12	1.176514e-11
## CCN3	4856	1.23143255	1.392592e-12	1.178321e-11
## RAD51D	5892	0.18763352	1.394840e-12	1.179812e-11
## RUFY4	285180	2.12502225	1.405388e-12	1.188321e-11
## PCDH7	5099	0.79339723	1.419532e-12	1.199862e-11
## RAB11A	8766	-0.20786018	1.468488e-12	1.240811e-11
## RTN4IP1	84816	-0.33795734	1.495134e-12	1.262887e-11
## TRBV6-2	28605	2.31006636	1.518318e-12	1.282024e-11
## UBE2L6	9246	0.55052488	1.576169e-12	1.330409e-11
## LINC02580	100506047	0.98237285	1.578030e-12	1.331517e-11
## ELL	8178	-0.30158159	1.584655e-12	1.336444e-11
## TPPP2	122664	-0.93490870	1.584969e-12	1.336444e-11
## CEND1	51286	-0.96566783	1.604128e-12	1.352130e-11
## LINC01929	101927229	1.75958948	1.627463e-12	1.371324e-11
## MT1M	4499	-1.01579969	1.630138e-12	1.373102e-11
## MEG8	79104	1.43829127	1.631443e-12	1.373725e-11
## CHAC1	79094	-0.90836473	1.635477e-12	1.376645e-11
## CCND2-AS1	103752584	1.23565405	1.638021e-12	1.378308e-11
## ATP2C1	27032	-0.25535962	1.640572e-12	1.379977e-11
## LRRC10B	390205	-0.95433850	1.659297e-12	1.395245e-11
## NAPG	8774	-0.26040645	1.662546e-12	1.397493e-11
## ZNF317	57693	0.13161170	1.695826e-12	1.424974e-11
## DENND5A	23258	0.30202502	1.699756e-12	1.427783e-11
## TSPAN8	7103	-0.89393077	1.714119e-12	1.439351e-11
## DNAJC11	55735	-0.32157905	1.735131e-12	1.456491e-11
## IRX2	153572	-0.82420837	1.762884e-12	1.478765e-11
## DOK6	220164	-0.65084692	1.762417e-12	1.478765e-11
## RBFOX2	23543	0.38435949	1.773244e-12	1.486942e-11
## CTNND2	1501	-0.98124854	1.782066e-12	1.493825e-11
## MRLN	100507027	1.42256101	1.792786e-12	1.502293e-11
## CAD	790	0.34580063	1.802624e-12	1.510016e-11
## CDKN2B-AS1	100048912	1.85250330	1.804414e-12	1.510995e-11
## RADX	55086	-0.52357727	1.812976e-12	1.517641e-11
## LINC00877	285286	1.23459658	1.832539e-12	1.533489e-11
## HMGCR	3156	-0.40672033	1.845442e-12	1.543755e-11
## DONSON	29980	0.40640931	1.848411e-12	1.545707e-11
## ITSN1	6453	0.34784357	1.859244e-12	1.554231e-11
## SNAP25	6616	0.73916949	1.865160e-12	1.558640e-11
## ZDHHC5	25921	-0.21202409	1.868599e-12	1.560977e-11
## ADCY5	111	-0.71467811	1.872602e-12	1.563783e-11
## SP7	121340	3.79397719	1.898444e-12	1.584819e-11
## CORO1C	23603	0.41787476	1.900996e-12	1.586405e-11

## C19orf38	255809	0.74132855	1.912484e-12	1.595443e-11
## TRIM13	10206	-0.33192671	1.940936e-12	1.618623e-11
## PDIA6	10130	-0.35331833	1.952509e-12	1.627716e-11
## PRSS23	11098	0.52910527	1.953920e-12	1.628334e-11
## LINC01503	100506119	-0.90710493	1.956355e-12	1.629804e-11
## BRCA2	675	0.85412863	1.978569e-12	1.647745e-11
## DYSF	8291	0.49803557	1.980853e-12	1.648889e-11
## ORMDL3	94103	0.29109983	1.981300e-12	1.648889e-11
## TCF23	150921	1.73831124	1.987282e-12	1.653301e-11
## SOWAHA	134548	-0.53265282	1.991664e-12	1.656380e-11
## ZNF74	7625	0.31707654	1.998525e-12	1.661518e-11
## OLIG1	116448	-0.77573913	2.006752e-12	1.667786e-11
## C1RL	51279	-0.67062654	2.009670e-12	1.669640e-11
## ACAN	176	1.19649123	2.036843e-12	1.691638e-11
## KCND1	3750	0.74816244	2.060056e-12	1.710332e-11
## CDC25C	995	1.27740142	2.062916e-12	1.712122e-11
## CHRAC1	54108	-0.17936672	2.125672e-12	1.763604e-11
## APBB1	322	-0.30873381	2.149038e-12	1.781773e-11
## SYNPO2L-AS1	105378360	1.91766640	2.148783e-12	1.781773e-11
## PLK1	5347	0.81676375	2.154034e-12	1.785306e-11
## XRCC3	7517	0.55522698	2.155551e-12	1.785954e-11
## LIPE	3991	0.89770141	2.163392e-12	1.791840e-11
## PAK4	10298	-0.47545190	2.178894e-12	1.804064e-11
## PSEN2	5664	-0.36112751	2.186658e-12	1.809876e-11
## BAX	581	0.38741237	2.191048e-12	1.812893e-11
## TNFRSF4	7293	1.16855602	2.267167e-12	1.875236e-11
## SVOP	55530	0.98844651	2.322270e-12	1.920160e-11
## TRIO	7204	0.48895197	2.328972e-12	1.925046e-11
## PLEKHF2	79666	-0.35635737	2.368177e-12	1.956786e-11
## ZNF331	55422	-0.52281022	2.418182e-12	1.997425e-11
## CHRDL2	25884	1.16446153	2.423084e-12	2.000114e-11
## LINC00243	401247	1.90100662	2.422608e-12	2.000114e-11
## MDGA1	266727	0.91583426	2.440589e-12	2.013880e-11
## DCBLD1	285761	0.33204635	2.441861e-12	2.014245e-11
## INIP	58493	-0.21227862	2.442778e-12	2.014318e-11
## GABRB3	2562	0.69454496	2.457485e-12	2.025758e-11
## ITGAE	3682	0.43540766	2.491133e-12	2.052799e-11
## FBXL16	146330	-0.79808087	2.510816e-12	2.068317e-11
## KIF11	3832	0.48767743	2.534082e-12	2.086775e-11
## DMPK	1760	0.87550727	2.535662e-12	2.087369e-11
## IGSF5	150084	-1.05484491	2.542078e-12	2.091941e-11
## TOM1L2	146691	-0.29485313	2.554187e-12	2.101195e-11
## EME1	146956	0.96483959	2.656451e-12	2.184582e-11
## LLGL2	3993	-0.51125598	2.674471e-12	2.198657e-11
## TRAV13-2	28670	2.14363317	2.681646e-12	2.203810e-11
## PGAP4	84302	-0.51208744	2.705611e-12	2.222753e-11
## RERGL	79785	-0.73175252	2.789143e-12	2.290604e-11
## CEACAM3	1084	1.93411129	2.797264e-12	2.296497e-11
## CUX2	23316	1.56087064	2.812691e-12	2.308382e-11
## IGF1R	3480	-0.37957350	2.815725e-12	2.310092e-11
## EZR	7430	-0.37638004	2.826672e-12	2.318291e-11
## SLC25A40	55972	-0.30095870	2.828551e-12	2.319049e-11
## FAM118B	79607	0.30547702	2.854949e-12	2.339903e-11
## ERLIN2	11160	-0.29552661	2.863337e-12	2.345987e-11

## ARHGDIG	398	2.48109323	2.866565e-12	2.347839e-11
## DUSP14	11072	0.37579171	2.883875e-12	2.361221e-11
## NMT2	9397	0.28326602	2.921145e-12	2.390931e-11
## TTC9	23508	0.68056531	2.948321e-12	2.412362e-11
## NCALD	83988	0.36964012	2.978320e-12	2.436087e-11
## WFDC21P	645638	1.84308916	3.028609e-12	2.476387e-11
## ALDH1A3-AS1	101927751	1.03273950	3.045712e-12	2.489534e-11
## DDR2	4921	0.81313746	3.089938e-12	2.524835e-11
## ZDHHC8BP	150244	-1.56882288	3.128959e-12	2.555860e-11
## FAM110C	642273	-0.63157078	3.142474e-12	2.566037e-11
## GDPD5	81544	0.75661870	3.149413e-12	2.570839e-11
## ITGA11	22801	0.95285611	3.241676e-12	2.645264e-11
## LMBR1	64327	-0.20039310	3.272154e-12	2.669239e-11
## CEP55	55165	1.15765054	3.354683e-12	2.735643e-11
## FXYD7	53822	1.97943697	3.386813e-12	2.760917e-11
## NPTX2	4885	1.69575167	3.428530e-12	2.793988e-11
## MMP13	4322	3.79429725	3.431170e-12	2.794265e-11
## ATP2A1-AS1	100289092	1.36129776	3.430921e-12	2.794265e-11
## ST6GAL2	84620	0.90639525	3.435424e-12	2.796792e-11
## DLG4	1742	0.58817829	3.480613e-12	2.832632e-11
## UGT8	7368	-0.73254688	3.594248e-12	2.924132e-11
## SLC15A3	51296	0.78405968	3.598124e-12	2.926305e-11
## VAMP1	6843	0.68467771	3.603139e-12	2.929083e-11
## LINC01854	151121	4.83499394	3.604577e-12	2.929083e-11
## TRBD1	28637	2.44541390	3.605155e-12	2.929083e-11
## BCAS4	55653	-0.45557244	3.667420e-12	2.978675e-11
## LSR	51599	-0.50978360	3.685303e-12	2.992200e-11
## PLEKHB1	58473	-0.46758829	3.693315e-12	2.997703e-11
## SLC39A13-AS1	127138868	0.54251717	3.766077e-12	3.055741e-11
## ZNF703	80139	1.10576016	3.782775e-12	3.068265e-11
## ADGRG5	221188	0.88737780	3.807553e-12	3.087332e-11
## ARGEF3	57221	-0.89912859	3.821565e-12	3.097660e-11
## ACKR3	57007	0.85321210	3.852345e-12	3.121568e-11
## NGF-AS1	112840934	1.93430363	3.854568e-12	3.122329e-11
## PFKP	5214	-0.57135037	3.868389e-12	3.132480e-11
## BPNT1	10380	-0.32284592	3.880545e-12	3.141277e-11
## CBARP	255057	-0.86544932	3.904290e-12	3.158416e-11
## ARTN	9048	-0.68799899	3.904982e-12	3.158416e-11
## DDX60L	91351	0.55491949	3.905617e-12	3.158416e-11
## FLRT1	23769	-0.97401844	3.979587e-12	3.217164e-11
## ITGA5	3678	0.92616789	4.063601e-12	3.283990e-11
## ERCC6L	54821	1.26979166	4.106542e-12	3.317589e-11
## VCF1	84923	0.21223422	4.128144e-12	3.333932e-11
## RCAN1	1827	0.47326809	4.154795e-12	3.354341e-11
## PSME3	10197	-0.25452839	4.156393e-12	3.354517e-11
## TSHZ3	57616	0.66807841	4.198969e-12	3.387754e-11
## CYP27C1	339761	1.08181699	4.233873e-12	3.414141e-11
## CCDC167	154467	0.59065389	4.234485e-12	3.414141e-11
## CXCL2	2920	-1.34319416	4.238184e-12	3.415990e-11
## HDLBP	3069	0.26975714	4.294842e-12	3.460509e-11
## KRTCAP3	200634	-0.67477269	4.313573e-12	3.474450e-11
## KRT8	3856	-0.63336021	4.331485e-12	3.487721e-11
## CENPI	2491	0.83895166	4.339362e-12	3.492906e-11
## ISM1	140862	0.71424149	4.386222e-12	3.528417e-11

## MIR497HG	100506755	0.75676664	4.386382e-12	3.528417e-11
## ACSL1	2180	-0.43488618	4.418132e-12	3.552780e-11
## MAP1B	4131	0.81355457	4.475447e-12	3.597679e-11
## TMEM74B	55321	0.96137016	4.504355e-12	3.619720e-11
## NDFIP1	80762	-0.19125086	4.586308e-12	3.683573e-11
## TAF1A	9015	0.38749729	4.586845e-12	3.683573e-11
## PDE8B	8622	-0.72510330	4.597866e-12	3.691204e-11
## LINC01543	100506787	-1.79779699	4.645559e-12	3.728261e-11
## CST3	1471	0.61589443	4.748839e-12	3.809889e-11
## TRAV20	28663	2.43072060	4.859103e-12	3.897065e-11
## MYOSLID	105373853	1.68200850	4.985476e-12	3.997099e-11
## NDFIP2	54602	-0.37084975	4.996584e-12	4.004683e-11
## LTBR	4055	-0.39207901	5.022708e-12	4.024294e-11
## HECW2-AS1	101927482	1.52873917	5.081198e-12	4.069815e-11
## USP13	8975	0.76187334	5.099044e-12	4.082763e-11
## COL9A2	1298	-0.65380171	5.100776e-12	4.082805e-11
## IGFBP6	3489	1.20601652	5.165819e-12	4.133505e-11
## KLHDC3	116138	0.39134557	5.229683e-12	4.183230e-11
## C4orf46	201725	0.36542933	5.289491e-12	4.228506e-11
## TRIM16	10626	0.45079667	5.289765e-12	4.228506e-11
## PIK3R5-DT	101928235	1.60828046	5.292155e-12	4.229025e-11
## IDI2-AS1	55853	1.99568651	5.323724e-12	4.252854e-11
## ASAP1	50807	0.44854209	5.407009e-12	4.317967e-11
## GPX7	2882	0.68216077	5.443173e-12	4.345418e-11
## NAT8L	339983	-0.90132463	5.508879e-12	4.396430e-11
## KIF15	56992	0.84984391	5.516445e-12	4.399578e-11
## SHMT2	6472	0.41176413	5.515650e-12	4.399578e-11
## HTR3B	9177	-1.18982028	5.582032e-12	4.450426e-11
## CLTC	1213	-0.29923447	5.620839e-12	4.479895e-11
## BMP7	655	-0.45006232	5.630805e-12	4.486367e-11
## RIPK4	54101	-0.52747413	5.633830e-12	4.487306e-11
## C5AR2	27202	-0.50337036	5.707023e-12	4.544114e-11
## FAM171B	165215	0.58000762	5.741250e-12	4.569870e-11
## PIGK	10026	-0.26930757	5.768830e-12	4.590319e-11
## RCOR2	283248	1.07815974	5.838670e-12	4.644370e-11
## CLDN22	53842	-1.04708805	5.964213e-12	4.742682e-11
## ANKRD23	200539	1.20274128	6.021999e-12	4.787066e-11
## STMN1	3925	0.39326571	6.090226e-12	4.839718e-11
## FTH1P22	100462772	2.52323828	6.182492e-12	4.911433e-11
## OPN4	94233	3.59108910	6.186969e-12	4.913383e-11
## HOXB8	3218	-0.57168678	6.198846e-12	4.921208e-11
## TEX2	55852	-0.21624941	6.202789e-12	4.922730e-11
## SLC4A10	57282	1.89215097	6.241557e-12	4.951880e-11
## SUV39H2	79723	0.28100019	6.315357e-12	5.008795e-11
## BRIP1	83990	0.75050170	6.328167e-12	5.017317e-11
## HID1	283987	-0.42950268	6.365498e-12	5.045270e-11
## ISG15	9636	0.99138429	6.423846e-12	5.089856e-11
## DEPTOR-AS1	121676927	-0.94209615	6.444689e-12	5.104706e-11
## GIT2	9815	0.26497250	6.502232e-12	5.148607e-11
## KCNA5	3741	-0.70444225	6.546688e-12	5.182120e-11
## CFAP276	127003	2.08991693	6.550639e-12	5.183558e-11
## PCSK2	5126	-0.93346705	6.558722e-12	5.188265e-11
## FAM53C	51307	0.28756035	6.583144e-12	5.205890e-11
## PRDM8	56978	1.02436976	6.649003e-12	5.256260e-11

## PCK1	5105	-1.08780392	6.701820e-12	5.296290e-11
## MB21D2	151963	0.44975868	6.716913e-12	5.306493e-11
## IFNG-AS1	100885789	2.45549138	6.744773e-12	5.326770e-11
## FAM217B	63939	0.32595324	6.851430e-12	5.409247e-11
## TYMS	7298	0.55522118	6.881471e-12	5.431199e-11
## DNAJC1	64215	-0.27024499	6.900322e-12	5.444309e-11
## FAM89B	23625	0.65509140	6.917895e-12	5.456402e-11
## KCP	375616	-0.74132103	7.051539e-12	5.560008e-11
## PRR13	54458	-0.43866140	7.122673e-12	5.614274e-11
## ING4	51147	0.24733802	7.140919e-12	5.626831e-11
## CCL4L2	9560	1.60459757	7.170563e-12	5.648358e-11
## SH3BP2	6452	-0.51737913	7.231453e-12	5.692631e-11
## TRIB1	10221	-0.38922612	7.230285e-12	5.692631e-11
## ADORA2B	136	1.29592656	7.331755e-12	5.769721e-11
## DCHS1	8642	0.64607574	7.344497e-12	5.777877e-11
## RNF125	54941	0.68037314	7.353740e-12	5.783276e-11
## ERBB4	2066	-0.64592582	7.498943e-12	5.893655e-11
## NBPF8	728841	0.78749597	7.496965e-12	5.893655e-11
## TP53AIP1	63970	-0.90359768	7.635345e-12	5.998918e-11
## CYLD	1540	0.27632942	7.711886e-12	6.057095e-11
## HDAC2-AS2	101927768	0.97512329	7.733379e-12	6.072014e-11
## SLC16A7	9194	-0.74630453	7.756577e-12	6.088262e-11
## THAP12	5612	0.23142838	7.775990e-12	6.100972e-11
## SLC16A12-AS1	101926906	1.20475317	7.777792e-12	6.100972e-11
## HTR2B	3357	0.81519195	7.792515e-12	6.110549e-11
## HHLA2	11148	-1.19175154	7.819977e-12	6.130105e-11
## FAAH2	158584	-0.48182591	7.884729e-12	6.178871e-11
## GJD3	125111	0.47616702	7.897648e-12	6.187000e-11
## C4orf54	285556	1.24414930	7.900625e-12	6.187338e-11
## ARHGEF18	23370	-0.33578066	7.915840e-12	6.197256e-11
## NEIL2	252969	0.27769658	7.935938e-12	6.210990e-11
## SLC44A2	57153	-0.41715592	7.954969e-12	6.223880e-11
## EXT1	2131	0.25168535	8.079408e-12	6.319205e-11
## EFNA1	1942	-0.47050098	8.146585e-12	6.369696e-11
## NXN	64359	0.88656608	8.183103e-12	6.396191e-11
## CA13	377677	-0.42701197	8.353607e-12	6.527364e-11
## MIR23B	407011	1.31238022	8.496052e-12	6.636533e-11
## DHX9	1660	-0.20890389	8.548974e-12	6.675727e-11
## SNED1	25992	0.64231162	8.742601e-12	6.824734e-11
## SRP54	6729	-0.24788327	8.849965e-12	6.906326e-11
## LGR4	55366	-0.39717319	8.883878e-12	6.930565e-11
## L3MBTL2-AS1	100506544	0.62545128	8.892821e-12	6.935316e-11
## CANX	821	-0.33070202	8.934209e-12	6.965358e-11
## HPRT1	3251	-0.31858119	8.971312e-12	6.992042e-11
## SEC23A	10484	0.46031943	8.976666e-12	6.993971e-11
## GNAL	2774	0.44097049	9.040626e-12	7.041547e-11
## PRPS2	5634	-0.37216985	9.075683e-12	7.066586e-11
## MEX3A	92312	0.57668386	9.097566e-12	7.081357e-11
## ACTG2	72	1.92902663	9.119206e-12	7.095928e-11
## SCARA3	51435	1.13946101	9.196075e-12	7.153451e-11
## MIR100HG	399959	0.49639802	9.259527e-12	7.200505e-11
## CRIM1	51232	-0.38687618	9.329847e-12	7.252867e-11
## HTRA1	5654	0.74910528	9.686926e-12	7.528046e-11
## ODAD2	55130	1.01751242	9.733991e-12	7.562203e-11

## FTL	2512	0.73932524	9.908634e-12	7.695421e-11
## C11orf87	399947	2.10065870	9.921721e-12	7.703123e-11
## ADM	133	-0.71686142	1.001192e-11	7.770669e-11
## PLEKHG4	25894	0.84003584	1.019115e-11	7.907249e-11
## CPD	1362	-0.38012090	1.020780e-11	7.917645e-11
## CENPH	64946	0.47198406	1.033335e-11	8.012471e-11
## TNFRSF25	8718	0.99437920	1.035560e-11	8.027158e-11
## ZNF706	51123	0.26371662	1.039419e-11	8.054503e-11
## ARSG	22901	0.37698604	1.051044e-11	8.141991e-11
## STEAP1	26872	0.60247211	1.051458e-11	8.142600e-11
## CDC42EP3-AS1	127379718	1.86954704	1.063834e-11	8.235817e-11
## LINC01497	102723487	1.85289286	1.067660e-11	8.262801e-11
## CLDN11	5010	0.92557488	1.068474e-11	8.266472e-11
## LINC02671	101928887	1.51043430	1.081688e-11	8.366043e-11
## CD46	4179	-0.31239242	1.082808e-11	8.372039e-11
## HABP2	3026	-1.28811078	1.143322e-11	8.837106e-11
## NFIA-AS2	100996570	1.70715588	1.150499e-11	8.889758e-11
## MTND4P18	100873350	-1.04498023	1.154820e-11	8.920306e-11
## KCNA2	3737	0.94306725	1.168038e-11	9.019542e-11
## TMEM38B	55151	-0.45098790	1.176190e-11	9.079605e-11
## C2orf27A	<NA>	0.63631129	1.185638e-11	9.149629e-11
## DUXAP10	503639	1.64516845	1.205764e-11	9.301989e-11
## F12	2161	-1.37327066	1.212380e-11	9.350059e-11
## THG1L	54974	0.26194588	1.218616e-11	9.395177e-11
## GYG1	2992	0.54618668	1.240253e-11	9.558953e-11
## HEPH	9843	0.60169973	1.247228e-11	9.609669e-11
## AMACR	23600	-0.64500335	1.253324e-11	9.653572e-11
## RHOBTB3	22836	-0.48824741	1.263959e-11	9.732403e-11
## FMN2	56776	-0.89100136	1.271546e-11	9.787725e-11
## IZUMO1R	390243	1.41323214	1.283734e-11	9.878413e-11
## TRAV16	28667	2.29821052	1.310639e-11	1.008225e-10
## BRCA1	672	0.43735286	1.315605e-11	1.011725e-10
## SCML2	10389	0.46134589	1.322115e-11	1.016410e-10
## MYOF	26509	0.65216658	1.335986e-11	1.026749e-10
## CEBPA-DT	80054	0.60646489	1.339059e-11	1.028785e-10
## CHRM2	1129	3.12151018	1.345088e-11	1.033090e-10
## IMPDH1	3614	0.64843682	1.355805e-11	1.040993e-10
## CA9	768	1.48008052	1.361413e-11	1.044968e-10
## MAP3K15	389840	-0.64722056	1.372773e-11	1.053355e-10
## MAP7D1	55700	0.68116855	1.374028e-11	1.053985e-10
## RPL23AP82	284942	0.42704311	1.376797e-11	1.055776e-10
## PNPLA1	285848	1.08546332	1.383270e-11	1.060405e-10
## PABIR1	116224	-0.21590435	1.395566e-11	1.069494e-10
## RNF128	79589	-0.55087416	1.397082e-11	1.070318e-10
## IFITM3P6	643058	1.47040262	1.411370e-11	1.080923e-10
## TLCD1	116238	-0.54268779	1.435753e-11	1.099251e-10
## GSN	2934	0.80062535	1.439478e-11	1.101756e-10
## AASS	10157	-0.63864179	1.442538e-11	1.103750e-10
## FANCF	2188	-0.23311566	1.447826e-11	1.107448e-10
## LINC01852	107984773	0.51292274	1.453045e-11	1.111090e-10
## LARP1B	55132	-0.34851652	1.454001e-11	1.111471e-10
## PIP5K1B	8395	-0.39148801	1.455894e-11	1.112568e-10
## TRBV14	28573	2.62654791	1.465030e-11	1.119198e-10
## NEGR1	257194	0.58608282	1.476646e-11	1.127718e-10

## NOPCHAP1	121053	0.33485155	1.477282e-11	1.127849e-10
## PMP22	5376	0.79011831	1.487926e-11	1.135618e-10
## LSMEM1	286006	1.07420258	1.522097e-11	1.161334e-10
## ELF3	1999	-0.83611000	1.525070e-11	1.163237e-10
## BCL2L14	79370	1.95116160	1.527305e-11	1.164576e-10
## GHDC	84514	-0.55466808	1.541250e-11	1.174841e-10
## LIAT1	400566	-0.47002509	1.561337e-11	1.189779e-10
## KIF7	374654	0.71942593	1.563339e-11	1.190931e-10
## CLECL1P	160365	1.36305726	1.578370e-11	1.202005e-10
## TBX2	6909	-0.47254228	1.590037e-11	1.210511e-10
## NUDT1	4521	0.62292487	1.607232e-11	1.223218e-10
## LINC01886	105373537	1.01018951	1.633718e-11	1.242986e-10
## CFI	3426	-0.63503729	1.637540e-11	1.245504e-10
## LINC01615	101929484	2.06162701	1.652650e-11	1.256604e-10
## GPI	2821	-0.36396717	1.660626e-11	1.262273e-10
## ARF6	382	-0.21051783	1.683880e-11	1.279549e-10
## ABHD11	83451	-0.42180410	1.706236e-11	1.295898e-10
## CENPW	387103	0.86119837	1.706996e-11	1.295898e-10
## LINC02611	101927070	1.12129337	1.706737e-11	1.295898e-10
## RRAGD	58528	-0.40197486	1.713764e-11	1.300630e-10
## MS4A8	83661	2.16400961	1.719915e-11	1.304891e-10
## WDHD1	11169	0.35466583	1.743744e-11	1.322557e-10
## FGD4	121512	-0.40074409	1.776559e-11	1.347025e-10
## VAPA	9218	-0.17373016	1.780531e-11	1.349616e-10
## TLL1	7092	0.56553063	1.791145e-11	1.357238e-10
## CDCA7L	55536	0.58188349	1.799595e-11	1.363216e-10
## SLC19A2	10560	-0.39613947	1.801822e-11	1.364477e-10
## NOS3	4846	-0.72626800	1.822807e-11	1.379939e-10
## SOHLH2	54937	1.22152837	1.833559e-11	1.387646e-10
## LINC02308	100506700	1.45795736	1.848306e-11	1.398371e-10
## NRN1	51299	0.77526707	1.853468e-11	1.401840e-10
## SYT15-AS1	101927699	0.89751050	1.883892e-11	1.424408e-10
## C19orf44	84167	0.29859606	1.890248e-11	1.428769e-10
## GCGR	2642	-0.84896808	1.892466e-11	1.430001e-10
## ACOT11	26027	-0.49354347	1.926117e-11	1.454569e-10
## MSRB3-AS1	100507065	2.00917493	1.926178e-11	1.454569e-10
## RS1	6247	-1.51080719	1.932967e-11	1.459243e-10
## ADORA3	140	0.85689599	1.944002e-11	1.467118e-10
## MT1A	4489	-1.19936559	1.960661e-11	1.479231e-10
## ANP32A	8125	-0.19544294	1.988256e-11	1.499584e-10
## C9orf85	138241	0.25096057	1.996691e-11	1.505479e-10
## DDRGK1	65992	-0.37950529	2.021404e-11	1.523639e-10
## KLHL26	55295	-0.47198429	2.036370e-11	1.534444e-10
## TMSB4X	7114	0.58220585	2.059922e-11	1.551710e-10
## HROB	78995	0.69744793	2.074375e-11	1.562113e-10
## PRRG2	5639	-0.48407692	2.082427e-11	1.567691e-10
## IFI27	3429	0.68278059	2.088933e-11	1.572102e-10
## TAF4	6874	-0.22063988	2.091566e-11	1.573596e-10
## GPR78	27201	2.23499119	2.103760e-11	1.582280e-10
## MPC1	51660	-0.52592650	2.108311e-11	1.585213e-10
## SOWAHB	345079	-0.49564899	2.116319e-11	1.590742e-10
## ARL9	132946	1.24632007	2.120113e-11	1.593100e-10
## LINC01679	101928399	-0.92338916	2.141671e-11	1.608802e-10
## UNCX	340260	-1.40259134	2.162217e-11	1.623734e-10

## FIBIN	387758	0.57621536	2.186512e-11	1.641471e-10
## MYOCOS	110806290	-1.12106176	2.205281e-11	1.655050e-10
## MATN4	8785	1.57434139	2.227627e-11	1.671305e-10
## RNF149	284996	-0.22881058	2.243412e-11	1.682628e-10
## CCDC90B	60492	0.28692569	2.247105e-11	1.684878e-10
## ZNF385D	79750	0.53714467	2.276039e-11	1.706047e-10
## GNAO1	2775	0.64629269	2.294198e-11	1.719127e-10
## CLU	1191	-0.75367445	2.315909e-11	1.734836e-10
## LINC02967	105372578	-0.61261523	2.316589e-11	1.734836e-10
## BORA	79866	0.44251480	2.323146e-11	1.739184e-10
## KCTD8	386617	-0.54581373	2.323826e-11	1.739184e-10
## MMP15	4324	-0.44047075	2.329120e-11	1.742609e-10
## APOBEC3D	140564	0.98444499	2.340913e-11	1.750893e-10
## KIRREL2	84063	-0.94085801	2.344748e-11	1.753222e-10
## LLGL1	3996	0.37681223	2.418544e-11	1.807845e-10
## LILRA2	11027	0.86228513	2.427016e-11	1.813620e-10
## CTSZ	1522	0.47524681	2.431608e-11	1.816492e-10
## KNDC1	85442	-0.78182816	2.526204e-11	1.886579e-10
## NECAP1	25977	-0.16232357	2.546317e-11	1.901015e-10
## GYPE	2996	0.76922475	2.622120e-11	1.957006e-10
## AUNIP	79000	1.09838133	2.643719e-11	1.972521e-10
## WARS2-IT1	104472716	1.35952636	2.710091e-11	2.021422e-10
## SEZ6L	23544	1.71938360	2.711630e-11	2.021949e-10
## AP4B1	10717	0.22523027	2.715488e-11	2.024205e-10
## IER2	9592	-0.67448456	2.787956e-11	2.077587e-10
## TTC3	7267	0.37682615	2.859536e-11	2.130275e-10
## ST6GALNAC5	81849	1.33371557	2.873782e-11	2.140232e-10
## ARNT	405	0.20208771	2.913548e-11	2.169183e-10
## DSTN	11034	-0.25722451	2.924414e-11	2.176606e-10
## UBE2Q2	92912	0.31396590	2.942216e-11	2.189186e-10
## SH3BP1	23616	0.91463924	3.002506e-11	2.233361e-10
## DPYSL2	1808	0.40871398	3.079916e-11	2.290240e-10
## ATP2B3	492	-1.29576595	3.087119e-11	2.294894e-10
## FRY	10129	-0.39973548	3.088267e-11	2.295045e-10
## PPP1R12B	4660	0.57304068	3.138811e-11	2.331894e-10
## GLDN	342035	0.92537541	3.156428e-11	2.344265e-10
## DLL1	28514	-0.47170054	3.161386e-11	2.347230e-10
## GLYATL2	219970	-1.16954527	3.193990e-11	2.370713e-10
## TP53INP1	94241	0.34094759	3.201810e-11	2.375792e-10
## RBSN	64145	0.24352274	3.246818e-11	2.408306e-10
## B3GALNT2	148789	0.31446295	3.247611e-11	2.408306e-10
## RIN1	9610	0.90806003	3.271406e-11	2.425211e-10
## LINC01634	100192420	4.94319263	3.275147e-11	2.427244e-10
## ALG6	29929	-0.24755000	3.347526e-11	2.480129e-10
## PRSS36	146547	0.69359353	3.357113e-11	2.486474e-10
## IPCEF1	26034	-0.55914135	3.388504e-11	2.508959e-10
## BRD9	65980	0.18234630	3.405692e-11	2.520917e-10
## LINC00570	100874055	1.29627594	3.410452e-11	2.523672e-10
## HP	3240	-2.05040354	3.454752e-11	2.555675e-10
## LINC00870	201617	0.84874670	3.510093e-11	2.595824e-10
## IMPA1	3612	-0.34794859	3.518070e-11	2.600931e-10
## HOXB9	3219	-0.59639853	3.529358e-11	2.608483e-10
## SLC35A5	55032	-0.17319504	3.546333e-11	2.620232e-10
## MIR3147HG	100653233	1.80997064	3.584259e-11	2.647449e-10

## CCDC195	110806281	1.49651008	3.606141e-11	2.662802e-10
## TRNP1	388610	-0.59528824	3.634510e-11	2.682935e-10
## CPM	1368	-0.40817356	3.703186e-11	2.732801e-10
## SRGAP1	57522	0.34650051	3.715517e-11	2.741068e-10
## ZNF71	58491	0.27757036	3.721304e-11	2.744504e-10
## WASL	8976	-0.23821584	3.726101e-11	2.747208e-10
## TMEM199	147007	-0.25990505	3.739997e-11	2.756617e-10
## CCDC184	387856	-0.77423897	3.788101e-11	2.791226e-10
## KCTD14	65987	-0.53270416	3.901970e-11	2.874258e-10
## CCNB1	891	0.36754447	3.974058e-11	2.926472e-10
## RILPL1	353116	0.43114337	4.041510e-11	2.975242e-10
## GNA12	2768	0.28617674	4.054272e-11	2.983733e-10
## WNT2	7472	1.20597195	4.063567e-11	2.989668e-10
## CDC42BPG	55561	-0.54803181	4.073120e-11	2.995790e-10
## LINC01354	100506795	1.06303748	4.121408e-11	3.030388e-10
## CDK5RAP2	55755	0.27808566	4.163340e-11	3.060294e-10
## LINC02084	105377006	1.37082248	4.245971e-11	3.120089e-10
## SLC1A7	6512	1.38596256	4.247994e-11	3.120632e-10
## PLXNA1	5361	0.54344140	4.259703e-11	3.128287e-10
## CARHSP1	23589	-0.45672780	4.310399e-11	3.164562e-10
## APOBEC3F	200316	0.37949447	4.319247e-11	3.170100e-10
## MRPS30	10884	-0.18540372	4.329795e-11	3.176883e-10
## CNOT11	55571	-0.21784439	4.338011e-11	3.181950e-10
## CDC42EP4	23580	-0.30744924	4.345945e-11	3.186808e-10
## CBFA2T3	863	0.75356610	4.395255e-11	3.221993e-10
## BRF2	55290	0.26936384	4.399925e-11	3.224444e-10
## LINC00595	414243	2.13717757	4.443373e-11	3.253341e-10
## LINC00856	100132987	2.13717757	4.443373e-11	3.253341e-10
## SERPINE3	647174	2.34910610	4.442945e-11	3.253341e-10
## COMTD1	118881	-0.82666634	4.470112e-11	3.271933e-10
## BRI3BP	140707	-0.38136730	4.525485e-11	3.311467e-10
## NRXN2	9379	-0.73194789	4.550946e-11	3.329095e-10
## RAB21	23011	-0.24006847	4.581904e-11	3.350733e-10
## AFDN	4301	-0.35124657	4.621692e-11	3.378813e-10
## FAM76A	199870	0.27929665	4.629854e-11	3.383762e-10
## RGS11	8786	0.94257111	4.663919e-11	3.407634e-10
## LINC02437	107986333	-0.97046878	4.719253e-11	3.447026e-10
## PDE2A-AS2	105369378	1.92338195	4.776635e-11	3.487891e-10
## DSE	29940	0.45219129	4.798147e-11	3.502546e-10
## BICC1	80114	-0.31339880	4.804890e-11	3.506415e-10
## PLCB1	23236	-0.61989579	4.869711e-11	3.552652e-10
## LINC01739	105378769	-0.87625799	4.901100e-11	3.574479e-10
## FANCG	2189	0.35360550	4.914901e-11	3.583468e-10
## ERBB2	2064	-0.33917797	4.947275e-11	3.605991e-10
## SMARCD3	6604	0.62029714	5.004288e-11	3.646453e-10
## BICDL3P	<NA>	-1.06031009	5.045410e-11	3.675315e-10
## KIF2A	3796	0.30386377	5.081391e-11	3.700416e-10
## NRBP2	340371	-0.60494772	5.123509e-11	3.729970e-10
## PRUNE1	58497	-0.17914603	5.182965e-11	3.772124e-10
## ZMYM4	9202	0.23427325	5.356007e-11	3.896896e-10
## LRRC30	339291	4.89621926	5.402734e-11	3.929717e-10
## HDAC1	3065	-0.21868556	5.578069e-11	4.056034e-10
## PDE5A	8654	0.58271956	5.612390e-11	4.079770e-10
## APLNR	187	1.08487789	5.720151e-11	4.156860e-10

## POU3F3	5455	-0.64669723	5.760853e-11	4.185187e-10
## MYH7B	57644	1.05468855	5.784120e-11	4.199892e-10
## LINC00652	29075	0.62244167	5.784551e-11	4.199892e-10
## TMEM184C	55751	-0.19356030	5.801808e-11	4.211163e-10
## GPR171	29909	1.17680704	5.831628e-11	4.231543e-10
## IRX2-DT	153571	-0.98408180	5.953138e-11	4.318424e-10
## CYP26B1	56603	-0.97857798	5.968753e-11	4.328459e-10
## TMEM63B	55362	-0.24207983	5.984343e-11	4.338470e-10
## SH2D2A	9047	1.08009103	5.994010e-11	4.344183e-10
## BLM	641	0.77504525	6.054915e-11	4.387015e-10
## CYFIP2	26999	-0.63810007	6.106351e-11	4.422964e-10
## KIR2DS4	3809	2.30880877	6.169157e-11	4.467124e-10
## PGLYRP1	8993	2.06596420	6.189977e-11	4.480865e-10
## NALCN	259232	0.96425876	6.194699e-11	4.482948e-10
## MIR210HG	100506211	-0.61261472	6.227870e-11	4.505611e-10
## TGFB2-AS1	728463	2.89868411	6.289565e-11	4.548890e-10
## DHX15	1665	-0.16700828	6.333979e-11	4.579649e-10
## LRRN2	10446	-0.72132147	6.358212e-11	4.595803e-10
## PPIL2	23759	-0.19268652	6.477015e-11	4.680284e-10
## ETS2-AS1	400867	-1.13905152	6.576594e-11	4.750826e-10
## CNPPD1	27013	-0.26836415	6.619387e-11	4.780319e-10
## MIS18BP1	55320	0.45953130	6.654297e-11	4.804102e-10
## FCRL2	79368	2.10990071	6.663000e-11	4.808957e-10
## KLHL13	90293	-0.38906598	6.686697e-11	4.824626e-10
## CX3CR1	1524	0.85070695	6.703939e-11	4.835631e-10
## MMP23B	8510	2.05158610	6.719227e-11	4.845221e-10
## PADI4	23569	1.49228178	6.801258e-11	4.902918e-10
## C10orf95	79946	-1.03488776	6.993902e-11	5.040297e-10
## MECOM	2122	-0.49110971	7.017012e-11	5.053954e-10
## SELENOW	6415	0.54285422	7.015614e-11	5.053954e-10
## SLC38A4	55089	-0.70082172	7.218354e-11	5.197429e-10
## IFFO2	126917	-0.49789998	7.265899e-11	5.230113e-10
## THSD1	55901	0.71390083	7.292962e-11	5.248039e-10
## C1QB	713	0.98442394	7.310600e-11	5.259174e-10
## ESAM	90952	-0.59665582	7.366870e-11	5.298085e-10
## HCN2	610	-0.70134223	7.427611e-11	5.340189e-10
## CENPL	91687	0.32574942	7.445515e-11	5.351478e-10
## CEP128	145508	0.36885642	7.492521e-11	5.383671e-10
## NEU3	10825	0.24518978	7.608019e-11	5.465045e-10
## EPS8L1	54869	-0.79201557	7.660286e-11	5.500964e-10
## FAM167A	83648	-0.60047391	7.683160e-11	5.515760e-10
## SIRLN1	112543493	-1.21487356	7.760324e-11	5.569511e-10
## SERPINE1	5054	1.22026242	8.016308e-11	5.751529e-10
## LINC01936	285043	-0.60734276	8.026811e-11	5.757365e-10
## TMEM200C	645369	-0.68654246	8.072652e-11	5.788537e-10
## GSTM5	2949	0.84797752	8.080214e-11	5.788974e-10
## NCAPD3	23310	0.24767904	8.078002e-11	5.788974e-10
## NTF4	4909	3.11669626	8.080409e-11	5.788974e-10
## MRC1	4360	0.71599796	8.141300e-11	5.830879e-10
## SLC05A1-AS1	121233925	2.12615211	8.150641e-11	5.835849e-10
## ASCL5	647219	2.71521045	8.179406e-11	5.854720e-10
## CDR2	1039	0.22050831	8.201737e-11	5.868976e-10
## TUFT1	7286	-0.29897780	8.304984e-11	5.939424e-10
## STARD9	57519	0.78892364	8.305075e-11	5.939424e-10

## VIM-AS1	100507347	0.65340455	8.318926e-11	5.947579e-10
## RPL7AP64	728486	1.76954534	8.378438e-11	5.988365e-10
## TMEM165	55858	-0.20931893	8.506431e-11	6.078059e-10
## FOXM1	2305	0.78344329	8.557012e-11	6.112403e-10
## CEL	1056	-0.83187366	8.585757e-11	6.131134e-10
## TPSD1	23430	1.97512443	8.646018e-11	6.172352e-10
## LINC00506	100846978	1.21861504	8.658463e-11	6.179421e-10
## TRAFD1	10906	0.25467735	8.680505e-11	6.193334e-10
## FBXL7	23194	0.68214013	8.695756e-11	6.202394e-10
## HSPA2	3306	-0.81837262	8.720538e-11	6.218245e-10
## VAC14-AS1	100130894	-0.97116446	8.725611e-11	6.220038e-10
## CPEB2	132864	-0.41109936	8.742496e-11	6.230246e-10
## CST2	1470	2.33993995	8.777759e-11	6.253542e-10
## LINC01914	101929723	1.07105900	8.925756e-11	6.357116e-10
## SLA	6503	0.60811531	8.956175e-11	6.376912e-10
## IKBKE	9641	0.47415699	9.090337e-11	6.470542e-10
## ZNF70	7621	0.37600531	9.102979e-11	6.477642e-10
## LAMB4	22798	-0.84376254	9.178870e-11	6.529734e-10
## RNF166	115992	0.45722435	9.199878e-11	6.542763e-10
## STAU1	6780	0.38892530	9.204345e-11	6.544026e-10
## TMCC1	23023	0.22687336	9.288983e-11	6.602269e-10
## GRIN2C	2905	1.28649768	9.302689e-11	6.610078e-10
## CDC20B	166979	1.11997324	9.344828e-11	6.638078e-10
## PDE4B	5142	0.55427531	9.420549e-11	6.689911e-10
## MTND4LP30	107075244	-0.48578715	9.468523e-11	6.720052e-10
## ERVFRD-1	405754	-0.86351818	9.467720e-11	6.720052e-10
## CLDN3	1365	-0.95722252	9.552154e-11	6.777428e-10
## PRR5L	79899	0.52598112	9.574769e-11	6.790523e-10
## LDB1	8861	0.21570311	9.576200e-11	6.790523e-10
## SRM	6723	0.61010081	9.585731e-11	6.795299e-10
## SLC5A3	6526	-0.70722354	9.611189e-11	6.811359e-10
## IGF2BP3	10643	1.32280568	9.630755e-11	6.823236e-10
## MMS22L	253714	0.44010393	9.682967e-11	6.858228e-10
## MSMO1	6307	-0.48934021	9.741289e-11	6.897525e-10
## FAM171A1	221061	-0.42405555	9.752221e-11	6.903254e-10
## TRD-AS1	105370401	0.93925476	9.837191e-11	6.961374e-10
## WWTR1	25937	-0.27425501	9.914144e-11	7.013788e-10
## MYO5B	4645	-0.43043542	9.940256e-11	7.030214e-10
## IGHJ3P	28478	2.27655752	9.959137e-11	7.041519e-10
## STK32A	202374	0.54515496	9.963093e-11	7.042267e-10
## SGTB	54557	0.36469873	9.987449e-11	7.057430e-10
## SPCS2	9789	-0.25279367	1.005379e-10	7.102244e-10
## LINC01127	100506328	-1.08217821	1.022965e-10	7.224375e-10
## SLC19A3	80704	-0.64713040	1.046264e-10	7.386771e-10
## GREM2	64388	1.26126997	1.065129e-10	7.517774e-10
## PDGFRB	5159	0.73547342	1.072075e-10	7.564604e-10
## CMTM1	113540	0.85813921	1.075213e-10	7.584541e-10
## ATF4	468	0.37533918	1.082171e-10	7.631410e-10
## KLHL14	57565	-0.66210718	1.085111e-10	7.649923e-10
## BTG2	7832	-0.56749067	1.089911e-10	7.679873e-10
## DPYD	1806	0.29666026	1.089991e-10	7.679873e-10
## GNMT	27232	-0.88290763	1.097686e-10	7.731849e-10
## SOX8	30812	1.08155390	1.103907e-10	7.773410e-10
## TRIM27	5987	0.16481062	1.105008e-10	7.778913e-10

## TMEM52	339456	1.19306316	1.114317e-10	7.840638e-10
## TAF12-DT	105378616	1.04805057	1.114422e-10	7.840638e-10
## GBP6	163351	1.63259558	1.128671e-10	7.938590e-10
## NEK6	10783	0.45499775	1.132655e-10	7.964308e-10
## SFXN3	81855	0.32514856	1.137892e-10	7.998820e-10
## LRRC75B	388886	0.59516957	1.143013e-10	8.032494e-10
## HNRNPM	4670	-0.23397956	1.147075e-10	8.058707e-10
## LRRC73	221424	-0.57795275	1.158510e-10	8.136690e-10
## THSD7A	221981	-0.56908467	1.160207e-10	8.146255e-10
## TNIP2	79155	-0.36297025	1.162838e-10	8.162368e-10
## TIMP3	7078	-0.52204980	1.202878e-10	8.440987e-10
## ELP2	55250	0.14406359	1.206148e-10	8.461490e-10
## SEC13	6396	0.29435768	1.213851e-10	8.513072e-10
## MARK2	2011	-0.22175842	1.232506e-10	8.641411e-10
## SPRED1	161742	0.36430799	1.243815e-10	8.718186e-10
## ARSI	340075	0.80709017	1.244739e-10	8.722143e-10
## FGR	2268	0.84407586	1.245455e-10	8.724222e-10
## VAV2	7410	-0.25896633	1.245753e-10	8.724222e-10
## ARHGEF16	27237	-0.48858036	1.251333e-10	8.760772e-10
## IGFLR1	79713	-1.03362145	1.266058e-10	8.861315e-10
## FKBP15	23307	0.16865261	1.268292e-10	8.874393e-10
## GPR31	2853	2.35268236	1.273254e-10	8.906550e-10
## MMP25	64386	0.96800187	1.273714e-10	8.907204e-10
## FSBP	100861412	-0.49848296	1.276276e-10	8.922547e-10
## ZC3HAV1	56829	0.29002805	1.299955e-10	9.085475e-10
## ILDR1	286676	-0.52716092	1.304039e-10	9.111401e-10
## KCNK15-AS1	106144538	1.76884327	1.306107e-10	9.123229e-10
## CALN1	83698	2.05331549	1.311232e-10	9.156394e-10
## FXYD4	53828	-0.87823423	1.323935e-10	9.242446e-10
## CILK1	22858	0.34529725	1.326516e-10	9.257800e-10
## BAIAP2L1	55971	-0.33037056	1.339976e-10	9.349051e-10
## IRF6	3664	-0.40865173	1.362551e-10	9.502485e-10
## Clorf198	84886	0.44931120	1.362749e-10	9.502485e-10
## TACC1	6867	-0.41999353	1.409130e-10	9.823080e-10
## AHCYL2	23382	-0.48018600	1.444142e-10	1.006427e-09
## F13A1	2162	0.80142853	1.456523e-10	1.014764e-09
## RCC1	1104	0.43689984	1.468957e-10	1.023133e-09
## ATF6	22926	-0.20421248	1.487606e-10	1.035826e-09
## SGPP1	81537	-0.40657631	1.489606e-10	1.036921e-09
## CC2D1B	200014	-0.21374828	1.505384e-10	1.047604e-09
## CASP4	837	0.45010393	1.518304e-10	1.056293e-09
## CYP2U1-AS1	101929595	0.89316079	1.522519e-10	1.058922e-09
## LPIN3	64900	-0.65718293	1.538856e-10	1.069979e-09
## SGO2	151246	0.50146303	1.542443e-10	1.072166e-09
## MAZ	4150	0.39417031	1.565208e-10	1.087679e-09
## FZD9	8326	1.29096400	1.585987e-10	1.101803e-09
## PRKAA1	5562	-0.26936542	1.592433e-10	1.105965e-09
## TMBIM1	64114	-0.34959326	1.600296e-10	1.110791e-09
## TPM3	7170	0.45574606	1.599974e-10	1.110791e-09
## CHN1	1123	0.58889696	1.623222e-10	1.126383e-09
## SLC12A1	6557	-1.09140440	1.644286e-10	1.140674e-09
## REM1	28954	1.01649442	1.649706e-10	1.144107e-09
## MX1	4599	0.62258452	1.652097e-10	1.145438e-09
## NTN4	59277	-0.42139679	1.655935e-10	1.147444e-09

## PRX	57716	-0.48931870	1.655633e-10	1.147444e-09
## TUBGCP3	10426	-0.30369545	1.683954e-10	1.166527e-09
## KCNJ16	3773	-0.52706567	1.691761e-10	1.171601e-09
## SNHG26	109729180	0.72021336	1.695126e-10	1.173597e-09
## EXOSC5	56915	0.40558131	1.712577e-10	1.185341e-09
## ENTR1	10807	0.23179273	1.714110e-10	1.186064e-09
## GAMT	2593	0.80639053	1.729978e-10	1.196703e-09
## APAF1	317	0.40854295	1.736057e-10	1.200567e-09
## RAP2A	5911	0.30835612	1.738640e-10	1.202011e-09
## CD5L	922	2.68476446	1.742401e-10	1.204269e-09
## AZIN2	113451	0.41355151	1.745022e-10	1.205737e-09
## ZDHHC20	253832	0.39635255	1.763729e-10	1.218316e-09
## PPP1R3B	79660	0.40080578	1.770625e-10	1.222732e-09
## DNASE1	1773	-0.70938253	1.785356e-10	1.232555e-09
## ARMCX5	64860	-0.24308413	1.789110e-10	1.234796e-09
## PKP1	5317	0.84175145	1.798953e-10	1.241236e-09
## MTND6P22	107075261	-0.92733695	1.807213e-10	1.246582e-09
## FOXN3	1112	0.37908913	1.811014e-10	1.248849e-09
## ARID3B	10620	0.33972248	1.823360e-10	1.257006e-09
## PAQR4	124222	0.76719716	1.838831e-10	1.267312e-09
## KIF13A	63971	0.34181618	1.841366e-10	1.268699e-09
## ESRRG	2104	-0.52767960	1.849317e-10	1.273817e-09
## SH3RF3-AS1	100287216	-0.77153425	1.851404e-10	1.274893e-09
## SLC22A15	55356	-0.45572838	1.872725e-10	1.289209e-09
## TRBV12-4	28576	2.34302074	1.876024e-10	1.291115e-09
## MAP3K6	9064	-0.54698931	1.934241e-10	1.330804e-09
## ROM1	6094	-0.46261210	1.943352e-10	1.336694e-09
## IFNLR1	163702	-0.44841220	1.946964e-10	1.338800e-09
## NUF2	83540	0.87697801	1.949445e-10	1.340127e-09
## C1orf54	79630	0.54174806	1.975752e-10	1.357827e-09
## UBE2T	29089	0.52549579	1.980026e-10	1.360379e-09
## ELK3	2004	0.49232698	1.993521e-10	1.369264e-09
## KLK4	9622	1.57553327	1.997490e-10	1.371602e-09
## ZNFX1	57169	0.27915577	2.012907e-10	1.381798e-09
## TRAM2	9697	0.54020331	2.015280e-10	1.383036e-09
## HES6	55502	0.75795954	2.016004e-10	1.383143e-09
## SLC46A2	57864	1.52481101	2.045124e-10	1.402725e-09
## CNTRL	11064	0.53870970	2.048876e-10	1.404902e-09
## SDE2	163859	-0.23008970	2.052664e-10	1.407103e-09
## RGMB	285704	0.46046058	2.056914e-10	1.409619e-09
## TRAM1L1	133022	-0.45456822	2.073689e-10	1.420714e-09
## MAGEF1	64110	-0.21789872	2.074333e-10	1.420754e-09
## CNIH2	254263	0.91700247	2.078645e-10	1.423307e-09
## PRTFDC1	56952	0.49286430	2.084090e-10	1.426633e-09
## ITGA6	3655	-0.38295868	2.088778e-10	1.429439e-09
## APBA2	321	0.62565122	2.119390e-10	1.449980e-09
## ATP6V1E2	90423	0.31009669	2.150060e-10	1.470549e-09
## NRSN2	80023	-0.38593412	2.222382e-10	1.519586e-09
## C1orf167	284498	0.82464349	2.239793e-10	1.531061e-09
## EPHB2	2048	0.79285028	2.257669e-10	1.542846e-09
## RTL10	79680	0.19725617	2.261461e-10	1.545003e-09
## FTLP14	100462794	-0.82030227	2.321902e-10	1.585850e-09
## PKM	5315	-0.54922596	2.323441e-10	1.586455e-09
## MAS1	4142	2.46968128	2.332062e-10	1.591894e-09

## ZNF519	162655	0.57869033	2.338420e-10	1.595786e-09
## C18orf63	644041	-2.27429881	2.356257e-10	1.607507e-09
## CCR9	10803	-1.27779527	2.364448e-10	1.612642e-09
## LDLRAD2	401944	1.21603662	2.388561e-10	1.628631e-09
## KIF3C	3797	0.52342722	2.390724e-10	1.629649e-09
## SQLE	6713	-0.48383789	2.411822e-10	1.643569e-09
## KIAA1549	57670	-0.47470002	2.416713e-10	1.646441e-09
## LINC01410	103352539	0.98469575	2.444360e-10	1.664809e-09
## SIAH2	6478	0.21722603	2.518990e-10	1.715157e-09
## EEPD1	80820	0.53436270	2.533612e-10	1.723918e-09
## PLA2G12A	81579	-0.25363255	2.533935e-10	1.723918e-09
## GPR158	57512	0.88106064	2.533985e-10	1.723918e-09
## BCL2L2	599	-0.20349571	2.574415e-10	1.750934e-09
## BPIFB4	149954	3.09073449	2.575241e-10	1.751005e-09
## MFSD4A	148808	-0.90835301	2.620213e-10	1.781086e-09
## GNAI2	2771	0.46384255	2.622085e-10	1.781859e-09
## GOSR1	9527	-0.15758204	2.625725e-10	1.783834e-09
## IRX3	79191	-0.91309175	2.649473e-10	1.799465e-09
## PSRC1	84722	0.39057077	2.662822e-10	1.808025e-09
## CPSF4	10898	0.25992544	2.706699e-10	1.837304e-09
## FKRP	79147	-0.24420518	2.711853e-10	1.840289e-09
## IFIT3	3437	0.46268637	2.769556e-10	1.878922e-09
## LINC01943	101928173	1.11627162	2.791530e-10	1.893301e-09
## RTP4	64108	0.52052426	2.792708e-10	1.893571e-09
## TNS4	84951	-0.80449907	2.802370e-10	1.899592e-09
## SELENOI	85465	-0.31824954	2.826816e-10	1.915629e-09
## HOOK1	51361	-0.52096538	2.859135e-10	1.936990e-09
## GOLPH3-DT	118597838	-0.43934148	2.866300e-10	1.941303e-09
## VILL	50853	0.35557959	2.909794e-10	1.970212e-09
## LAPTM4B	55353	-0.32391583	2.913802e-10	1.972376e-09
## ROR1	4919	0.53150320	2.947512e-10	1.994639e-09
## TTC39A-AS1	102724097	-1.06550929	2.993045e-10	2.024888e-09
## RBM47	54502	-0.39893450	2.993904e-10	2.024905e-09
## LINC02408	100507175	1.86780929	2.998573e-10	2.027500e-09
## NCK1	4690	0.25133971	3.010587e-10	2.034591e-09
## STXBP5	134957	0.47249815	3.010736e-10	2.034591e-09
## HOXB6	3216	-0.47364554	3.016932e-10	2.037645e-09
## SSX2IP	117178	-0.44189167	3.016339e-10	2.037645e-09
## L1TD1	54596	0.98939578	3.052550e-10	2.061128e-09
## MEFV	4210	0.96575366	3.080050e-10	2.079120e-09
## NTRK2	4915	-0.70944558	3.097542e-10	2.090346e-09
## LRRC52	440699	-1.37172046	3.109656e-10	2.097939e-09
## SLC18B1	116843	-0.30412853	3.142581e-10	2.119563e-09
## RECQL4	9401	0.54753741	3.150182e-10	2.124100e-09
## VSIG1	340547	1.32181842	3.151391e-10	2.124326e-09
## PCDHGA12	26025	0.94568237	3.163337e-10	2.131788e-09
## ARFGAP3	26286	-0.24209129	3.173492e-10	2.138038e-09
## LIPG	9388	-0.67995947	3.195510e-10	2.152275e-09
## NUP62	23636	0.22796208	3.221101e-10	2.168911e-09
## TNFAIP1	7126	-0.22922631	3.237091e-10	2.178756e-09
## CAPZA1	829	0.27029898	3.237515e-10	2.178756e-09
## SFTA2	389376	-1.08115534	3.263046e-10	2.195329e-09
## TWNK	56652	0.20373989	3.278840e-10	2.205344e-09
## RAB32	10981	0.45457065	3.296008e-10	2.216278e-09

## SIGLEC22P	114195	1.40489212	3.318922e-10	2.231068e-09
## DCAF5	8816	0.18876426	3.333385e-10	2.240171e-09
## GAL3ST3	89792	-0.96932886	3.352085e-10	2.252115e-09
## RAB35-AS1	127138862	-0.40415217	3.365349e-10	2.260402e-09
## PLPP6	403313	-0.17416552	3.369981e-10	2.262888e-09
## ELF3-AS1	102723465	-0.86492418	3.409176e-10	2.288574e-09
## RN7SL138P	106480489	0.79802768	3.4434976e-10	2.305257e-09
## ISYNA1	51477	-0.71006986	3.469946e-10	2.328083e-09
## PAQR7	164091	0.52782575	3.473082e-10	2.329544e-09
## WNT3	7473	-0.51254959	3.500831e-10	2.347508e-09
## HOXA5	3202	-0.29004983	3.539037e-10	2.372473e-09
## OPRL1	4987	0.70000773	3.540998e-10	2.373133e-09
## PKD1L1	168507	0.92920283	3.549971e-10	2.378490e-09
## TMEM68	137695	-0.27362760	3.554014e-10	2.380543e-09
## ARHGEF5	7984	-0.36773080	3.555804e-10	2.381085e-09
## COG2	22796	-0.14687874	3.627132e-10	2.428180e-09
## DLK1	8788	1.39653816	3.645441e-10	2.439765e-09
## PPEF1	5475	-1.22574205	3.650450e-10	2.442444e-09
## NUDT10	170685	-0.55400338	3.698116e-10	2.473656e-09
## SERTAD4	56256	0.76981853	3.723512e-10	2.489958e-09
## NPC1	4864	-0.39871602	3.727331e-10	2.491826e-09
## SRRM4	84530	-1.04616750	3.786085e-10	2.530408e-09
## MTMR6	9107	-0.29086961	3.854132e-10	2.575179e-09
## EXOC7	23265	0.14267913	3.856116e-10	2.575796e-09
## HOMER3-AS1	102724360	0.73822434	3.880254e-10	2.591208e-09
## STAT3	6774	-0.33558352	3.902116e-10	2.605091e-09
## NWD1	284434	-1.05366828	3.918680e-10	2.615431e-09
## PGM2L1	283209	0.53146630	3.927303e-10	2.620467e-09
## COX10	1352	-0.20595758	3.930711e-10	2.622021e-09
## GLYR1	84656	-0.17290202	4.024914e-10	2.683387e-09
## SERTAD4BP	<NA>	1.60486222	4.024658e-10	2.683387e-09
## C20orf202	400831	0.68507299	4.043564e-10	2.695081e-09
## PTBP2	58155	-0.29512248	4.060893e-10	2.705889e-09
## PRAM1	84106	0.89107659	4.085665e-10	2.721649e-09
## UBE2L5	171222	1.64816953	4.114831e-10	2.740326e-09
## HIVEP1	3096	0.35804321	4.123297e-10	2.745212e-09
## IFT70A	92104	-0.30849169	4.151094e-10	2.762962e-09
## SPATS2	65244	0.26004329	4.194583e-10	2.791143e-09
## SLC38A6	145389	0.41968079	4.197803e-10	2.792521e-09
## SH3KBP1	30011	0.34607881	4.267678e-10	2.838228e-09
## ST8SIA5	29906	-0.56126181	4.284794e-10	2.848831e-09
## ARMC3	219681	0.78613257	4.290125e-10	2.851596e-09
## RASAL1	8437	-0.70195322	4.296140e-10	2.854813e-09
## ALG8	79053	-0.27929973	4.368094e-10	2.901833e-09
## OTULIN	90268	0.24461080	4.407289e-10	2.927071e-09
## CTNS	1497	-0.34317824	4.482676e-10	2.976326e-09
## ARRB1	408	0.38681254	4.522204e-10	3.001751e-09
## COLCA1	399948	-0.59964676	4.562825e-10	3.027886e-09
## ARHGEF25	115557	0.73764644	4.568501e-10	3.030685e-09
## USP2-AS1	100499227	-0.56680356	4.569535e-10	3.030685e-09
## BISPR	105221694	0.44954653	4.578486e-10	3.035792e-09
## KLF10	7071	-0.45532372	4.616031e-10	3.059852e-09
## FAM200C	63920	0.31038952	4.666598e-10	3.092528e-09
## TRAIP	10293	0.42912884	4.708875e-10	3.119694e-09

## ZNF503-AS1	253264	-0.52266988	4.758995e-10	3.152040e-09
## AFF3	3899	0.49027004	4.764073e-10	3.154543e-09
## CLEC2L	154790	1.87651366	4.826020e-10	3.194691e-09
## RBM23	55147	-0.13036431	4.910852e-10	3.249962e-09
## MIDN	90007	-0.46494612	4.952443e-10	3.276594e-09
## PCDHGC3	5098	0.78849383	4.957037e-10	3.278741e-09
## POLR3D	661	0.24831061	4.978962e-10	3.292347e-09
## AP3B2	8120	-0.49103158	4.992544e-10	3.300254e-09
## KLHL1	57626	1.17718711	4.993636e-10	3.300254e-09
## SOCS3-DT	101928674	-1.23574663	5.058113e-10	3.341958e-09
## SEMA3G	56920	-0.55504505	5.060187e-10	3.342419e-09
## UBD	10537	1.19622554	5.138139e-10	3.392987e-09
## PACS2	23241	0.32401173	5.195515e-10	3.429943e-09
## PLEKHA3	65977	-0.17131167	5.267618e-10	3.476599e-09
## TPST2	8459	-0.29066743	5.302330e-10	3.498559e-09
## ANGPT2	285	0.94124105	5.348087e-10	3.527792e-09
## PGAP6	58986	-0.43280502	5.373782e-10	3.543780e-09
## SLC34A2	10568	-1.35534611	5.416150e-10	3.570750e-09
## EPAS1	2034	-0.28215223	5.420234e-10	3.572474e-09
## TRAV27	28655	2.45856780	5.434376e-10	3.580824e-09
## MTCO3P8	107075151	-0.77258285	5.471629e-10	3.604393e-09
## RABEP1	9135	0.22265814	5.492484e-10	3.617150e-09
## SIRT2	22933	0.39040729	5.553589e-10	3.656401e-09
## GDI1	2664	-0.24369084	5.591693e-10	3.680491e-09
## LILRA1	11024	0.85275684	5.706874e-10	3.755287e-09
## ZNF565	147929	0.30438857	5.724801e-10	3.766064e-09
## C8orf89	100130301	1.76573353	5.739511e-10	3.774719e-09
## KLHL15	80311	-0.31426417	5.744908e-10	3.777246e-09
## SUSD4	55061	-0.64660537	5.747133e-10	3.777687e-09
## NOS1	4842	-0.69019639	5.755717e-10	3.782306e-09
## IL18BP	10068	-0.77816482	5.783406e-10	3.799354e-09
## SWINGN	100861555	1.48615415	5.784786e-10	3.799354e-09
## RABEPK	10244	0.31875267	5.792138e-10	3.803155e-09
## L3MBTL4-AS1	101927150	1.47391636	5.850910e-10	3.840707e-09
## POU2AF1	5450	1.11231253	5.868580e-10	3.851266e-09
## FUCA1	2517	-0.26981237	5.889673e-10	3.864065e-09
## CAMK2N2	94032	0.98680816	5.933891e-10	3.892024e-09
## CLIC3	9022	0.97035607	5.949894e-10	3.901467e-09
## LINC02185	101927311	0.76190699	5.967483e-10	3.911945e-09
## HPCAL1	3241	-0.36509789	6.013459e-10	3.941021e-09
## MTND1P14	100873337	-0.95615587	6.119393e-10	4.009366e-09
## LINC02524	105378013	-1.03053603	6.134158e-10	4.017956e-09
## P3H2-AS1	101929152	-0.70727107	6.188430e-10	4.052413e-09
## ZDHHC18	84243	0.29549631	6.206373e-10	4.063067e-09
## MLXIP	22877	0.31349250	6.242394e-10	4.085549e-09
## IGF2BP2-AS1	646600	1.39698264	6.246484e-10	4.087125e-09
## PCBP1-AS1	400960	0.30009579	6.249364e-10	4.087909e-09
## ASS1P1	442167	1.02108635	6.308942e-10	4.125770e-09
## HNRNPK	3190	-0.14536759	6.339889e-10	4.144892e-09
## PTCHD4	442213	0.71382549	6.370559e-10	4.163824e-09
## PIM1	5292	-0.34823271	6.444575e-10	4.211068e-09
## SLF2	55719	0.39111530	6.448355e-10	4.212406e-09
## GEMIN2	8487	0.31248824	6.531244e-10	4.265406e-09
## TRBV15	28572	2.47250264	6.679432e-10	4.361012e-09

## AMZ2P1	201283	0.40878540	6.727816e-10	4.391422e-09
## IRF1	3659	0.57848338	6.739735e-10	4.398021e-09
## MAFK	7975	-0.41732383	6.784820e-10	4.426253e-09
## TAB3	257397	-0.33015878	6.843062e-10	4.463050e-09
## REG1B	5968	-3.26818127	6.934655e-10	4.521573e-09
## EPHX3	79852	-0.68649460	7.033603e-10	4.584860e-09
## LAMA5	3911	-0.54396241	7.061204e-10	4.601618e-09
## TTLL4	9654	0.25364295	7.100422e-10	4.625935e-09
## CCNE2	9134	0.95826450	7.114876e-10	4.634109e-09
## NTAN1	123803	0.43506821	7.123996e-10	4.638806e-09
## UBASH3B	84959	0.64236441	7.195764e-10	4.684283e-09
## TSNAX	7257	-0.28817540	7.249699e-10	4.718129e-09
## SMAGP	57228	-0.48493743	7.268521e-10	4.729112e-09
## PTTG1IP	754	-0.25468977	7.288907e-10	4.741106e-09
## AFTP8-DT	101927402	0.63789793	7.308888e-10	4.752831e-09
## ELMO1	9844	0.54760387	7.311173e-10	4.753045e-09
## ADAMTS3	9508	0.68680766	7.321214e-10	4.758300e-09
## SIAE	54414	-0.32796241	7.330976e-10	4.763370e-09
## HS6ST1	9394	-0.44627054	7.352113e-10	4.775827e-09
## RDM1	201299	1.24954407	7.360431e-10	4.779953e-09
## RGS13	6003	1.77574796	7.425510e-10	4.819640e-09
## GRTP1	79774	-0.49907270	7.424575e-10	4.819640e-09
## LINC02934	105369168	0.81317624	7.546274e-10	4.896716e-09
## MIA2-AS1	100288846	-0.60568535	7.588667e-10	4.922910e-09
## TMEM30A	55754	-0.25171698	7.596136e-10	4.926440e-09
## FKBP5	2289	-0.97575503	7.812167e-10	5.065194e-09
## TCEAL2	140597	-0.50815794	7.863001e-10	5.096793e-09
## GATA3	2625	-0.47548816	7.887606e-10	5.111379e-09
## FNBP1L	54874	-0.29557114	7.909114e-10	5.123950e-09
## MTND6P4	106478943	-0.82249492	8.021486e-10	5.195366e-09
## BCL11B	64919	0.91629431	8.151743e-10	5.278324e-09
## PDE4DIP	9659	0.57393856	8.187023e-10	5.299756e-09
## ARHGAP17	55114	0.24246483	8.191088e-10	5.300976e-09
## CEP250	11190	0.28010062	8.261627e-10	5.345202e-09
## MYO18A	399687	0.43518608	8.293502e-10	5.364397e-09
## SMIM22	440335	-0.79793561	8.339305e-10	5.392588e-09
## FBXW11	23291	-0.17549854	8.344657e-10	5.394613e-09
## TMEM150C	441027	-0.36980693	8.437339e-10	5.453079e-09
## FLNB	2317	-0.32109684	8.497708e-10	5.490636e-09
## GIMAP4	55303	0.42212282	8.504920e-10	5.493835e-09
## MPIG6B	80739	1.37192811	8.550470e-10	5.521790e-09
## FBXW2	26190	0.17002873	8.587960e-10	5.544527e-09
## PPP1CC	5501	0.18965686	8.596403e-10	5.548504e-09
## INSIG1	3638	-0.52131300	8.679998e-10	5.600972e-09
## BMERB1	89927	0.25445508	8.729256e-10	5.631262e-09
## FNDC4	64838	0.89961111	8.792820e-10	5.670762e-09
## UGCG	7357	-0.58825006	8.868258e-10	5.717897e-09
## CBLN3	643866	0.46799559	8.907344e-10	5.741575e-09
## STX10	8677	0.32308289	8.989118e-10	5.792749e-09
## IER5	51278	0.50924734	9.119057e-10	5.874926e-09
## RASSF3	283349	0.49323608	9.189710e-10	5.918875e-09
## LINC01659	101929374	-1.80235529	9.249443e-10	5.955769e-09
## GNE	10020	-0.34441473	9.262450e-10	5.962564e-09
## TMEM263	90488	-0.29812443	9.363924e-10	6.026290e-09

## PPM1B	5495	-0.24732318	9.483005e-10	6.101311e-09
## SLC7A1	6541	-0.53212966	9.565455e-10	6.152730e-09
## LINC02328	101928767	0.75733918	9.671686e-10	6.219414e-09
## ZC3H10	84872	0.16569825	9.957052e-10	6.401225e-09
## MESP2	145873	1.02515629	1.010421e-09	6.494115e-09
## CARHSP1-DT	119545623	-1.93695362	1.012732e-09	6.507247e-09
## TSPAN1	10103	-0.59238369	1.019826e-09	6.551092e-09
## NBPF15	284565	0.50500091	1.025818e-09	6.587847e-09
## ELMO3	79767	-0.47014165	1.033288e-09	6.634062e-09
## TMTC1	83857	-0.36137463	1.033837e-09	6.635833e-09
## DHX30	22907	-0.17262034	1.035316e-09	6.643577e-09
## KCNIP4	80333	-0.73511415	1.037294e-09	6.653762e-09
## EPB41L4A-DT	54508	-0.45320944	1.037451e-09	6.653762e-09
## WDR38	401551	1.45694467	1.040095e-09	6.668956e-09
## IDH1	3417	0.54481539	1.051890e-09	6.742809e-09
## KCTD4	386618	0.89204552	1.057563e-09	6.777381e-09
## CARD8-AS1	100505812	0.41389070	1.061067e-09	6.798047e-09
## MOAP1	64112	-0.18618959	1.062058e-09	6.802603e-09
## MICU2	221154	-0.25649495	1.065786e-09	6.824681e-09
## ST8SIA2	8128	1.63340517	1.074297e-09	6.877367e-09
## RFX8	731220	1.02385297	1.084153e-09	6.938637e-09
## SEPTIN1	1731	0.65609360	1.089780e-09	6.972816e-09
## PCLAF	9768	0.80575501	1.092978e-09	6.991431e-09
## AP4M1	9179	0.21848782	1.102027e-09	7.047462e-09
## NAIP	4671	0.73545784	1.111041e-09	7.103239e-09
## KLK15	55554	-1.11186311	1.112361e-09	7.109808e-09
## HRCT1	646962	-0.84870567	1.112967e-09	7.111810e-09
## SPATA12	353324	1.88817028	1.113604e-09	7.114011e-09
## C14orf180	400258	0.91101012	1.120644e-09	7.157104e-09
## SPON1	10418	0.93193987	1.122815e-09	7.169081e-09
## COMETT	100996266	0.93422222	1.137829e-09	7.263040e-09
## IL27	246778	1.74688808	1.140611e-09	7.278884e-09
## GLT8D1	55830	0.17172344	1.143167e-09	7.293278e-09
## ZNF93	81931	0.36048828	1.146079e-09	7.309938e-09
## EXD2	55218	-0.16064564	1.168249e-09	7.449387e-09
## LYPD6B	130576	-0.80955457	1.174396e-09	7.486623e-09
## PARP2	10038	0.23421732	1.174814e-09	7.487320e-09
## RAB44	401258	1.66797112	1.178775e-09	7.510595e-09
## LINC00242	401288	0.88070794	1.183414e-09	7.538178e-09
## MAP3K2-DT	100506922	0.45747592	1.184541e-09	7.543380e-09
## PABIR2	159090	-0.21969703	1.188675e-09	7.567363e-09
## B3GNT5	84002	0.49642424	1.188930e-09	7.567363e-09
## PLK4	10733	0.51219277	1.190214e-09	7.573551e-09
## SLC39A14	23516	-0.45523870	1.190998e-09	7.576552e-09
## NKAIN4	128414	-1.10897564	1.210313e-09	7.697411e-09
## DUSP5P2	643459	-1.52941771	1.215339e-09	7.727355e-09
## SLC23A4P	641842	-0.99688663	1.230266e-09	7.820216e-09
## SSTR5-AS1	146336	-1.46392337	1.239154e-09	7.874656e-09
## TMX4	56255	-0.25733156	1.241201e-09	7.883538e-09
## QSOX2	169714	-0.29010168	1.241036e-09	7.883538e-09
## DARS1	1615	-0.15637140	1.255898e-09	7.972720e-09
## INPP5J	27124	-0.56255953	1.255717e-09	7.972720e-09
## NPM2	10361	-0.51540156	1.257666e-09	7.981860e-09
## HCRT2	3062	-1.18233460	1.269596e-09	8.055469e-09

## STX2	2054	0.28819472	1.278470e-09	8.109659e-09
## LINC02894	100288748	-0.82690121	1.282608e-09	8.133781e-09
## PDE9A	5152	-0.44169473	1.312072e-09	8.318463e-09
## KDM5B	10765	0.29716071	1.323508e-09	8.388776e-09
## TFAP2B	7021	-0.66593579	1.324929e-09	8.395595e-09
## TBC1D27P	96597	2.46246467	1.328339e-09	8.415006e-09
## LRIT3	345193	-0.80439988	1.336215e-09	8.462697e-09
## LINC00402	100507612	1.85434036	1.346972e-09	8.528602e-09
## GPR156	165829	0.65836947	1.350272e-09	8.547265e-09
## COL24A1	255631	0.89617465	1.359359e-09	8.602550e-09
## LUCAT1	100505994	1.59844956	1.369096e-09	8.661910e-09
## PPP2CA	5515	-0.18187029	1.391578e-09	8.801859e-09
## PDCD2L	84306	0.41689493	1.392355e-09	8.804479e-09
## DCLRE1B	64858	0.30758956	1.404184e-09	8.876973e-09
## SREBF1	6720	-0.55665365	1.406067e-09	8.886560e-09
## ZNRF3-AS1	100874123	-1.12888134	1.413086e-09	8.928601e-09
## TM9SF1	10548	-0.31395004	1.428998e-09	9.026795e-09
## MCM6	4175	0.30797118	1.435837e-09	9.067636e-09
## MRPS23	51649	-0.31443607	1.445949e-09	9.129125e-09
## TTC22	55001	-0.55074117	1.456012e-09	9.190273e-09
## ST8SIA5-DT	105372097	-0.66934561	1.461890e-09	9.224977e-09
## MAP7D3	79649	0.46129762	1.484150e-09	9.363016e-09
## FAT3	120114	0.90422198	1.487608e-09	9.382391e-09
## OTOGL	283310	1.14696587	1.497854e-09	9.442117e-09
## PRELP	5549	1.03543687	1.497574e-09	9.442117e-09
## SYTL4	94121	-0.42476949	1.506967e-09	9.497095e-09
## EPGN	255324	1.98693601	1.543102e-09	9.722304e-09
## ZBED10P	113763	-0.41772418	1.560241e-09	9.827736e-09
## CD109-AS1	101928489	0.95708492	1.589410e-09	1.000888e-08
## KIF18A	81930	0.55194116	1.594302e-09	1.003708e-08
## FGFR4	2264	-0.51720723	1.605229e-09	1.010325e-08
## RDH12	145226	1.12777479	1.615679e-09	1.016639e-08
## SKAP2	8935	-0.19691388	1.634762e-09	1.028381e-08
## INSM1	3642	2.54612737	1.638951e-09	1.030749e-08
## BATF3	55509	0.72803497	1.639818e-09	1.031028e-08
## ATP6V1H	51606	-0.22256929	1.641372e-09	1.031738e-08
## RBFA	79863	0.22811962	1.644144e-09	1.033213e-08
## STAM2	10254	-0.20087182	1.665837e-09	1.046574e-08
## ANXA2P2	304	0.81921614	1.670323e-09	1.049122e-08
## EFS	10278	0.73040833	1.676467e-09	1.052709e-08
## KRT17P4	339186	2.29666283	1.690501e-09	1.061247e-08
## GARNL3	84253	0.25775205	1.695456e-09	1.064083e-08
## SMIM5	643008	-0.56275180	1.696344e-09	1.064365e-08
## LAMA5-AS1	101928158	1.32864861	1.703214e-09	1.068400e-08
## ATP8B1-AS1	100505549	-0.38426476	1.713827e-09	1.074780e-08
## LTB4R2	56413	-0.78842524	1.715007e-09	1.075242e-08
## THAP4	51078	-0.33650172	1.736989e-09	1.088743e-08
## FLT4	2324	-0.37817918	1.754162e-09	1.098940e-08
## GAS5	60674	0.48907089	1.753770e-09	1.098940e-08
## TRIM21	6737	0.30140028	1.767181e-09	1.106811e-08
## BCRP3	644165	-0.79498418	1.768934e-09	1.107624e-08
## HCLS1	3059	0.61155985	1.770171e-09	1.108112e-08
## GSDMB	55876	0.80035489	1.772004e-09	1.108974e-08
## SPOCK2	9806	-0.55639322	1.775404e-09	1.110816e-08

## GATA2-AS1	101927167	-0.43649306	1.778510e-09	1.112473e-08
## FURIN	5045	-0.30622381	1.781511e-09	1.114063e-08
## MAGIX	79917	-0.50968948	1.793825e-09	1.121475e-08
## FGD1	2245	0.40359829	1.794912e-09	1.121866e-08
## SLC20A2	6575	-0.30943386	1.802168e-09	1.126111e-08
## KLF14	136259	1.70228068	1.809870e-09	1.130633e-08
## CLEC11A	6320	0.90157052	1.824292e-09	1.139350e-08
## MAP4	4134	0.35142790	1.828869e-09	1.141622e-08
## LINC02968	105373105	2.32841314	1.828809e-09	1.141622e-08
## CD164L2	388611	-1.00023857	1.891176e-09	1.180212e-08
## ENTHD1	150350	3.08677136	1.896427e-09	1.183185e-08
## SLC9A1	6548	-0.44364306	1.897878e-09	1.183787e-08
## RFPL1S	10740	0.67059719	1.909505e-09	1.190734e-08
## SNCAIP	9627	0.80009588	1.911407e-09	1.191614e-08
## PBX3	5090	0.42361641	1.965359e-09	1.224934e-08
## TRBJ1-6	28630	2.37792371	1.973815e-09	1.229889e-08
## TBX5-AS1	255480	2.67547532	1.979622e-09	1.233191e-08
## MAPK1IP1L	93487	-0.19945961	1.986040e-09	1.236872e-08
## RHOQ	23433	0.25475037	1.989436e-09	1.238670e-08
## STAC2	342667	-0.61508290	2.013476e-09	1.253316e-08
## DCAF1	9730	-0.17108146	2.060572e-09	1.282304e-08
## NHERF2	9351	-0.50698416	2.061831e-09	1.282759e-08
## FIRRM	55732	0.31239898	2.070765e-09	1.287987e-08
## ETNK1	55500	-0.31006486	2.076167e-09	1.291017e-08
## PLAGL1	5325	0.40183058	2.077379e-09	1.291440e-08
## ARRDC4	91947	-0.38026318	2.105166e-09	1.308379e-08
## APLP2	334	-0.29551374	2.135087e-09	1.326636e-08
## NECTIN2	5819	-0.34290634	2.154759e-09	1.338517e-08
## WLS	79971	-0.30170525	2.162609e-09	1.343050e-08
## EIF3EP1	3647	0.58133375	2.181227e-09	1.354267e-08
## PI4KA	5297	-0.20524514	2.182627e-09	1.354790e-08
## FAM98B	283742	-0.17745083	2.190043e-09	1.359046e-08
## NCAPD2	9918	0.21981214	2.195186e-09	1.361890e-08
## SLAIN1	122060	-0.26011348	2.205816e-09	1.368135e-08
## AXL	558	0.66446699	2.210223e-09	1.370519e-08
## DUSP28	285193	0.38944527	2.216246e-09	1.373903e-08
## SLC6A8	6535	-0.39327560	2.225406e-09	1.379230e-08
## LAMP3	27074	1.08281882	2.238489e-09	1.386984e-08
## CWC25	54883	0.18300693	2.244671e-09	1.390460e-08
## FBXO34	55030	-0.20107721	2.251768e-09	1.394501e-08
## EXOC4	60412	0.18489497	2.255224e-09	1.396285e-08
## ARSD	414	-0.41939959	2.258416e-09	1.397905e-08
## LINC02993	105373656	0.75246931	2.259663e-09	1.398321e-08
## EWSR1	2130	-0.17303237	2.278389e-09	1.409550e-08
## SPIC	121599	2.58415127	2.288985e-09	1.415745e-08
## ANXA11	311	-0.30173296	2.312934e-09	1.430194e-08
## CLMN	79789	-0.37221282	2.317743e-09	1.432802e-08
## THBS4-AS1	101929215	1.05311763	2.319557e-09	1.433560e-08
## KREMEN2	79412	2.24395520	2.350438e-09	1.452060e-08
## SPARCL1	8404	0.73821637	2.350687e-09	1.452060e-08
## FIZ1	84922	-0.28233493	2.356997e-09	1.455588e-08
## NUP54	53371	0.19176414	2.358136e-09	1.455922e-08
## FEZ2	9637	0.26252436	2.363476e-09	1.458847e-08
## RRAD	6236	1.06860907	2.366285e-09	1.460211e-08

## RCC2	55920	0.26244494	2.388372e-09	1.473466e-08
## IL6ST	3572	-0.32310289	2.398544e-09	1.479139e-08
## ZNF556	80032	0.76775515	2.398784e-09	1.479139e-08
## THBS3-AS1	105371450	-0.53344733	2.414414e-09	1.488399e-08
## TCF3	6929	0.38507942	2.424254e-09	1.494086e-08
## LEMD3	23592	-0.22984384	2.428206e-09	1.496142e-08
## NDN	4692	0.48625041	2.440632e-09	1.503417e-08
## LRP4	4038	0.56730305	2.466465e-09	1.518745e-08
## TET3	200424	0.39767417	2.466766e-09	1.518745e-08
## NEDD4L	23327	-0.33443352	2.470203e-09	1.520268e-08
## FBXO31	79791	0.32993341	2.470490e-09	1.520268e-08
## EYS	346007	1.25668075	2.487670e-09	1.530452e-08
## OSBPL2	9885	-0.13562471	2.489154e-09	1.530978e-08
## ASTILCS	105375790	1.92576275	2.493754e-09	1.533419e-08
## ARGLU1-DT	283483	-0.62830427	2.495844e-09	1.534316e-08
## TRAF5	7188	0.49349545	2.520376e-09	1.549005e-08
## TENT5B	115572	-0.68383744	2.528306e-09	1.553486e-08
## FGF10	2255	1.13508273	2.532243e-09	1.555512e-08
## BICDL1	92558	-0.53430904	2.545286e-09	1.563128e-08
## ASPRV1	151516	0.36040237	2.549998e-09	1.565627e-08
## ZNF853	54753	0.44072121	2.553102e-09	1.567137e-08
## ATRN	8455	-0.27550072	2.561430e-09	1.571851e-08
## MYO19	80179	-0.34525351	2.566342e-09	1.574468e-08
## FGF9	2254	-0.56889644	2.590575e-09	1.588934e-08
## ATP6V0B	533	-0.41907858	2.593035e-09	1.590041e-08
## LINC02345	101928227	2.16521404	2.594189e-09	1.590348e-08
## RPN2	6185	-0.25864593	2.609026e-09	1.599040e-08
## EHD2	30846	0.98089898	2.628795e-09	1.610750e-08
## STARD4	134429	-0.47766998	2.635533e-09	1.614471e-08
## PEX26	55670	-0.14980410	2.640107e-09	1.616866e-08
## GFPT1	2673	-0.27045326	2.641135e-09	1.617088e-08
## RSPO3	84870	1.12592031	2.647659e-09	1.620674e-08
## CAMSAP3	57662	-0.55165133	2.649533e-09	1.621413e-08
## NFIA	4774	0.26409563	2.660108e-09	1.627475e-08
## EBF1	1879	0.54325132	2.670655e-09	1.633516e-08
## MADD	8567	-0.19828712	2.671956e-09	1.633900e-08
## GGA2	23062	-0.21107333	2.769373e-09	1.693045e-08
## GEMIN5	25929	0.19216815	2.781451e-09	1.700001e-08
## VAMP2	6844	-0.24575083	2.783349e-09	1.700733e-08
## DHRS4-AS1	55449	0.43172507	2.801348e-09	1.711301e-08
## L1CAM	3897	-0.55508515	2.810030e-09	1.716173e-08
## LINC02607	100996635	1.43543654	2.845484e-09	1.737390e-08
## LINC00540	100506622	-0.86643616	2.875847e-09	1.755488e-08
## STARD7-AS1	285033	0.24852902	2.882661e-09	1.759205e-08
## LNROP	100505622	1.44577697	2.905206e-09	1.772518e-08
## HSD17B13	345275	1.04252196	2.913790e-09	1.777309e-08
## GPR27	2850	-0.37023836	2.950082e-09	1.798995e-08
## ADRA2B	151	-0.54090389	2.952569e-09	1.800060e-08
## MYH10	4628	0.27311550	2.989811e-09	1.822307e-08
## KLC2	64837	-0.33600241	2.993981e-09	1.824391e-08
## S1PR2	9294	0.60330169	3.009918e-09	1.833643e-08
## DUSP8	1850	-0.51780807	3.019206e-09	1.838840e-08
## MAPK4	5596	-0.44715475	3.021791e-09	1.839953e-08
## SOWAHC	65124	-0.34858711	3.023691e-09	1.840649e-08

## SLAMF9	89886	3.30839710	3.042436e-09	1.851596e-08
## NUS1P2	646208	-0.93969247	3.049468e-09	1.855411e-08
## TNNI3	7137	2.87993769	3.061151e-09	1.862053e-08
## HOATZ	399949	3.01634886	3.072721e-09	1.868623e-08
## LINC01484	101928136	0.83572336	3.087429e-09	1.877098e-08
## C17orf58	284018	0.29864008	3.106890e-09	1.888458e-08
## THY1	7070	0.64696246	3.111847e-09	1.890998e-08
## RBP1	5947	0.58700347	3.150310e-09	1.913892e-08
## APOL4	80832	0.75571339	3.152665e-09	1.914844e-08
## SLC39A9	55334	-0.22479810	3.190074e-09	1.937081e-08
## ANKRD29	147463	0.50528653	3.232476e-09	1.962338e-08
## POLR2J4	84820	-0.36538378	3.251340e-09	1.973297e-08
## RADIL	55698	0.93621830	3.252539e-09	1.973532e-08
## MED28	80306	0.19779255	3.253714e-09	1.973752e-08
## SLC17A3	10786	0.89857759	3.254847e-09	1.973947e-08
## IL10	3586	1.13412454	3.284649e-09	1.991524e-08
## PARG	8505	0.26254241	3.287508e-09	1.992759e-08
## NFE2	4778	0.92185955	3.315072e-09	2.008967e-08
## PABPC5	140886	0.48476333	3.321722e-09	2.012495e-08
## CEROX1	115804232	0.94020185	3.342821e-09	2.024773e-08
## PVR	5817	-0.29597167	3.387922e-09	2.051580e-08
## DPP6	1804	-0.77362332	3.414563e-09	2.067197e-08
## KDF1	126695	-0.44638367	3.423450e-09	2.072061e-08
## LIMA1	51474	0.31659064	3.424852e-09	2.072141e-08
## CDKN1C	1028	-0.58672933	3.425287e-09	2.072141e-08
## FAM120C	54954	-0.20619717	3.432784e-09	2.076160e-08
## EPSTI1	94240	0.48011414	3.438718e-09	2.078313e-08
## AFAP1	60312	0.45369253	3.438910e-09	2.078313e-08
## RPS3AP38	100271594	1.17479204	3.438054e-09	2.078313e-08
## BMP5	653	0.87507183	3.443935e-09	2.080832e-08
## TMED10P2	100129727	-0.95908817	3.488645e-09	2.107322e-08
## SARM1	23098	-0.17688664	3.518903e-09	2.125071e-08
## TPBG	7162	0.67009509	3.521899e-09	2.126352e-08
## NVL	4931	0.16558036	3.538265e-09	2.135703e-08
## KNL1	57082	0.68361560	3.570715e-09	2.154754e-08
## LINC01094	100505702	0.67264487	3.594923e-09	2.168824e-08
## TBC1D24	57465	-0.33081309	3.672426e-09	2.215032e-08
## ZDHHC6	64429	-0.25005225	3.677021e-09	2.217253e-08
## ABI3	51225	-0.65529832	3.708232e-09	2.235519e-08
## ATP1A4	480	1.64526029	3.715770e-09	2.239507e-08
## KCNE4	23704	0.67843808	3.716893e-09	2.239629e-08
## TRIM2	23321	-0.45698601	3.731832e-09	2.248072e-08
## C1orf21	81563	0.51176874	3.736323e-09	2.250220e-08
## WIF1	11197	1.00160653	3.765233e-09	2.267069e-08
## PLEKHA2	59339	-0.25657408	3.772922e-09	2.271136e-08
## TRAV25	28658	2.07027909	3.812800e-09	2.294573e-08
## COQ8B	79934	-0.27142409	3.855166e-09	2.319495e-08
## POLR1D	51082	0.27148217	3.873955e-09	2.330222e-08
## MBOAT1	154141	0.37808147	3.911713e-09	2.352352e-08
## TAF12	6883	0.25772071	3.922721e-09	2.358388e-08
## ARMCX6	54470	0.21761741	3.941868e-09	2.369314e-08
## GPR183	1880	0.83707505	3.986466e-09	2.395527e-08
## CTNND1	1500	-0.19942624	3.990573e-09	2.397402e-08
## TMEM267	64417	-0.28762244	4.007749e-09	2.407126e-08

## MMRN1	22915	1.21577073	4.013266e-09	2.409844e-08
## FHL2	2274	0.59971217	4.028546e-09	2.418421e-08
## LARRPM	100270746	-0.61250379	4.029685e-09	2.418508e-08
## ENTPD6	955	-0.20811484	4.047278e-09	2.428264e-08
## LINC00517	400208	2.48862053	4.047940e-09	2.428264e-08
## RFK	55312	-0.27135964	4.061850e-09	2.436007e-08
## STARD7	56910	-0.16997783	4.070911e-09	2.440839e-08
## TRBV7-3	28595	1.43315721	4.111537e-09	2.464590e-08
## MYO16	23026	0.80441880	4.137632e-09	2.479620e-08
## AICDA	57379	1.58942691	4.147124e-09	2.484084e-08
## LINC02550	105369490	1.20609429	4.146830e-09	2.484084e-08
## STRIP2	57464	-0.98913557	4.165976e-09	2.494760e-08
## ANXA2R-AS1	153684	0.80035773	4.221083e-09	2.527138e-08
## PGPEP1L	145814	1.18106673	4.246365e-09	2.541648e-08
## WDR5	11091	0.14188041	4.261312e-09	2.549967e-08
## UTP11	51118	0.32320237	4.272945e-09	2.556298e-08
## ZBTB47-AS1	101928323	0.97945613	4.281815e-09	2.560975e-08
## FEM1A	55527	0.48564980	4.305402e-09	2.574448e-08
## ERP44	23071	-0.18678676	4.363043e-09	2.608273e-08
## TRAV8-1	28685	2.03164034	4.366317e-09	2.609589e-08
## SSTR1	6751	-0.55984779	4.376895e-09	2.615267e-08
## HDAC4	9759	0.35416419	4.381024e-09	2.617091e-08
## RAP2CP1	106480249	-1.44214775	4.434314e-09	2.648274e-08
## SPINDOC	144097	0.30279062	4.438080e-09	2.649872e-08
## COPDA1	115253418	2.48751088	4.457163e-09	2.660612e-08
## PIGS	94005	-0.24212142	4.520854e-09	2.697968e-08
## PPP2R3C	55012	0.29832448	4.552581e-09	2.716236e-08
## OXCT1	5019	-0.50128569	4.559595e-09	2.719518e-08
## DOCK5	80005	-0.35479928	4.560321e-09	2.719518e-08
## RHOJ	57381	0.61501329	4.587400e-09	2.734324e-08
## MARVELD2	153562	-0.49200906	4.586848e-09	2.734324e-08
## HPDL	84842	-0.84639333	4.666082e-09	2.780541e-08
## ZFP90	146198	0.22359444	4.689012e-09	2.793520e-08
## MGP	4256	0.85878387	4.699352e-09	2.798994e-08
## SGPP2	130367	-0.51192084	4.717857e-09	2.809327e-08
## PROSER2	254427	-0.58560704	4.760294e-09	2.833902e-08
## PPIC	5480	0.50775908	4.777615e-09	2.843518e-08
## GALC	2581	-0.22639270	4.795436e-09	2.853425e-08
## LIFR-AS1	100506495	-0.44345489	4.799008e-09	2.854852e-08
## NDP	4693	1.58861803	4.806631e-09	2.858687e-08
## SAE1	10055	0.28331651	4.851445e-09	2.884162e-08
## LINC01979	101928766	-0.85669629	4.851839e-09	2.884162e-08
## EPPK1	83481	-0.58607844	4.854026e-09	2.884756e-08
## NIFK	84365	0.24487712	4.863291e-09	2.889556e-08
## LRBA	987	-0.31109671	4.886985e-09	2.902924e-08
## EMICERI	128385368	-0.50361054	4.899505e-09	2.909650e-08
## CXCR4	7852	0.65721940	4.908146e-09	2.914069e-08
## HNRNPDL	9987	-0.23553474	4.927514e-09	2.924854e-08
## TCTN2	79867	-0.29622955	4.957969e-09	2.942212e-08
## PLD4	122618	0.96461897	4.990987e-09	2.961083e-08
## DENND3	22898	-0.38632867	5.004480e-09	2.968364e-08
## SS18	6760	-0.17121603	5.009061e-09	2.970356e-08
## DSC2	1824	-0.32516879	5.048201e-09	2.992836e-08
## POLR1G	10849	0.27077067	5.049909e-09	2.993118e-08

## CACNG8	59283	1.53850634	5.136116e-09	3.043471e-08
## CCNP	79935	-1.05935192	5.150089e-09	3.051007e-08
## LINC03088	124903027	-1.49872463	5.178241e-09	3.066937e-08
## KLC3	147700	-0.70209116	5.196250e-09	3.076853e-08
## TRIB1AL	130406855	0.86921805	5.235469e-09	3.099321e-08
## PYGL	5836	0.43357411	5.245980e-09	3.104787e-08
## MEG9	100507257	1.06864401	5.283782e-09	3.126399e-08
## SCAT8	112935969	1.46797934	5.299721e-09	3.135066e-08
## TRPA1	8989	0.97874472	5.315444e-09	3.143602e-08
## CDK5R1	8851	0.42269737	5.321786e-09	3.146587e-08
## SOX9-AS1	400618	0.54483415	5.326864e-09	3.148823e-08
## MAN2B1	4125	0.37817497	5.331495e-09	3.150794e-08
## PDPK1	5170	-0.28814487	5.357012e-09	3.165105e-08
## RPL4P4	647276	0.40749589	5.363927e-09	3.168420e-08
## MTMR7	9108	-0.74019078	5.388709e-09	3.182285e-08
## SLC25A17	10478	-0.21313161	5.432841e-09	3.207567e-08
## EMBP1	647121	0.74017727	5.493037e-09	3.242320e-08
## ZFPM2-AS1	102723356	0.65020965	5.566475e-09	3.284869e-08
## ARHGEF2	9181	0.44183025	5.584522e-09	3.294719e-08
## ILF2	3608	-0.33473287	5.598320e-09	3.302058e-08
## TTC7B	145567	-0.22771187	5.614892e-09	3.311029e-08
## CAPN2	824	-0.19315863	5.642266e-09	3.326364e-08
## FGF1	2246	-0.70031210	5.673149e-09	3.342948e-08
## ADAMTS10	81794	0.73387304	5.672377e-09	3.342948e-08
## PLXND1	23129	0.57116557	5.688036e-09	3.350908e-08
## EMC10	284361	-0.30887643	5.788404e-09	3.408384e-08
## TBC1D8	11138	-0.35509111	5.787833e-09	3.408384e-08
## NUP62CL	54830	-0.40960905	5.805269e-09	3.417486e-08
## TCEANC	170082	0.23872895	5.809509e-09	3.419154e-08
## KIR3DX1	90011	2.11296958	5.825799e-09	3.427911e-08
## BTBD6	90135	0.34971290	5.856900e-09	3.445377e-08
## SFT2D3	84826	-0.18270336	5.876801e-09	3.456247e-08
## NCKAP1	10787	-0.17142667	5.904597e-09	3.471755e-08
## MT1DP	326343	-0.88893297	5.925135e-09	3.482987e-08
## CDC73	79577	-0.19156032	5.931290e-09	3.485762e-08
## PI4KB	5298	0.09924680	5.962062e-09	3.503000e-08
## GALNT3	2591	-0.52311881	5.989633e-09	3.518348e-08
## CCR3	1232	1.62076766	6.004357e-09	3.526145e-08
## MEF2C-AS1	101929423	0.74025395	6.058488e-09	3.557075e-08
## NDUFAF4	29078	-0.31219754	6.074987e-09	3.565900e-08
## GABRB1	2560	-0.86623928	6.089383e-09	3.573487e-08
## IRF1-AS1	<NA>	0.48263343	6.137704e-09	3.600974e-08
## SCLT1	132320	0.28862051	6.185471e-09	3.628123e-08
## TMEM50B	757	-0.22178047	6.249487e-09	3.664787e-08
## CYTIP	9595	0.57993875	6.307017e-09	3.697631e-08
## EIF2D	1939	0.20518466	6.309709e-09	3.698318e-08
## SAMD9	54809	0.44883975	6.317236e-09	3.701837e-08
## LPCAT2	54947	-0.38479068	6.359684e-09	3.725812e-08
## LINC00683	400660	0.43219533	6.388178e-09	3.741603e-08
## DNM1	1759	0.56244342	6.437054e-09	3.769322e-08
## CNIH3	149111	0.47131072	6.468559e-09	3.786857e-08
## RSPO1	284654	1.32783537	6.472974e-09	3.788529e-08
## CHST15	51363	0.55083998	6.526413e-09	3.818887e-08
## FAM131B	9715	0.91026780	6.534710e-09	3.822821e-08

## TRAV24	28659	2.06478742	6.596877e-09	3.858260e-08
## LINC02693	339263	0.29967796	6.615460e-09	3.868198e-08
## HS3ST3B1	9953	-0.38983190	6.637069e-09	3.879899e-08
## RECQL	5965	0.29436863	6.722141e-09	3.928685e-08
## KBTBD4	55709	-0.16873189	6.765359e-09	3.952993e-08
## BRWD1-AS2	103091865	-0.58261185	6.804421e-09	3.974861e-08
## FANCC	2176	0.32350523	6.843770e-09	3.996887e-08
## CXCL14	9547	0.48741939	6.896958e-09	4.026982e-08
## HACD4	401494	0.41153914	6.900942e-09	4.028340e-08
## LURAP1L	286343	0.39515298	6.939911e-09	4.050115e-08
## CELSR2	1952	-0.54139689	6.948148e-09	4.053948e-08
## HLA-F-AS1	285830	0.43599530	7.056626e-09	4.116252e-08
## SMC4	10051	0.32473529	7.150562e-09	4.170046e-08
## SLC30A3	7781	1.28248405	7.317212e-09	4.266209e-08
## LDHA	3939	-0.50016832	7.327653e-09	4.271271e-08
## SLC45A2	51151	-0.85943111	7.356807e-09	4.287237e-08
## MCU	90550	0.25966951	7.408225e-09	4.316166e-08
## STBD1	8987	0.80573050	7.520798e-09	4.380702e-08
## EEF2K	29904	0.40555166	7.524494e-09	4.381805e-08
## C2orf49	79074	0.25578141	7.527618e-09	4.382574e-08
## SYN3-AS1	105373004	-1.14039045	7.540199e-09	4.388848e-08
## DIS3L2	129563	-0.14346122	7.552216e-09	4.394789e-08
## VAMP5	10791	0.51735470	7.563340e-09	4.400209e-08
## KIAA0408	9729	2.02012698	7.565542e-09	4.400436e-08
## NEBL-AS1	100128511	-0.90985903	7.593317e-09	4.415535e-08
## SLC17A8	246213	1.47051246	7.660920e-09	4.453780e-08
## TFDP1	7027	0.18707736	7.682816e-09	4.465442e-08
## COQ8A	56997	0.49599202	7.782592e-09	4.522352e-08
## ZG16B	124220	0.93625700	7.793729e-09	4.527741e-08
## PLAAT4	5920	-0.78022696	7.820836e-09	4.542403e-08
## SPSB4	92369	0.68688011	7.828626e-09	4.545841e-08
## SLCO2B1	11309	0.50111616	7.839387e-09	4.551002e-08
## TCEAL5	340543	0.97045862	7.894974e-09	4.582177e-08
## PFKFB1	5207	0.95135069	7.948012e-09	4.611859e-08
## MRPS6	64968	-0.54610044	7.963483e-09	4.619732e-08
## STUM	375057	-0.64074100	8.038178e-09	4.661951e-08
## FOSL2	2355	-0.44468613	8.070158e-09	4.679382e-08
## INHBC	3626	-0.82730049	8.081988e-09	4.684175e-08
## TRGV2	6974	1.95292698	8.082280e-09	4.684175e-08
## CXCR1	3577	1.04843561	8.130141e-09	4.710791e-08
## EDA	1896	-0.29666350	8.151121e-09	4.721821e-08
## CEP68	23177	0.29227144	8.155406e-09	4.722052e-08
## TICAM1	148022	-0.37860887	8.155301e-09	4.722052e-08
## TGM1	7051	-0.71387711	8.158551e-09	4.722748e-08
## MAP2K3	5606	0.32851890	8.179073e-09	4.733500e-08
## LINC01554	202299	-1.12515145	8.216221e-09	4.753866e-08
## SPRR2F	6705	3.73568224	8.226013e-09	4.758399e-08
## CDK15	65061	0.97856460	8.237634e-09	4.763987e-08
## CARD8	22900	0.33993683	8.324339e-09	4.812985e-08
## ZNF485	220992	0.33596756	8.415634e-09	4.864613e-08
## CENPM	79019	0.71902001	8.449807e-09	4.883205e-08
## TYRP1	7306	-0.76086471	8.542489e-09	4.935593e-08
## ZNF467	168544	-0.53398345	8.572455e-09	4.951729e-08
## ZMIZ1-AS1	283050	0.65326631	8.586758e-09	4.958812e-08

## MKNK1	8569	0.26308262	8.600532e-09	4.965586e-08
## IFT52	51098	0.26897776	8.610181e-09	4.969976e-08
## KIR3DL2	3812	1.80927556	8.653592e-09	4.993848e-08
## SIM1	6492	-0.52202716	8.687458e-09	5.011468e-08
## C1QTNF4	114900	1.24679491	8.688249e-09	5.011468e-08
## TUBA8	51807	1.28035518	8.740729e-09	5.040542e-08
## EXTL2	2135	0.28951625	8.819875e-09	5.084977e-08
## WASL-DT	116435299	-0.32294595	8.907170e-09	5.134087e-08
## DAZAP1	26528	-0.25137222	8.942401e-09	5.153172e-08
## NEURL1B	54492	0.49551163	9.043929e-09	5.210444e-08
## C2CD2	25966	0.35408368	9.051111e-09	5.213346e-08
## LMAN1	3998	-0.25633139	9.134932e-09	5.260379e-08
## NAXD-AS1	127138861	-0.72524211	9.167225e-09	5.277724e-08
## WDR72	256764	-0.63486542	9.223240e-09	5.308051e-08
## GALNT9	50614	-0.67329273	9.224270e-09	5.308051e-08
## SUNO1	119863868	-0.73365977	9.267765e-09	5.331817e-08
## PIGR	5284	-0.70985178	9.308743e-09	5.354125e-08
## HES2	54626	-0.74179486	9.491200e-09	5.457777e-08
## PLEKHS1	79949	-1.41187543	9.529963e-09	5.478771e-08
## SACM1L	22908	-0.19966511	9.715045e-09	5.583853e-08
## CCNC	892	-0.24975937	9.752855e-09	5.604260e-08
## DIRAS1	148252	-0.55560233	9.768754e-09	5.612068e-08
## SLC49A4	84925	-0.22003598	9.781448e-09	5.618033e-08
## DDX60	55601	0.36554762	9.785250e-09	5.618889e-08
## CAV2	858	0.46453813	9.818478e-09	5.636637e-08
## TMEM169	92691	0.29645296	9.868260e-09	5.663878e-08
## SLC18A2	6571	0.97827247	9.887157e-09	5.673384e-08
## SCNM1	79005	0.35331215	9.897399e-09	5.677920e-08
## EIF4E2	9470	0.20903379	9.913818e-09	5.685997e-08
## TPM4	7171	0.51993798	1.014291e-08	5.816016e-08
## SP6	80320	-0.45536244	1.027208e-08	5.888698e-08
## SPRR2G	6706	5.02995937	1.028427e-08	5.894295e-08
## CKMT1A	548596	-0.55707012	1.033800e-08	5.922670e-08
## LNCATV	101927851	0.74292917	1.033866e-08	5.922670e-08
## RBP5	83758	0.69106960	1.039779e-08	5.955144e-08
## GBA1LP	2630	0.38705362	1.044004e-08	5.977932e-08
## SLC4A7	9497	-0.74964767	1.052586e-08	6.025651e-08
## IRX1	79192	-0.85300889	1.067198e-08	6.107860e-08
## APCDD1L-DT	149773	0.56476659	1.069238e-08	6.118098e-08
## TMEM238L	100289255	-2.34625967	1.074118e-08	6.144574e-08
## RARB	5915	-0.38472266	1.075443e-08	6.150703e-08
## GNB5	10681	-0.33944754	1.084513e-08	6.199658e-08
## B3GNT7	93010	0.53423438	1.084408e-08	6.199658e-08
## C16orf74	404550	0.55844400	1.086971e-08	6.212251e-08
## GRK1	6011	-1.30746020	1.092597e-08	6.242932e-08
## ANKRD44	91526	0.44607197	1.093257e-08	6.245236e-08
## ATP6V1G2	534	0.51605354	1.102361e-08	6.295762e-08
## CYB5B	80777	-0.19780332	1.104193e-08	6.304323e-08
## METTL25B	51093	-0.20199145	1.104378e-08	6.304323e-08
## GET1	7485	-0.31818992	1.110220e-08	6.336178e-08
## S100PBP	64766	0.27894784	1.110494e-08	6.336255e-08
## PAX9	5083	2.14847130	1.111133e-08	6.338415e-08
## PIGU	128869	-0.24828211	1.112189e-08	6.342951e-08
## USP46-DT	643783	-0.31042832	1.125861e-08	6.419416e-08

## PHF20	51230	0.18747357	1.128183e-08	6.431145e-08
## RARS2	57038	0.22902204	1.130328e-08	6.440351e-08
## TNFRSF13B	23495	1.80990044	1.130099e-08	6.440351e-08
## ISLR2	57611	1.19043552	1.137654e-08	6.480575e-08
## GAD1	2571	-0.74196977	1.146588e-08	6.529935e-08
## GPR85	54329	0.87871053	1.150734e-08	6.552012e-08
## RPS6KA6	27330	-0.49012015	1.151603e-08	6.553889e-08
## EML4-AS1	102723824	1.80673821	1.151347e-08	6.553889e-08
## HSPB7	27129	1.25035355	1.158596e-08	6.592140e-08
## KNG1	3827	-0.68818669	1.158996e-08	6.592878e-08
## CACNA1D	776	-0.48327958	1.167664e-08	6.640628e-08
## CNEP1R1	255919	0.22413780	1.174041e-08	6.675332e-08
## BCAT2	587	-0.33859892	1.183485e-08	6.727453e-08
## DEPTOR	64798	-0.31720602	1.186112e-08	6.740811e-08
## C1QL1	10882	-0.97760827	1.188365e-08	6.752034e-08
## ZEB2-AS1	100303491	0.69532426	1.197217e-08	6.800742e-08
## EGFL6	25975	1.12210723	1.212743e-08	6.887326e-08
## MPP7	143098	-0.35828917	1.213911e-08	6.892347e-08
## ZDHHC13	54503	-0.25761594	1.214657e-08	6.894974e-08
## AKR1B10	57016	1.46093457	1.220769e-08	6.928052e-08
## SUN2	25777	-0.35754912	1.225637e-08	6.954051e-08
## UTP14A	10813	0.20141860	1.228360e-08	6.967873e-08
## BPNT2	54928	-0.25111707	1.236908e-08	7.014727e-08
## GLYCTK	132158	0.60069687	1.237455e-08	7.016191e-08
## PNPLA8	50640	-0.24187347	1.244019e-08	7.051764e-08
## MBIP	51562	-0.23068455	1.244332e-08	7.051890e-08
## APPL2	55198	0.16360660	1.245789e-08	7.058501e-08
## LYG1	129530	-0.79996641	1.250499e-08	7.081889e-08
## TMEM236	653567	0.65072640	1.250316e-08	7.081889e-08
## CKAP4	10970	0.53036366	1.254954e-08	7.105460e-08
## PPP1R36	145376	-0.73307661	1.259906e-08	7.130674e-08
## LDLRAD4	753	0.51929320	1.259994e-08	7.130674e-08
## ZNF516	9658	0.26194630	1.260991e-08	7.134653e-08
## SLC39A13	91252	-0.39026401	1.266388e-08	7.163524e-08
## DLG3	1741	-0.33221717	1.269293e-08	7.178284e-08
## TTC4P1	222052	2.80397680	1.272057e-08	7.192245e-08
## MON1A	84315	0.35012962	1.274789e-08	7.206013e-08
## CLSTN1	22883	-0.35138575	1.282462e-08	7.247697e-08
## CERK	64781	-0.30328083	1.283955e-08	7.254449e-08
## SLC33A1	9197	-0.32851262	1.299354e-08	7.339751e-08
## RIC8B	55188	-0.16596133	1.300382e-08	7.343851e-08
## OCLN	100506658	-0.52105721	1.301335e-08	7.347525e-08
## TFAP2E-AS1	105378645	1.09021441	1.309000e-08	7.389084e-08
## RGS14	10636	-0.46233882	1.310622e-08	7.396525e-08
## NR3C2	4306	-0.30956571	1.319855e-08	7.446897e-08
## UBQLN1-AS1	105376114	0.36920393	1.325312e-08	7.475954e-08
## CA7	766	2.30344364	1.327684e-08	7.487595e-08
## SLC7A6OS	84138	0.14718082	1.328630e-08	7.491193e-08
## TMEM131L	23240	0.36350295	1.330736e-08	7.501327e-08
## ADGRA3P1	100996333	1.32218576	1.333175e-08	7.513332e-08
## STS	412	0.36818786	1.339436e-08	7.546864e-08
## KHNYN	23351	0.23450122	1.339911e-08	7.547791e-08
## ERVV-2	100271846	-3.13372519	1.344803e-08	7.573596e-08
## TINCR	257000	-0.70710779	1.346524e-08	7.581528e-08

## ACTN1	87	0.63689519	1.357459e-08	7.641330e-08
## SHC4	399694	0.71149264	1.360884e-08	7.658833e-08
## JUN	3725	-0.69031965	1.363829e-08	7.673630e-08
## LCT-AS1	100507600	3.00811385	1.364790e-08	7.677257e-08
## CPAMD8	27151	-0.64588472	1.376571e-08	7.741737e-08
## DDX24	57062	-0.15120840	1.383683e-08	7.779934e-08
## GABRG1	2565	1.07253538	1.388061e-08	7.802744e-08
## CALD1	800	0.32706223	1.389051e-08	7.806503e-08
## RPL21P16	729402	0.63429643	1.393739e-08	7.831038e-08
## LSM11	134353	0.26873151	1.408251e-08	7.910751e-08
## GP2	2813	-1.15288957	1.411406e-08	7.926639e-08
## UXS1	80146	-0.36936851	1.411774e-08	7.926877e-08
## SELENOP	6414	0.43607749	1.417552e-08	7.957479e-08
## TENM3-AS1	90768	0.68859983	1.418745e-08	7.962339e-08
## SGSM1	129049	-0.40436113	1.423725e-08	7.988443e-08
## SLC8B1	80024	-0.36668697	1.428777e-08	8.014940e-08
## SLC22A12	116085	0.82633823	1.429843e-08	8.019065e-08
## DNAL1	83544	-0.24586934	1.432267e-08	8.030808e-08
## RTP3	83597	-1.52840509	1.433282e-08	8.034646e-08
## CABLES2	81928	0.22016761	1.441972e-08	8.081494e-08
## RDH11	51109	-0.31472815	1.452920e-08	8.140975e-08
## HOXB2	3212	-0.39855147	1.459412e-08	8.175467e-08
## DDX10	1662	0.38782289	1.462482e-08	8.190776e-08
## MTCO3P28	107075184	-0.77624551	1.464317e-08	8.199162e-08
## MYO1A	4640	1.11661858	1.464742e-08	8.199654e-08
## PCGF5	84333	-0.23649390	1.470421e-08	8.229549e-08
## GNPDA1	10007	0.43652106	1.474478e-08	8.250353e-08
## KDSR	2531	-0.16684622	1.478733e-08	8.272261e-08
## ENAM	10117	-0.44711434	1.484307e-08	8.301528e-08
## PLEKHG5	57449	0.56397474	1.490746e-08	8.335624e-08
## ACAD10	80724	-0.33824444	1.496629e-08	8.366594e-08
## TMEM106B	54664	-0.29296216	1.501780e-08	8.393459e-08
## GBF1	8729	-0.21944995	1.503364e-08	8.400380e-08
## METAP1D	254042	0.25151191	1.508880e-08	8.429264e-08
## TRIM16L	147166	0.42525030	1.511017e-08	8.439260e-08
## COBLL1	22837	-0.41473708	1.512909e-08	8.447888e-08
## DIAPH3	81624	0.48277933	1.516287e-08	8.464804e-08
## PIGW	284098	-0.21980583	1.527092e-08	8.523167e-08
## CCL3	6348	1.42410038	1.528177e-08	8.527264e-08
## KAT14	57325	0.17228141	1.549377e-08	8.643572e-08
## CLLU1	574028	2.66249332	1.553308e-08	8.663515e-08
## MGAT4A	11320	-0.32933410	1.553936e-08	8.665032e-08
## FAM174B	400451	0.42736868	1.560241e-08	8.698190e-08
## TMEM168	64418	-0.21987942	1.612288e-08	8.986285e-08
## KANK3	256949	-0.49617011	1.614219e-08	8.994989e-08
## DDX3X	1654	-0.25322333	1.617835e-08	9.013071e-08
## EDNRB	1910	-0.46294317	1.621789e-08	9.033025e-08
## ESM1	11082	-0.72589997	1.625634e-08	9.052369e-08
## TRERF1	55809	0.36893803	1.631522e-08	9.081604e-08
## CTDSP2	10106	0.18841368	1.631632e-08	9.081604e-08
## PLA2G4F	255189	-0.44284266	1.648492e-08	9.173344e-08
## CHMP1B	57132	-0.13504025	1.657681e-08	9.222366e-08
## GID4	79018	0.20455645	1.677580e-08	9.330937e-08
## PIP4K2A	5305	0.26245457	1.687961e-08	9.386530e-08

## DIS3L	115752	0.20229570	1.690785e-08	9.400085e-08
## SYAP1	94056	-0.18976000	1.701477e-08	9.457365e-08
## LARGE1	9215	0.32604737	1.708395e-08	9.493643e-08
## CDH13-AS2	102724163	1.04660862	1.718923e-08	9.549966e-08
## CA11	770	-0.32268492	1.745247e-08	9.693998e-08
## CDK13-DT	112267983	-0.36270327	1.749708e-08	9.716557e-08
## TM6SF1	53346	0.71445608	1.750672e-08	9.719687e-08
## KIR2DL4	3805	1.16490553	1.751790e-08	9.723672e-08
## LINC02099	101929450	2.50569841	1.761495e-08	9.775311e-08
## SLITRK1	114798	-1.58836553	1.772544e-08	9.834381e-08
## ADSL	158	0.43142165	1.791798e-08	9.938936e-08
## CDH1	999	-0.49961406	1.795133e-08	9.955162e-08
## CRIP3	401262	-0.70167749	1.797414e-08	9.965540e-08
## INSC	387755	-0.93596693	1.803088e-08	9.994718e-08
## PTEN	5728	0.20234366	1.817605e-08	1.007289e-07
## TNS2	23371	-0.38724096	1.823865e-08	1.010528e-07
## HOXB5	3215	-0.52114786	1.837114e-08	1.017637e-07
## SSH1	54434	0.23913865	1.883432e-08	1.043056e-07
## POR	5447	-0.41103681	1.898936e-08	1.051402e-07
## CLN5	1203	-0.25458802	1.905735e-08	1.054926e-07
## DAZAP2	9802	-0.19603946	1.911405e-08	1.057824e-07
## CCN1	3491	-0.71983606	1.925206e-08	1.065219e-07
## CNNM2	54805	-0.36738718	1.933853e-08	1.069760e-07
## BTG3	10950	-0.30219473	1.937140e-08	1.071335e-07
## MYL12A	10627	0.44436973	1.943008e-08	1.074335e-07
## ITPKB	3707	-0.34198473	1.943642e-08	1.074441e-07
## IPO5	3843	0.14869489	1.947066e-08	1.076090e-07
## KNOP1	400506	0.20375086	1.948329e-08	1.076543e-07
## ANAPC5	51433	0.17140424	1.950614e-08	1.077560e-07
## ASTN2	23245	0.25411753	1.968818e-08	1.087369e-07
## SAFB2	9667	-0.26838429	1.988252e-08	1.097853e-07
## TMC2	117532	2.45241068	2.014766e-08	1.112240e-07
## ZFHX3-AS1	101927978	0.26041814	2.017081e-08	1.113266e-07
## MTCYBP3	100873204	-0.88872451	2.023171e-08	1.116373e-07
## VSIG4	11326	0.82930014	2.024397e-08	1.116796e-07
## GOT2	2806	-0.29452257	2.041045e-08	1.125725e-07
## MOB3B	79817	-0.28349473	2.056469e-08	1.133975e-07
## PLK3	1263	0.59804906	2.063286e-08	1.137475e-07
## LINC01415	100132501	1.21371456	2.073412e-08	1.142798e-07
## PRSS16	10279	-0.69174677	2.078709e-08	1.145458e-07
## SBF1	6305	0.30773071	2.116783e-08	1.166174e-07
## CCDC62	84660	0.99562819	2.119372e-08	1.167336e-07
## NCAM2	4685	0.67510214	2.124778e-08	1.170049e-07
## NFASC	23114	-0.44992176	2.138266e-08	1.177209e-07
## FBP1	2203	0.77137941	2.147267e-08	1.181897e-07
## STAB1	23166	0.70920560	2.159665e-08	1.188452e-07
## KIRREL3	84623	0.88764155	2.169139e-08	1.193395e-07
## CLDN19	149461	-0.85779839	2.170704e-08	1.193985e-07
## SMG9	56006	0.21278708	2.171238e-08	1.194009e-07
## CTSD	1509	-0.60098036	2.177564e-08	1.197217e-07
## CALM3	808	0.24889339	2.182459e-08	1.199637e-07
## LINC01819	102723854	-1.57896193	2.186322e-08	1.201488e-07
## PLP1	5354	1.19619478	2.187511e-08	1.201870e-07
## FRMPD2	143162	0.66173376	2.188284e-08	1.202023e-07

## GLI1	2735	0.64427956	2.189076e-08	1.202186e-07
## BMP1	649	0.70693987	2.189651e-08	1.202230e-07
## AACSP1	729522	-0.62018991	2.194496e-08	1.204618e-07
## SP1	6667	-0.23003909	2.203955e-08	1.209537e-07
## TWF2	11344	0.52980039	2.204933e-08	1.209801e-07
## ZNF280B	140883	0.40532688	2.208725e-08	1.211608e-07
## MICB	4277	0.45345136	2.217804e-08	1.216314e-07
## ZNF30	90075	0.27586257	2.224576e-08	1.219752e-07
## ID4	3400	-0.40649053	2.228974e-08	1.221888e-07
## PHACTR1	221692	-0.59864673	2.229645e-08	1.221980e-07
## ABHD13	84945	-0.17511133	2.230561e-08	1.222207e-07
## LINC00926	283663	0.87769013	2.239144e-08	1.226633e-07
## ESRRA	2101	-0.35214377	2.246065e-08	1.230147e-07
## LINC01203	100133123	2.39769205	2.250981e-08	1.232562e-07
## RNF183	138065	0.81875311	2.256627e-08	1.235375e-07
## ZNF3	7551	0.13939954	2.261506e-08	1.237767e-07
## MUL1	79594	-0.22935376	2.270363e-08	1.242335e-07
## PHLPP1	23239	-0.21222211	2.271894e-08	1.242893e-07
## TNK2	10188	0.44513296	2.274863e-08	1.243957e-07
## CACNA2D3	55799	-0.54620738	2.274691e-08	1.243957e-07
## LAMC1	3915	0.51234995	2.286329e-08	1.249765e-07
## TEX10	54881	0.16567727	2.286512e-08	1.249765e-07
## DUOX1	53905	0.69772126	2.316460e-08	1.265849e-07
## ARHGEF40	55701	0.38857677	2.329520e-08	1.272699e-07
## SYNE2	23224	-0.51871564	2.330086e-08	1.272723e-07
## TMEM129	92305	-0.25451182	2.355335e-08	1.285936e-07
## PKP3	11187	-0.73069356	2.354931e-08	1.285936e-07
## MYH14	79784	-0.43345245	2.382500e-08	1.300475e-07
## STON1	11037	-0.29133419	2.394025e-08	1.306472e-07
## FAM169A-AS1	441086	-0.52135615	2.422820e-08	1.321889e-07
## SEPTIN4-AS1	101927688	-0.50606978	2.424382e-08	1.322444e-07
## KCNK17	89822	1.82640163	2.433388e-08	1.327060e-07
## LRRC75A	388341	0.40751086	2.448527e-08	1.334740e-07
## LINC02012	100129516	-0.66415485	2.448571e-08	1.334740e-07
## NENF	29937	0.44160983	2.473969e-08	1.348283e-07
## RPL37P2	116730	0.66106811	2.494337e-08	1.359078e-07
## CCDC68	80323	-0.51028877	2.505234e-08	1.364710e-07
## TAP1	6890	0.46035296	2.506380e-08	1.365028e-07
## NUDT21	11051	-0.14852816	2.516936e-08	1.370469e-07
## PHETA1	144717	0.29823087	2.519261e-08	1.371429e-07
## LINC02976	123706548	0.47932106	2.531011e-08	1.377245e-07
## PCDHGB4	8641	-0.45581984	2.531079e-08	1.377245e-07
## ATG12	9140	0.23888228	2.544839e-08	1.384422e-07
## TCEANC2	127428	0.24758276	2.550533e-08	1.387209e-07
## SBK1	388228	0.57497490	2.552004e-08	1.387698e-07
## STK24	8428	-0.16221072	2.562335e-08	1.393004e-07
## ULK4	54986	0.60817208	2.565159e-08	1.394228e-07
## SMC02	341346	1.85152054	2.566116e-08	1.394436e-07
## LAPTM4A	9741	-0.24794291	2.585744e-08	1.404788e-07
## SYNJ2BP	55333	-0.27129813	2.590531e-08	1.407074e-07
## TMEM179	388021	1.10993715	2.592868e-08	1.408029e-07
## LINC01124	440925	-0.73343625	2.608389e-08	1.416141e-07
## GRIN3B	116444	-1.00611127	2.621112e-08	1.422730e-07
## DTX1	1840	-0.74788288	2.627360e-08	1.425804e-07

## FIGNL1	63979	0.29302981	2.630287e-08	1.427073e-07
## RIBC2	26150	0.91843629	2.638063e-08	1.430973e-07
## RFX7	64864	0.28886762	2.641130e-08	1.432316e-07
## IKBIP	121457	0.36963595	2.658114e-08	1.441206e-07
## ORC1	4998	0.53483202	2.666639e-08	1.445505e-07
## GGTLC2	91227	-1.15719263	2.671299e-08	1.447708e-07
## TAX1BP1	8887	-0.23484800	2.673137e-08	1.448382e-07
## CIITA	4261	0.52347852	2.690045e-08	1.457217e-07
## SMC6	79677	0.26079557	2.698473e-08	1.461458e-07
## ALS2CL	259173	-0.56985114	2.722615e-08	1.474204e-07
## ANGPTL8	55908	-1.49939095	2.740041e-08	1.483309e-07
## TTC28	23331	0.31956913	2.752921e-08	1.489950e-07
## CYTH3	9265	0.30126607	2.756156e-08	1.491325e-07
## CCL11	6356	1.09360361	2.756689e-08	1.491325e-07
## COASY	80347	-0.26495323	2.763006e-08	1.494409e-07
## ARFIP1	27236	-0.17663679	2.783512e-08	1.505165e-07
## SH3TC1	54436	-0.37479282	2.793025e-08	1.509973e-07
## PPP1CB	5500	-0.27310543	2.809456e-08	1.518519e-07
## IL6-AS1	541472	2.42603472	2.815564e-08	1.521481e-07
## ITGA3	3675	-0.42974528	2.849141e-08	1.539283e-07
## PDZRN4	29951	0.85454681	2.931161e-08	1.583244e-07
## CHI3L2	1117	1.20782490	2.938250e-08	1.586720e-07
## NCAPG2	54892	0.26772434	2.948167e-08	1.591722e-07
## ZNF185	7739	-0.23972805	2.955685e-08	1.595072e-07
## CLEC4C	170482	2.65347540	2.955596e-08	1.595072e-07
## FNTA	2339	0.21312297	2.977718e-08	1.606606e-07
## LEFTY1	10637	1.30377236	2.988250e-08	1.611930e-07
## JRK	8629	0.24547411	2.996075e-08	1.615793e-07
## OSBPL6	114880	0.59353802	3.003215e-08	1.619284e-07
## RPL29	6159	0.46264571	3.016686e-08	1.626187e-07
## GINS2	51659	0.54438679	3.048830e-08	1.643150e-07
## CPNE8	144402	-0.24804428	3.069369e-08	1.653852e-07
## CELSR3	1951	0.60920512	3.076460e-08	1.656938e-07
## DESI2	51029	0.28162269	3.075886e-08	1.656938e-07
## WBP2	23558	-0.32614911	3.085049e-08	1.661196e-07
## SLC27A6	28965	1.61983130	3.089113e-08	1.662553e-07
## EFHD2	79180	0.39771461	3.08492e-08	1.662553e-07
## SRGAP2B	647135	-0.41650620	3.089621e-08	1.662553e-07
## GUCD1	83606	-0.27034309	3.100799e-08	1.668198e-07
## TRAV38-1	28644	2.13600397	3.135474e-08	1.686480e-07
## DUSP4	1846	0.79130202	3.142984e-08	1.690145e-07
## MAFF	23764	-0.61141003	3.163265e-08	1.700675e-07
## CLPX	10845	-0.18097234	3.173931e-08	1.706032e-07
## ACP3	55	-0.66417783	3.176206e-08	1.706877e-07
## DAG1	1605	-0.28520988	3.233031e-08	1.737031e-07
## CLEC4F	165530	1.30639909	3.310384e-08	1.778062e-07
## EXOC3L1	283849	-0.38386419	3.310864e-08	1.778062e-07
## KLRC2	3822	2.19752374	3.318694e-08	1.781873e-07
## RCVRN	5957	1.95355046	3.326101e-08	1.785456e-07
## KCNMB2	10242	-0.65945337	3.330773e-08	1.787569e-07
## KTN1-AS1	100129075	0.24994038	3.350578e-08	1.797801e-07
## HPD	3242	0.94573429	3.363932e-08	1.804567e-07
## OSTN	344901	1.25329332	3.364673e-08	1.804567e-07
## PYROXD1	79912	-0.27361039	3.385784e-08	1.815489e-07

## TRIM55	84675	0.52699109	3.398639e-08	1.821979e-07
## PHLDB1	23187	0.41715332	3.402317e-08	1.823549e-07
## IGKV3-15	28913	1.57187317	3.431834e-08	1.838964e-07
## KCNQ5-DT	112267960	2.89039062	3.456679e-08	1.851868e-07
## LRRTM4	80059	1.12696391	3.466962e-08	1.856968e-07
## LRRC27	80313	0.20654247	3.472194e-08	1.859361e-07
## ERMP1	79956	-0.40314162	3.501390e-08	1.874582e-07
## MIR27B	407019	0.91341936	3.502503e-08	1.874765e-07
## SLC12A2	6558	-0.29856613	3.544237e-08	1.896686e-07
## LINC02986	123689089	-0.51592579	3.558084e-08	1.903677e-07
## GAS6-DT	100506394	-0.39483875	3.570420e-08	1.909856e-07
## LINC03084	101927392	2.40296453	3.577159e-08	1.913040e-07
## GLIPR1L1	256710	1.60252039	3.594478e-08	1.921879e-07
## MST1	4485	-0.64528069	3.604747e-08	1.926946e-07
## NOC2L	26155	-0.20493189	3.616295e-08	1.932694e-07
## PPM1F	9647	0.26828145	3.655947e-08	1.953456e-07
## GRK4	2868	0.24699714	3.694006e-08	1.973358e-07
## AP3D1	8943	-0.22223758	3.702465e-08	1.977442e-07
## GRINA	2907	-0.37148796	3.707916e-08	1.979918e-07
## CSK	1445	0.35004179	3.710530e-08	1.980879e-07
## KCTD17	79734	0.56577094	3.740199e-08	1.996279e-07
## DSG2	1829	-0.39522548	3.754622e-08	2.003097e-07
## ZNF124	7678	0.27828608	3.754428e-08	2.003097e-07
## KLHL29	114818	0.35405240	3.759976e-08	2.005150e-07
## LCTL	197021	2.71225083	3.760120e-08	2.005150e-07
## PSAT1P3	729779	1.25420421	3.784514e-08	2.017715e-07
## ZNF202	7753	0.30031002	3.826781e-08	2.039803e-07
## LRRC8C	84230	0.39572729	3.835578e-08	2.044043e-07
## TNFAIP8L3	388121	0.69775552	3.867719e-08	2.060720e-07
## LPCAT4	254531	0.33482682	3.872743e-08	2.062945e-07
## ZNF674-AS1	401588	-0.32603906	3.911549e-08	2.083159e-07
## CPEB4	80315	-0.39848851	3.917623e-08	2.085937e-07
## KIAA1210	57481	1.32534849	3.937046e-08	2.095819e-07
## C2CD4C	126567	-0.89601089	3.949315e-08	2.101890e-07
## TTL	150465	0.25749581	3.968278e-08	2.111520e-07
## UBA7	7318	0.35444767	3.981661e-08	2.118177e-07
## HLA-DPB2	3116	1.50261697	4.016719e-08	2.136360e-07
## SRSF8	10929	-0.12016749	4.028018e-08	2.141901e-07
## TSC22D2	9819	-0.19997436	4.066774e-08	2.162036e-07
## LINC03062	100129066	1.32942469	4.123997e-08	2.191978e-07
## FBXO39	162517	1.47678245	4.127900e-08	2.193573e-07
## LINC01785	374890	-1.47052943	4.129989e-08	2.194203e-07
## MICAL3	57553	-0.35345616	4.144037e-08	2.201185e-07
## TMEM53	79639	-0.36265755	4.155776e-08	2.206939e-07
## HLX	3142	0.75501669	4.160358e-08	2.208889e-07
## GTF2H2C	728340	-0.29553360	4.161272e-08	2.208892e-07
## TSPYL5	85453	-0.33495694	4.162237e-08	2.208921e-07
## KXD1	79036	0.26270316	4.166085e-08	2.210481e-07
## BAZ1A	11177	0.42140754	4.186796e-08	2.220985e-07
## SERPINA5	5104	-0.53438986	4.207787e-08	2.231633e-07
## HS3ST5	222537	1.40662425	4.222831e-08	2.239123e-07
## LIN7C	55327	-0.27075723	4.255938e-08	2.256186e-07
## TOX	9760	-0.43743206	4.269532e-08	2.262899e-07
## LINC00336	401253	-1.12765544	4.286987e-08	2.271654e-07

## STK19	8859	-0.33439097	4.288033e-08	2.271713e-07
## RRP1B	23076	0.17950116	4.296247e-08	2.275569e-07
## SLC9A8	23315	-0.22128420	4.326559e-08	2.291124e-07
## TRGV4	6977	1.30857217	4.337478e-08	2.296407e-07
## PLS3-AS1	101927352	-0.48750705	4.347695e-08	2.301314e-07
## PTBP1	5725	-0.23867932	4.354927e-08	2.304640e-07
## RASGRP3	25780	0.25588789	4.394922e-08	2.325299e-07
## RRBP1	6238	-0.34532723	4.418913e-08	2.337484e-07
## ADIPOR2	79602	-0.16515227	4.432759e-08	2.344298e-07
## PDZRN3	23024	0.33304719	4.434945e-08	2.344944e-07
## TUBA1A	7846	0.70561588	4.480848e-08	2.368699e-07
## PDK4-AS1	107986824	-0.60541369	4.506933e-08	2.381970e-07
## MROH1	727957	-0.34717515	4.563057e-08	2.411108e-07
## CCDC34	91057	0.29484320	4.565892e-08	2.412081e-07
## CCRL2	9034	0.59985353	4.566892e-08	2.412085e-07
## FAM183DP	<NA>	-1.71384610	4.568717e-08	2.412525e-07
## BGN	633	0.87779594	4.584677e-08	2.420426e-07
## LINC01270	284751	0.57742868	4.693085e-08	2.477121e-07
## MARS2	92935	-0.22605248	4.704174e-08	2.482435e-07
## NPM3	10360	0.41186376	4.740133e-08	2.500868e-07
## PKMYT1	9088	0.95794924	4.773319e-08	2.517830e-07
## HAUS8	93323	0.26561087	4.783003e-08	2.522391e-07
## APOBEC3B	9582	0.77187277	4.816614e-08	2.539565e-07
## BHLHE40-AS1	100507582	0.43565066	4.828665e-08	2.545367e-07
## SAXO4	220004	0.50626283	4.849276e-08	2.555677e-07
## CARS2	79587	0.22740624	4.924398e-08	2.594705e-07
## LIG4	3981	-0.30997776	4.953460e-08	2.609452e-07
## ZFYVE26	23503	0.18985504	4.958657e-08	2.611624e-07
## RBPJ	3516	0.21079224	4.961170e-08	2.612381e-07
## OXSR1	9943	-0.15176963	4.975811e-08	2.619523e-07
## EHD4-AS1	101928363	-1.07338639	5.001217e-08	2.632328e-07
## ATP13A1	57130	-0.35442308	5.011070e-08	2.636943e-07
## MEGF11	84465	-1.39348526	5.028134e-08	2.645349e-07
## PPM1L	151742	-0.38091392	5.076967e-08	2.670463e-07
## SYT12	91683	0.90683794	5.124859e-08	2.695070e-07
## HMGN2P46	283651	0.67415767	5.131523e-08	2.697407e-07
## PCDHGA7	56108	-0.37349388	5.131520e-08	2.697407e-07
## C21orf91	54149	0.26133321	5.172077e-08	2.717818e-07
## PCDHA12	56137	-0.68081023	5.172589e-08	2.717818e-07
## NBPF25P	101929780	0.55314273	5.173923e-08	2.717931e-07
## C6orf118	168090	1.28763764	5.177192e-08	2.719061e-07
## TMEM237	65062	0.28811915	5.195818e-08	2.728254e-07
## EIF2AK3-DT	101928403	-0.35984053	5.245220e-08	2.753599e-07
## FANCA	2175	0.75906060	5.248577e-08	2.754766e-07
## COQ10B	80219	-0.25702628	5.258612e-08	2.759301e-07
## ID1	3397	-0.58629653	5.259489e-08	2.759301e-07
## NPC2	10577	0.32001967	5.280564e-08	2.769760e-07
## COL4A3	1285	-0.51664097	5.315227e-08	2.787340e-07
## BHLHE22-AS1	401463	1.43245395	5.321285e-08	2.789915e-07
## PYY	5697	-0.64865565	5.332043e-08	2.794952e-07
## SANBR	84542	0.42276073	5.343916e-08	2.800572e-07
## AKNAD1	254268	1.80018306	5.385664e-08	2.821842e-07
## ING1	3621	-0.17603095	5.407396e-08	2.832618e-07
## STX11	8676	0.46799831	5.415828e-08	2.836423e-07

## FYTTD1	84248	0.20576531	5.421971e-08	2.839029e-07
## TMEM38A	79041	0.68871506	5.455933e-08	2.856196e-07
## AGO4	192670	0.34392114	5.473140e-08	2.864587e-07
## NEDD4	4734	0.31705530	5.484925e-08	2.870137e-07
## JADE1	79960	-0.26905179	5.497206e-08	2.875944e-07
## LINC00853	100874253	-0.73578373	5.516190e-08	2.885255e-07
## LINC02361	100996246	-0.51870976	5.558841e-08	2.906938e-07
## ZNF391	346157	0.27949096	5.580764e-08	2.917774e-07
## SLC6A20	54716	-0.92689577	5.595245e-08	2.924716e-07
## FCHSD2	9873	0.25806783	5.658652e-08	2.957224e-07
## JAZF1-AS1	100128081	1.33255841	5.713289e-08	2.985135e-07
## ASRGL1	80150	-0.47838223	5.752922e-08	3.005028e-07
## KLK11	11012	2.46285609	5.753835e-08	3.005028e-07
## CDC42EP5	148170	0.76597033	5.757657e-08	3.006378e-07
## PGM3	5238	0.28085476	5.778000e-08	3.016352e-07
## F2R	2149	0.29617365	5.803332e-08	3.028925e-07
## LINC00689	154822	0.73389328	5.806466e-08	3.029910e-07
## SLC27A4	10999	-0.37514652	5.816350e-08	3.034416e-07
## DUSP18	150290	0.28086375	5.843425e-08	3.047888e-07
## UBFD1	56061	0.20320791	5.856331e-08	3.053964e-07
## CORO1A-AS1	107984834	1.73396879	5.871194e-08	3.061057e-07
## FAM222A-AS1	84983	0.68912714	5.890411e-08	3.070418e-07
## CDCA4	55038	0.36231492	5.914879e-08	3.082511e-07
## TMEM263-DT	119863870	-0.35155295	5.919909e-08	3.084471e-07
## SYNDIG1L	646658	0.70697850	5.930532e-08	3.089343e-07
## KIF13B	23303	-0.29310689	5.962508e-08	3.105334e-07
## TBCEL	219899	0.20260748	5.967541e-08	3.107290e-07
## GZF1	64412	-0.16664883	6.003900e-08	3.125552e-07
## RALA	5898	0.19566176	6.059202e-08	3.153666e-07
## IL22RA1	58985	-0.57062489	6.071420e-08	3.159348e-07
## PUS7	54517	0.23186801	6.085040e-08	3.165758e-07
## PAPPA	5069	-0.64753459	6.125082e-08	3.185908e-07
## POU5F2	134187	1.87515755	6.135183e-08	3.190479e-07
## APOC1P1	342	1.86559835	6.140503e-08	3.192562e-07
## FRY-AS1	100507099	-0.91452718	6.175288e-08	3.209961e-07
## PLEKHA4	57664	0.55565452	6.214206e-08	3.229500e-07
## AREL1	9870	-0.16684747	6.264627e-08	3.255008e-07
## USP21	27005	0.18215358	6.268048e-08	3.256089e-07
## ACTG1P25	148709	0.75824694	6.289937e-08	3.266761e-07
## ESAM-AS1	101929340	-0.65410616	6.329765e-08	3.286744e-07
## PDIA3	2923	-0.28218415	6.366007e-08	3.304857e-07
## SOX17	64321	-0.73300061	6.384974e-08	3.313995e-07
## SLC5A6	8884	-0.24671729	6.399747e-08	3.320954e-07
## C12orf76	400073	0.23321141	6.424225e-08	3.332944e-07
## SMAD1	4086	0.20933698	6.437571e-08	3.339155e-07
## SEC14L6	730005	-0.456555881	6.462969e-08	3.351613e-07
## TEX51	101929926	1.01705591	6.470530e-08	3.354819e-07
## SH3GLB1	51100	0.21482431	6.485382e-08	3.361802e-07
## HIP1	3092	-0.41234385	6.548781e-08	3.393942e-07
## SLC17A5	26503	-0.32896164	6.565453e-08	3.401857e-07
## MTCO3P17	107075271	-0.94840928	6.577998e-08	3.407630e-07
## FOLR3	2352	-0.63310607	6.621994e-08	3.429690e-07
## LINC01138	388685	0.35090727	6.676972e-08	3.457428e-07
## GPRC5C	55890	-0.35032155	6.688515e-08	3.462667e-07

## RALYL	138046	-0.56861648	6.742062e-08	3.489646e-07
## BAG4	9530	-0.19014185	6.748256e-08	3.492107e-07
## ASB4	51666	1.17425497	6.786520e-08	3.511161e-07
## SSBP3	23648	-0.20913107	6.804433e-08	3.519679e-07
## STXBP3	6814	-0.21284937	6.820476e-08	3.527227e-07
## TLL2	7093	0.70410986	6.822693e-08	3.527610e-07
## GPR135	64582	-0.29540541	6.824120e-08	3.527610e-07
## TK1	7083	-0.50287799	6.843943e-08	3.536353e-07
## ACSL5	51703	0.38607198	6.843744e-08	3.536353e-07
## KLF11	8462	-0.27526382	6.931819e-08	3.580998e-07
## MAEA	10296	-0.18621059	6.948602e-08	3.588905e-07
## HLCS-AS1	122455337	-0.47311049	6.952870e-08	3.590346e-07
## TEX26	122046	2.43437126	6.983229e-08	3.605257e-07
## SMURF2	64750	0.22090099	6.993811e-08	3.609953e-07
## MS4A4E	643680	0.92248992	6.996952e-08	3.610807e-07
## AP5B1	91056	-0.23853578	7.039389e-08	3.631936e-07
## SNORA73B	26768	1.37005896	7.044086e-08	3.633588e-07
## DNM1L	10059	-0.18339297	7.054324e-08	3.638097e-07
## ABCA4	24	-0.85156247	7.068220e-08	3.644490e-07
## PRSS23-AS1	107984429	0.36048989	7.113974e-08	3.667303e-07
## ADISSL	54976	0.51036980	7.124820e-08	3.672115e-07
## GAS2L3	283431	0.51032996	7.194012e-08	3.706991e-07
## IL18R1	8809	-0.40712674	7.209466e-08	3.714166e-07
## PNCK	139728	-0.74530527	7.303342e-08	3.761732e-07
## USP38	84640	-0.25162585	7.385758e-08	3.802570e-07
## SLC29A3	55315	0.38451643	7.384998e-08	3.802570e-07
## EIF3L	51386	0.27159536	7.395976e-08	3.807024e-07
## GJD4	219770	2.74977828	7.410030e-08	3.813450e-07
## RPL4	6124	0.29119363	7.420584e-08	3.818073e-07
## RASSF4	83937	-0.52012263	7.428190e-08	3.820274e-07
## RAB8B	51762	0.25374641	7.429577e-08	3.820274e-07
## KIR2DL3	3804	1.98860935	7.429323e-08	3.820274e-07
## SENCR	100507392	0.75488405	7.522112e-08	3.867037e-07
## AKAP6	9472	0.50431697	7.541724e-08	3.876300e-07
## ALDOC	230	-0.50326611	7.620799e-08	3.915286e-07
## CKMT2	1160	0.67486519	7.619958e-08	3.915286e-07
## GLG1	2734	-0.27273602	7.625857e-08	3.917057e-07
## RIC1	57589	0.26591793	7.657535e-08	3.932497e-07
## CIZ1	25792	0.20936866	7.721748e-08	3.964635e-07
## OSBPL10	114884	-0.28230472	7.740691e-08	3.973522e-07
## CDK1	983	0.44906052	7.820071e-08	4.013422e-07
## CD1A	909	1.81096931	7.845172e-08	4.025455e-07
## MAS1L	116511	2.31869067	7.895493e-08	4.050420e-07
## DENND1C	79958	0.49363669	7.963016e-08	4.084197e-07
## FOXC2	2303	-0.49048549	8.032542e-08	4.118987e-07
## AGPS	8540	0.22448971	8.058269e-08	4.131308e-07
## NCOA7	135112	-0.32572778	8.091820e-08	4.147634e-07
## ZNF165	7718	-0.34270203	8.098756e-08	4.150314e-07
## FAM83E	54854	1.08794648	8.162113e-08	4.181900e-07
## SLC39A8	64116	-0.52035123	8.168703e-08	4.184394e-07
## ADCY8	114	-1.09092990	8.203288e-08	4.201225e-07
## HSPA8P4	100420028	1.64195097	8.243367e-08	4.220861e-07
## ARGEF2	10564	-0.27575197	8.308278e-08	4.252824e-07
## IL21	59067	2.84624688	8.309291e-08	4.252824e-07

## MTND6P3	106478942	-0.89542203	8.349041e-08	4.272269e-07
## DLG5	9231	0.29662436	8.395489e-08	4.295132e-07
## HBEGF	1839	-0.46079821	8.402130e-08	4.297625e-07
## SMAP2	64744	0.32496001	8.454629e-08	4.323568e-07
## TLK1	9874	-0.19173150	8.459576e-08	4.325187e-07
## UCHL5	51377	-0.18196122	8.463145e-08	4.326102e-07
## TM9SF4	9777	-0.25193147	8.558619e-08	4.373985e-07
## VPS39	23339	0.12884093	8.611042e-08	4.399852e-07
## AMZ2	51321	0.24925028	8.620948e-08	4.403987e-07
## SWI5	375757	0.30994928	8.623669e-08	4.404451e-07
## TLNRD1	59274	-0.43091890	8.645033e-08	4.414435e-07
## CNTNAP1	8506	0.71479914	8.793315e-08	4.489209e-07
## GABRE	2564	0.79004115	8.820296e-08	4.502038e-07
## MRRF	92399	-0.20476554	8.823702e-08	4.502830e-07
## CA1	759	1.98152769	8.853694e-08	4.517187e-07
## ZMYND15	84225	0.44938647	8.873283e-08	4.526231e-07
## ESPNL	339768	0.76312509	8.938054e-08	4.558314e-07
## RIGI	23586	0.33479452	9.013478e-08	4.595815e-07
## SP100	6672	0.24735536	9.045008e-08	4.610924e-07
## TMEM243	79161	0.26304615	9.056718e-08	4.615925e-07
## MUC12-AS1	102724094	1.21488507	9.059998e-08	4.616628e-07
## LINC01571	101927364	-1.25125538	9.062931e-08	4.617155e-07
## FUBP1	8880	-0.20541860	9.233116e-08	4.702736e-07
## KCNG3	170850	-0.77062004	9.234788e-08	4.702736e-07
## LMAN2L	81562	-0.21826312	9.332191e-08	4.751342e-07
## MFGE8	4240	0.67208922	9.336687e-08	4.752636e-07
## CYP21A2	1589	-0.95899457	9.342375e-08	4.754535e-07
## CNOT9	9125	0.17451731	9.349405e-08	4.757117e-07
## CCN4	8840	0.68021802	9.353493e-08	4.758201e-07
## ARMH4	145407	-0.42415929	9.365493e-08	4.763308e-07
## SMARCA4	6597	-0.20520910	9.391120e-08	4.775342e-07
## DPF1	8193	1.60069377	9.403762e-08	4.780770e-07
## TMEM101	84336	-0.25180395	9.453445e-08	4.805023e-07
## SNX21	90203	0.33314670	9.488800e-08	4.821440e-07
## PPP1R3G	648791	0.54996935	9.489711e-08	4.821440e-07
## USP7	7874	-0.11622231	9.521320e-08	4.836488e-07
## PAK3	5063	0.54272925	9.529637e-08	4.839701e-07
## CAMSAP1	157922	0.22421969	9.565676e-08	4.856642e-07
## TRA2B	6434	0.12499951	9.566992e-08	4.856642e-07
## SHF	90525	0.42795749	9.605665e-08	4.875102e-07
## ECE1-AS1	100506801	1.21817672	9.607367e-08	4.875102e-07
## MIR130AHG	123466203	0.67437791	9.619391e-08	4.880184e-07
## CA10	56934	-0.47331016	9.644407e-08	4.891854e-07
## ZNF326	284695	-0.23887074	9.668043e-08	4.902820e-07
## GRAMD1B	57476	-0.67818884	9.834903e-08	4.986396e-07
## DCAF10	79269	-0.16851304	9.869401e-08	5.002843e-07
## CDC16	8881	0.12429670	9.909845e-08	5.022297e-07
## HSPB9	94086	-0.84912737	9.939660e-08	5.036357e-07
## RPL13A	23521	0.39064325	9.964608e-08	5.047946e-07
## AIDA	64853	0.27454375	9.982183e-08	5.055795e-07
## LIFR	3977	-0.33725143	1.001262e-07	5.069230e-07
## NOS1AP	9722	-0.38763301	1.001288e-07	5.069230e-07
## RAB4A	5867	0.19187234	1.004022e-07	5.082014e-07
## DPH5	51611	0.23546006	1.007914e-07	5.100649e-07

## TUBB3	10381	1.57715405	1.025477e-07	5.188449e-07
## GPD1L	23171	-0.24920979	1.026516e-07	5.192625e-07
## LAYN	143903	0.51941823	1.033150e-07	5.225095e-07
## SPAG5-AS1	100506436	-0.70750124	1.036309e-07	5.239981e-07
## PRCD	768206	0.73861294	1.042278e-07	5.269066e-07
## RPP40	10799	0.31141289	1.045684e-07	5.285183e-07
## EPS8L2	64787	-0.36323358	1.047764e-07	5.294595e-07
## MIR4280HG	117751736	2.00374883	1.052333e-07	5.316579e-07
## ZNF227	7770	0.22332570	1.053015e-07	5.318920e-07
## VMA21	203547	-0.18807752	1.057042e-07	5.338151e-07
## MICU1	10367	0.32669093	1.063809e-07	5.371209e-07
## LINC00941	100287314	0.98396709	1.066874e-07	5.385564e-07
## REV3L	5980	0.39972864	1.067679e-07	5.388510e-07
## LGR6	59352	-0.66272959	1.075735e-07	5.428041e-07
## DNAJC19	131118	-0.35756577	1.077801e-07	5.436824e-07
## MIR670HG	100507261	-1.81158556	1.077924e-07	5.436824e-07
## SIGLEC14	100049587	0.82247408	1.078267e-07	5.437426e-07
## NFKB1	4790	0.20096345	1.080070e-07	5.445392e-07
## ZMAT3	64393	0.31179978	1.083124e-07	5.459653e-07
## RRP15	51018	-0.21767822	1.086157e-07	5.473809e-07
## MTCYBP19	107075127	-0.86976915	1.102831e-07	5.556686e-07
## EVA1A	84141	-0.44076273	1.106183e-07	5.572419e-07
## SREBF2-AS1	112637020	-0.76579622	1.107341e-07	5.577096e-07
## KDM7A-DT	100134229	-0.37220771	1.111886e-07	5.598829e-07
## POLH	5429	0.27940365	1.112621e-07	5.601370e-07
## GLB1	2720	-0.22432551	1.116226e-07	5.618355e-07
## UTS2R	2837	2.06978647	1.120873e-07	5.640575e-07
## EPHA1	2041	-0.42669017	1.123278e-07	5.651506e-07
## C22orf39	128977	0.22065670	1.131944e-07	5.693930e-07
## HDAC11	79885	-0.25736649	1.132404e-07	5.694363e-07
## SP2	6668	-0.24043975	1.132499e-07	5.694363e-07
## RUBCN	9711	0.18565252	1.135730e-07	5.709427e-07
## TAF11	6882	0.23441429	1.137281e-07	5.716045e-07
## ZBTB34	403341	0.24721543	1.146090e-07	5.759125e-07
## STING1	340061	0.43787150	1.148032e-07	5.767451e-07
## ADH4	127	0.84523352	1.148221e-07	5.767451e-07
## FAM222B	55731	-0.20322149	1.153912e-07	5.794838e-07
## MTCYBP13	107075129	-0.70848945	1.156324e-07	5.805749e-07
## OIP5-AS1	729082	0.29204547	1.160110e-07	5.823557e-07
## MYH4	4622	2.76393162	1.167641e-07	5.860147e-07
## CYP21A1P	1590	-0.96075891	1.169429e-07	5.867912e-07
## ANGPTL4	51129	-1.18223242	1.180481e-07	5.922145e-07
## DNAJB4	11080	0.28467193	1.184412e-07	5.940638e-07
## NOTCH1	4851	-0.43106890	1.197826e-07	6.004203e-07
## FBXO8	26269	-0.17936403	1.197571e-07	6.004203e-07
## ADH1A	124	1.19136067	1.197665e-07	6.004203e-07
## VPS37A	137492	-0.13500125	1.201376e-07	6.020754e-07
## MCPH1-AS1	100507530	-0.31447843	1.204146e-07	6.033390e-07
## TYRO3	7301	-0.53625079	1.204571e-07	6.034277e-07
## TBX5	6910	2.71806046	1.216891e-07	6.094736e-07
## PARP11	57097	0.19039754	1.217987e-07	6.098971e-07
## TRABD2A	129293	-0.73781687	1.230338e-07	6.159547e-07
## NEFL	4747	-1.05760432	1.230964e-07	6.161414e-07
## KIAA0319L	79932	-0.20093904	1.236987e-07	6.190287e-07

## LYRM4	57128	0.31262124	1.240499e-07	6.206580e-07
## C3orf38	285237	0.16062505	1.244178e-07	6.223707e-07
## POU5F1	5460	-0.71954091	1.244959e-07	6.226334e-07
## NMU	10874	1.46838087	1.248420e-07	6.242358e-07
## CYP4A11	1579	-0.84604500	1.248761e-07	6.242776e-07
## EPDR1	54749	0.27910821	1.250549e-07	6.250432e-07
## TNFSF13	8741	-0.31254033	1.257968e-07	6.286219e-07
## FIGN	55137	0.31785636	1.270874e-07	6.349403e-07
## ATP6V0CP3	442211	-1.29759952	1.273588e-07	6.361656e-07
## CCDC91	55297	-0.18714917	1.275588e-07	6.370336e-07
## PRKG1	5592	0.35459370	1.276679e-07	6.374474e-07
## CKMT1B	1159	-0.49650199	1.277614e-07	6.377832e-07
## VMP1	81671	-0.21771119	1.282638e-07	6.401599e-07
## THAP3	90326	0.25321480	1.293246e-07	6.453216e-07
## TPSG1	25823	-1.31341773	1.294194e-07	6.456624e-07
## CPT1A	1374	-0.30145401	1.299180e-07	6.480167e-07
## CMTM4	146223	-0.34075047	1.302153e-07	6.493663e-07
## CEP19	84984	0.26352250	1.311292e-07	6.537894e-07
## TTC32	130502	-0.37869843	1.328483e-07	6.622248e-07
## ZNF850	342892	0.40333185	1.337309e-07	6.664878e-07
## MYO3B	140469	-0.61640053	1.338118e-07	6.667457e-07
## EFNB1	1947	-0.30859150	1.338375e-07	6.667457e-07
## ADAMTS1	9510	-0.73097089	1.339168e-07	6.670038e-07
## HACD2	201562	-0.28301061	1.349036e-07	6.717811e-07
## TM9SF3	56889	-0.18612090	1.358446e-07	6.763285e-07
## CHRM3-AS2	100506915	-0.97867422	1.364311e-07	6.791094e-07
## ICA1	3382	-0.23927509	1.365650e-07	6.795568e-07
## MYH15	22989	1.02175289	1.365769e-07	6.795568e-07
## GNGT2	2793	-0.54568059	1.373126e-07	6.830776e-07
## FAM13B	51306	0.25585928	1.375974e-07	6.843543e-07
## TMEM92	162461	1.45178051	1.378151e-07	6.852969e-07
## SV2B	9899	0.75697263	1.391786e-07	6.919351e-07
## ATG7	10533	0.18577416	1.392319e-07	6.920586e-07
## RFWD3	55159	-0.22467074	1.398038e-07	6.947590e-07
## ABCA3	21	-0.36458988	1.416984e-07	7.040304e-07
## TRAV35	28647	2.05366035	1.417801e-07	7.042925e-07
## TMIE	259236	-0.36909614	1.423446e-07	7.069520e-07
## FGD3	89846	0.37101471	1.428618e-07	7.093756e-07
## METRN	79006	0.56273331	1.467177e-07	7.283731e-07
## OTUB2	78990	0.29793358	1.471113e-07	7.301780e-07
## TRIM45	80263	0.50662989	1.477955e-07	7.334243e-07
## LINC01665	101929350	-1.39657074	1.479311e-07	7.339472e-07
## BTBD3	22903	-0.21146534	1.488232e-07	7.382224e-07
## FBN1-DT	105370809	1.24843986	1.495439e-07	7.416461e-07
## JOSD1	9929	0.19684948	1.497037e-07	7.422871e-07
## BSPRY	54836	-0.39166898	1.500502e-07	7.438537e-07
## MPZL1	9019	0.33183006	1.512873e-07	7.498332e-07
## RXFP4	339403	-1.31396311	1.513200e-07	7.498426e-07
## UCP2	7351	0.66042735	1.517092e-07	7.516178e-07
## CHAC2	494143	-0.34483969	1.542250e-07	7.639260e-07
## GPRIN1	114787	0.80480044	1.547493e-07	7.663670e-07
## ZNF35	7584	0.20229840	1.554549e-07	7.697043e-07
## KCNH8	131096	0.98550139	1.562472e-07	7.734700e-07
## MBD2	8932	-0.14387646	1.563873e-07	7.740058e-07

## SCAMP1	9522	-0.23853021	1.576426e-07	7.800595e-07
## MEGF9	1955	-0.25343255	1.578903e-07	7.811263e-07
## ARHGEF3	50650	-0.24605125	1.583722e-07	7.833510e-07
## SUCO	51430	-0.26292687	1.584667e-07	7.836590e-07
## ASPHD1	253982	0.73351095	1.586021e-07	7.841687e-07
## PRELID3A	10650	0.59729342	1.591790e-07	7.868613e-07
## RPGRIP1	57096	0.87016705	1.592630e-07	7.871163e-07
## IFIT2	3433	0.34495193	1.597798e-07	7.893495e-07
## GRM7	2917	1.18393787	1.597687e-07	7.893495e-07
## UBA1	7317	-0.21793252	1.604816e-07	7.926551e-07
## LSM10	84967	0.35292021	1.607255e-07	7.936983e-07
## PLIN3	10226	0.44670269	1.616067e-07	7.978880e-07
## SPDL1	54908	0.25107980	1.617275e-07	7.983219e-07
## NYAP2	57624	1.82058930	1.627130e-07	8.030235e-07
## PLCD3	113026	0.56752484	1.633148e-07	8.058298e-07
## DIO3	1735	1.10741025	1.637914e-07	8.080175e-07
## LEF1	51176	0.49246350	1.642840e-07	8.102831e-07
## CRYM	1428	0.67107475	1.654685e-07	8.159597e-07
## CASP16P	197350	2.52869476	1.655439e-07	8.161659e-07
## NOC3L	64318	0.19245396	1.657903e-07	8.172151e-07
## CATSPERG	57828	-0.36839505	1.671144e-07	8.235746e-07
## LINC01589	100506737	-1.88767696	1.691665e-07	8.335190e-07
## CALR	811	-0.30026908	1.692986e-07	8.340007e-07
## KRT222	125113	0.77479446	1.698987e-07	8.367875e-07
## ENTREP1	9413	0.50971241	1.704161e-07	8.391654e-07
## GPM6A	2823	-0.69773167	1.713335e-07	8.435122e-07
## KMO	8564	0.73950380	1.717251e-07	8.452689e-07
## CARMIL1	55604	-0.23507074	1.722040e-07	8.474544e-07
## BCL7A	605	-0.21965515	1.726781e-07	8.496153e-07
## POP1	10940	-0.23983342	1.736042e-07	8.539990e-07
## SPMIP4	136895	-0.25975472	1.738710e-07	8.551385e-07
## ASB1	51665	0.16663259	1.739161e-07	8.551871e-07
## ZNF367	195828	-0.32026664	1.760928e-07	8.657155e-07
## URB1	9875	0.21347400	1.765046e-07	8.675642e-07
## LINC01150	101927624	0.89088120	1.787974e-07	8.786565e-07
## ESRP1	54845	-0.45040960	1.790608e-07	8.797727e-07
## DLX5	1749	1.29541687	1.793469e-07	8.810006e-07
## APEX1	328	0.18208838	1.794355e-07	8.810793e-07
## TMEM138	51524	0.21373254	1.794070e-07	8.810793e-07
## MTND1P2	100873170	-0.76178507	1.800259e-07	8.838000e-07
## RTKN2	219790	0.49524287	1.802382e-07	8.846636e-07
## EP300-AS1	101927279	-1.05567295	1.813058e-07	8.897240e-07
## GUCY1A2	2977	0.55621726	1.819618e-07	8.927627e-07
## FANCD2	2177	0.33686281	1.825803e-07	8.956162e-07
## PTPRE	5791	0.47151195	1.840865e-07	9.028226e-07
## RNF216P1	441191	0.17883025	1.841940e-07	9.031675e-07
## DLEU2	8847	0.40872753	1.844595e-07	9.042867e-07
## IQCK	124152	-0.22287539	1.845751e-07	9.046710e-07
## RALGAPA1	253959	-0.25158756	1.849136e-07	9.061477e-07
## SIM2	6493	-0.90472196	1.869045e-07	9.157192e-07
## ACTRT3	84517	-0.25418096	1.870690e-07	9.163402e-07
## SEMA3F	6405	-0.32297307	1.875498e-07	9.185100e-07
## SNRK	54861	-0.26833373	1.877036e-07	9.190781e-07
## COL4A5	1287	-0.40701497	1.878895e-07	9.198030e-07

## MTATP8P1	106480795	-0.43303542	1.892406e-07	9.262308e-07
## EXPH5	23086	-0.39225993	1.899160e-07	9.293494e-07
## FZD10	11211	1.30473943	1.907539e-07	9.332615e-07
## EIF3E	3646	0.25500792	1.921147e-07	9.397300e-07
## TMEM151A	256472	1.28424583	1.923626e-07	9.407535e-07
## AGRN	375790	-0.58013655	1.927322e-07	9.423714e-07
## VKORC1L1	154807	0.18293226	1.947952e-07	9.522667e-07
## ZMPSTE24-DT	120017338	-0.31905642	1.965595e-07	9.606984e-07
## LINC01389	102724077	-1.41611654	1.967110e-07	9.612453e-07
## BSG	682	-0.34850464	1.969295e-07	9.621197e-07
## SCARB1	949	0.41037488	1.986792e-07	9.704731e-07
## SLC52A3	113278	-0.42906143	2.006312e-07	9.798108e-07
## ZDHHC24	254359	-0.32215789	2.013868e-07	9.833032e-07
## SP2-AS1	100506325	0.32619061	2.019822e-07	9.860121e-07
## RNF11	26994	-0.17160948	2.032704e-07	9.921016e-07
## INHBB	3625	0.92943113	2.036168e-07	9.935926e-07
## TMEM240	339453	0.68185500	2.044668e-07	9.975404e-07
## LARP4	113251	-0.32815631	2.049922e-07	9.999026e-07
## B2M	567	0.37234579	2.059308e-07	1.003877e-06
## LINC02910	284756	0.99331229	2.059097e-07	1.003877e-06
## SLC1A3-AS1	107986412	1.09332751	2.059081e-07	1.003877e-06
## ANKH	56172	0.34916479	2.065338e-07	1.006614e-06
## ZNF398	57541	0.14913152	2.075239e-07	1.011237e-06
## OSER1	51526	0.20194882	2.086562e-07	1.016550e-06
## UGT2A3	79799	-0.59570781	2.091236e-07	1.018624e-06
## FAM86DP	692099	0.28086927	2.100724e-07	1.023040e-06
## DMAC2L	27109	-0.27563683	2.113493e-07	1.029052e-06
## HOXC5	3222	0.78496071	2.119505e-07	1.031773e-06
## NIPAL3	57185	-0.29789785	2.121810e-07	1.032688e-06
## CDX1	1044	1.03755781	2.137630e-07	1.040179e-06
## GPR15	2838	1.96158877	2.142317e-07	1.042251e-06
## NKRF	55922	-0.13362546	2.143932e-07	1.042828e-06
## RRAGC-DT	105378663	0.45927379	2.148903e-07	1.044828e-06
## RPS29P11	100129902	-1.92377831	2.148695e-07	1.044828e-06
## RIOK1	83732	0.20838581	2.154720e-07	1.047447e-06
## KIFBP	26128	-0.14313816	2.157308e-07	1.048495e-06
## SRGAP2C	653464	-0.32383243	2.163787e-07	1.051434e-06
## MSL1	339287	0.26414353	2.178809e-07	1.058522e-06
## TRBV5-5	28610	2.16477054	2.186398e-07	1.061996e-06
## C4orf19	55286	-0.34978086	2.196389e-07	1.066636e-06
## CSGALNACT1	55790	0.35978492	2.199148e-07	1.067762e-06
## TRBV25-1	28562	2.18829705	2.206624e-07	1.071178e-06
## B3GALT2	8707	-0.54384887	2.214717e-07	1.074892e-06
## ABHD12	26090	-0.26735935	2.224903e-07	1.079598e-06
## NSD2	7468	0.23968864	2.225301e-07	1.079598e-06
## MVB12B	89853	0.31690893	2.228997e-07	1.081175e-06
## MKNK2	2872	0.32395618	2.241454e-07	1.087000e-06
## LRRC37A3	374819	0.48347251	2.243759e-07	1.087901e-06
## FAM124A	220108	-0.34637729	2.252264e-07	1.091807e-06
## GON7	84520	-0.27015413	2.276455e-07	1.103313e-06
## MISP	126353	-0.54762905	2.278934e-07	1.104295e-06
## ADTRP	84830	-0.56655878	2.294130e-07	1.111271e-06
## TTC23-AS1	128193289	1.13684860	2.294246e-07	1.111271e-06
## ACTR6	64431	-0.21883535	2.299838e-07	1.113758e-06

## MANSC1	54682	-0.28617666	2.313971e-07	1.120379e-06
## LITAF	9516	-0.26419613	2.316981e-07	1.121613e-06
## TMSB4XP4	7118	0.57253067	2.351146e-07	1.137925e-06
## KRT18	3875	-0.46422827	2.361729e-07	1.142819e-06
## PLCG1	5335	0.21758008	2.366120e-07	1.144716e-06
## NARS1	4677	-0.18485581	2.374196e-07	1.148394e-06
## DNM1P35	100128285	-0.62991958	2.389967e-07	1.155793e-06
## TAFA3	284467	1.63940583	2.391742e-07	1.156421e-06
## GLIS3	169792	-0.30577377	2.413315e-07	1.166390e-06
## ELAVL4	1996	1.23458956	2.413320e-07	1.166390e-06
## EMCN	51705	-0.30904404	2.427902e-07	1.173132e-06
## RASA4B	100271927	0.62405599	2.428236e-07	1.173132e-06
## PLA2G4C	8605	0.48668391	2.442841e-07	1.179954e-06
## GCNT3	9245	-0.69523240	2.445278e-07	1.180896e-06
## FOXP4-AS1	101060264	0.75764883	2.447404e-07	1.181688e-06
## GOLGA3	2802	0.27755241	2.448999e-07	1.182223e-06
## CCDC126	90693	-0.20863853	2.457978e-07	1.186322e-06
## CSMD1	64478	-0.79658107	2.487397e-07	1.200283e-06
## VAPB	9217	-0.15400341	2.508642e-07	1.210294e-06
## DCP1B	196513	0.13109004	2.523588e-07	1.217263e-06
## CPS1	1373	0.41854346	2.529217e-07	1.219494e-06
## NPM1P25	399804	-0.42588987	2.529059e-07	1.219494e-06
## ARPC5	10092	0.23878502	2.553740e-07	1.231074e-06
## TRPM4	54795	-0.34745600	2.556489e-07	1.232155e-06
## BACE2	25825	-0.45276009	2.562486e-07	1.234800e-06
## PCDHGC5	56097	1.07510416	2.565905e-07	1.236203e-06
## EVA1C	59271	-0.43103903	2.568376e-07	1.237148e-06
## RFX5-AS1	101927886	0.66845154	2.569132e-07	1.237267e-06
## PERP	64065	-0.38199797	2.582597e-07	1.243505e-06
## DTX2	113878	0.36095794	2.595165e-07	1.249309e-06
## CHAF1B	8208	0.46417000	2.603800e-07	1.253217e-06
## ASB9	140462	0.53779166	2.604691e-07	1.253398e-06
## SPATA13	221178	-0.30572937	2.611080e-07	1.256224e-06
## TRBJ1-4	28632	2.33916186	2.618696e-07	1.259638e-06
## GGCX	2677	-0.21451077	2.620885e-07	1.260442e-06
## HERC5	51191	0.29874908	2.624318e-07	1.261843e-06
## POLA2	23649	-0.32277256	2.639897e-07	1.269083e-06
## ATOSB	80256	0.17827343	2.644042e-07	1.270824e-06
## TMEM72	643236	-0.53118496	2.687800e-07	1.291600e-06
## KIT	3815	-0.48025281	2.689557e-07	1.292189e-06
## RAB5B	5869	-0.11506655	2.693765e-07	1.293955e-06
## DCUN1D1	54165	-0.18312815	2.727684e-07	1.309989e-06
## AARS2	57505	-0.16887417	2.729256e-07	1.310485e-06
## RABGGTA	5875	-0.23350845	2.737255e-07	1.313831e-06
## DOK5	55816	0.58410519	2.737305e-07	1.313831e-06
## TMEM79	84283	0.28564233	2.738531e-07	1.314160e-06
## SYPL2	284612	0.50475967	2.743020e-07	1.316054e-06
## IGF2-AS	51214	1.42509812	2.745763e-07	1.317110e-06
## CHODL	140578	0.69393092	2.751446e-07	1.319576e-06
## JPT2	90861	-0.26133520	2.753262e-07	1.320186e-06
## GPX4	2879	0.41113823	2.767110e-07	1.326564e-06
## IRX5	10265	-0.78352855	2.771024e-07	1.328178e-06
## CASS4	57091	0.52258831	2.782379e-07	1.333358e-06
## TMEM59	9528	-0.18874036	2.784078e-07	1.333909e-06

## C17orf67	339210	0.50098177	2.811767e-07	1.346910e-06
## COG5	10466	0.14474074	2.814428e-07	1.347919e-06
## TRIP6	7205	0.30577174	2.815168e-07	1.348008e-06
## DPPA4	55211	1.83020225	2.827539e-07	1.353665e-06
## UTP15	84135	-0.16857978	2.828746e-07	1.353976e-06
## ADM5	199800	0.88972466	2.830225e-07	1.354417e-06
## CEP85L	387119	0.41303336	2.848394e-07	1.362843e-06
## PRICKLE2	166336	0.23964243	2.851747e-07	1.364179e-06
## BET1L	51272	0.16459456	2.855549e-07	1.365729e-06
## LINC01985	101928015	1.57461879	2.876419e-07	1.375440e-06
## KPNA6	23633	-0.15927012	2.883766e-07	1.378682e-06
## MAP3K13	9175	-0.24597105	2.900328e-07	1.386327e-06
## BICD2	23299	0.17837814	2.906330e-07	1.388923e-06
## ADAMTS7P3	400406	1.95381080	2.911442e-07	1.391092e-06
## RFLNB	359845	0.44672131	2.919714e-07	1.394771e-06
## NUCB1	4924	-0.32874824	2.929347e-07	1.398547e-06
## ZNF285	26974	0.26609927	2.929338e-07	1.398547e-06
## FGD5P1	100132526	0.86852683	2.928815e-07	1.398547e-06
## CHCHD7	79145	-0.22879483	2.938031e-07	1.402418e-06
## B4GAT1	11041	-0.26402862	2.939010e-07	1.402609e-06
## XAGE2	9502	-1.33020006	2.949894e-07	1.407528e-06
## XPO6	23214	0.133350571	2.953800e-07	1.409114e-06
## SORCS2	57537	-0.66480650	2.964848e-07	1.414107e-06
## EEF1E1	9521	-0.38600491	2.982598e-07	1.422294e-06
## IL17RB	55540	-0.61702870	2.999285e-07	1.429971e-06
## NRSN2-AS1	100507459	-0.25512334	3.008149e-07	1.433916e-06
## TMSB15B	286527	1.16523865	3.044903e-07	1.451151e-06
## MMD	23531	0.33833506	3.046416e-07	1.451587e-06
## PRDX4	10549	0.40191601	3.071784e-07	1.463161e-06
## RBM11	54033	-0.41671497	3.071909e-07	1.463161e-06
## AMER1	139285	0.23443481	3.097143e-07	1.474891e-06
## GRM7-AS3	101927347	1.24958261	3.103891e-07	1.477815e-06
## DUXAP9	503638	1.63204089	3.105304e-07	1.478198e-06
## RFLNA	144347	0.81181124	3.106295e-07	1.478380e-06
## CCDC134	79879	-0.22518953	3.107828e-07	1.478820e-06
## MICU3	286097	-0.39226395	3.125938e-07	1.487146e-06
## CYTH1	9267	0.21664117	3.141201e-07	1.493823e-06
## PACSIN3	29763	0.53927235	3.141141e-07	1.493823e-06
## BPGM	669	-0.24023664	3.172047e-07	1.508196e-06
## DESI1	27351	-0.20977215	3.182404e-07	1.512825e-06
## NUP205	23165	-0.15868560	3.184855e-07	1.513694e-06
## MAFG	4097	0.24707110	3.188082e-07	1.514931e-06
## TRIM61	391712	0.63572321	3.193764e-07	1.517335e-06
## MAPKAPK2	9261	-0.16306201	3.199402e-07	1.519716e-06
## C5orf64-AS1	<NA>	-1.05436134	3.231709e-07	1.534762e-06
## CRCP	27297	-0.15431639	3.240127e-07	1.538459e-06
## RAB6A	5870	-0.11828862	3.244847e-07	1.540399e-06
## NPNT	255743	-0.41245117	3.245932e-07	1.540613e-06
## SGK2	10110	-0.43359636	3.247452e-07	1.541034e-06
## ZNF736P9Y	100419726	2.09831508	3.308256e-07	1.569581e-06
## BASP1-AS1	285696	1.77734754	3.315385e-07	1.572656e-06
## DTWD1	56986	0.23628992	3.316982e-07	1.573107e-06
## ATP8B4	79895	0.33579038	3.336997e-07	1.582290e-06
## TRMT6	51605	-0.18845055	3.339936e-07	1.583375e-06

## PRL	5617	2.20843130	3.357551e-07	1.591415e-06
## RERG-AS1	100873980	0.70432163	3.366713e-07	1.595446e-06
## HDAC3	8841	0.16857872	3.368925e-07	1.596183e-06
## WNT7B	7477	-1.70270701	3.370305e-07	1.596526e-06
## ZBTB42	100128927	-0.27577158	3.413551e-07	1.616697e-06
## ARL14	80117	1.52770032	3.416269e-07	1.617669e-06
## ZNF501	115560	0.26538869	3.430486e-07	1.624084e-06
## RPS19	6223	0.42947072	3.446822e-07	1.631500e-06
## RASL11B	65997	-0.54957399	3.459943e-07	1.637392e-06
## STAC	6769	0.32857156	3.462938e-07	1.638490e-06
## DNAI2	64446	2.61364991	3.473862e-07	1.643339e-06
## CRMP1	1400	0.78726291	3.479102e-07	1.645498e-06
## ITGA7	3679	0.68436936	3.485521e-07	1.648213e-06
## GRPEL1	80273	-0.26822258	3.486633e-07	1.648418e-06
## PUM3	9933	-0.36527180	3.529770e-07	1.668488e-06
## SPTBN2	6712	-0.46660726	3.536420e-07	1.671306e-06
## TEDC2	80178	0.47360397	3.555971e-07	1.680219e-06
## DCUN1D3	123879	0.24773501	3.566333e-07	1.684787e-06
## USP3-AS1	100130855	0.43405237	3.576092e-07	1.689069e-06
## H3-7	440686	0.88536384	3.588141e-07	1.694431e-06
## ANKRD50	57182	0.35348727	3.604375e-07	1.701766e-06
## LINC00954	400946	0.88570353	3.607768e-07	1.703037e-06
## MMP2-AS1	107984884	1.89329587	3.611523e-07	1.704479e-06
## KCND3	3752	-0.44848352	3.618878e-07	1.707618e-06
## SMAD3-DT	102723493	0.68028343	3.624159e-07	1.709779e-06
## PALLD	23022	0.34854151	3.624878e-07	1.709786e-06
## CHUK	1147	-0.20973565	3.630543e-07	1.712125e-06
## GTF2F1	2962	-0.17284433	3.636046e-07	1.714388e-06
## LAMP5	24141	0.81046710	3.637534e-07	1.714757e-06
## MSH2	4436	0.18906079	3.642372e-07	1.716705e-06
## ADA2	51816	0.52154394	3.645208e-07	1.717708e-06
## LHX6	26468	0.89084642	3.659535e-07	1.724125e-06
## WDR76	79968	0.30902168	3.665772e-07	1.726729e-06
## ZSCAN31	64288	0.34972263	3.682822e-07	1.734423e-06
## CHD5	26038	-0.60231124	3.688786e-07	1.736896e-06
## DGKG	1608	-0.56869673	3.690211e-07	1.737230e-06
## ADAMTS9-AS1	101929335	-0.46623710	3.693335e-07	1.738364e-06
## FAM167B	84734	-0.52669787	3.699993e-07	1.741161e-06
## CALCOCO2	10241	-0.11601295	3.707518e-07	1.744364e-06
## PDE4D	5144	-0.31646884	3.713235e-07	1.746716e-06
## HSPA1L	3305	0.25424637	3.725039e-07	1.751929e-06
## PGM5P3-AS1	101929127	0.81761720	3.763271e-07	1.769568e-06
## ATP6AP2	10159	-0.20370771	3.765645e-07	1.770341e-06
## SH3BGRL3	83442	0.47559821	3.775808e-07	1.774776e-06
## ARHGAP5-AS1	84837	-0.22788328	3.785805e-07	1.779131e-06
## HBP1	26959	0.15991431	3.787900e-07	1.779771e-06
## ADAMTS7P4	642935	0.73060259	3.791827e-07	1.781272e-06
## LINC02384	100507195	0.56363844	3.807690e-07	1.788378e-06
## CSPP1	79848	0.38776294	3.839297e-07	1.802875e-06
## NPR3	4883	0.55845617	3.841561e-07	1.803241e-06
## MAL	4118	-0.51688146	3.841416e-07	1.803241e-06
## NPHS2	7827	-0.86629232	3.850960e-07	1.807194e-06
## CAPSL	133690	0.69838279	3.851470e-07	1.807194e-06
## TMEM132E	124842	-0.69667648	3.869468e-07	1.815288e-06

## TMEM127	55654	-0.18390113	3.870424e-07	1.815387e-06
## DNAJC25	548645	-0.22965185	3.873082e-07	1.816282e-06
## NOTCH2	4853	0.35890136	3.885518e-07	1.821763e-06
## SEH1L	81929	-0.13222074	3.889758e-07	1.823399e-06
## LINC01020	340094	0.91742594	3.914930e-07	1.834845e-06
## NPL	80896	0.62682822	3.924743e-07	1.839089e-06
## IGBP1	3476	0.29236612	3.934301e-07	1.843213e-06
## ZCCHC18	644353	0.79636288	3.936915e-07	1.844082e-06
## TUBB2A	7280	-0.39069817	3.938939e-07	1.844674e-06
## LINC02006	105374165	-0.94264574	3.956698e-07	1.852634e-06
## UBXN2A	165324	0.18244387	3.990147e-07	1.867936e-06
## HPCA	3208	-0.78151696	4.001004e-07	1.872658e-06
## RASSF7	8045	-0.46319566	4.010297e-07	1.876646e-06
## BAAT	570	0.74906032	4.031124e-07	1.886029e-06
## TMEM39A	55254	0.25977287	4.032492e-07	1.886306e-06
## RPL6	6128	0.29731440	4.034187e-07	1.886735e-06
## FBXL22	283807	0.50158582	4.036407e-07	1.887410e-06
## SETMAR	6419	0.17905778	4.054732e-07	1.895614e-06
## FCHSD1	89848	0.39708675	4.088708e-07	1.911131e-06
## HEPACAM	220296	1.07796954	4.099130e-07	1.915634e-06
## ZBTB21	49854	-0.23113328	4.104874e-07	1.917949e-06
## AIMP1	9255	-0.16022975	4.149548e-07	1.938450e-06
## LINC02220	105374658	1.53947171	4.179459e-07	1.952048e-06
## KIAA0513	9764	0.25425028	4.184080e-07	1.953831e-06
## TAF15	8148	-0.18652580	4.189964e-07	1.956202e-06
## MAP3K19	80122	2.88664440	4.212012e-07	1.966118e-06
## PPWD1	23398	0.21230109	4.239406e-07	1.978318e-06
## SINHCAF	58516	-0.25904306	4.239777e-07	1.978318e-06
## FRRS1	391059	0.35218410	4.259991e-07	1.987369e-06
## DCP2	167227	0.22025058	4.263409e-07	1.988582e-06
## NTRK3	4916	-0.51700380	4.292141e-07	2.001599e-06
## TNFRSF10D	8793	-0.26120452	4.313175e-07	2.011022e-06
## RMC1	29919	-0.24980387	4.340906e-07	2.023563e-06
## HLF	3131	0.32890016	4.353387e-07	2.028992e-06
## RASA1	5921	0.18050822	4.363089e-07	2.033124e-06
## ZNF691	51058	0.17167934	4.365973e-07	2.034078e-06
## MIR3131	100422957	-1.31881084	4.376846e-07	2.038753e-06
## RRP8	23378	0.16396835	4.404851e-07	2.051404e-06
## CLEC4GP1	440508	1.22299060	4.415999e-07	2.056202e-06
## S1PR5	53637	0.66817967	4.418100e-07	2.056786e-06
## PCDHA5	56143	-0.70409617	4.422652e-07	2.058511e-06
## ZNF547	284306	0.32379023	4.428188e-07	2.060693e-06
## DMXL2	23312	0.39644968	4.430862e-07	2.061543e-06
## DLG1	1739	-0.15783806	4.432524e-07	2.061921e-06
## TMEM44	93109	0.45212046	4.440903e-07	2.065424e-06
## ARHGEF17	9828	-0.25280721	4.501086e-07	2.092613e-06
## ARFGAP2	84364	-0.16338080	4.500756e-07	2.092613e-06
## ZNF786	136051	0.20382246	4.509612e-07	2.096176e-06
## ATRNL1	26033	0.55917955	4.526236e-07	2.103501e-06
## WDFY2	115825	-0.20959121	4.596651e-07	2.135817e-06
## PLEKHA7	144100	-0.32185922	4.607946e-07	2.140656e-06
## GIMAP7	168537	0.31637832	4.624070e-07	2.147735e-06
## BVES-AS1	154442	1.39651298	4.632932e-07	2.151441e-06
## LTB4R	1241	-0.63518813	4.693892e-07	2.179333e-06

## LEPROT	54741	-0.16126646	4.698231e-07	2.180930e-06
## FBXO44	93611	-0.28109903	4.707331e-07	2.184737e-06
## BMPR1B	658	-0.43359310	4.709755e-07	2.185445e-06
## PLEKHA8	84725	0.26379619	4.710709e-07	2.185470e-06
## COG7	91949	-0.13269320	4.720546e-07	2.189616e-06
## TMEM97	27346	-0.34506181	4.728913e-07	2.193079e-06
## AKTIP	64400	-0.18055672	4.742053e-07	2.198753e-06
## HNRNPL	3191	-0.09976089	4.763779e-07	2.208405e-06
## CENPK	64105	0.64747372	4.767145e-07	2.209544e-06
## POLB	5423	0.31874100	4.792253e-07	2.220758e-06
## QRSL1	55278	-0.18610760	4.794695e-07	2.221466e-06
## FUT1	2523	-0.33478126	4.807257e-07	2.226862e-06
## MTFP1	51537	-0.64648097	4.824709e-07	2.234520e-06
## TMEM201	199953	-0.35576990	4.829298e-07	2.236219e-06
## GPR15LG	387695	-1.64533843	4.862454e-07	2.251143e-06
## NYX	60506	-0.58832468	4.871330e-07	2.254823e-06
## HSPD1P6	645548	1.34086847	4.912165e-07	2.273291e-06
## GPAT3	84803	0.58236006	4.920486e-07	2.276709e-06
## FAM9C	171484	1.78672800	4.980526e-07	2.304050e-06
## CD274	29126	0.36474410	5.002774e-07	2.313902e-06
## CLNS1A	1207	0.20830644	5.036962e-07	2.329271e-06
## NUPR2	389493	-0.57944801	5.041523e-07	2.330937e-06
## UROS	7390	0.32423423	5.054570e-07	2.336525e-06
## PPP5D1P	100506012	0.43772111	5.067334e-07	2.341979e-06
## DPH6	89978	-0.21984851	5.099952e-07	2.356606e-06
## TXNIP	10628	-0.30140833	5.113446e-07	2.362393e-06
## TMSB10	9168	0.50622190	5.114648e-07	2.362499e-06
## EMX2	2018	-0.27776872	5.122553e-07	2.365701e-06
## B3GLCT	145173	-0.24152778	5.134211e-07	2.370634e-06
## MGAT5	4249	-0.29079273	5.233135e-07	2.415851e-06
## LINC00659	100652730	-0.57495648	5.243994e-07	2.420404e-06
## SCNN1B	6338	-0.52019543	5.257571e-07	2.426210e-06
## SNHG8	100093630	0.43021186	5.308613e-07	2.449299e-06
## SERPINF2	5345	-0.63380434	5.311408e-07	2.450124e-06
## RPL28	6158	0.46807171	5.314020e-07	2.450823e-06
## RDH14	57665	-0.19155059	5.314940e-07	2.450823e-06
## ZNF549	256051	0.19668917	5.327924e-07	2.456344e-06
## ADAM32	203102	0.76918760	5.336642e-07	2.459897e-06
## HSPA13	6782	-0.24961703	5.345243e-07	2.463394e-06
## CNGA3	1261	1.37215174	5.346271e-07	2.463400e-06
## EPHB4	2050	-0.28482258	5.367241e-07	2.472594e-06
## CDH8	1006	1.00311247	5.452423e-07	2.511360e-06
## CYB5RL	606495	0.28083046	5.458023e-07	2.513463e-06
## NUSAP1	51203	0.80547044	5.477947e-07	2.522160e-06
## TOMM20	9804	-0.19117330	5.497087e-07	2.530493e-06
## FUS	2521	-0.17909152	5.541026e-07	2.550236e-06
## GAL	51083	1.36484659	5.557775e-07	2.557461e-06
## HSP90B1	7184	-0.32022277	5.558830e-07	2.557462e-06
## TOP3A	7156	0.11597497	5.562868e-07	2.558835e-06
## TRPM8	79054	1.23611714	5.584132e-07	2.568130e-06
## SH2D3A	10045	-0.41385217	5.610311e-07	2.579681e-06
## PDCD4	27250	0.22117889	5.634523e-07	2.590324e-06
## GGT3P	2679	-1.04949596	5.640367e-07	2.592520e-06
## BST2	684	0.38721824	5.687601e-07	2.613737e-06

## FYCO1	79443	0.28880132	5.719623e-07	2.627955e-06
## CHST10	9486	0.19792246	5.733551e-07	2.633857e-06
## APOA2	336	1.09701925	5.755981e-07	2.643661e-06
## ASS1P3	158452	0.94025215	5.776438e-07	2.652555e-06
## AKR1C3	8644	0.42907636	5.859531e-07	2.690203e-06
## STIL	6491	0.35438413	5.873202e-07	2.695971e-06
## RHBDD1	84236	-0.15771027	5.874869e-07	2.696227e-06
## UBP1	7342	0.13090915	5.881187e-07	2.698616e-06
## KRT7	3855	-0.49898331	5.984735e-07	2.745611e-06
## FGFR1L	53834	-0.28384419	6.010050e-07	2.756185e-06
## SHROOM3	57619	-0.32822883	6.009777e-07	2.756185e-06
## RHOF	54509	-0.44534202	6.035358e-07	2.767269e-06
## DSP	1832	-0.35739527	6.055707e-07	2.776075e-06
## MTOR	2475	-0.17948907	6.057087e-07	2.776184e-06
## LINC01108	102216342	0.97812647	6.069204e-07	2.781213e-06
## SELENOT	51714	-0.18817534	6.079645e-07	2.785472e-06
## GNPTAB	79158	0.19896712	6.139279e-07	2.812264e-06
## TMEM272	283521	1.02618555	6.144604e-07	2.814173e-06
## MTM1	4534	-0.21925968	6.171267e-07	2.825852e-06
## GOSR2	9570	0.20134226	6.186405e-07	2.831717e-06
## AMZ1	155185	0.98981294	6.185889e-07	2.831717e-06
## SH3BGRL2	83699	-0.22732241	6.246637e-07	2.858748e-06
## NAMPT-AS1	128266843	-0.52565845	6.277870e-07	2.872501e-06
## CD24P4	938	-0.85206225	6.290710e-07	2.877834e-06
## TRAV26-2	28656	1.94736914	6.314278e-07	2.888072e-06
## NAV2	89797	-0.33095370	6.344337e-07	2.901275e-06
## ZNF346	23567	0.13750660	6.382117e-07	2.918003e-06
## NTSR1	4923	1.05840301	6.404053e-07	2.927481e-06
## PHKA1	5255	0.42790189	6.426932e-07	2.937387e-06
## CPOX	1371	0.19053720	6.516540e-07	2.977782e-06
## ADGRF1	266977	-0.52853564	6.540739e-07	2.988278e-06
## REEP2	51308	0.50099461	6.548298e-07	2.991169e-06
## CERS3-AS1	102723320	1.31744034	6.553123e-07	2.992810e-06
## MTRR	4552	-0.16721980	6.567699e-07	2.998904e-06
## ORMDL2	29095	-0.34450412	6.573002e-07	3.000761e-06
## ADAP1	11033	-0.50574411	6.600467e-07	3.012734e-06
## LHFPL4	375323	-1.28093362	6.605562e-07	3.014493e-06
## CACNA2D2	9254	-0.42980760	6.701868e-07	3.057869e-06
## HPGD	3248	0.58490838	6.703943e-07	3.058242e-06
## BNIP5	389384	1.37325561	6.709280e-07	3.059527e-06
## SEMA3B-AS1	101928931	-0.55166032	6.708256e-07	3.059527e-06
## GJC1	10052	0.61263746	6.722615e-07	3.065033e-06
## ADGRE5	976	0.52351511	6.726314e-07	3.066144e-06
## TULP3	7289	-0.20817829	6.728774e-07	3.066691e-06
## SERTAD2	9792	0.21672711	6.737203e-07	3.069956e-06
## SH3GL1	6455	0.31556142	6.750259e-07	3.075329e-06
## HOXB-AS2	100874350	-0.74974064	6.758016e-07	3.078286e-06
## PSMB8-AS1	100507463	0.38284953	6.764263e-07	3.080554e-06
## ATP5F1B	506	-0.23784449	6.833947e-07	3.111706e-06
## ARHGEF38	54848	-0.59405974	6.849785e-07	3.118333e-06
## IGHJ5	28476	1.97968042	6.885469e-07	3.133991e-06
## RN7SL1	6029	0.84460666	6.892288e-07	3.136507e-06
## CEP70	80321	-0.30167756	6.961997e-07	3.167637e-06
## GSDMA	284110	0.94233592	6.970586e-07	3.170951e-06

## ZNF189	7743	-0.26426722	6.994413e-07	3.181008e-06
## IGLV1-47	28822	1.52370210	6.995312e-07	3.181008e-06
## PITPNM1	9600	-0.40726034	7.006137e-07	3.185335e-06
## LINC01637	101928891	0.59002719	7.018963e-07	3.190569e-06
## GNA11	2767	-0.24551424	7.027635e-07	3.193913e-06
## TRAV10	28676	1.90812005	7.094281e-07	3.222997e-06
## OR52K3P	390035	1.33430324	7.093011e-07	3.222997e-06
## LINC00475	158314	0.91089778	7.100873e-07	3.225389e-06
## SMIM10L1	100129361	0.21077524	7.142321e-07	3.243610e-06
## EPHB3	2049	0.72679236	7.166614e-07	3.254034e-06
## SLC22A31	146429	-1.11522045	7.172173e-07	3.255950e-06
## CASTOR3P	352954	0.30552802	7.174212e-07	3.256267e-06
## LIN9	286826	0.23771724	7.180823e-07	3.258659e-06
## FRMPD1	22844	0.44949006	7.188196e-07	3.261396e-06
## DIPK2A	205428	-0.23892081	7.198897e-07	3.265641e-06
## TMEM62	80021	-0.18147897	7.211712e-07	3.270844e-06
## STAR	6770	1.27582770	7.214587e-07	3.271344e-06
## WDR46	9277	0.18465751	7.215506e-07	3.271344e-06
## WNT6	7475	-0.83624215	7.230906e-07	3.277714e-06
## SPAST	6683	0.21091472	7.291797e-07	3.304699e-06
## SIDT2	51092	0.24934848	7.348039e-07	3.329567e-06
## HOXA-AS2	285943	-0.35430241	7.392381e-07	3.349035e-06
## CYP24A1	1591	-0.99544626	7.424868e-07	3.363126e-06
## GSG1	83445	-1.20859828	7.428653e-07	3.364213e-06
## PLA2G15	23659	-0.29242010	7.434023e-07	3.366018e-06
## ARV1	64801	-0.21986627	7.452099e-07	3.373574e-06
## MVP	9961	-0.35029020	7.461535e-07	3.377217e-06
## ZNF664	144348	-0.17441868	7.479841e-07	3.384872e-06
## CYS1	192668	-0.33012815	7.560019e-07	3.420518e-06
## PPP3CA	5530	0.26740898	7.571272e-07	3.424972e-06
## B3GALNT1	8706	-0.22447362	7.602387e-07	3.438407e-06
## RAB18	22931	-0.16032471	7.607219e-07	3.439952e-06
## NIPAL4	348938	1.47647212	7.625617e-07	3.447630e-06
## MRAS	22808	0.32462367	7.668534e-07	3.466389e-06
## RPL14P1	144581	0.40351186	7.696634e-07	3.478444e-06
## GALNT10	55568	0.27553317	7.726316e-07	3.491209e-06
## RGL3	57139	-0.47751152	7.739561e-07	3.496544e-06
## NNMT	4837	0.98197955	7.741106e-07	3.496591e-06
## CCDC15	80071	0.35215689	7.814227e-07	3.528963e-06
## SYVN1	84447	-0.26777693	7.820510e-07	3.531145e-06
## MTND1P11	100873212	-0.64166491	7.841299e-07	3.539874e-06
## LRRC25	126364	0.62172988	7.856867e-07	3.546243e-06
## ATP4B	496	-0.67177081	7.866427e-07	3.549899e-06
## ZC4H2	55906	-0.19253918	7.874157e-07	3.552572e-06
## SCEL	8796	1.37981141	7.875274e-07	3.552572e-06
## LSM14A	26065	-0.09475278	7.911458e-07	3.568232e-06
## CNDP2	55748	-0.32654927	7.966760e-07	3.592507e-06
## CEACAM16-AS1	107985305	-0.81510308	7.972489e-07	3.594424e-06
## NR2F6	2063	-0.33668881	8.000143e-07	3.606223e-06
## DGCR11	25786	-0.27781523	8.009861e-07	3.609934e-06
## PRDM14	63978	-1.41237538	8.019930e-07	3.613802e-06
## MON1B	22879	-0.12339336	8.050187e-07	3.626763e-06
## TUBB4B	10383	-0.30985411	8.064713e-07	3.632634e-06
## UBE2D1	7321	0.24606222	8.132534e-07	3.662504e-06

## PCDHA10	56139	-0.51985826	8.137902e-07	3.664242e-06
## TENM4	26011	-0.48268781	8.153797e-07	3.670719e-06
## PCNT	5116	0.30466582	8.172925e-07	3.678649e-06
## KCNS3	3790	0.43435243	8.211753e-07	3.695441e-06
## MSANTD7	100421372	0.20208029	8.220657e-07	3.698763e-06
## PLD6	201164	0.35612565	8.248353e-07	3.710537e-06
## LINC01275	101927512	1.18504294	8.256488e-07	3.713509e-06
## ZNF354C	30832	0.31716586	8.277155e-07	3.722116e-06
## HNRNPAB	3182	-0.24686018	8.297005e-07	3.730352e-06
## GINM1	116254	-0.18723232	8.367117e-07	3.760483e-06
## ANKRD42	338699	-0.19873005	8.366659e-07	3.760483e-06
## FAH	2184	0.45093373	8.379559e-07	3.765379e-06
## RPL13AP5	728658	0.49248599	8.418190e-07	3.782038e-06
## MINDY2-DT	101928725	-0.50812486	8.421959e-07	3.783032e-06
## C5orf47	133491	-0.79777331	8.441503e-07	3.791110e-06
## IL3RA	3563	0.53907833	8.449036e-07	3.793792e-06
## HS1BP3-IT1	100874343	-0.66083483	8.452885e-07	3.794819e-06
## RPL23AP7	118433	0.35596253	8.455337e-07	3.795219e-06
## NKAPD1	55216	0.16358331	8.462658e-07	3.797803e-06
## LINC01758	105378788	0.97077218	8.469957e-07	3.800377e-06
## SYT17	51760	-0.35775453	8.502589e-07	3.814315e-06
## SDCBP2	27111	-0.33911786	8.513956e-07	3.818709e-06
## MMTG1	93380	-0.17795314	8.516054e-07	3.818945e-06
## RASD2	23551	0.59456557	8.536749e-07	3.827519e-06
## ASS1	445	0.67869321	8.545292e-07	3.830643e-06
## IL17REL	400935	1.95829673	8.554293e-07	3.833970e-06
## TBC1D4	9882	-0.34598164	8.567998e-07	3.839405e-06
## GNPAT	8443	0.15880606	8.578081e-07	3.843215e-06
## RPS8	6202	0.36542573	8.584783e-07	3.845508e-06
## WNT5B	81029	0.47820969	8.587571e-07	3.846048e-06
## TVP23B	51030	-0.16242074	8.624201e-07	3.861742e-06
## ATP2B4	493	0.42501172	8.692885e-07	3.891779e-06
## NRGN	4900	-0.52586654	8.702254e-07	3.895257e-06
## PLD3	23646	0.38185769	8.709454e-07	3.897762e-06
## TPM1-AS	111064646	-0.73217766	8.762025e-07	3.920566e-06
## NOTCH4	4855	-0.43238876	8.835163e-07	3.952564e-06
## C5orf67	101928448	-0.88305535	8.837867e-07	3.953046e-06
## ZNF623	9831	0.17460398	8.839950e-07	3.953250e-06
## ECRG4	84417	0.63604162	8.876742e-07	3.968973e-06
## PRSS30P	124221	0.89771703	8.901177e-07	3.979167e-06
## PML	5371	0.40594078	8.905800e-07	3.980501e-06
## FKBP4	2288	-0.24833943	8.999915e-07	4.021827e-06
## ABL1	25	0.23487219	9.021927e-07	4.030922e-06
## ARL8B	55207	-0.12138679	9.138241e-07	4.082140e-06
## H2BC21	8349	-0.40418172	9.147306e-07	4.085438e-06
## PIGG	54872	-0.19849613	9.185913e-07	4.101927e-06
## CD99L2	83692	0.25060121	9.264049e-07	4.136058e-06
## ATP11AUN	400165	0.94340561	9.266030e-07	4.136183e-06
## MAP2K5-DT	118732298	-0.34941836	9.284816e-07	4.143807e-06
## TGM5	9333	2.19848753	9.317198e-07	4.157496e-06
## GIMAP6	474344	0.27305770	9.346061e-07	4.169610e-06
## GINS1	9837	0.31255413	9.469531e-07	4.223918e-06
## KCNJ10	3766	-0.51085437	9.484258e-07	4.229711e-06
## FARS2-AS1	101927972	-0.87078631	9.518057e-07	4.244006e-06

## PPP2R5B	5526	-0.19183552	9.531238e-07	4.248965e-06
## ENTPD1	953	0.47988349	9.532676e-07	4.248965e-06
## SF3B2	10992	-0.11985210	9.576414e-07	4.267677e-06
## SLC50A1	55974	-0.20799283	9.603472e-07	4.278951e-06
## ISL2	64843	2.18374642	9.606762e-07	4.279632e-06
## ALPL	249	-0.53388103	9.652699e-07	4.298520e-06
## WEE2	494551	0.84480918	9.651582e-07	4.298520e-06
## LINC01123	440894	-0.43590076	9.672339e-07	4.306477e-06
## TFAP4	7023	0.28404141	9.762487e-07	4.345563e-06
## CLDN4	1364	-0.53806667	9.763702e-07	4.345563e-06
## ADAMTS7P1	390660	1.89091442	9.835348e-07	4.376649e-06
## DAO	1610	0.82600373	9.884895e-07	4.397891e-06
## DGKB	1607	0.66307510	9.920891e-07	4.413099e-06
## CGREF1	10669	0.55032449	1.001762e-06	4.455310e-06
## RNF150	57484	-0.32830714	1.003642e-06	4.462857e-06
## LINC01106	151009	-0.38446698	1.004802e-06	4.467196e-06
## RPL10	6134	0.39250380	1.017457e-06	4.522630e-06
## ZSCAN5A	79149	-0.19943039	1.019303e-06	4.530007e-06
## ZNF239	8187	0.30926863	1.026401e-06	4.560719e-06
## PCDHGA5	56110	0.58426109	1.029592e-06	4.574061e-06
## ILVBL	10994	-0.33001320	1.032984e-06	4.585779e-06
## FKBP1B	2281	-0.41918842	1.032748e-06	4.585779e-06
## SYT16	83851	0.84412787	1.032864e-06	4.585779e-06
## TTC9-DT	101928075	3.20849748	1.032732e-06	4.585779e-06
## SIRPA	140885	0.28191673	1.034508e-06	4.591703e-06
## ZNF273	10793	0.36517050	1.035189e-06	4.593886e-06
## WNT16	51384	1.19777276	1.037386e-06	4.602798e-06
## CFAP221	200373	-0.38929083	1.038000e-06	4.604681e-06
## TOX2	84969	-0.46011049	1.038912e-06	4.607885e-06
## LINC01278	92249	-0.14485958	1.041798e-06	4.619843e-06
## SMIM18	100507341	1.09056926	1.043117e-06	4.624846e-06
## ITGB5	3693	0.26947967	1.044513e-06	4.630192e-06
## SLC29A2	3177	-0.47851683	1.045777e-06	4.634951e-06
## OTUD7A	161725	-0.24773828	1.050528e-06	4.655156e-06
## MTPAP	55149	-0.11549394	1.053429e-06	4.667161e-06
## CEP250-AS1	102725201	1.27475404	1.056412e-06	4.679523e-06
## ATP10D	57205	-0.24359125	1.057249e-06	4.682379e-06
## ALDH3B2	222	-0.56265161	1.059154e-06	4.689962e-06
## SRSF1	6426	-0.18583468	1.064348e-06	4.712099e-06
## RPL7A	6130	0.31315849	1.065238e-06	4.715180e-06
## ACVR1C	130399	0.57879506	1.065453e-06	4.715274e-06
## LINC00906	148145	1.09917955	1.070884e-06	4.738445e-06
## USF1	7391	0.18894215	1.071701e-06	4.741200e-06
## DIRC1	116093	2.87076738	1.072919e-06	4.745723e-06
## PDCD6IP-DT	105377023	-0.25881986	1.076028e-06	4.758610e-06
## ALAS1	211	-0.21716023	1.078036e-06	4.765753e-06
## GNPDA2	132789	-0.19169389	1.077894e-06	4.765753e-06
## IL27RA	9466	0.41915942	1.080527e-06	4.775897e-06
## GJC3	349149	0.65465642	1.086973e-06	4.803516e-06
## CDK2AP2	10263	-0.43937003	1.088962e-06	4.811431e-06
## RPS15A	6210	0.43144721	1.089692e-06	4.813782e-06
## GALNTL6	442117	1.14407402	1.092350e-06	4.824645e-06
## ARL15	54622	-0.21995996	1.095933e-06	4.839592e-06
## USP11	8237	-0.28003477	1.099175e-06	4.853024e-06

## TRPV6	55503	-0.49016992	1.101808e-06	4.863768e-06
## ATP6V0A4	50617	-0.41560696	1.107788e-06	4.889277e-06
## PIWIL2	55124	0.53679305	1.114505e-06	4.918028e-06
## PRR32	100130613	3.30068518	1.115275e-06	4.920533e-06
## HIVEP2	3097	0.32139721	1.120692e-06	4.943536e-06
## CC2D1A	54862	-0.25778210	1.123706e-06	4.955077e-06
## DIPK1B	138311	-0.35996820	1.123716e-06	4.955077e-06
## DDHD1	80821	0.28902703	1.124000e-06	4.955429e-06
## LINC03082	101927646	-0.71750671	1.128059e-06	4.972424e-06
## ZNF710	374655	0.28874540	1.128630e-06	4.974038e-06
## MUC13	56667	1.03653766	1.129609e-06	4.977447e-06
## LINC02919	105378032	1.10545405	1.130806e-06	4.981818e-06
## RIN3	79890	0.35040049	1.131971e-06	4.986047e-06
## PRORSD1P	344405	-0.41332073	1.135060e-06	4.998750e-06
## FBXO10	26267	0.27940899	1.137665e-06	5.009314e-06
## ZNF667	63934	0.32943259	1.140886e-06	5.022586e-06
## C4BPB	725	0.75239195	1.141170e-06	5.022925e-06
## SLC6A2	6530	-0.81282715	1.151276e-06	5.066491e-06
## MT3	4504	-0.73926803	1.153104e-06	5.073616e-06
## ARHGEF12	23365	-0.27081821	1.157079e-06	5.090185e-06
## PRKD1	5587	-0.21848179	1.160993e-06	5.106478e-06
## PTPRN2	5799	0.24752696	1.170218e-06	5.146123e-06
## DEXI	28955	0.25869239	1.177968e-06	5.179265e-06
## RPL12	6136	0.39509225	1.178914e-06	5.182489e-06
## SARAF	51669	-0.15123197	1.185570e-06	5.210806e-06
## CDH13	1012	0.58516420	1.187374e-06	5.217789e-06
## ZNF697	90874	-0.25708160	1.191320e-06	5.234184e-06
## DPP3	10072	-0.25849973	1.194456e-06	5.247011e-06
## ANXA7	310	-0.13639506	1.197944e-06	5.261385e-06
## USH2A	7399	1.12397579	1.199301e-06	5.266390e-06
## HEATR6	63897	0.14948140	1.199877e-06	5.267970e-06
## TMEM196	256130	2.12143012	1.203841e-06	5.284418e-06
## MT1JP	4498	-1.64704255	1.206869e-06	5.296755e-06
## C19orf47	126526	0.39147374	1.211207e-06	5.314833e-06
## NRK	203447	-0.45054236	1.219379e-06	5.348759e-06
## CYP3A4	1576	1.02985610	1.219290e-06	5.348759e-06
## MPZL2	10205	-0.34356791	1.222278e-06	5.359650e-06
## ZNF581	51545	0.38478762	1.222303e-06	5.359650e-06
## CAPN11	11131	0.97720071	1.225953e-06	5.374685e-06
## SUPT6H	6830	-0.15290148	1.239133e-06	5.431490e-06
## ADAM28	10863	0.44730403	1.245486e-06	5.458352e-06
## PCSK5	5125	0.39452362	1.248776e-06	5.471781e-06
## LINC00921	283876	0.46287822	1.249416e-06	5.473601e-06
## SLC35D2	11046	-0.32608526	1.255143e-06	5.497698e-06
## P2RX5-TAX1BP3	100533970	1.38732627	1.257371e-06	5.506466e-06
## LMAN2	10960	-0.21892950	1.260131e-06	5.517559e-06
## HSPA5	3309	-0.37386509	1.260877e-06	5.519829e-06
## VPS37B	79720	-0.22092375	1.265970e-06	5.541125e-06
## POC1B	282809	-0.17653313	1.269081e-06	5.553397e-06
## HOXC6	3223	0.25355092	1.269230e-06	5.553397e-06
## LINC00398	100874158	0.82477060	1.270627e-06	5.558508e-06
## SSH3	54961	-0.27034987	1.272380e-06	5.565173e-06
## ACOX2	8309	0.53322556	1.280832e-06	5.601133e-06
## LRRC28	123355	0.27581492	1.298955e-06	5.679363e-06

## YIPF1	54432	-0.22550557	1.299747e-06	5.681806e-06
## MLXIPL	51085	-0.56140366	1.304440e-06	5.700268e-06
## AMIGO2	347902	-0.29992324	1.304415e-06	5.700268e-06
## HOXB7	3217	-0.25746821	1.304685e-06	5.700314e-06
## CPEB3	22849	-0.29205764	1.315596e-06	5.745921e-06
## RPRM	56475	-0.87049443	1.315475e-06	5.745921e-06
## CRIPTO3	6998	-1.51937506	1.326533e-06	5.792647e-06
## MARCHF2	51257	0.36975234	1.328879e-06	5.801849e-06
## PEG3	5178	-0.33131777	1.333860e-06	5.822550e-06
## RGR	5995	1.80969617	1.335843e-06	5.830156e-06
## CALHM5	254228	0.37413908	1.337071e-06	5.834470e-06
## IMMT	10989	-0.15414508	1.340099e-06	5.846322e-06
## PABPC1P4	341315	0.32191034	1.340268e-06	5.846322e-06
## RAB11FIP4	84440	-0.32983209	1.349239e-06	5.884395e-06
## NFKBIA	4792	-0.27011050	1.350780e-06	5.890059e-06
## CCND1	595	0.32673545	1.352256e-06	5.894430e-06
## PRKCD	5580	-0.23177619	1.352267e-06	5.894430e-06
## INHA	3623	-0.69311903	1.353079e-06	5.896910e-06
## FCGR2A	2212	0.52632066	1.364681e-06	5.946408e-06
## ARNT2	9915	-0.34078454	1.377257e-06	6.000128e-06
## DDX25	29118	-0.42606563	1.382550e-06	6.022107e-06
## REXO2	25996	0.28517762	1.385244e-06	6.032765e-06
## PLCL2	23228	0.19695771	1.386096e-06	6.035393e-06
## PRKD3	23683	0.22000970	1.387529e-06	6.040549e-06
## SOD2-OT1	100129518	-0.52272299	1.388871e-06	6.045307e-06
## PDIA5	10954	0.27841462	1.397487e-06	6.081722e-06
## STK25	10494	0.22811542	1.413544e-06	6.150497e-06
## NOMO2	283820	-0.40871635	1.414083e-06	6.151740e-06
## HSD17B12	51144	-0.25573042	1.416708e-06	6.162059e-06
## ADCY1	107	-0.36403901	1.417556e-06	6.164645e-06
## IZUMO4	113177	0.47391730	1.427595e-06	6.207188e-06
## PARVB	29780	0.41456143	1.430184e-06	6.217337e-06
## IGF2R	3482	-0.25608356	1.431167e-06	6.220494e-06
## SLC9A6	10479	-0.18633841	1.431518e-06	6.220909e-06
## SLC25A47	283600	-0.71184325	1.438072e-06	6.248271e-06
## LINC02889	101927630	0.74126917	1.442351e-06	6.265745e-06
## ARPP19	10776	-0.14281005	1.445203e-06	6.277011e-06
## WNK2	65268	0.70157534	1.466165e-06	6.366916e-06
## EPM2A	7957	0.25766321	1.467561e-06	6.371844e-06
## TDRD3	81550	0.18539140	1.470700e-06	6.384331e-06
## LINC02450	105369739	1.10380551	1.490339e-06	6.468429e-06
## SPMIP5	143379	-0.60204115	1.496194e-06	6.492680e-06
## IRS2	8660	-0.34097290	1.497392e-06	6.496718e-06
## LRP3	4037	0.58354361	1.498507e-06	6.500395e-06
## LINC02325	101929241	1.38885442	1.502620e-06	6.517074e-06
## ITGAV	3685	-0.41014964	1.506957e-06	6.534720e-06
## BVES	11149	0.85703748	1.537305e-06	6.665129e-06
## ZKSCAN5	23660	0.12723972	1.538273e-06	6.668138e-06
## PRSS3	5646	0.84177959	1.540302e-06	6.675740e-06
## CDPF1	150383	0.21513541	1.551898e-06	6.724801e-06
## FAT4	79633	0.45155746	1.554735e-06	6.735892e-06
## PALD1	27143	0.31240159	1.555676e-06	6.738767e-06
## LYST	1130	0.34427631	1.555981e-06	6.738886e-06
## SLC15A2	6565	-0.44311796	1.561040e-06	6.759593e-06

## FBXL4	26235	-0.21318887	1.562778e-06	6.765913e-06
## RBP2	5948	-0.76537441	1.571929e-06	6.804320e-06
## LINC01645	102724661	1.06716763	1.575974e-06	6.820612e-06
## STX1B	112755	-0.45945265	1.585726e-06	6.861595e-06
## WDR82	80335	0.16693063	1.592884e-06	6.891343e-06
## MED6	10001	0.18200648	1.595612e-06	6.901916e-06
## SUGT1P1	441394	0.61139291	1.598003e-06	6.911031e-06
## MRPL35	51318	-0.18193041	1.604389e-06	6.937414e-06
## NCSTN	23385	-0.19735496	1.611042e-06	6.964939e-06
## MEI1	150365	0.65097309	1.619953e-06	7.002220e-06
## ZNF687	57592	-0.18009966	1.620509e-06	7.003378e-06
## ZWINT	11130	0.28139215	1.621620e-06	7.006931e-06
## COPS7B	64708	0.16731837	1.627049e-06	7.029140e-06
## LINC01885	105373538	1.57680599	1.630269e-06	7.041799e-06
## MPV17L2	84769	-0.30913453	1.638885e-06	7.077759e-06
## HECA	51696	0.25021864	1.657896e-06	7.158587e-06
## RTN1	6252	0.44150710	1.659363e-06	7.163651e-06
## LMTK2	22853	-0.25631687	1.660484e-06	7.167214e-06
## CACNA1H	8912	-0.53333095	1.664910e-06	7.185045e-06
## TRBJ1-3	28633	2.10212390	1.666024e-06	7.188573e-06
## RIMBP3	85376	0.91280958	1.670115e-06	7.204947e-06
## SYNGR1	9145	-0.39536247	1.684259e-06	7.264673e-06
## ANKRD9	122416	-0.30010287	1.691087e-06	7.292832e-06
## ARF3	377	-0.20756017	1.712422e-06	7.383528e-06
## CALU	813	0.40913594	1.716300e-06	7.398935e-06
## C4BPA	722	1.56199961	1.719530e-06	7.411546e-06
## PGM5P4-AS1	103344932	0.69175729	1.730326e-06	7.456757e-06
## C5orf22	55322	-0.14135332	1.733714e-06	7.470031e-06
## WDR20	91833	-0.09885887	1.738781e-06	7.490536e-06
## CPLX1	10815	-0.60177221	1.747323e-06	7.526002e-06
## IFITM1	8519	0.52732090	1.750080e-06	7.536539e-06
## ZNF333	84449	0.29790591	1.765298e-06	7.600726e-06
## CLEC12B	387837	1.79976833	1.767994e-06	7.610989e-06
## COL4A1	1282	0.53756645	1.777466e-06	7.650406e-06
## ST7L	54879	-0.17901330	1.778180e-06	7.650770e-06
## ERICH4	100170765	0.76668208	1.777908e-06	7.650770e-06
## COLGALT2	23127	0.48526852	1.779760e-06	7.656211e-06
## PROX1	5629	-0.72503856	1.796088e-06	7.725085e-06
## PPP6C	5537	-0.13371924	1.809253e-06	7.780334e-06
## PNPLA6	10908	-0.27929971	1.817219e-06	7.813207e-06
## SBSN	374897	2.44002302	1.819358e-06	7.821020e-06
## AKAP13	11214	0.26812951	1.821434e-06	7.828560e-06
## TMEM42	131616	0.28572124	1.829542e-06	7.862014e-06
## INSL3	3640	1.43987231	1.830071e-06	7.862900e-06
## RPLP0P6	220717	0.45378667	1.833084e-06	7.874452e-06
## HLA-B	3106	0.39419435	1.842017e-06	7.911428e-06
## MILIP	92659	0.36793193	1.850240e-06	7.945342e-06
## EHF	26298	-0.59716520	1.852975e-06	7.955681e-06
## SOCS2-AS1	144481	-0.39467997	1.857013e-06	7.971609e-06
## UGT2B4	7363	1.01566978	1.866353e-06	8.010262e-06
## ADIRF-AS1	100133190	0.66586335	1.866677e-06	8.010262e-06
## BEX4	56271	-0.21603586	1.868152e-06	8.015175e-06
## IGHJ6	28475	1.82792295	1.875460e-06	8.045109e-06
## XPR1	9213	-0.23940357	1.879875e-06	8.062626e-06

## TRAV1-1	28693	2.13654045	1.881675e-06	8.068924e-06
## LINC03092	107985164	0.72524915	1.887140e-06	8.090928e-06
## FCHO2	115548	-0.23697518	1.895521e-06	8.125427e-06
## ENOX2	10495	0.20249116	1.906468e-06	8.170912e-06
## LYIL1	4066	0.56543386	1.911661e-06	8.191727e-06
## GFUS	7264	0.28430124	1.913955e-06	8.200111e-06
## LYN	4067	0.34372556	1.943703e-06	8.326095e-06
## MEX3C	51320	0.18106920	1.945489e-06	8.332277e-06
## WDR6	11180	-0.17066295	1.947413e-06	8.339048e-06
## GPR17	2840	-0.72901714	1.947912e-06	8.339715e-06
## XRCC2	7516	0.57661019	1.948805e-06	8.342068e-06
## DNAJC3-DT	100289274	-0.34165146	1.950151e-06	8.346358e-06
## MEIS1	4211	0.29657924	1.950899e-06	8.348089e-06
## LINC02449	101927905	0.51056592	1.951948e-06	8.351107e-06
## DYRK1B	9149	0.41534116	1.960484e-06	8.385627e-06
## STX12	23673	-0.13814700	1.960707e-06	8.385627e-06
## VSTM4	196740	0.35601121	1.961191e-06	8.386222e-06
## P2RX4	5025	-0.28552355	1.966616e-06	8.407939e-06
## RPL10A	4736	0.34559314	1.969055e-06	8.416888e-06
## CBLB	868	0.26436110	1.971114e-06	8.424207e-06
## TGFBR3	7049	-0.30590892	1.979581e-06	8.458907e-06
## CSF3	1440	2.16647899	2.003882e-06	8.561239e-06
## C8B	732	-1.32586500	2.005792e-06	8.567894e-06
## RPL35	11224	0.39761036	2.025057e-06	8.648666e-06
## HMG20A	10363	0.11985382	2.031491e-06	8.674619e-06
## RCL1	10171	-0.14735005	2.046442e-06	8.736681e-06
## RNF135	84282	0.25599485	2.047103e-06	8.736681e-06
## SNN	8303	0.19362663	2.046752e-06	8.736681e-06
## FOXO3B	2310	0.36076618	2.055429e-06	8.770672e-06
## RAB14	51552	-0.10744743	2.060960e-06	8.792729e-06
## RPL32	6161	0.38684978	2.074478e-06	8.848848e-06
## VPS33B	26276	-0.22732320	2.085095e-06	8.892577e-06
## LINC01781	101927412	0.68884094	2.100085e-06	8.954931e-06
## BTBD9	114781	-0.14893960	2.101549e-06	8.959604e-06
## PPP1R11	6992	-0.20748928	2.102942e-06	8.963968e-06
## AQP5-AS1	101927318	-0.78269229	2.104038e-06	8.967067e-06
## GPR19	2842	0.88178926	2.109249e-06	8.987700e-06
## FAM162B	221303	0.41926923	2.110503e-06	8.991469e-06
## BTG1P1	100129641	1.54597215	2.122025e-06	9.038972e-06
## CIR1	9541	0.24662825	2.135715e-06	9.095690e-06
## RPL30	6156	0.38956881	2.145307e-06	9.134941e-06
## CACNG5	27091	-1.12240962	2.152812e-06	9.165290e-06
## SAT1	6303	0.31015805	2.156037e-06	9.177414e-06
## KIF26A	26153	-0.64728667	2.157326e-06	9.181291e-06
## S100A16	140576	0.34031869	2.165955e-06	9.216403e-06
## LRRC8A	56262	-0.17766255	2.173668e-06	9.247605e-06
## NFATC4	4776	0.59024612	2.177772e-06	9.263439e-06
## RPA2	6118	0.20693357	2.179225e-06	9.266379e-06
## C2orf15	150590	-0.34859434	2.178871e-06	9.266379e-06
## CASZ1	54897	-0.34736623	2.191353e-06	9.316316e-06
## PACC1	55248	-0.32627782	2.204557e-06	9.370813e-06
## RPL18A	6142	0.46673565	2.227682e-06	9.467456e-06
## LINC03049	126568845	0.43616632	2.237054e-06	9.505621e-06
## AHNAK	79026	0.41468509	2.238322e-06	9.509348e-06

## LGALS9C	654346	1.81754379	2.250104e-06	9.557731e-06
## TPT1-AS1	100190939	0.30210634	2.262912e-06	9.610454e-06
## HSPG2	3339	0.60960852	2.270293e-06	9.640118e-06
## PPP6R3	55291	-0.16898374	2.272840e-06	9.649245e-06
## URI1	8725	0.13709413	2.274238e-06	9.653493e-06
## AMD1	262	-0.16292370	2.276041e-06	9.659459e-06
## CDC42SE2	56990	-0.23237304	2.279928e-06	9.674266e-06
## LINC01485	101928154	0.75992468	2.287966e-06	9.706682e-06
## BNIPL	149428	-0.56617508	2.292105e-06	9.722541e-06
## ELOVL3	83401	0.73260346	2.318876e-06	9.834382e-06
## BEX5	340542	-0.35934411	2.324309e-06	9.855705e-06
## TLR1	7096	0.31947994	2.334466e-06	9.897046e-06
## TNFAIP8	25816	0.31722907	2.342270e-06	9.928398e-06
## CES5A	221223	-1.31030762	2.346910e-06	9.946331e-06
## SLC4A8	9498	-0.67574889	2.356226e-06	9.984071e-06
## RDH5	5959	0.43827880	2.368033e-06	1.003235e-05
## WNK4	65266	-0.53816475	2.376469e-06	1.006633e-05
## CPA5	93979	1.24054055	2.379498e-06	1.007565e-05
## ZNF234	10780	0.27225510	2.379212e-06	1.007565e-05
## IFT88	8100	-0.25740514	2.387605e-06	1.010822e-05
## STOM	2040	-0.19491581	2.392378e-06	1.012666e-05
## SNUPN	10073	0.15752153	2.401202e-06	1.016225e-05
## KCNJ12	3768	0.58993354	2.404408e-06	1.017404e-05
## BCOR	54880	-0.22793379	2.424086e-06	1.025552e-05
## AP3M2	10947	0.15139730	2.432459e-06	1.028916e-05
## TM2D1	83941	-0.17903161	2.436522e-06	1.030275e-05
## CPTP	80772	-0.44054847	2.436417e-06	1.030275e-05
## FAM111A	63901	0.33379985	2.437480e-06	1.030501e-05
## DTYMK	1841	0.28692273	2.440288e-06	1.031509e-05
## ZCCHC2	54877	0.19331610	2.443961e-06	1.032882e-05
## MLKL	197259	0.36336119	2.444865e-06	1.033084e-05
## LINC01159	102682016	-0.62048603	2.445414e-06	1.033136e-05
## TOMM40	10452	-0.22256556	2.458945e-06	1.038672e-05
## LINC01423	102724678	1.08593294	2.459604e-06	1.038770e-05
## CD2BP2	10421	0.13738844	2.461594e-06	1.039430e-05
## KDR	3791	-0.37344820	2.471047e-06	1.043240e-05
## SVIL-AS1	102724316	0.19758204	2.481393e-06	1.047426e-05
## PTPRG-AS1	100506994	0.43252268	2.492641e-06	1.051991e-05
## CD300E	342510	0.83565891	2.494186e-06	1.052461e-05
## RNF130	55819	0.19048324	2.500188e-06	1.054810e-05
## GANAB	23193	-0.25377941	2.501067e-06	1.054998e-05
## NECTIN3	25945	-0.22981886	2.510658e-06	1.058860e-05
## PIK3C2A	5286	-0.29973025	2.533758e-06	1.068417e-05
## TNFSF18	8995	0.92766643	2.534324e-06	1.068470e-05
## DRD1	1812	-0.78170235	2.537250e-06	1.069518e-05
## ART4	420	0.61551951	2.544860e-06	1.072540e-05
## WBP11	51729	-0.10248199	2.549618e-06	1.074359e-05
## TBC1D9B	23061	0.16145472	2.554463e-06	1.076214e-05
## SMIM12	113444	-0.23237906	2.561458e-06	1.078974e-05
## FCGRT	2217	0.37233999	2.566842e-06	1.081054e-05
## ZNF225	7768	0.17592893	2.568663e-06	1.081634e-05
## CAMLG	819	0.25338816	2.569331e-06	1.081727e-05
## ZDHHC21	340481	-0.28573698	2.577836e-06	1.085120e-05
## AGAP2-AS1	100130776	0.59751835	2.586171e-06	1.088440e-05

## PAQR9	344838	1.76531806	2.588081e-06	1.089056e-05
## HIF1AN	55662	0.15341025	2.594979e-06	1.091769e-05
## CTSA	5476	-0.33795269	2.621970e-06	1.102934e-05
## NUP214	8021	-0.16237081	2.640362e-06	1.110286e-05
## MIR3142HG	107075116	0.76860078	2.640025e-06	1.110286e-05
## LINC00640	283553	1.36719168	2.651632e-06	1.114832e-05
## MMP27	64066	2.67054470	2.652996e-06	1.115213e-05
## PTPN4	5775	-0.30678554	2.658147e-06	1.117185e-05
## OSGIN1	29948	0.48514667	2.666901e-06	1.120670e-05
## EPB42	2038	2.07191389	2.667743e-06	1.120830e-05
## CAVIN3	112464	0.63708292	2.671353e-06	1.122153e-05
## NME8	51314	1.06069601	2.688573e-06	1.129191e-05
## DYRK1A	1859	-0.15582735	2.689871e-06	1.129541e-05
## PHLDA1	22822	-0.28615814	2.724411e-06	1.143848e-05
## FAAP100	80233	0.29871458	2.732441e-06	1.147021e-05
## THTPA	79178	-0.18324259	2.740489e-06	1.150201e-05
## DDX1	1653	-0.12333271	2.743653e-06	1.151131e-05
## MMP1	4312	-0.77937693	2.743526e-06	1.151131e-05
## GMPR	2766	-0.45997899	2.754568e-06	1.155511e-05
## HCP5	10866	0.31771916	2.755083e-06	1.155528e-05
## LINC00598	646982	0.43931447	2.774815e-06	1.163603e-05
## CAPN1	823	-0.31555868	2.776075e-06	1.163930e-05
## MYBPHL	343263	1.45245954	2.786850e-06	1.168247e-05
## PPIL3	53938	0.24596985	2.801387e-06	1.174138e-05
## OSGEP	55644	0.19274826	2.850695e-06	1.194598e-05
## ZNF295-AS1	150142	0.89196777	2.872229e-06	1.203415e-05
## SST	6750	-1.06178374	2.883489e-06	1.207924e-05
## KATNAL1	84056	0.21000328	2.889377e-06	1.210182e-05
## RXFP2	122042	1.50857610	2.891634e-06	1.210919e-05
## HCG11	493812	0.26774525	2.896912e-06	1.212920e-05
## MKLN1-AS	100506881	-0.25776380	2.911189e-06	1.218687e-05
## GCOM1	145781	-0.54702558	2.926704e-06	1.224971e-05
## TLCD2	727910	-0.33671457	2.940135e-06	1.230381e-05
## ARMC2	84071	0.23778003	2.945734e-06	1.232512e-05
## UNKL	64718	0.34073861	2.951607e-06	1.234756e-05
## ATE1	11101	-0.19141764	2.957033e-06	1.236813e-05
## LYVE1	10894	0.58617929	2.964716e-06	1.239814e-05
## C17orf113	110806298	-0.36349565	2.992540e-06	1.251234e-05
## CDC37L1	55664	0.15568664	2.995423e-06	1.252224e-05
## UBC	7316	-0.21226143	2.996488e-06	1.252238e-05
## GGTL3C	728226	-1.75941156	2.996273e-06	1.252238e-05
## FEN1	2237	0.18109989	3.000553e-06	1.253721e-05
## SEL1L	6400	-0.22682520	3.003398e-06	1.254694e-05
## BTBD10	84280	0.17406726	3.021106e-06	1.261875e-05
## JAM3	83700	0.38432390	3.026085e-06	1.263738e-05
## MTRF1L	54516	-0.18769196	3.041167e-06	1.269818e-05
## HLCS	3141	-0.14294933	3.050625e-06	1.273548e-05
## TMEM216	51259	0.29736841	3.061190e-06	1.277739e-05
## NINJ1	4814	0.31722296	3.064388e-06	1.278855e-05
## TPM3P5	644330	0.94970641	3.075057e-06	1.283087e-05
## ZMPSTE24	10269	-0.21126327	3.090832e-06	1.289447e-05
## DIPK1A	388650	0.36254791	3.099170e-06	1.292704e-05
## LINC02798	107985194	0.52324899	3.121118e-06	1.301635e-05
## SEC1P	653677	0.91761086	3.136140e-06	1.307676e-05

## TBC1D22A	25771	0.18564837	3.140117e-06	1.309109e-05
## NOTUM	147111	1.01280250	3.145319e-06	1.311053e-05
## SMAD5-AS1	9597	0.62151809	3.150031e-06	1.312792e-05
## NKAIN1	79570	1.12182165	3.173242e-06	1.322239e-05
## PARPBP	55010	0.30022775	3.207126e-06	1.336128e-05
## MIOX	55586	0.85599331	3.212726e-06	1.338232e-05
## MTND5P19	100873270	-0.78509488	3.217885e-06	1.340151e-05
## AP1S3	130340	-0.45066011	3.225704e-06	1.343177e-05
## CLN8-AS1	101927752	0.37557783	3.226544e-06	1.343297e-05
## NCMAP	400746	0.71474961	3.239927e-06	1.348638e-05
## MICB-DT	102725068	0.63527310	3.240878e-06	1.348802e-05
## UNC119B	84747	-0.12532132	3.247446e-06	1.351304e-05
## WIPF2	147179	-0.15598402	3.258998e-06	1.355879e-05
## IL1RAPL1	11141	0.93608044	3.266229e-06	1.358655e-05
## LRIG1	26018	0.26285393	3.270072e-06	1.360021e-05
## RAB3A	5864	-0.32460926	3.280123e-06	1.363968e-05
## IL15RA	3601	0.37854453	3.281463e-06	1.364291e-05
## LHFPL1	340596	0.77634741	3.285737e-06	1.365835e-05
## HAO2	51179	0.76067945	3.290908e-06	1.367750e-05
## SLC26A11	284129	-0.21942087	3.302433e-06	1.372306e-05
## PCYOX1L	78991	0.21994924	3.307664e-06	1.374244e-05
## MYG1-AS1	112268097	0.89416943	3.321632e-06	1.379812e-05
## RBMS3	27303	0.37947809	3.328976e-06	1.382626e-05
## RRS1-DT	100505676	-0.58612048	3.347816e-06	1.390213e-05
## SFTPD	6441	-0.43130461	3.356191e-06	1.393453e-05
## CATSPER1	117144	1.08210810	3.379541e-06	1.402908e-05
## SRGAP3-AS4	101927440	-1.18258706	3.380336e-06	1.402998e-05
## LYPD6	130574	-0.44309242	3.390169e-06	1.406839e-05
## AMHR2	269	1.08622718	3.399281e-06	1.410379e-05
## SHROOM1	134549	-0.30470441	3.407102e-06	1.413383e-05
## PIWIL4	143689	0.41693577	3.407801e-06	1.413432e-05
## SHB	6461	-0.21880364	3.417963e-06	1.417405e-05
## PTGES	9536	0.51056335	3.429982e-06	1.422146e-05
## FOXN1	8456	-1.03832593	3.436063e-06	1.424425e-05
## CZIB	54987	0.21954328	3.438122e-06	1.425035e-05
## AGPAT2	10555	-0.42321678	3.442199e-06	1.426482e-05
## TBC1D9	23158	-0.22518151	3.448251e-06	1.428746e-05
## GTF2H1	2965	0.18768132	3.462217e-06	1.434288e-05
## CCDC85B	11007	0.86187568	3.479200e-06	1.441078e-05
## PAG1	55824	0.34526544	3.498882e-06	1.448983e-05
## ACTN4	81	-0.23981792	3.500345e-06	1.449342e-05
## BCL2L12	83596	0.35733117	3.502244e-06	1.449881e-05
## SPRING1	79794	0.18014777	3.520548e-06	1.457211e-05
## ANKRD18B	441459	1.39208497	3.532140e-06	1.461760e-05
## GHRHR	2692	-0.82582269	3.558199e-06	1.472293e-05
## NR0B2	8431	-0.51740745	3.573484e-06	1.478366e-05
## STXBP2	6813	-0.27500835	3.602354e-06	1.490056e-05
## CBX4	8535	-0.33886520	3.604622e-06	1.490740e-05
## LINC01624	401289	1.33524519	3.613728e-06	1.494252e-05
## HEATR3	55027	0.16067031	3.627247e-06	1.499587e-05
## TTC21B	79809	0.23159022	3.641007e-06	1.505020e-05
## TRBJ1-5	28631	2.30272351	3.643287e-06	1.505706e-05
## KCNC1	3746	1.26008331	3.644935e-06	1.506131e-05
## CIP2A	57650	0.30023232	3.650457e-06	1.507900e-05

## LINC00664	400680	1.04445094	3.650018e-06	1.507900e-05
## SLC35F4	341880	1.23807689	3.653369e-06	1.508846e-05
## MCF2L-AS1	100289410	-0.39113594	3.680758e-06	1.519641e-05
## PCDHGC4	56098	0.81855445	3.680349e-06	1.519641e-05
## PDZD8	118987	-0.26157300	3.684588e-06	1.520964e-05
## PDE7B-AS1	644135	-0.89094556	3.685483e-06	1.521075e-05
## ALDH1A2	8854	-0.27686531	3.711120e-06	1.531396e-05
## GLA	2717	-0.24279479	3.752689e-06	1.548287e-05
## NFATC3	4775	0.16060413	3.755841e-06	1.549324e-05
## PCA3	50652	-0.97911586	3.761261e-06	1.551297e-05
## SLC25A29	123096	-0.42316512	3.791413e-06	1.563467e-05
## DACH2	117154	-0.55173585	3.801117e-06	1.567203e-05
## MTND1P20	100873339	-0.74372002	3.812331e-06	1.571560e-05
## VANGL2	57216	0.27054486	3.834135e-06	1.580280e-05
## MDH1	4190	-0.28192078	3.836041e-06	1.580798e-05
## EXOC8	149371	-0.18000803	3.846504e-06	1.584840e-05
## GNG11	2791	0.35507256	3.854222e-06	1.587751e-05
## ABCB9	23457	-0.20039215	3.865942e-06	1.592310e-05
## CRACR2B	283229	-0.53145665	3.871955e-06	1.594516e-05
## FHIP1A	729830	-0.29980404	3.905180e-06	1.607926e-05
## SMYD2	56950	0.22107035	3.906166e-06	1.608059e-05
## RHOG	391	0.41097366	3.920331e-06	1.613617e-05
## N4BP1	9683	0.14535783	3.930540e-06	1.617545e-05
## ITGB7	3695	0.23956406	3.932046e-06	1.617891e-05
## LINC01235	401492	1.24859089	3.997083e-06	1.644373e-05
## TARBP1	6894	0.24295978	4.016670e-06	1.652151e-05
## ELAVL3	1995	-1.52953923	4.029306e-06	1.657068e-05
## HRK	8739	0.85792273	4.050618e-06	1.665551e-05
## RANBP9	10048	0.12566528	4.059637e-06	1.668977e-05
## RHNO1	83695	0.20807024	4.073891e-06	1.674554e-05
## RPL11	6135	0.33563754	4.089645e-06	1.680745e-05
## C1GALT1C1L	728819	-0.34121494	4.093735e-06	1.682141e-05
## OSGIN2	734	-0.20023134	4.103331e-06	1.685799e-05
## ZNF878	729747	-0.56109205	4.120728e-06	1.692661e-05
## PGAP2	27315	0.23317728	4.138258e-06	1.699574e-05
## PEA15	8682	0.30786776	4.177528e-06	1.715413e-05
## CHP1	11261	0.28080607	4.212347e-06	1.729418e-05
## ZNF365	22891	0.60330498	4.226580e-06	1.734968e-05
## BDKRB2	624	-0.42834840	4.263395e-06	1.749785e-05
## MESD	23184	-0.14455699	4.277159e-06	1.755137e-05
## LINC02875	388407	-0.71618770	4.327762e-06	1.775303e-05
## SLC25A25-AS1	100289019	-0.44506743	4.327516e-06	1.775303e-05
## TTC9C	283237	0.14578751	4.334274e-06	1.777674e-05
## LINC01145	103091866	0.44802417	4.340325e-06	1.779855e-05
## SLC1A5	6510	-0.37125769	4.355610e-06	1.785822e-05
## EPM2AIP1	9852	-0.17766164	4.376397e-06	1.794042e-05
## ADNP2	22850	-0.12281425	4.392802e-06	1.800464e-05
## GPR142	350383	2.29546391	4.407107e-06	1.806022e-05
## QSER1	79832	0.24862930	4.425013e-06	1.813054e-05
## ALX4	60529	1.30849317	4.429056e-06	1.814405e-05
## THAP2	83591	0.30312410	4.470508e-06	1.831077e-05
## COL19A1	1310	0.64352428	4.480062e-06	1.834681e-05
## ARHGEF2-AS2	107985209	0.76542678	4.481968e-06	1.835153e-05
## TUT1	64852	-0.27112957	4.483321e-06	1.835397e-05

## TRAV36DV7	28646	1.75838771	4.515091e-06	1.848092e-05
## SLC4A3	6508	-0.39367957	4.517297e-06	1.848372e-05
## KRT5	3852	2.10949625	4.516931e-06	1.848372e-05
## CYP4B1	1580	-0.70310338	4.541311e-06	1.857260e-05
## TARS2	80222	0.17992524	4.540629e-06	1.857260e-05
## RPL10AP6	100128936	0.49207364	4.540132e-06	1.857260e-05
## MFN2	9927	-0.17323654	4.545998e-06	1.858864e-05
## ANK3-DT	105378320	-0.68409488	4.558876e-06	1.863816e-05
## UEVLD	55293	-0.16428909	4.566965e-06	1.866809e-05
## PGAP3	93210	-0.24283570	4.582718e-06	1.872933e-05
## TRIM50	135892	-0.69219391	4.585743e-06	1.873855e-05
## LINC01348	731656	-0.70085589	4.589881e-06	1.875230e-05
## BRD4	23476	-0.20350834	4.591259e-06	1.875478e-05
## CS	1431	-0.19913724	4.610224e-06	1.882592e-05
## PDE2A	5138	-0.31714169	4.610034e-06	1.882592e-05
## MAPK6	5597	0.23857502	4.622517e-06	1.887295e-05
## RPL32P18	644907	0.50794396	4.658481e-06	1.901659e-05
## KIF22	3835	0.19508211	4.681115e-06	1.910578e-05
## NEK11	79858	0.21678075	4.683145e-06	1.911085e-05
## SAMD4A-AS1	729451	3.04430098	4.684775e-06	1.911429e-05
## UBL4A	8266	0.18785265	4.692555e-06	1.914282e-05
## CDH7	1005	-1.10566157	4.703757e-06	1.918530e-05
## PTGR2	145482	-0.28990838	4.764231e-06	1.942869e-05
## GBA1	2629	-0.25610520	4.773268e-06	1.946228e-05
## ST6GALNAC2	10610	-0.36751375	4.774594e-06	1.946442e-05
## CCL14	6358	0.65795910	4.785648e-06	1.950621e-05
## TSC22D4	81628	-0.33384259	4.797651e-06	1.955186e-05
## VPS4A	27183	-0.19882099	4.815863e-06	1.962278e-05
## TC2N	123036	-0.32628024	4.816770e-06	1.962319e-05
## FTLP15	442304	2.56721307	4.8353659e-06	1.977016e-05
## LINC00891	441501	1.01313203	4.856523e-06	1.977851e-05
## NFIB-AS1	123706550	0.75759325	4.859074e-06	1.978558e-05
## DERL1	79139	-0.21521640	4.871370e-06	1.983233e-05
## BRI3	25798	0.38337337	4.878232e-06	1.985694e-05
## RBBP8	5932	-0.32725948	4.884397e-06	1.987870e-05
## DST	667	0.35435748	4.903880e-06	1.995465e-05
## PTP4A2P2	5769	0.87221605	4.910224e-06	1.997712e-05
## COQ2	27235	0.23939681	5.045085e-06	2.052237e-05
## LRATD1	151354	-0.40641724	5.046187e-06	2.052341e-05
## BNC2	54796	0.41443854	5.047896e-06	2.052693e-05
## LINC01036	104169671	-0.51745038	5.050611e-06	2.053453e-05
## LZTS1	11178	0.44336477	5.051824e-06	2.053603e-05
## LINC02635	105376491	-0.59443773	5.052770e-06	2.053644e-05
## SPINK13	153218	-1.22553249	5.070395e-06	2.060463e-05
## COL28A1	340267	-0.62120704	5.101961e-06	2.072944e-05
## EFNB2	1948	-0.28074521	5.112050e-06	2.076695e-05
## STAG3	10734	0.54971844	5.145773e-06	2.090046e-05
## WFIKKN1	117166	-0.56170787	5.153789e-06	2.092952e-05
## ANKMY2	57037	-0.13335928	5.158729e-06	2.094608e-05
## TSHR	7253	0.86427708	5.164552e-06	2.096622e-05
## FZD2	2535	0.47333224	5.216432e-06	2.117329e-05
## POF1B	79983	-0.71450868	5.232141e-06	2.123351e-05
## MINDY3	80013	-0.11678810	5.240487e-06	2.126383e-05
## AGBL4	84871	0.44738189	5.247650e-06	2.128934e-05

## UBL7-DT	440288	0.22423179	5.254223e-06	2.131245e-05
## HOXD9	3235	-0.30291890	5.277767e-06	2.140438e-05
## ACER1	125981	1.30985699	5.305915e-06	2.151494e-05
## SECISBP2L	9728	-0.24216433	5.307286e-06	2.151691e-05
## PAX2	5076	-0.45821613	5.325237e-06	2.158609e-05
## POU4F1	5457	2.18093091	5.344107e-06	2.165896e-05
## CBX7	23492	-0.18613007	5.347758e-06	2.167015e-05
## RIMS1	22999	1.05592134	5.367958e-06	2.174837e-05
## KIFC3	3801	-0.28021722	5.382440e-06	2.180341e-05
## RARRES1	5918	-0.76462086	5.394314e-06	2.184787e-05
## PRDM7	11105	0.97785666	5.400545e-06	2.186946e-05
## NPPC	4880	-1.47489701	5.402398e-06	2.187332e-05
## TMEM219	124446	0.35981877	5.429529e-06	2.197951e-05
## DPH7	92715	0.27165675	5.430997e-06	2.198179e-05
## GFM1	85476	-0.17138489	5.446667e-06	2.204154e-05
## GNL3	26354	0.25118097	5.448290e-06	2.204444e-05
## STRIP1	85369	0.13232845	5.491252e-06	2.221457e-05
## RAB3IL1	5866	0.39026567	5.516313e-06	2.231224e-05
## TGFA	7039	-0.28117843	5.525626e-06	2.234619e-05
## SORBS1	10580	0.39231000	5.528426e-06	2.235235e-05
## BSCL2	26580	-0.28380400	5.528990e-06	2.235235e-05
## APOM	55937	0.66500147	5.545524e-06	2.241547e-05
## TMEM121B	27439	0.65730929	5.565851e-06	2.249389e-05
## MRPL50	54534	-0.18757031	5.580109e-06	2.254776e-05
## TMEM9B	56674	-0.17383759	5.606325e-06	2.264993e-05
## CCDC138	165055	0.29167686	5.614465e-06	2.267904e-05
## ATP5MC3	518	-0.28867892	5.624482e-06	2.271573e-05
## TPTE2P2	644623	-1.19866279	5.637706e-06	2.276535e-05
## LINC02048	105374289	-1.55481911	5.650666e-06	2.281390e-05
## VTN	7448	0.69068801	5.663839e-06	2.286328e-05
## KHDC1	80759	0.48734216	5.666356e-06	2.286584e-05
## RAB5C-AS1	105371781	0.61016373	5.666232e-06	2.286584e-05
## LMO4	8543	0.25068036	5.680154e-06	2.291772e-05
## LINC02869	440714	1.10928925	5.698107e-06	2.298634e-05
## KCNQ4	9132	0.69274011	5.721656e-06	2.307750e-05
## RORB	6096	0.62661828	5.739802e-06	2.314685e-05
## NEU1	4758	-0.21938752	5.761538e-06	2.323065e-05
## ZNF536	9745	-0.69090272	5.786170e-06	2.332610e-05
## ZNF200	7752	0.16927780	5.787531e-06	2.332771e-05
## INPP4A	3631	0.23048904	5.793391e-06	2.334389e-05
## LETM2	137994	-0.39497960	5.793466e-06	2.334389e-05
## SAC3D1	29901	0.41241491	5.804633e-06	2.338501e-05
## FAAH	2166	-0.34827167	5.810477e-06	2.340467e-05
## DKK1	22943	0.91615630	5.826712e-06	2.346618e-05
## FAM53A	152877	0.37295247	5.846505e-06	2.354199e-05
## TFAP2A	7020	-0.35716352	5.849616e-06	2.355062e-05
## SVOPL	136306	-0.52421999	5.856094e-06	2.357279e-05
## PCAT14	101978785	-1.35937245	5.862050e-06	2.359286e-05
## CHD9NB	105371267	-0.53945683	5.885106e-06	2.368173e-05
## DPP10	57628	-0.99579097	5.919657e-06	2.381682e-05
## LZIC	84328	0.14587416	5.933641e-06	2.386913e-05
## KIR2DL1	3802	1.41311632	5.947767e-06	2.392199e-05
## AOX1	316	-0.53700399	6.025792e-06	2.423180e-05
## SCARNA5	677775	1.90080812	6.043301e-06	2.429819e-05

## ZFAS1	441951	0.37808605	6.057626e-06	2.435176e-05
## ZNF628	89887	-0.51945014	6.071357e-06	2.440292e-05
## AASDHPPPT	60496	-0.23346498	6.077829e-06	2.442489e-05
## LINC02212	101929412	-0.82174105	6.157018e-06	2.473904e-05
## APIP	51074	-0.21295279	6.173257e-06	2.480019e-05
## CFAP141	388701	1.03665119	6.178487e-06	2.481299e-05
## CLDN14-AS1	105369301	0.83934632	6.177629e-06	2.481299e-05
## SLC25A21-AS1	100129794	-0.33803300	6.184203e-06	2.483184e-05
## BAZ1B	9031	0.17614881	6.198002e-06	2.488314e-05
## CBS	875	-0.73596459	6.210986e-06	2.493115e-05
## ADCY3	109	0.48689185	6.221921e-06	2.497092e-05
## PDE4DIPPP2	100996724	0.69402688	6.227437e-06	2.498893e-05
## NT5C3AP2	100420394	1.80339285	6.238422e-06	2.502887e-05
## RAB11FIP1	80223	-0.18230861	6.241820e-06	2.503837e-05
## PRSS22	64063	-0.62180365	6.250948e-06	2.507085e-05
## OVGP1	5016	0.35322146	6.264938e-06	2.512282e-05
## HLA-DQB1	3119	0.59173173	6.269300e-06	2.513616e-05
## GPR83	10888	0.75198560	6.287453e-06	2.520478e-05
## WDR70	55100	0.13614599	6.300205e-06	2.525174e-05
## COL6A2-DT	122152369	1.57076837	6.306989e-06	2.527476e-05
## CLEC9A	283420	0.93972770	6.330889e-06	2.536635e-05
## ELF2	1998	0.19577431	6.348287e-06	2.543187e-05
## RPL6P27	645387	0.36826904	6.383343e-06	2.556809e-05
## TMED8	283578	-0.23285049	6.384440e-06	2.556827e-05
## FBXO45	200933	0.18051299	6.399001e-06	2.562236e-05
## ANGPTL7	10218	1.25493483	6.411788e-06	2.566933e-05
## BHMT	635	0.64421628	6.416836e-06	2.568531e-05
## PARP10	84875	-0.31556646	6.427861e-06	2.572521e-05
## NT5DC3	51559	0.31879148	6.436401e-06	2.575514e-05
## C14orf39	317761	2.54672557	6.487220e-06	2.595422e-05
## TRAK1	22906	0.18771820	6.547806e-06	2.619230e-05
## LINC00528	200298	0.71383938	6.591961e-06	2.636459e-05
## JAM2	58494	0.55920152	6.601201e-06	2.639720e-05
## GBA2	57704	-0.22726361	6.614167e-06	2.644470e-05
## NCOA5	57727	0.14204241	6.643773e-06	2.655870e-05
## ARNT2-DT	101929560	-0.44437779	6.698720e-06	2.677395e-05
## ITIH1	3697	1.25035745	6.726440e-06	2.688032e-05
## PCNP	57092	-0.14313477	6.727728e-06	2.688105e-05
## TNFSF4	7292	0.44517087	6.738994e-06	2.692163e-05
## LINC00601	101101772	2.42026355	6.762397e-06	2.701068e-05
## ARK2N	147339	-0.15505205	6.793859e-06	2.713189e-05
## TRIM36	55521	0.54194542	6.807654e-06	2.718235e-05
## TYMSOS	494514	0.64518375	6.808730e-06	2.718235e-05
## ELP4	26610	-0.17770951	6.811999e-06	2.719093e-05
## KBTBD11-OT1	104266957	-0.58837215	6.832306e-06	2.726751e-05
## FTLIP2	392437	0.98443890	6.847260e-06	2.732270e-05
## FAM217A	222826	-0.80129590	6.870126e-06	2.740945e-05
## EMC3-AS1	442075	0.45622305	6.875795e-06	2.742756e-05
## LINC01011	401232	0.27214036	6.881800e-06	2.744701e-05
## LRP8	7804	-0.39937111	6.888546e-06	2.746940e-05
## GDF11	10220	0.31828516	6.890970e-06	2.747456e-05
## PPT1	5538	-0.16755634	6.916905e-06	2.756892e-05
## PTK2	5747	-0.10453925	6.916359e-06	2.756892e-05
## RNU6-287P	106481269	-1.36135093	6.961092e-06	2.774049e-05

## LMBRD2	92255	-0.24325914	6.969449e-06	2.776924e-05
## ZNF670	93474	0.22514009	6.973278e-06	2.777994e-05
## ALDH3A1	218	-0.46525575	6.996364e-06	2.786734e-05
## IL1RAPL2	26280	-0.56116501	7.008942e-06	2.791287e-05
## WNT8B	7479	-0.75523561	7.069778e-06	2.815053e-05
## SOX13	9580	-0.23263730	7.071910e-06	2.815440e-05
## CLPB	81570	-0.18343621	7.128109e-06	2.837349e-05
## HSPB8	26353	0.62870811	7.131312e-06	2.838160e-05
## ATP23	91419	0.31635200	7.138862e-06	2.840699e-05
## SPATA16	83893	0.85708662	7.202230e-06	2.865445e-05
## TKT	7086	-0.39419419	7.210025e-06	2.868077e-05
## CCDC3	83643	0.66054449	7.212956e-06	2.868773e-05
## BTG1-DT	101928617	-0.55004459	7.223196e-06	2.872376e-05
## NBPF14	25832	0.44866530	7.251885e-06	2.883312e-05
## ERN2	10595	1.89042899	7.259892e-06	2.886024e-05
## SRPK2	6733	0.14740714	7.274051e-06	2.891180e-05
## TRPC7-AS1	100874024	0.54101851	7.279698e-06	2.892951e-05
## ARHGAP31	57514	0.23497767	7.286809e-06	2.894430e-05
## TMEM91	641649	0.32796604	7.285467e-06	2.894430e-05
## AASDH	132949	-0.14748997	7.286994e-06	2.894430e-05
## TRMT10A	93587	-0.19394098	7.298630e-06	2.898578e-05
## ADCY6	112	-0.24928908	7.308332e-06	2.901957e-05
## NDEL1	81565	0.23595190	7.328434e-06	2.909464e-05
## OR10AC1	392133	2.02396717	7.338527e-06	2.912813e-05
## FAM181B	220382	-0.48962912	7.339268e-06	2.912813e-05
## STK32A-AS1	105378217	0.72785000	7.352285e-06	2.917503e-05
## IFT20	90410	0.25893591	7.356599e-06	2.918738e-05
## MIR3945HG	731424	1.58068038	7.362899e-06	2.920761e-05
## SMAD7	4092	-0.21718540	7.407516e-06	2.937980e-05
## TSPEAR	54084	-0.86866389	7.409899e-06	2.938446e-05
## THBD	7056	-0.45909980	7.437439e-06	2.948886e-05
## GTF2IRD1	9569	-0.18204050	7.450103e-06	2.953425e-05
## PCNX2	80003	0.26833308	7.478555e-06	2.964221e-05
## NADSYN1	55191	0.18418008	7.535147e-06	2.985678e-05
## LINC00930	100144604	1.58497556	7.534386e-06	2.985678e-05
## CDH12	1010	-0.74747737	7.558573e-06	2.994471e-05
## PRKAR1B-AS2	101927000	-0.77042479	7.565532e-06	2.996740e-05
## MIR762HG	101928736	0.32496054	7.575392e-06	3.000157e-05
## SLC30A6	55676	-0.14496194	7.612103e-06	3.014204e-05
## BDH1	622	-0.32464824	7.639389e-06	3.024516e-05
## ATP6V1E1	529	-0.23920560	7.683566e-06	3.041511e-05
## PDE8A	5151	-0.23286968	7.709957e-06	3.051460e-05
## CLTRN	57393	-0.53519683	7.712829e-06	3.052100e-05
## PERM1	84808	0.98364751	7.733777e-06	3.059891e-05
## ABCC12	94160	3.02915917	7.750181e-06	3.065882e-05
## GUSBP5	441046	-0.42774145	7.766093e-06	3.071677e-05
## KIF26B	55083	0.50748298	7.787016e-06	3.079451e-05
## PPP1R16B	26051	-0.49910084	7.822345e-06	3.092919e-05
## HCFC1R1	54985	0.46323155	7.861198e-06	3.107270e-05
## RPL21P125	100129685	-1.15732196	7.859985e-06	3.107270e-05
## CSMD3	114788	-0.97920086	7.896625e-06	3.120766e-05
## IGSF22	283284	-0.44157123	7.926472e-06	3.132052e-05
## CDC34	997	0.27522476	7.937357e-06	3.135843e-05
## EMX1	2016	-0.40973884	7.947254e-06	3.139243e-05

## USP24	23358	-0.24516975	7.988761e-06	3.155126e-05
## AGPAT5	55326	-0.22308854	7.991410e-06	3.155659e-05
## FBXO25	26260	-0.14734847	7.998900e-06	3.158104e-05
## CFAP52	146845	0.68787633	8.011784e-06	3.162677e-05
## POM121	9883	-0.25223562	8.018305e-06	3.164737e-05
## IGLV3-19	28797	1.54281443	8.048249e-06	3.176039e-05
## LINC00933	100506874	0.52025564	8.075749e-06	3.186374e-05
## SLC12A6	9990	0.36341051	8.091102e-06	3.191914e-05
## LIMCH1	22998	0.31669223	8.143897e-06	3.211698e-05
## LINC02568	102723344	-0.50801887	8.143055e-06	3.211698e-05
## TMSB15B-AS1	100128594	0.90984518	8.163262e-06	3.218418e-05
## RNF224	643596	0.72936296	8.163586e-06	3.218418e-05
## UCA1	652995	-1.59734603	8.177931e-06	3.223551e-05
## CRP	1401	-1.06455577	8.190898e-06	3.228138e-05
## MACC1-AS1	100874041	-1.28970921	8.193602e-06	3.228681e-05
## EIF3G	8666	0.28445150	8.217459e-06	3.237556e-05
## MED22	6837	0.16115741	8.219911e-06	3.237997e-05
## MAGT1	84061	-0.18249521	8.249419e-06	3.248658e-05
## STT3B	201595	-0.14689505	8.249646e-06	3.248658e-05
## EPN3	55040	-0.45009355	8.283897e-06	3.261617e-05
## OPA3	80207	-0.16209854	8.285937e-06	3.261892e-05
## PITX1-AS1	100996485	0.73444174	8.330595e-06	3.278941e-05
## DIRC3	729582	0.49912407	8.396420e-06	3.304314e-05
## SLC25A5-AS1	100303728	-0.36065585	8.426544e-06	3.315632e-05
## P4HA2	8974	0.38124681	8.472758e-06	3.333277e-05
## ENTPD7	57089	0.24452655	8.482420e-06	3.336538e-05
## ABLIM1	3983	-0.18200481	8.507325e-06	3.345251e-05
## ERFL	390937	1.44341621	8.506400e-06	3.345251e-05
## FGFR1	2260	0.37933604	8.542706e-06	3.358620e-05
## CCDC96	<NA>	-0.31390371	8.647253e-06	3.399173e-05
## BBS9	27241	0.13817695	8.686986e-06	3.414240e-05
## RFT1	91869	-0.14585572	8.723373e-06	3.427987e-05
## LINC02274	100506498	-0.75481094	8.737536e-06	3.432997e-05
## UBA52	7311	0.35529836	8.754566e-06	3.439132e-05
## ELOVL1	64834	-0.22290671	8.771074e-06	3.445060e-05
## SERPINB9	5272	0.32677869	8.782926e-06	3.449158e-05
## BARD1	580	0.32067433	8.796249e-06	3.453832e-05
## SLC31A2	1318	-0.35986373	8.803863e-06	3.456263e-05
## CDH26	60437	0.53918910	8.833970e-06	3.467522e-05
## SIGLEC9	27180	0.65298220	8.836460e-06	3.467940e-05
## SLC12A2-DT	644873	0.14504911	8.881043e-06	3.484873e-05
## FAM72A	729533	0.69177603	8.914142e-06	3.497297e-05
## MRAP2	112609	-0.31603029	8.990785e-06	3.526797e-05
## LINC01378	103689918	-1.68623653	9.004476e-06	3.531597e-05
## OR6E1P	79323	0.82415359	9.009590e-06	3.533033e-05
## LNC-LBCS	100506885	-0.62855608	9.029205e-06	3.540154e-05
## PKD1-AS1	105371049	-0.67731627	9.033501e-06	3.541266e-05
## MIR4453HG	54553	-0.31410181	9.040366e-06	3.543386e-05
## ZCCHC17	51538	0.17515189	9.050272e-06	3.546697e-05
## FAM83B	222584	-0.44644593	9.064677e-06	3.551769e-05
## RNF103	7844	-0.12808978	9.106735e-06	3.567673e-05
## HSPA8	3312	0.23133838	9.162515e-06	3.588947e-05
## TRAM1	23471	-0.21058028	9.195251e-06	3.601189e-05
## HELLPAR	101101692	0.71664217	9.207555e-06	3.605427e-05

## TATDN2P3	100420458	2.13567711	9.307232e-06	3.643871e-05
## NTN3	4917	0.95054926	9.348543e-06	3.659455e-05
## CCPG1	9236	-0.20782760	9.392982e-06	3.676258e-05
## PRR3	80742	0.20206272	9.443534e-06	3.695448e-05
## RNF14	9604	-0.15848967	9.503635e-06	3.718368e-05
## LMNA	4000	0.44004245	9.556924e-06	3.738616e-05
## MSANTD4	84437	0.14278968	9.568902e-06	3.742699e-05
## ZSCAN1	284312	-0.58191844	9.628028e-06	3.765219e-05
## ARRDC5	645432	1.39223048	9.636102e-06	3.767770e-05
## PYGB	5834	-0.25302691	9.713272e-06	3.796722e-05
## ITPKA	3706	0.95191533	9.711902e-06	3.796722e-05
## FBXO48	554251	0.23470168	9.716858e-06	3.797513e-05
## CNN3	1266	-0.19976558	9.734008e-06	3.803604e-05
## DZIP1	22873	0.23965837	9.761669e-06	3.813799e-05
## CHAF1A	10036	0.20619351	9.764714e-06	3.814376e-05
## SCAMP4	113178	-0.29126872	9.860318e-06	3.851102e-05
## BUD13P1	100420358	-0.90938739	9.956432e-06	3.888016e-05
## RAB25	57111	-0.43433817	9.969539e-06	3.892509e-05
## DRAIC	145837	0.63040405	9.985031e-06	3.897931e-05
## SMG1P7	100506060	0.59372860	9.987082e-06	3.898106e-05
## PRPF4	9128	0.16473637	1.003478e-05	3.916093e-05
## FGF14	2259	-0.51736611	1.008241e-05	3.933516e-05
## FLCN	201163	0.21140130	1.008266e-05	3.933516e-05
## CORO7	79585	0.29944483	1.010344e-05	3.940991e-05
## FGL2	10875	0.28584885	1.014132e-05	3.955130e-05
## C5	727	0.35705019	1.015850e-05	3.961196e-05
## ANKMY1	51281	0.19524400	1.017467e-05	3.966864e-05
## FAHD2A	51011	-0.20276027	1.018794e-05	3.970764e-05
## LIF	3976	0.59097129	1.018770e-05	3.970764e-05
## TPI1P2	286016	-0.31728548	1.020112e-05	3.975265e-05
## SLC2A4RG	56731	0.39442797	1.022173e-05	3.982656e-05
## CCDC89	220388	0.24353274	1.024476e-05	3.990989e-05
## TAF1	6872	0.24752834	1.027966e-05	4.003942e-05
## PCDH10	57575	0.61638325	1.029310e-05	4.008535e-05
## HTT	3064	0.15207291	1.033075e-05	4.022552e-05
## NHS	4810	-0.38673068	1.034219e-05	4.026364e-05
## TMOD3	29766	0.17581573	1.035713e-05	4.031535e-05
## UBE2QL1	134111	0.41136657	1.036617e-05	4.034404e-05
## C2	717	-0.83661330	1.037247e-05	4.036211e-05
## LINC02245	400958	0.38909667	1.037718e-05	4.037399e-05
## TRBV13	28574	1.83935939	1.046584e-05	4.071240e-05
## ZNF174	7727	0.12041948	1.052525e-05	4.093694e-05
## GPM6B	2824	-0.53570786	1.054706e-05	4.101523e-05
## HMOX2	3163	-0.29236074	1.058184e-05	4.114389e-05
## EDIL3	10085	0.67166162	1.061801e-05	4.127793e-05
## HCCS	3052	-0.14505918	1.064285e-05	4.136788e-05
## RANBP3L	202151	-0.61836692	1.064532e-05	4.137085e-05
## PPFIA3	8541	-0.32086382	1.064978e-05	4.138156e-05
## DYNC1LI1	51143	-0.14969909	1.065801e-05	4.140692e-05
## PRSS57	400668	1.55792439	1.069058e-05	4.152681e-05
## AKAP14	158798	1.84554289	1.074748e-05	4.174118e-05
## LRRC70	100130733	-0.48814834	1.078847e-05	4.189366e-05
## TNFRSF17	608	1.35880228	1.079283e-05	4.190392e-05
## FUT11	170384	0.25910570	1.079894e-05	4.192092e-05

## YJU2	55702	-0.22955306	1.080426e-05	4.193489e-05
## BRINP2	57795	0.98177243	1.082961e-05	4.202656e-05
## PIK3C2B	5287	0.29063624	1.084721e-05	4.208813e-05
## TMEM207	131920	-0.71124339	1.087037e-05	4.217129e-05
## CMAS	55907	-0.16412826	1.088196e-05	4.220949e-05
## CPNE5	57699	0.40761502	1.089947e-05	4.227067e-05
## PAPLN-AS1	101928123	0.36525687	1.090394e-05	4.228126e-05
## GIMAP8	155038	0.24485402	1.094820e-05	4.244609e-05
## EMILIN1	11117	0.68900405	1.095955e-05	4.248335e-05
## TPT1P9	389787	0.46116104	1.102686e-05	4.273744e-05
## MLH1	4292	0.12268736	1.103030e-05	4.274394e-05
## STXBP6	29091	0.43491202	1.103835e-05	4.276834e-05
## HOXC8	3224	0.35707242	1.108211e-05	4.293105e-05
## NANOS3	342977	0.90535661	1.109470e-05	4.297294e-05
## SCIN	85477	-0.32696950	1.112399e-05	4.307955e-05
## TFCP2L1	29842	-0.37768427	1.118241e-05	4.329887e-05
## LMF1	64788	-0.29090195	1.120881e-05	4.339419e-05
## RPS23P8	653658	0.44236400	1.131262e-05	4.378912e-05
## CBX1	10951	0.15326396	1.136793e-05	4.399619e-05
## ZMIZ1	57178	-0.23220629	1.137850e-05	4.403007e-05
## CD82	3732	-0.39121674	1.140672e-05	4.413215e-05
## ZNF449	203523	0.32190908	1.140851e-05	4.413215e-05
## EMP1	2012	0.60107100	1.144725e-05	4.427497e-05
## STT3A	3703	-0.22048071	1.148673e-05	4.442058e-05
## MRPL14	64928	0.30203713	1.149860e-05	4.445941e-05
## TTC23	64927	0.12527024	1.151246e-05	4.450593e-05
## TUSC1	286319	-0.30196557	1.151992e-05	4.452767e-05
## IGKV3-20	28912	1.13738128	1.152634e-05	4.454542e-05
## B4GALNT3	283358	-0.36304771	1.156818e-05	4.470000e-05
## PLEKHA3P1	91405	0.89794898	1.158961e-05	4.477568e-05
## GREB1L	80000	0.83673323	1.164059e-05	4.495865e-05
## MAML1	9794	0.18089262	1.164066e-05	4.495865e-05
## BLOC1S3	388552	0.26290019	1.168242e-05	4.511273e-05
## CCDC85C	317762	-0.22649283	1.173623e-05	4.531332e-05
## RPRD1A	55197	-0.12588086	1.183188e-05	4.567085e-05
## HOXA4	3201	-0.26869057	1.183259e-05	4.567085e-05
## PHF21A	51317	0.18196738	1.185149e-05	4.573655e-05
## PCGF1	84759	0.23069413	1.185544e-05	4.574453e-05
## GRAMD4	23151	-0.23820124	1.187731e-05	4.582165e-05
## POFUT1	23509	-0.16777586	1.191831e-05	4.597251e-05
## ZNF420	147923	0.16146551	1.192263e-05	4.598143e-05
## LINC02937	100507103	-0.49384987	1.192441e-05	4.598143e-05
## RCN1	5954	0.35172505	1.198607e-05	4.621187e-05
## LINC02535	101928820	0.74479010	1.202151e-05	4.634118e-05
## WNK3	65267	-0.30670842	1.210304e-05	4.664806e-05
## GALNT12	79695	0.25342940	1.214223e-05	4.679168e-05
## ADAM33	80332	0.96553758	1.217819e-05	4.692281e-05
## TSPAN12	23554	-0.24045225	1.218145e-05	4.692793e-05
## NSG1	27065	-0.90273581	1.228591e-05	4.732284e-05
## NARF-AS2	105371941	-0.32357006	1.229074e-05	4.733396e-05
## ATXN7L3B	552889	-0.11680329	1.229947e-05	4.736009e-05
## MEX3D	399664	0.40499441	1.237047e-05	4.762593e-05
## TECTA	7007	0.31100604	1.238543e-05	4.767597e-05
## PXN	5829	-0.16690550	1.241083e-05	4.776618e-05

## VAT1	10493	0.30324656	1.247906e-05	4.802115e-05
## SLC7A10	56301	0.87699722	1.252542e-05	4.819192e-05
## SCAP	22937	-0.18110590	1.256237e-05	4.832643e-05
## LCAL1	80078	1.02926632	1.260518e-05	4.848344e-05
## CABLES1	91768	0.21556804	1.261605e-05	4.851759e-05
## SLC14A1	6563	-0.80526278	1.266550e-05	4.869908e-05
## GREB1	9687	-0.53074799	1.266725e-05	4.869908e-05
## SMAD9	4093	-0.45770603	1.267443e-05	4.871630e-05
## TCN1	6947	-1.52595128	1.267574e-05	4.871630e-05
## KLHL4	56062	0.48178556	1.272324e-05	4.889113e-05
## CCDC142	84865	0.25487471	1.275322e-05	4.899857e-05
## GPAT2	150763	0.68187630	1.275563e-05	4.900008e-05
## PRRG1	5638	-0.24818363	1.277612e-05	4.907106e-05
## NBEAP2	100418881	0.62805784	1.278093e-05	4.908174e-05
## SLC7A14-AS1	101928583	0.81538629	1.279687e-05	4.913522e-05
## ADGRE2	30817	0.67765085	1.283882e-05	4.928850e-05
## SLC16A1	6566	-0.55195664	1.295934e-05	4.974333e-05
## SLC22A17	51310	-0.34617253	1.297606e-05	4.979963e-05
## VPS52	6293	-0.12560552	1.298050e-05	4.980881e-05
## CYP1B1-AS1	285154	0.42506275	1.306653e-05	5.013101e-05
## CIAPIN1	57019	-0.15127109	1.318646e-05	5.058315e-05
## VPS26A	9559	-0.11615447	1.321067e-05	5.066801e-05
## C1QTNF1	114897	0.58196747	1.322701e-05	5.072267e-05
## AK2	204	-0.19674079	1.329253e-05	5.096589e-05
## SEPSECS-AS1	285540	0.33578713	1.338046e-05	5.129494e-05
## HTR6	3362	1.60919991	1.347049e-05	5.162961e-05
## TSPYL2	64061	-0.35820263	1.347201e-05	5.162961e-05
## ZNF567-DT	101927621	0.36018064	1.349641e-05	5.171497e-05
## RPH3AL	9501	-0.31289259	1.350843e-05	5.175284e-05
## NUP210	23225	-0.27288044	1.356885e-05	5.197613e-05
## KYNU	8942	0.46322468	1.364786e-05	5.226233e-05
## SHISA9	729993	-0.47612351	1.364596e-05	5.226233e-05
## TMEM132E-DT	400591	-0.79994347	1.370428e-05	5.247009e-05
## CCDC78	124093	0.84304996	1.374266e-05	5.260875e-05
## LINC01119	100134259	0.50651292	1.374735e-05	5.261843e-05
## OXNAD1	92106	-0.18843119	1.375099e-05	5.262405e-05
## SNRNP40	9410	0.15343018	1.379526e-05	5.278516e-05
## BHLHE40	8553	-0.25783813	1.381376e-05	5.284762e-05
## LINC00299	339789	0.77642903	1.383163e-05	5.290768e-05
## CHFR	55743	0.26722545	1.383941e-05	5.292146e-05
## PPP1R2	5504	-0.13060447	1.383959e-05	5.292146e-05
## BEND5	79656	0.26261966	1.395470e-05	5.335323e-05
## ARHGEF26-AS1	100507524	-0.45408177	1.399147e-05	5.348542e-05
## JAKMIP1	152789	1.69148908	1.400725e-05	5.353732e-05
## MARVELD3	91862	-0.39418504	1.401742e-05	5.356776e-05
## SRSF5	6430	-0.31655780	1.403153e-05	5.361326e-05
## ZNF616	90317	0.15216157	1.405547e-05	5.369629e-05
## HM CES	56941	-0.15757741	1.406359e-05	5.371884e-05
## MDC1-AS1	106478956	1.52010540	1.407212e-05	5.374300e-05
## TAF5	6877	0.20230209	1.409226e-05	5.381146e-05
## FAM3B	54097	-0.37834227	1.416982e-05	5.409912e-05
## RWDD2B	10069	0.19112146	1.422368e-05	5.429619e-05
## LINC03072	128071538	-0.31523227	1.423014e-05	5.431235e-05
## ZSCAN12P1	221584	-0.46151987	1.426009e-05	5.441810e-05

## FKBP11	51303	0.37673954	1.427129e-05	5.445229e-05
## DNMT1	1786	0.22797429	1.432734e-05	5.465755e-05
## HORMAD1	84072	1.68210218	1.435115e-05	5.473942e-05
## R3HCC1L	27291	0.22925481	1.435330e-05	5.473942e-05
## RPLP0	6175	0.34818411	1.438603e-05	5.485561e-05
## CCNDBP1	23582	-0.15739291	1.443340e-05	5.502762e-05
## ITM2C	81618	-0.34834557	1.444164e-05	5.505039e-05
## G6PC2	57818	-1.35622001	1.445409e-05	5.508922e-05
## NUP88	4927	-0.13117728	1.448271e-05	5.518962e-05
## KCNJ9	3765	-0.68303357	1.450940e-05	5.528269e-05
## THNSL1	79896	0.24475224	1.453808e-05	5.538326e-05
## CCNI2	645121	-0.39096726	1.455708e-05	5.544695e-05
## ERICH2	285141	-0.49446829	1.457070e-05	5.549015e-05
## C10orf55	414236	-0.71422366	1.459120e-05	5.555949e-05
## TPM4P2	643634	-0.36655308	1.462787e-05	5.569043e-05
## ASXL3	80816	-0.35883496	1.464840e-05	5.575984e-05
## RAB38	23682	0.24905073	1.465914e-05	5.579198e-05
## TET1	80312	0.40739708	1.471985e-05	5.601428e-05
## UBE2F	140739	0.16534364	1.476700e-05	5.618490e-05
## CNKSR3	154043	-0.25121647	1.479599e-05	5.628638e-05
## SPRYD7	57213	-0.17460338	1.481615e-05	5.635425e-05
## MTND5P6	100873196	-0.83114679	1.491349e-05	5.671559e-05
## FDCSP	260436	2.44128164	1.495229e-05	5.685426e-05
## SNAPC3	6619	-0.12508525	1.501743e-05	5.707518e-05
## CPT1C	126129	0.55815690	1.501373e-05	5.707518e-05
## PITPNA	5306	-0.09900718	1.501724e-05	5.707518e-05
## TRGV3	6976	0.89767461	1.502933e-05	5.711144e-05
## PNMA8B	57469	0.51408496	1.504382e-05	5.715756e-05
## COMMD3	23412	0.30504920	1.511041e-05	5.740160e-05
## ST3GAL3	6487	0.35409276	1.513368e-05	5.748103e-05
## SEMA3D	223117	0.34918325	1.516099e-05	5.757575e-05
## HPSE	10855	-0.32112914	1.518497e-05	5.765779e-05
## PLCE1-AS1	100128054	-1.06246085	1.525026e-05	5.789668e-05
## DYDC2	84332	0.79564212	1.531934e-05	5.814985e-05
## MANEA	79694	-0.23770501	1.532487e-05	5.816173e-05
## LINC00869	57234	0.25411408	1.533926e-05	5.820729e-05
## S100A5	6276	-0.59445997	1.542519e-05	5.852422e-05
## ZRANB3	84083	0.18232897	1.554121e-05	5.895521e-05
## BRK1	55845	0.28254876	1.556157e-05	5.902323e-05
## COL26A1	136227	-0.70719001	1.556756e-05	5.903673e-05
## CCR12P	100133168	2.33374086	1.558712e-05	5.910165e-05
## LINC00840	100506835	0.70882922	1.562076e-05	5.921999e-05
## RMDN3	55177	-0.10824125	1.563299e-05	5.925709e-05
## NAT14	57106	-0.38566254	1.570993e-05	5.953019e-05
## MLF1	4291	0.21356922	1.570867e-05	5.953019e-05
## HTATSF1P2	401233	0.76661242	1.577914e-05	5.978312e-05
## PHGDH	26227	-0.38197930	1.582444e-05	5.994539e-05
## CASP1P2	440067	1.85054425	1.583500e-05	5.997606e-05
## SLC6A16	28968	-0.37848642	1.593686e-05	6.035245e-05
## LINC00939	400084	0.71653999	1.599486e-05	6.056265e-05
## IL10RB-DT	100288432	0.70772803	1.607832e-05	6.086082e-05
## MCRIP1	348262	0.35140472	1.607862e-05	6.086082e-05
## ZNF561-AS1	284385	0.20114118	1.608563e-05	6.087787e-05
## PPT2	9374	-0.16635339	1.609596e-05	6.090749e-05

## PPP1R26P1	100418740	-0.62992055	1.610105e-05	6.091727e-05
## ZC3H7A	29066	0.18975240	1.610573e-05	6.092548e-05
## TMC1	117531	0.70718249	1.611175e-05	6.093876e-05
## MTCO3P24	107075217	-0.57377036	1.613830e-05	6.102970e-05
## RAMP2-AS1	100190938	0.44992224	1.614297e-05	6.103786e-05
## NAP1L5	266812	-0.17933047	1.623864e-05	6.139006e-05
## GSKIP	51527	-0.17492323	1.624357e-05	6.139912e-05
## THUMPD3	25917	-0.11344041	1.627551e-05	6.151030e-05
## NUDCD3	23386	0.13319317	1.627858e-05	6.151234e-05
## CSDE1	7812	0.16922525	1.640685e-05	6.198737e-05
## VDAC1	7416	-0.19062737	1.650196e-05	6.233701e-05
## A1BG-AS1	503538	0.42538833	1.661291e-05	6.274639e-05
## CKLF	51192	0.68460839	1.665791e-05	6.290659e-05
## MYO1B-AS1	122152331	0.55060938	1.670192e-05	6.306299e-05
## PORCN	64840	-0.26124210	1.673312e-05	6.317098e-05
## IDH2-DT	105370966	-0.56136531	1.674022e-05	6.318797e-05
## TTR	7276	0.75690165	1.677752e-05	6.331728e-05
## TNFRSF11A	8792	0.51620490	1.677969e-05	6.331728e-05
## AKAP1	8165	-0.20961372	1.683117e-05	6.350166e-05
## EIF3H	8667	0.23624821	1.692941e-05	6.386241e-05
## LINC02520	100505530	1.02064548	1.694088e-05	6.389574e-05
## PES1P2	347193	-1.33092850	1.698994e-05	6.407085e-05
## TMEM177	80775	-0.27099526	1.701143e-05	6.413200e-05
## LINC02292	101929080	-0.74311797	1.701141e-05	6.413200e-05
## MPV17L	255027	-0.34601468	1.712552e-05	6.455210e-05
## PGM1	5236	0.31855462	1.713077e-05	6.456185e-05
## E2F5	1875	-0.21163331	1.722152e-05	6.489379e-05
## ZNF512B	57473	0.25024832	1.726020e-05	6.502669e-05
## HOXB-AS3	404266	-0.39231241	1.726214e-05	6.502669e-05
## HSF5	124535	1.21854145	1.735200e-05	6.535510e-05
## RPL35A	6165	0.36693575	1.745283e-05	6.572467e-05
## GABRA2	2555	-0.42087810	1.751642e-05	6.595389e-05
## CEPT1	10390	-0.13861065	1.756260e-05	6.611756e-05
## RAMP1	10267	0.72807152	1.759026e-05	6.621142e-05
## BCL2L13	23786	-0.15694745	1.764778e-05	6.640737e-05
## LINC01522	101927457	2.16374563	1.764713e-05	6.640737e-05
## PAWR	5074	-0.21596823	1.773879e-05	6.673950e-05
## CMTM2	146225	1.05052407	1.785090e-05	6.715090e-05
## PFKM	5213	0.36404299	1.785780e-05	6.716644e-05
## IL20RA	53832	0.61313185	1.790958e-05	6.735077e-05
## TRPM5	29850	-0.69183432	1.795215e-05	6.750043e-05
## FBXO21	23014	-0.29318162	1.798804e-05	6.762491e-05
## HAR1B	768097	1.23803196	1.806063e-05	6.788729e-05
## SCN3A	6328	-0.60633524	1.808180e-05	6.795635e-05
## PCP2	126006	-0.63096032	1.815051e-05	6.820406e-05
## CPVL	54504	-0.29962857	1.816508e-05	6.824823e-05
## DEPDC5	9681	-0.13388632	1.820806e-05	6.839440e-05
## CLIP4	79745	0.23751495	1.820961e-05	6.839440e-05
## RNF43	54894	-0.35266443	1.826001e-05	6.857308e-05
## POLR3GL	84265	0.24622335	1.832907e-05	6.881770e-05
## RALGPS2-AS1	646976	-0.44741926	1.833081e-05	6.881770e-05
## ZNF24TR	122965328	0.89636324	1.842258e-05	6.915155e-05
## ZDHHC20P1	100048907	1.28736145	1.843336e-05	6.918134e-05
## ACOT13	55856	0.36700208	1.845467e-05	6.925061e-05

## C1orf131	128061	0.19840123	1.846886e-05	6.929316e-05
## SEZ6L2	26470	0.56090004	1.850755e-05	6.942759e-05
## SPECC1	92521	0.24703765	1.854211e-05	6.954650e-05
## TNFRSF10C	8794	0.39563450	1.857200e-05	6.964786e-05
## MYO6	4646	-0.29590581	1.859905e-05	6.973853e-05
## HEXA-AS1	80072	-0.48057289	1.860292e-05	6.974231e-05
## TMEM241	85019	0.17746757	1.861391e-05	6.977275e-05
## PLXNB2	23654	-0.26345710	1.863055e-05	6.982433e-05
## DPYSL4	10570	0.96908368	1.869158e-05	7.004228e-05
## MARCHF8	220972	-0.13805418	1.873285e-05	7.018232e-05
## PDE9A-AS1	101928284	0.96671554	1.873473e-05	7.018232e-05
## LINC02861	102724927	0.33900289	1.879240e-05	7.038751e-05
## PDIK1L	149420	-0.18735086	1.891567e-05	7.082738e-05
## LINC02964	105375746	0.96181460	1.891330e-05	7.082738e-05
## THOC5	8563	0.13763456	1.893276e-05	7.086953e-05
## PLEKHA1	59338	-0.25230206	1.893177e-05	7.086953e-05
## CX3CL1	6376	-0.28960916	1.896429e-05	7.097662e-05
## DEPDC1B	55789	-0.52430592	1.897915e-05	7.102129e-05
## NALF2	27112	-0.32714479	1.900560e-05	7.110933e-05
## LINC00519	161342	1.40450469	1.907555e-05	7.136006e-05
## RPL7AP45	100132678	0.36800430	1.908651e-05	7.139006e-05
## F5	2153	-0.43580005	1.912331e-05	7.151669e-05
## EVX1	2128	-1.00269473	1.913623e-05	7.155400e-05
## TMSB4XP8	7117	0.62350109	1.915078e-05	7.159741e-05
## RASSF8	11228	-0.21285889	1.917224e-05	7.166660e-05
## MZT1	440145	-0.20207947	1.941227e-05	7.255271e-05
## LINC00163	727699	2.07947699	1.946403e-05	7.273497e-05
## YBX2	51087	-0.52198578	1.952671e-05	7.295797e-05
## MTERF1	7978	0.22363832	1.961030e-05	7.325902e-05
## MIGA2	84895	-0.17292253	1.962973e-05	7.332033e-05
## SUSD3	203328	-0.50505195	1.965655e-05	7.340921e-05
## CHRM3	1131	-0.34354573	1.966668e-05	7.343578e-05
## RNGTT	8732	-0.16219780	1.969306e-05	7.352299e-05
## ALDH18A1	5832	0.21362348	1.972324e-05	7.362433e-05
## PMFBP1	83449	0.60453306	1.972837e-05	7.363218e-05
## PIP5K1A	8394	-0.11394811	1.976554e-05	7.375958e-05
## FBXL12	54850	0.17019930	1.978595e-05	7.382441e-05
## PGA5	5222	0.91948515	1.979841e-05	7.385957e-05
## TMEM72-AS1	220980	-0.62800152	1.981916e-05	7.392564e-05
## C1orf74	148304	-0.19414944	1.982672e-05	7.394247e-05
## KLHDC8B	200942	0.21514781	1.984558e-05	7.400145e-05
## FAM241B	219738	-0.25285827	1.985459e-05	7.402369e-05
## SPAG9	9043	-0.17987114	1.987643e-05	7.408240e-05
## ATMIN	23300	0.12446540	1.987430e-05	7.408240e-05
## SIGLEC15	284266	0.95843729	1.993046e-05	7.427237e-05
## NTN5	126147	0.65126250	2.002874e-05	7.462718e-05
## RNF152	220441	-0.47473665	2.007959e-05	7.480517e-05
## RHBDL2	54933	0.51589151	2.014825e-05	7.504944e-05
## HNF1B	6928	-0.35658670	2.017002e-05	7.511901e-05
## LAD1	3898	-0.35915615	2.022103e-05	7.529748e-05
## ROBO3	64221	0.50067112	2.028741e-05	7.552423e-05
## GANC	2595	0.18409808	2.028814e-05	7.552423e-05
## NRG3	10718	-0.38608329	2.032301e-05	7.564244e-05
## BEND4	389206	0.83479966	2.033817e-05	7.568729e-05

## ANKEF1	63926	-0.15880340	2.040205e-05	7.591335e-05
## EPB41L4B	54566	-0.32036271	2.044735e-05	7.607028e-05
## DBF4	10926	0.26166388	2.059280e-05	7.659968e-05
## TMEM35A	59353	0.61464761	2.082957e-05	7.746854e-05
## TXK	7294	0.46754898	2.089396e-05	7.768423e-05
## MTND2P28	100652939	-0.33535777	2.089121e-05	7.768423e-05
## RPL13AP25	100287887	0.42230621	2.090847e-05	7.772629e-05
## ZNF804A	91752	-0.58118465	2.091441e-05	7.773649e-05
## TAFA4	151647	-0.78840827	2.095566e-05	7.787790e-05
## TADA3	10474	0.16816716	2.096426e-05	7.789793e-05
## TOP1P1	7151	0.49764476	2.097652e-05	7.793158e-05
## CLDN24	100132463	-0.87900955	2.129264e-05	7.909391e-05
## MTF1	4520	0.17304544	2.134549e-05	7.927814e-05
## PAPSS2	9060	0.19543062	2.139398e-05	7.944608e-05
## LINC00997	401321	-0.27790711	2.152967e-05	7.993774e-05
## REEP4	80346	0.34015629	2.153917e-05	7.996081e-05
## LIMS2	55679	-0.36528146	2.155815e-05	8.001901e-05
## FUT4	2526	0.27149404	2.158944e-05	8.012295e-05
## HSF2	3298	0.21381249	2.162108e-05	8.022811e-05
## SNX32	254122	0.48679049	2.167060e-05	8.039957e-05
## NBN	4683	-0.16779887	2.172860e-05	8.060248e-05
## VN1R51P	100312801	0.82242760	2.175695e-05	8.069530e-05
## EML4	27436	0.22487305	2.181993e-05	8.091656e-05
## ATF7IP	55729	0.16423359	2.186838e-05	8.108382e-05
## PRMT5	10419	-0.12516516	2.191916e-05	8.125972e-05
## PDIA4	9601	-0.30958964	2.193986e-05	8.132405e-05
## CLEC3A	10143	-1.03678137	2.197395e-05	8.143800e-05
## SCARNA21	677763	1.48585139	2.198230e-05	8.145654e-05
## SIMC1	375484	0.15578581	2.205514e-05	8.171396e-05
## PLLP	51090	-0.30416799	2.207047e-05	8.174801e-05
## FRZB	2487	0.36427643	2.207105e-05	8.174801e-05
## B3GAT3	26229	-0.25146128	2.216362e-05	8.207836e-05
## MGAT5B	146664	-0.49667302	2.227284e-05	8.246577e-05
## MTCL1	23255	0.28359020	2.227842e-05	8.246577e-05
## HMGB1P10	100130561	1.03982604	2.227750e-05	8.246577e-05
## RPH3AL-AS1	100506388	-0.38084720	2.233725e-05	8.267094e-05
## GCM1	8521	-0.70540266	2.237419e-05	8.279507e-05
## NCK1-DT	101927597	0.26303760	2.247305e-05	8.314822e-05
## ACTN4P1	344978	-0.94512370	2.255669e-05	8.344497e-05
## CYP11A1	1583	0.45683735	2.260339e-05	8.360503e-05
## RPL19	6143	0.28239685	2.264454e-05	8.374448e-05
## WNT11	7481	0.86891917	2.268728e-05	8.388977e-05
## HCG22	285834	1.03539613	2.269741e-05	8.390170e-05
## PPIAP78	202227	-1.52446494	2.269465e-05	8.390170e-05
## SCT	6343	1.38716900	2.272355e-05	8.398557e-05
## NCOA1	8648	-0.15381936	2.280559e-05	8.427594e-05
## F2RL1	2150	-0.30493003	2.287260e-05	8.451072e-05
## STMN3	50861	0.37716780	2.288028e-05	8.452624e-05
## EED	8726	0.15326491	2.293147e-05	8.470249e-05
## DEGS1	8560	0.16462779	2.295638e-05	8.478162e-05
## TMDD1	112163659	-0.74842668	2.297571e-05	8.484011e-05
## AKR7A2	8574	0.34847121	2.314894e-05	8.546678e-05
## CFAP157	286207	0.72610099	2.325033e-05	8.582807e-05
## NMD3	51068	-0.11805025	2.331836e-05	8.606613e-05

## LINC02983	100129484	-0.45744360	2.335691e-05	8.619533e-05
## MAPK6-DT	112543478	0.73370444	2.336088e-05	8.619689e-05
## CNTFR	1271	0.72356004	2.346278e-05	8.655974e-05
## KLB	152831	0.56403755	2.347673e-05	8.659808e-05
## PTPRF	5792	-0.23079251	2.351881e-05	8.674013e-05
## LYPLAL1-AS1	102723886	0.79024324	2.359442e-05	8.700576e-05
## PSEN1	5663	-0.13495025	2.362763e-05	8.710181e-05
## POU6F2	11281	-0.66494950	2.362482e-05	8.710181e-05
## PLVAP	83483	-0.43963690	2.370011e-05	8.735575e-05
## FDFT1	2222	-0.20896810	2.372331e-05	8.742799e-05
## PON2	5445	-0.24512264	2.376489e-05	8.755468e-05
## SLC35F1	222553	-0.53906294	2.376294e-05	8.755468e-05
## DELEC1	50514	0.79704772	2.377416e-05	8.757554e-05
## SAMSN1	64092	0.52562573	2.378418e-05	8.759919e-05
## H6PD	9563	0.26074254	2.381527e-05	8.769538e-05
## MAGEE1	57692	-0.19354389	2.381752e-05	8.769538e-05
## NFYC	4802	-0.11596187	2.405027e-05	8.853897e-05
## BCAN	63827	-0.81810633	2.408042e-05	8.863650e-05
## NETO1	81832	0.91649903	2.409179e-05	8.866496e-05
## LIMK2	3985	-0.22385273	2.419359e-05	8.902611e-05
## DIP2C-AS1	414235	-0.38827000	2.424220e-05	8.919148e-05
## LINC01909	101927481	-0.50261427	2.432668e-05	8.948875e-05
## TMEM26-AS1	101928781	0.59901637	2.433265e-05	8.949716e-05
## FOXP3	50943	0.55735476	2.439966e-05	8.973003e-05
## LINC02829	105375009	1.71083107	2.446718e-05	8.996474e-05
## LINC02880	285759	1.17476456	2.451731e-05	9.013542e-05
## PODXL	5420	-0.37109016	2.452773e-05	9.016009e-05
## PCDHA6	56142	-0.51059059	2.459295e-05	9.038615e-05
## NHLRC2	374354	-0.19542932	2.460523e-05	9.041763e-05
## BOLL	66037	1.55944006	2.466556e-05	9.062561e-05
## LSM7	51690	0.33688506	2.470905e-05	9.077167e-05
## LRFN4	78999	0.54425585	2.472687e-05	9.082340e-05
## SLC5A2	6524	-0.70800366	2.473669e-05	9.084575e-05
## BMP6	654	-0.64977129	2.480438e-05	9.108056e-05
## PWWP3A	84939	0.17478761	2.495485e-05	9.161925e-05
## KRT8P46	100418744	0.91882883	2.497977e-05	9.169688e-05
## INVS	27130	0.19921126	2.500556e-05	9.177770e-05
## GALK2	2585	-0.22473839	2.505391e-05	9.194127e-05
## FLT3LG	2323	0.86321591	2.511332e-05	9.214536e-05
## DUS1L	64118	0.26572482	2.512030e-05	9.215705e-05
## ATL1	51062	0.21901808	2.515523e-05	9.227130e-05
## TFIP11-DT	100507599	-0.25765062	2.517411e-05	9.232660e-05
## LINC02132	107984811	2.02212045	2.519305e-05	9.238213e-05
## HFE	3077	0.19126516	2.525138e-05	9.258206e-05
## ENKUR	219670	0.53536355	2.526884e-05	9.263210e-05
## ZNF404	342908	0.37812771	2.531310e-05	9.278032e-05
## CCDC190	339512	1.13693108	2.534897e-05	9.289781e-05
## ARMCX1	51309	0.18296440	2.538201e-05	9.300487e-05
## GATA5	140628	-0.42807707	2.554348e-05	9.358242e-05
## SPATA6	54558	-0.17198230	2.559182e-05	9.374537e-05
## DAPL1	92196	-0.53481654	2.561750e-05	9.382530e-05
## MFHAS1	9258	-0.18840681	2.583293e-05	9.460008e-05
## MEIS1-AS2	100873998	0.46146347	2.587562e-05	9.474210e-05
## ASB18	401036	2.60111325	2.590676e-05	9.484186e-05

## IVNS1ABP	10625	-0.21587765	2.611444e-05	9.557334e-05
## CABP1	9478	-0.58290445	2.611330e-05	9.557334e-05
## MTMR2	8898	-0.16022927	2.615030e-05	9.569017e-05
## BRD3	8019	0.17850732	2.617081e-05	9.575082e-05
## RNF217-AS1	7955	0.46866774	2.621347e-05	9.589244e-05
## TMEM215	401498	2.12998596	2.624874e-05	9.600703e-05
## SMU1	55234	-0.07645027	2.628214e-05	9.611470e-05
## FBXW7	55294	0.24562353	2.630267e-05	9.617533e-05
## MALL	7851	0.52421142	2.631149e-05	9.619309e-05
## GJC2	57165	0.58068046	2.633118e-05	9.625061e-05
## LINC02938	123464514	-0.65148133	2.637454e-05	9.639460e-05
## GPBAR1	151306	-0.82693185	2.648947e-05	9.680010e-05
## CHI3L1	1116	0.76167705	2.656960e-05	9.707830e-05
## LINC00539	100652865	1.00394441	2.671592e-05	9.759826e-05
## PKDREJ	10343	-0.45863453	2.673289e-05	9.764557e-05
## OLFML2A	169611	0.40180245	2.681544e-05	9.793238e-05
## CIRBP-AS1	148046	-0.43992966	2.684173e-05	9.801366e-05
## SECTM1	6398	-0.61856305	2.686953e-05	9.810043e-05
## B4GALNT1	2583	0.63520504	2.694146e-05	9.834827e-05
## TRBV10-2	28584	2.01403685	2.696497e-05	9.841929e-05
## KLHL6-AS1	100874019	0.69060474	2.701037e-05	9.857021e-05
## KLHDC10	23008	-0.15038650	2.703409e-05	9.864195e-05
## FBLN5	10516	0.36649840	2.735048e-05	9.978142e-05
## PPM1L-DT	119863869	-0.42405743	2.742516e-05	1.000388e-04
## CDH18	1016	-1.16757471	2.743369e-05	1.000550e-04
## NOMO3	408050	-0.49896161	2.747572e-05	1.001932e-04
## CDK5	1020	0.25655951	2.749579e-05	1.002514e-04
## SLC30A7	148867	-0.17797302	2.751188e-05	1.002949e-04
## SLC39A2	29986	1.00198283	2.756863e-05	1.004868e-04
## DNAH2	146754	0.59418722	2.759027e-05	1.005506e-04
## BCL11A	53335	0.69578844	2.759953e-05	1.005692e-04
## COX5B	1329	-0.36844716	2.769761e-05	1.009115e-04
## RPL3	6122	0.24704197	2.775603e-05	1.011092e-04
## CBX3	11335	-0.15656434	2.786545e-05	1.014926e-04
## ADGRG1	9289	-0.40047819	2.787315e-05	1.015054e-04
## XPOT	11260	0.16622954	2.795309e-05	1.017813e-04
## MPZ	4359	-0.36991465	2.804174e-05	1.020887e-04
## WNT7A	7476	0.87719602	2.807685e-05	1.022012e-04
## C14orf132	56967	0.43964005	2.818978e-05	1.025970e-04
## LIME1	54923	0.60597691	2.820361e-05	1.026319e-04
## UBR4	23352	-0.22427241	2.822464e-05	1.026931e-04
## SRCIN1	80725	-0.51644488	2.828543e-05	1.028988e-04
## HHEX	3087	0.38772059	2.844993e-05	1.034818e-04
## LINC02453	643770	-0.46292196	2.846592e-05	1.035244e-04
## SLC16A13	201232	-0.48186488	2.853729e-05	1.037685e-04
## MRPL15	29088	-0.21619779	2.859815e-05	1.039742e-04
## NBAS	51594	0.13485345	2.860767e-05	1.039932e-04
## LINC01505	100996590	0.80598093	2.875898e-05	1.045277e-04
## MELTF	4241	-0.98881655	2.878034e-05	1.045897e-04
## NALF1	728215	0.42960891	2.878483e-05	1.045903e-04
## LINC01546	100129464	1.34579002	2.879444e-05	1.046096e-04
## C2orf68	388969	0.15736257	2.883338e-05	1.047354e-04
## STC1	6781	-0.55692860	2.890016e-05	1.049623e-04
## ZNF710-AS1	109729181	-0.31602462	2.891436e-05	1.049982e-04

## ACADL	33	-0.27826403	2.908901e-05	1.056166e-04
## SCARF2	91179	0.61440261	2.913982e-05	1.057853e-04
## MT2A	4502	-0.50388268	2.921893e-05	1.060566e-04
## RPS18	6222	0.39209316	2.940625e-05	1.067206e-04
## DENND2D	79961	-0.24889329	2.945301e-05	1.068743e-04
## ARID5B	84159	-0.21797706	2.952894e-05	1.071339e-04
## ACOD1	730249	1.15321822	2.961993e-05	1.074480e-04
## SH3BGRL	6451	0.15446697	2.964366e-05	1.075180e-04
## FGL1	2267	-1.15578464	2.980499e-05	1.080870e-04
## PIM2	11040	0.29363424	2.989367e-05	1.083924e-04
## SNPH	9751	0.27127963	3.001610e-05	1.088201e-04
## CEACAM16	388551	2.07228157	3.007649e-05	1.090228e-04
## PCBP4	57060	0.31100079	3.010828e-05	1.091217e-04
## ZNF589	51385	0.19437283	3.062157e-05	1.109655e-04
## SYNGR3	9143	-0.42323880	3.068964e-05	1.111956e-04
## TMEM67	91147	-0.21626415	3.071958e-05	1.112875e-04
## LY6E	4061	-0.41886439	3.080054e-05	1.115642e-04
## IGKJ1	28950	1.68484063	3.081406e-05	1.115965e-04
## SGIP1	84251	-0.47098655	3.084936e-05	1.117077e-04
## C8orf76	84933	0.32759536	3.086731e-05	1.117560e-04
## KRT79	338785	2.15242242	3.088467e-05	1.118022e-04
## CRYGN	155051	0.81280181	3.091346e-05	1.118898e-04
## ANKRD66	100287718	2.14992466	3.092195e-05	1.119038e-04
## OR7A5	26659	-1.45335659	3.094398e-05	1.119669e-04
## ZNF322	79692	0.21705680	3.099529e-05	1.121359e-04
## C4orf3	401152	0.17147743	3.126071e-05	1.130793e-04
## CNN2P4	647507	0.80462060	3.130066e-05	1.132069e-04
## SMOX	54498	0.41281000	3.133623e-05	1.133187e-04
## KRT8P3	728638	-0.61561005	3.134384e-05	1.133294e-04
## C2CD5-AS1	105369692	-1.29028516	3.136515e-05	1.133895e-04
## ETFRF1	144363	-0.23666006	3.137553e-05	1.134102e-04
## TLN2	83660	0.33793559	3.149769e-05	1.138348e-04
## SNCB	6620	1.92563347	3.159496e-05	1.141551e-04
## DOCK7	85440	0.17286465	3.159570e-05	1.141551e-04
## NEXMIF	340533	-0.35266166	3.164284e-05	1.143084e-04
## IL12B	3593	2.11660296	3.170975e-05	1.145331e-04
## GPR150	285601	0.97919480	3.173228e-05	1.145975e-04
## STARD3	10948	0.17560480	3.175583e-05	1.146654e-04
## CPNE1	8904	0.23775854	3.183065e-05	1.149065e-04
## PCMTD1-DT	102724330	-0.19959668	3.183205e-05	1.149065e-04
## CEBPG	1054	0.16091203	3.194978e-05	1.153143e-04
## KLF17	128209	2.25109045	3.197268e-05	1.153799e-04
## AIDAP2	646890	0.88397621	3.201072e-05	1.155000e-04
## CXADR	1525	-0.31799781	3.213616e-05	1.159354e-04
## EFCAB11	90141	0.21318237	3.230335e-05	1.165212e-04
## ANKRD36C	400986	0.71694499	3.242721e-05	1.169507e-04
## SLC18A1	6570	1.27704211	3.245285e-05	1.170258e-04
## CRHBP	1393	-0.46994556	3.248801e-05	1.171352e-04
## CCDC148	130940	-0.37077807	3.254094e-05	1.173086e-04
## CNN2	1265	0.36195053	3.255657e-05	1.173476e-04
## XPA	7507	-0.19755194	3.256674e-05	1.173668e-04
## COPG1	22820	-0.15899394	3.261402e-05	1.175198e-04
## LIPC	3990	-0.43322920	3.262292e-05	1.175344e-04
## UGGT2	55757	-0.21368858	3.270928e-05	1.178281e-04

## MUC3A	4584	0.73494188	3.271986e-05	1.178487e-04
## SLC9A3	6550	-0.47398330	3.275322e-05	1.179175e-04
## GAL3ST1	9514	-0.50177757	3.275319e-05	1.179175e-04
## MAGED1	9500	0.22976145	3.275352e-05	1.179175e-04
## SETDB1	9869	0.11012503	3.276449e-05	1.179396e-04
## CHST3	9469	0.22508535	3.277411e-05	1.179438e-04
## BPHL	670	0.45028205	3.277538e-05	1.179438e-04
## ST6GALNAC1	55808	0.80204292	3.289321e-05	1.183503e-04
## RPAP2	79871	0.25933398	3.290152e-05	1.183627e-04
## PHPT1	29085	0.29518403	3.290724e-05	1.183657e-04
## RACK1	10399	0.29830315	3.300014e-05	1.186823e-04
## CDC27	996	0.14985413	3.323060e-05	1.194935e-04
## TRAV22	28661	1.36546541	3.342088e-05	1.201599e-04
## CHASERR	100507217	-0.23277264	3.347081e-05	1.203216e-04
## LNPK	80856	0.19679776	3.361235e-05	1.208126e-04
## POLD3	10714	0.37943773	3.362601e-05	1.208438e-04
## LIG1	3978	0.18463480	3.364955e-05	1.209105e-04
## ZNF510	22869	0.21151847	3.366714e-05	1.209558e-04
## FICD	11153	-0.19010870	3.370076e-05	1.210587e-04
## C17orf100	388327	-0.24089380	3.371408e-05	1.210887e-04
## RNF13	11342	-0.11568137	3.375064e-05	1.212021e-04
## AOPEP	84909	0.19391491	3.376328e-05	1.212295e-04
## MND1	84057	0.61492077	3.391551e-05	1.217581e-04
## FES	2242	0.34329819	3.392277e-05	1.217662e-04
## PPIP5K1	9677	-0.12559291	3.412306e-05	1.224671e-04
## NOD1	10392	0.24422096	3.415423e-05	1.225608e-04
## LHPP	64077	0.33623156	3.417273e-05	1.225910e-04
## PPM1K	152926	-0.31627292	3.417057e-05	1.225910e-04
## RNASEL	6041	0.15891704	3.455346e-05	1.239385e-04
## IGLV3-25	28793	1.33141354	3.486577e-05	1.250403e-04
## EDNRA	1909	0.42099379	3.519866e-05	1.262155e-04
## RDH13	112724	-0.23034663	3.533102e-05	1.266715e-04
## SMLR1	100507203	0.58701237	3.548174e-05	1.271931e-04
## PDE3B	5140	0.39684810	3.560189e-05	1.276049e-04
## NDRG3	57446	-0.13880447	3.561218e-05	1.276230e-04
## EEF2	1938	0.24873295	3.562432e-05	1.276477e-04
## EEF1AKMT1	221143	0.23258114	3.576489e-05	1.281325e-04
## ARHGAP29	9411	-0.27152682	3.590016e-05	1.285981e-04
## MIEF2	125170	-0.21849511	3.594619e-05	1.287440e-04
## PANK4	55229	-0.15829396	3.616415e-05	1.295056e-04
## IRF2-DT	117134601	-0.20805989	3.621451e-05	1.296668e-04
## PSMD12	5718	-0.12197816	3.622438e-05	1.296831e-04
## MOB3A	126308	0.23967614	3.624219e-05	1.297277e-04
## SCHLAP1	101669767	-0.78521038	3.637812e-05	1.301951e-04
## EIF3F	8665	0.22680346	3.643074e-05	1.303642e-04
## OSBPL3	26031	-0.32049047	3.669984e-05	1.313079e-04
## ADGRG4	139378	1.53763465	3.670888e-05	1.313208e-04
## GRIK2	2898	-0.35493822	3.674866e-05	1.314438e-04
## TPBGL	100507050	0.63099975	3.688251e-05	1.319031e-04
## SALL4	57167	0.75672564	3.701122e-05	1.323300e-04
## HLX-AS1	100873924	0.88780720	3.701275e-05	1.323300e-04
## PIK3CB	5291	-0.19464454	3.703466e-05	1.323888e-04
## NMI	9111	0.25990206	3.707382e-05	1.325093e-04
## MIR29B2CHG	100128537	0.59387124	3.722707e-05	1.330375e-04

## SLC4A4	8671	-0.54731478	3.732919e-05	1.333828e-04
## RN7SL648P	106479459	1.84082354	3.752640e-05	1.340678e-04
## SCARNA6	677772	1.29833552	3.757662e-05	1.342275e-04
## CDADC1	81602	-0.24115826	3.758929e-05	1.342530e-04
## KIF20B	9585	0.29061683	3.763096e-05	1.343821e-04
## PRXL2C	195827	0.21118967	3.769073e-05	1.345757e-04
## TMEM140	55281	0.24010106	3.779429e-05	1.349257e-04
## ZNF860	344787	-0.30176674	3.780220e-05	1.349341e-04
## PPP2R5E	5529	-0.11108900	3.793438e-05	1.353860e-04
## POC1A	25886	0.24004652	3.796753e-05	1.354844e-04
## DLGAP2-AS1	100507435	1.06257253	3.830093e-05	1.366541e-04
## FAM169A	26049	-0.37075593	3.848833e-05	1.373026e-04
## PLA2G4A	5321	0.38047932	3.854216e-05	1.374744e-04
## ADGRB3	577	-0.49715552	3.865583e-05	1.378596e-04
## TMEM65	157378	-0.16709768	3.869372e-05	1.379745e-04
## TRAPP13	80006	-0.17624578	3.870240e-05	1.379852e-04
## ATXN3	4287	0.20798348	3.872918e-05	1.380604e-04
## RALB	5899	-0.14593862	3.876852e-05	1.381804e-04
## SNHG5	387066	0.42792605	3.901035e-05	1.390219e-04
## MDM2	4193	0.17925656	3.903592e-05	1.390926e-04
## TRPM6	140803	-0.68995768	3.904993e-05	1.391222e-04
## TBX3	6926	-0.30398437	3.909057e-05	1.392465e-04
## SEMG1	6406	-1.45699632	3.914934e-05	1.394354e-04
## STX4	6810	0.16025033	3.917541e-05	1.395079e-04
## RRN3	54700	-0.12267821	3.922255e-05	1.396553e-04
## NTNG2	84628	0.53518086	3.930387e-05	1.399243e-04
## RPRD1B	58490	-0.10949395	3.962301e-05	1.410398e-04
## HR	55806	0.60257979	3.978691e-05	1.416025e-04
## C22orf46P	79640	0.19971043	3.983399e-05	1.417493e-04
## EMC7	56851	-0.17285230	3.990108e-05	1.419672e-04
## CLDN16	10686	-0.52634513	3.996490e-05	1.421735e-04
## ZFR	51663	-0.12911681	3.998764e-05	1.422335e-04
## RPL7P9	653702	0.33274633	4.010626e-05	1.426346e-04
## LINC02721	105376620	-1.18168677	4.016590e-05	1.428258e-04
## IRX4-AS1	101929056	2.71093739	4.045165e-05	1.438209e-04
## SHISAL2A	348378	0.68493939	4.048704e-05	1.439256e-04
## CCDC159	126075	0.24297219	4.057636e-05	1.442221e-04
## VRK1	7443	0.17086842	4.070149e-05	1.446361e-04
## TMEM92-AS1	103752589	1.65274991	4.070476e-05	1.446361e-04
## FCGBP	8857	-0.56847414	4.097268e-05	1.455668e-04
## MFSD14A	64645	-0.42563621	4.102459e-05	1.457300e-04
## LINC01780	105378934	0.59639346	4.105456e-05	1.458151e-04
## FIRRE	286467	0.90765430	4.107386e-05	1.458623e-04
## ZBTB2	57621	0.13775095	4.110387e-05	1.459476e-04
## USP48	84196	0.10073318	4.125318e-05	1.464563e-04
## AGA	175	-0.16921934	4.133201e-05	1.467148e-04
## PRKACA	5566	0.23976115	4.151603e-05	1.473464e-04
## TTC39B	158219	-0.29570167	4.153336e-05	1.473864e-04
## NAGLU	4669	-0.26006240	4.175350e-05	1.481256e-04
## ATN1	1822	-0.27209725	4.175384e-05	1.481256e-04
## HNRNPR	10236	-0.12148344	4.177113e-05	1.481653e-04
## RYR2	6262	0.64787024	4.179859e-05	1.482410e-04
## HSD11B1-AS1	101930114	0.46882464	4.187463e-05	1.484891e-04
## LINC00685	283981	0.45281900	4.201134e-05	1.489521e-04

## EXOG	9941	0.21473405	4.229520e-05	1.499366e-04
## LRMDA	83938	0.30412917	4.234174e-05	1.500797e-04
## GJD3-AS1	123706509	-0.23903500	4.244499e-05	1.504238e-04
## FAM110A	83541	0.38264506	4.248286e-05	1.505360e-04
## ATP5F1A	498	-0.18304177	4.256337e-05	1.507841e-04
## OR7E91P	79315	-0.93467376	4.256529e-05	1.507841e-04
## HM13	81502	-0.25776272	4.258739e-05	1.508185e-04
## RHPN2P1	646090	-0.61355242	4.258710e-05	1.508185e-04
## UGT1A4	54657	1.33091015	4.261004e-05	1.508767e-04
## SLC30A5	64924	-0.10446110	4.267811e-05	1.510957e-04
## RTN4RL2	349667	-0.52843820	4.269181e-05	1.511222e-04
## LINC02009	105377068	-0.92331909	4.287201e-05	1.517379e-04
## POLR2G	5436	0.19430323	4.290518e-05	1.517943e-04
## MIR126	406913	0.98574214	4.290667e-05	1.517943e-04
## DHFR	1719	0.22852030	4.289549e-05	1.517943e-04
## TMEM115	11070	-0.20503392	4.292158e-05	1.518249e-04
## CCDC93	54520	0.17773400	4.296218e-05	1.519464e-04
## MTND6P35	112163686	-1.10721478	4.299152e-05	1.520281e-04
## AMIGO1	57463	-0.23597610	4.314909e-05	1.525631e-04
## TMPRSS2	7113	-0.35956520	4.316841e-05	1.526092e-04
## SNX25	83891	-0.17516386	4.351130e-05	1.537766e-04
## ARSB	411	0.27836762	4.350612e-05	1.537766e-04
## SKI	6497	0.34230817	4.354688e-05	1.538800e-04
## BRAF	673	-0.15259439	4.367283e-05	1.543026e-04
## IFT122	55764	-0.17637538	4.381610e-05	1.547863e-04
## B4GALT1-AS1	101929639	0.33210524	4.385597e-05	1.549046e-04
## FANCE	2178	0.32092762	4.388589e-05	1.549878e-04
## PAIP2B	400961	-0.30458181	4.389973e-05	1.550142e-04
## DYNC2I2	89891	-0.30070155	4.392924e-05	1.550958e-04
## AIRIM	54955	0.10925240	4.403714e-05	1.554542e-04
## CAMK2G	818	0.24620497	4.409251e-05	1.556270e-04
## TSPEAR-AS1	54082	0.85878238	4.414957e-05	1.558058e-04
## NFE2L3	9603	0.32447006	4.436982e-05	1.565603e-04
## PRKAR1A	5573	-0.13011500	4.440906e-05	1.566761e-04
## PSORS1C3	100130889	-0.74984718	4.441862e-05	1.566870e-04
## CDIN1	84529	0.15543757	4.447360e-05	1.568582e-04
## ATOX1	475	0.31748777	4.451709e-05	1.569888e-04
## ASAP2	8853	-0.19454007	4.457031e-05	1.571537e-04
## PEDS1	387521	0.21376000	4.474724e-05	1.577546e-04
## TFAP2E	339488	0.60932363	4.498274e-05	1.585619e-04
## BLOC1S2	282991	0.18466585	4.507043e-05	1.588479e-04
## PCSK7	9159	0.15555535	4.510441e-05	1.589446e-04
## TMPRSS13	84000	-0.84989624	4.517158e-05	1.591583e-04
## EIF3D	8664	0.15592821	4.521736e-05	1.592965e-04
## SNX11	29916	0.14479553	4.524923e-05	1.593856e-04
## C2CD6	151254	0.60491059	4.529341e-05	1.595181e-04
## GPBP1L1	60313	-0.09987312	4.561175e-05	1.606160e-04
## SEPTIN6	23157	-0.20315906	4.567918e-05	1.608302e-04
## MTLN	205251	0.44521647	4.569417e-05	1.608596e-04
## ALAD	210	0.34805158	4.582340e-05	1.612912e-04
## PKN3	29941	-0.39259516	4.613559e-05	1.623665e-04
## CD2AP	23607	-0.24244777	4.631654e-05	1.629797e-04
## SMAP1	60682	0.10676311	4.641904e-05	1.633168e-04
## VPS37D	155382	-0.34139257	4.645597e-05	1.634230e-04

## MOV10L1	54456	0.61436095	4.668367e-05	1.642003e-04
## SMIM10L2B	644596	-0.23834544	4.746986e-05	1.669414e-04
## CEP57	9702	0.16028285	4.749587e-05	1.670087e-04
## SPAG5	10615	-0.51324284	4.752210e-05	1.670731e-04
## STXBP4	252983	-0.20037881	4.752793e-05	1.670731e-04
## SERPINB2	5055	2.00560914	4.762918e-05	1.674048e-04
## CYB561	1534	-0.16320171	4.772194e-05	1.677065e-04
## TMEM44-AS2	122152323	0.47891549	4.792238e-05	1.683866e-04
## C1QTNF7	114905	0.42602729	4.827339e-05	1.695954e-04
## B3GALT1	8708	0.72633494	4.829069e-05	1.696317e-04
## ANO8	57719	-0.29828138	4.841293e-05	1.700365e-04
## BCL3	602	-0.49870889	4.846336e-05	1.701890e-04
## MIR3189	100422943	-1.16979085	4.854128e-05	1.704380e-04
## LRRC61	65999	-0.32088427	4.858436e-05	1.705646e-04
## NEPRO	25871	0.09454029	4.860034e-05	1.705961e-04
## TMEM131	23505	-0.17273704	4.867879e-05	1.708468e-04
## CCDC18	343099	0.44643994	4.870672e-05	1.709201e-04
## ITM2B	9445	-0.18043337	4.872919e-05	1.709743e-04
## ADD3	120	0.23277109	4.875902e-05	1.710543e-04
## PRKAR1B-AS1	101926963	0.47073891	4.895057e-05	1.717015e-04
## KCTD12	115207	0.28450871	4.903693e-05	1.719796e-04
## CYP46A1	10858	0.36699575	4.906227e-05	1.720436e-04
## TRIP4	9325	-0.17546047	4.909635e-05	1.721383e-04
## MYEF2	50804	-0.28326717	4.911938e-05	1.721942e-04
## H1-10	8971	-0.46886044	4.942855e-05	1.732530e-04
## ZNF653	115950	-0.23521239	4.948701e-05	1.734329e-04
## TMEM128	85013	-0.17862733	4.953126e-05	1.735630e-04
## GNG12	55970	-0.18889430	4.962004e-05	1.738490e-04
## SYNPO	11346	0.40205352	4.966743e-05	1.739900e-04
## COL9A1	1297	-0.79078997	4.974273e-05	1.742286e-04
## FPR2	2358	0.76656953	4.980955e-05	1.744375e-04
## RDH10	157506	-0.23018718	4.984746e-05	1.745451e-04
## ASB15	142685	0.74891804	4.992843e-05	1.748035e-04
## C11orf54	28970	-0.41144068	5.015428e-05	1.755689e-04
## PRPSAP1	5635	-0.16575742	5.017474e-05	1.756152e-04
## HOXD3	3232	-0.24093539	5.021618e-05	1.757350e-04
## LINC00920	100505865	0.40688418	5.026401e-05	1.758770e-04
## ZNF445	353274	0.24235197	5.039787e-05	1.763200e-04
## FZD8	8325	-0.31472621	5.042932e-05	1.764046e-04
## MRTO4	51154	0.15296711	5.050435e-05	1.766417e-04
## CAB39L	81617	-0.21018247	5.053514e-05	1.767239e-04
## SCIRT	101929705	-0.49227205	5.057645e-05	1.768429e-04
## MIR325HG	101928469	1.29265803	5.058665e-05	1.768531e-04
## PAAF1	80227	0.23178947	5.062149e-05	1.769495e-04
## RPL22L1	200916	0.33755695	5.067223e-05	1.771014e-04
## TSSC2	650368	0.45332877	5.076808e-05	1.774109e-04
## GPN3	51184	-0.17739585	5.082716e-05	1.775918e-04
## DRAXIN	374946	0.52637096	5.092872e-05	1.779211e-04
## CRLF1	9244	0.88081699	5.106995e-05	1.783865e-04
## STAM	8027	-0.11899356	5.107662e-05	1.783865e-04
## RMND1	55005	0.31905808	5.116207e-05	1.786592e-04
## CKS1BP1	317780	-0.92863812	5.118678e-05	1.787198e-04
## YPEL3	83719	0.31134673	5.125887e-05	1.789371e-04
## CLEC4A	50856	0.91017958	5.126754e-05	1.789371e-04

## AADACP1	201651	1.07914138	5.127109e-05	1.789371e-04
## NEXN-AS1	374987	0.55678128	5.137455e-05	1.792724e-04
## DUSP3	1845	-0.14682772	5.143712e-05	1.794417e-04
## DENND4A	10260	-0.19262998	5.143782e-05	1.794417e-04
## PSPH	5723	0.25326839	5.150506e-05	1.796504e-04
## ZNF286A	57335	0.23316290	5.158776e-05	1.799131e-04
## EIF4G2	1982	0.11345194	5.159858e-05	1.799250e-04
## SLC20A1-DT	400999	0.40962203	5.165839e-05	1.801077e-04
## FAM135A	57579	-0.23950209	5.211878e-05	1.816868e-04
## RFC4	5984	0.18481951	5.214829e-05	1.817636e-04
## HARBI1	283254	0.15099342	5.237656e-05	1.825330e-04
## C1orf202	122455338	-1.15496183	5.259972e-05	1.832844e-04
## GMFB	2764	-0.17894368	5.266600e-05	1.834891e-04
## LINC00235	64493	-0.42116633	5.275284e-05	1.837653e-04
## IQCA1-AS1	107080627	0.84270635	5.292057e-05	1.843232e-04
## LINC01975	105371496	-1.05243269	5.325513e-05	1.854619e-04
## GPER1	2852	-0.39645980	5.328972e-05	1.855557e-04
## LINC01687	101927843	-1.08922850	5.330154e-05	1.855703e-04
## WNT3A	89780	-0.79975806	5.338891e-05	1.858478e-04
## PRR15-DT	107986700	-0.43164530	5.341150e-05	1.858999e-04
## DBF4B	80174	0.25452552	5.366368e-05	1.867508e-04
## TECPR1	25851	0.16471191	5.376804e-05	1.870872e-04
## UACA	55075	0.30737921	5.379434e-05	1.871519e-04
## ERGIC2	51290	0.16936331	5.383300e-05	1.872596e-04
## VEGFA	7422	-0.28363261	5.405282e-05	1.879973e-04
## MAP4K5	11183	0.22080367	5.408010e-05	1.880653e-04
## SMIM20	389203	0.25410604	5.421643e-05	1.885124e-04
## OST4	100128731	0.31665225	5.422476e-05	1.885144e-04
## ZNF830	91603	0.11254389	5.429851e-05	1.887438e-04
## ARMC12	221481	-0.55872858	5.433913e-05	1.888580e-04
## TNR	7143	0.84854847	5.446279e-05	1.892337e-04
## HNMT	3176	0.23323680	5.445633e-05	1.892337e-04
## OR7E47P	26628	1.46336126	5.450418e-05	1.893504e-04
## RGS6	9628	-0.53426265	5.455764e-05	1.895090e-04
## CNIH3-AS2	102723817	2.28411884	5.463561e-05	1.897527e-04
## UBE4A	9354	-0.13136692	5.469767e-05	1.899411e-04
## ARL5C	390790	1.44946611	5.479111e-05	1.902384e-04
## SRRT	51593	-0.13979074	5.496830e-05	1.908160e-04
## ABCA2	20	-0.31203931	5.497316e-05	1.908160e-04
## AP3B1	8546	-0.13314723	5.498808e-05	1.908405e-04
## TLE3	7090	-0.22970079	5.524206e-05	1.916946e-04
## PRKAA2	5563	-0.26162401	5.530905e-05	1.918996e-04
## ARPIN	348110	0.13839668	5.538751e-05	1.921445e-04
## PCDHGB5	56101	-0.35183577	5.558951e-05	1.928177e-04
## SERPINB1	1992	-0.19246646	5.567015e-05	1.930698e-04
## SGPL1	8879	-0.14343209	5.580156e-05	1.934979e-04
## TTC19	54902	-0.14971941	5.585723e-05	1.935805e-04
## PIGV	55650	-0.18454754	5.584278e-05	1.935805e-04
## JUND	3727	-0.37732965	5.583350e-05	1.935805e-04
## STARD13-AS	100874241	0.60940676	5.585268e-05	1.935805e-04
## LINC02458	728084	0.82790535	5.591201e-05	1.937427e-04
## SVIP	258010	-0.21978942	5.599447e-05	1.940008e-04
## VSIG10L2	338667	1.35385039	5.603008e-05	1.940965e-04
## LRRC37A9P	100533790	1.41104146	5.607844e-05	1.942363e-04

## FBXL17	64839	-0.15078404	5.616618e-05	1.945125e-04
## HYKK	123688	0.29229678	5.618531e-05	1.945510e-04
## RHBTL1	9028	0.54395456	5.628784e-05	1.948783e-04
## KDM2B-DT	101928346	0.98659436	5.652605e-05	1.956752e-04
## CCDC187	399693	-0.63127815	5.666922e-05	1.961428e-04
## CLDN34	100288814	-1.18192637	5.682462e-05	1.966527e-04
## LINC01788	101927244	-0.50056102	5.693387e-05	1.970027e-04
## SNX7	51375	0.19116371	5.706459e-05	1.974269e-04
## POLR3B	55703	-0.13472182	5.707819e-05	1.974458e-04
## MIR4432HG	106660609	2.15686996	5.712291e-05	1.975443e-04
## ANKRD63	100131244	-1.18322164	5.712265e-05	1.975443e-04
## CD58	965	-0.19639644	5.722522e-05	1.978700e-04
## LINC02929	122152367	1.84955350	5.731657e-05	1.981576e-04
## RPL13	6137	0.36916264	5.740494e-05	1.984349e-04
## MAST3	23031	0.26815733	5.752042e-05	1.988058e-04
## GRXCR2	643226	1.15126406	5.767260e-05	1.993034e-04
## RN7SL535P	106479417	0.97775204	5.824093e-05	2.012388e-04
## SMIM24	284422	0.50480837	5.844432e-05	2.019129e-04
## ANTXR1P1	100996567	1.82323498	5.845533e-05	2.019222e-04
## FOXA3	3171	-0.53829764	5.855784e-05	2.022476e-04
## CLPTM1	1209	-0.29140280	5.857595e-05	2.022814e-04
## AGO1	26523	0.16097148	5.859868e-05	2.023311e-04
## CACNA2D1	781	0.34626486	5.862403e-05	2.023611e-04
## ADAT3	113179	-0.66402315	5.861781e-05	2.023611e-04
## VWA1	64856	-0.37044492	5.863584e-05	2.023732e-04
## TFR2	7036	0.94949826	5.865987e-05	2.024274e-04
## ARFIP2	23647	-0.14654081	5.899774e-05	2.035644e-04
## NAPB	63908	-0.21195804	5.902607e-05	2.036332e-04
## DLGAP4	22839	0.24970209	5.938098e-05	2.048285e-04
## UTS2B	257313	0.44670106	5.970693e-05	2.059237e-04
## DACH1	1602	-0.28783549	5.976487e-05	2.060942e-04
## CRACD	57482	0.36068804	5.981552e-05	2.062396e-04
## BLVRBP1	127379696	-0.73015844	6.007673e-05	2.071109e-04
## BICD1	636	0.29571075	6.020335e-05	2.075180e-04
## MPG	4350	0.35678014	6.021759e-05	2.075376e-04
## SMURF1	57154	-0.13740419	6.027132e-05	2.076933e-04
## NECAB1	64168	-0.45213036	6.034302e-05	2.079109e-04
## VGLL1	51442	-0.98553615	6.059649e-05	2.087453e-04
## CLDN14	23562	-0.66822911	6.060235e-05	2.087453e-04
## PLCD4	84812	0.37866412	6.081429e-05	2.094456e-04
## GINS4	84296	0.29160108	6.119976e-05	2.107433e-04
## CSPG5	10675	0.46045565	6.124678e-05	2.108753e-04
## UBE2G1	7326	0.13705099	6.129173e-05	2.110002e-04
## RPL23	9349	0.32071231	6.149851e-05	2.116821e-04
## DHX32	55760	-0.08715964	6.155857e-05	2.118588e-04
## S100A1	6271	0.58640288	6.186742e-05	2.128916e-04
## BOK	666	0.37594105	6.189071e-05	2.129415e-04
## NELFA	7469	-0.19970014	6.195755e-05	2.131413e-04
## NEURL2	140825	-0.46702086	6.199900e-05	2.132537e-04
## WDR91	29062	-0.19463270	6.204605e-05	2.133854e-04
## SMIM43	132332	1.38374873	6.207601e-05	2.134582e-04
## GVQW3	100506127	0.35724970	6.210422e-05	2.135250e-04
## NOL8	55035	0.19016821	6.217274e-05	2.137303e-04
## PARD6A	50855	-0.40107396	6.225671e-05	2.139887e-04

## PSTPIP2	9050	0.33020050	6.236926e-05	2.143453e-04
## FAM24B	196792	-0.47144883	6.275970e-05	2.156566e-04
## CYP20A1	57404	-0.12962212	6.291688e-05	2.161661e-04
## CCDC162P	221262	0.65564593	6.316968e-05	2.170040e-04
## DDX55	57696	0.20428956	6.339712e-05	2.177424e-04
## PDE4DIPP6	100132057	0.46856822	6.340254e-05	2.177424e-04
## MYL10	93408	2.39831383	6.346652e-05	2.179313e-04
## IQCA1	79781	-0.33025576	6.356978e-05	2.182550e-04
## RPL15P3	653232	0.40219420	6.401632e-05	2.197571e-04
## NOL7	51406	-0.14818835	6.404193e-05	2.198140e-04
## OTUD6B-AS1	100506365	-0.21033957	6.478138e-05	2.223206e-04
## PIAS1	8554	-0.12156430	6.490957e-05	2.227291e-04
## ZYX	7791	0.45512698	6.509656e-05	2.233392e-04
## CHIC1	53344	-0.20711531	6.524640e-05	2.238217e-04
## ODF2	4957	0.12482312	6.526425e-05	2.238513e-04
## CASP5	838	0.99579277	6.538573e-05	2.242363e-04
## CCL25	6370	1.72912465	6.546910e-05	2.244905e-04
## NEMP1	23306	0.20005754	6.550465e-05	2.245808e-04
## RETREG2	79137	-0.14449090	6.563626e-05	2.250002e-04
## PPP2R5D	5528	0.13450899	6.575226e-05	2.253661e-04
## CTNNA1	1495	-0.10924122	6.579029e-05	2.254647e-04
## TMCO1-AS1	100147773	-0.40782785	6.601449e-05	2.262011e-04
## ZNF24	7572	-0.15422033	6.605763e-05	2.263170e-04
## SLC6A3	6531	-0.93795642	6.618984e-05	2.267380e-04
## CABP4	57010	0.47274880	6.625675e-05	2.269352e-04
## LHFPL3-AS2	723809	0.36762296	6.640353e-05	2.274059e-04
## TM4SF4	7104	0.63756131	6.642169e-05	2.274360e-04
## BANF1	8815	0.25539061	6.672594e-05	2.284456e-04
## VEGFB	7423	0.32739463	6.684172e-05	2.288098e-04
## RALGAPB	57148	-0.15331606	6.705297e-05	2.295006e-04
## DYNC1I1	1780	-0.36077787	6.714755e-05	2.297919e-04
## SH3BP5	9467	0.24642808	6.744887e-05	2.307906e-04
## MIPOL1	145282	-0.23394786	6.751810e-05	2.309950e-04
## CCDC71L	168455	-0.39640199	6.803278e-05	2.327230e-04
## PRR22	163154	-0.45270310	6.805618e-05	2.327703e-04
## GFER	2671	0.17649198	6.811575e-05	2.329413e-04
## GPR137C	283554	0.32133976	6.877928e-05	2.351773e-04
## ITGB1-DT	101929475	0.71630931	6.881317e-05	2.352601e-04
## CYP2U1	113612	0.15781181	6.886439e-05	2.354021e-04
## CHST4	10164	1.46361089	6.931994e-05	2.369260e-04
## P2RY6	5031	-0.41191722	6.942130e-05	2.372057e-04
## LINC02660	101927904	2.59291715	6.941592e-05	2.372057e-04
## LINC00324	284029	0.24198644	6.961437e-05	2.378320e-04
## FCGR1CP	100132417	0.84127189	6.976511e-05	2.383134e-04
## SLC45A3	85414	-0.25537089	6.986998e-05	2.386381e-04
## IL1B	3553	-0.88774369	7.002022e-05	2.391177e-04
## LINC01500	102723742	1.22409569	7.028575e-05	2.399907e-04
## STRBP	55342	-0.20017472	7.032884e-05	2.401041e-04
## RBM22	55696	0.07438586	7.069835e-05	2.413317e-04
## TBXAS1	6916	0.34355173	7.078734e-05	2.416016e-04
## KCNQ3	3786	0.42359726	7.088620e-05	2.419050e-04
## TMEM198B	440104	0.29473109	7.101958e-05	2.423261e-04
## NOB1	28987	0.14431513	7.108665e-05	2.425210e-04
## CRISP3	10321	1.53922269	7.130630e-05	2.432361e-04

## ATG2A	23130	-0.25262979	7.162398e-05	2.442855e-04
## UBE2I	7329	0.16367930	7.164895e-05	2.443364e-04
## FAM81A	145773	-0.30664694	7.181562e-05	2.448704e-04
## FCRLB	127943	-0.39729422	7.184595e-05	2.449394e-04
## GORAB	92344	0.22970851	7.194624e-05	2.452470e-04
## CKAP2-DT	123706541	0.49555952	7.206468e-05	2.456163e-04
## SNHG31	101928103	0.56492699	7.211390e-05	2.457495e-04
## SRRD	402055	0.12148336	7.214578e-05	2.458237e-04
## BNC2-AS1	111216284	0.48813610	7.225114e-05	2.461482e-04
## GKAP1	80318	0.26115810	7.243820e-05	2.467509e-04
## HLA-DOA	3111	0.38531738	7.293420e-05	2.484056e-04
## CHKA-DT	105369362	-0.63144584	7.308744e-05	2.488927e-04
## ZSCAN20	7579	0.21050645	7.313427e-05	2.490172e-04
## WRN	7486	0.21323234	7.321274e-05	2.492495e-04
## BMP4	652	0.28408834	7.341059e-05	2.498881e-04
## ANO9	338440	-0.42890522	7.343276e-05	2.499285e-04
## SOX6	55553	-0.27249385	7.347095e-05	2.500235e-04
## PTGIR	5739	0.48977569	7.376435e-05	2.509868e-04
## MED21	9412	-0.15349283	7.386746e-05	2.513024e-04
## CCDC13	152206	-0.35003877	7.406573e-05	2.519417e-04
## BBIP1	92482	-0.18537381	7.408125e-05	2.519592e-04
## TMEM167B-DT	105378892	-0.28596463	7.410339e-05	2.519992e-04
## NEK9	91754	0.11490647	7.437696e-05	2.528941e-04
## NIPA2	81614	-0.12482680	7.452314e-05	2.533557e-04
## MKRN2	23609	0.08998014	7.465677e-05	2.537745e-04
## HSPA9	3313	-0.15785287	7.484080e-05	2.543645e-04
## ANKRD13D	338692	0.27645633	7.487926e-05	2.544596e-04
## CEP89	84902	0.09183224	7.489674e-05	2.544834e-04
## WDR1	9948	-0.14447377	7.494535e-05	2.546130e-04
## PATL1	219988	-0.11351787	7.506369e-05	2.549794e-04
## ZNF879	345462	0.17390523	7.520751e-05	2.554322e-04
## OAZ1	4946	0.25733382	7.525765e-05	2.555668e-04
## RNF214	257160	0.09208465	7.530695e-05	2.556985e-04
## ZNF281	23528	0.14527742	7.538275e-05	2.559201e-04
## ACVR2B	93	-0.23510265	7.546300e-05	2.561568e-04
## SPINT1-AS1	102724362	-0.39536236	7.570323e-05	2.569363e-04
## EMC1	23065	-0.17926011	7.589501e-05	2.575513e-04
## NNT-AS1	100652772	-0.19015313	7.598762e-05	2.578296e-04
## PSME3IP1	80011	-0.11016433	7.614599e-05	2.583308e-04
## INTS6L	203522	0.39767366	7.653359e-05	2.596096e-04
## BABAM1	29086	0.22873331	7.655430e-05	2.596435e-04
## RNF145	153830	0.18686003	7.657270e-05	2.596697e-04
## COL4A2-AS2	100129836	2.57562412	7.662158e-05	2.597630e-04
## NUP153-AS1	105374952	0.45084019	7.661793e-05	2.597630e-04
## HSPBP1	23640	-0.29993754	7.667547e-05	2.599094e-04
## LINC01152	102606463	0.74970177	7.691178e-05	2.606741e-04
## PSMD7	5713	0.16172042	7.702308e-05	2.610149e-04
## TULP4	56995	0.17514410	7.703888e-05	2.610320e-04
## RNF25	64320	0.13896452	7.740834e-05	2.622473e-04
## LTF	4057	-1.03875720	7.764006e-05	2.629957e-04
## NDUFS1	4719	-0.18299549	7.784949e-05	2.636684e-04
## LYNX1	66004	-0.34951320	7.793190e-05	2.639107e-04
## RAP1GAP2	23108	-0.30391212	7.795320e-05	2.639460e-04
## PRR36	80164	-0.44141553	7.842790e-05	2.655163e-04

## DYRK4	8798	0.19815591	7.862833e-05	2.661363e-04
## TTC16	158248	0.41794936	7.863291e-05	2.661363e-04
## KRT8P12	90133	0.18657453	7.878178e-05	2.666030e-04
## ETF1	2107	-0.10092392	7.896562e-05	2.671879e-04
## FBRSL1	57666	-0.29929754	7.908692e-05	2.675611e-04
## C13orf46	100507747	0.80633388	7.916556e-05	2.677898e-04
## RBM15B	29890	0.11278450	7.940392e-05	2.685588e-04
## SNX10-AS1	105375304	-0.40538967	7.942751e-05	2.686012e-04
## ADAMTSL5	339366	0.49615641	7.999093e-05	2.704689e-04
## AARS1	16	-0.15675036	8.003511e-05	2.705806e-04
## ZFHX2	85446	-0.24833693	8.033870e-05	2.715692e-04
## CYP39A1	51302	-0.20619618	8.053934e-05	2.722095e-04
## FFAR3	2865	1.95260957	8.056343e-05	2.722531e-04
## MBTPS2	51360	-0.15065448	8.069646e-05	2.726647e-04
## EPM2A-DT	100507557	0.28538193	8.080490e-05	2.729932e-04
## TEP1	7011	0.24023627	8.090671e-05	2.732991e-04
## SOAT1	6646	-0.18536450	8.103221e-05	2.736850e-04
## ZRANB2-AS1	100132618	-0.55128344	8.122117e-05	2.742851e-04
## MMEL1	79258	-0.39146491	8.159079e-05	2.754950e-04
## PROSER1	80209	-0.12611956	8.183915e-05	2.762953e-04
## ATP2B1-AS1	338758	-0.27308567	8.185743e-05	2.763186e-04
## STPG2	285555	-0.41762576	8.191444e-05	2.764726e-04
## GPR137	56834	-0.24823995	8.205063e-05	2.768938e-04
## FMR1	2332	-0.22332507	8.218975e-05	2.772863e-04
## HSPH1	10808	0.22997744	8.217951e-05	2.772863e-04
## ZNF780A	284323	0.18045023	8.225777e-05	2.774773e-04
## RTRAF	51637	0.19050699	8.230670e-05	2.776038e-04
## RAD23A	5886	0.26347227	8.242547e-05	2.779658e-04
## BAHD1	22893	-0.14488341	8.252521e-05	2.782635e-04
## MYLIP	29116	0.14222403	8.255318e-05	2.783192e-04
## ZXDA	7789	0.17171543	8.265902e-05	2.786374e-04
## CKS1B	1163	0.25084475	8.279424e-05	2.790545e-04
## KLK7	5650	-0.62441848	8.309817e-05	2.800400e-04
## PPP1R13L	10848	-0.34366047	8.325286e-05	2.805224e-04
## LRRIQ4	344657	0.94462216	8.342829e-05	2.810746e-04
## NME1	4830	0.28852095	8.345911e-05	2.811394e-04
## CASC2	255082	-0.23588593	8.416129e-05	2.834655e-04
## HECW2	57520	-0.36969252	8.440651e-05	2.842520e-04
## SET	6418	-0.08574287	8.477620e-05	2.854574e-04
## ECD	11319	-0.09423942	8.485469e-05	2.856821e-04
## APPBP2	10513	-0.12768190	8.487997e-05	2.857277e-04
## ZNF671	79891	0.17396267	8.522113e-05	2.868364e-04
## SNAI1	6615	0.47321386	8.548191e-05	2.876743e-04
## RAB3IP	117177	-0.28142853	8.564651e-05	2.881883e-04
## RIPPLY3	53820	-0.45888479	8.570729e-05	2.883130e-04
## SLC24A5	283652	-0.99763163	8.570049e-05	2.883130e-04
## DNAJB6	10049	0.17277716	8.578153e-05	2.885228e-04
## TRIL	9865	0.39963615	8.622039e-05	2.899587e-04
## XXYL1T1-AS2	101410543	1.16125836	8.736707e-05	2.937743e-04
## CCL8	6355	0.91985632	8.751324e-05	2.942251e-04
## GFAP	2670	-0.44394141	8.754105e-05	2.942779e-04
## POLL	27343	0.14395132	8.765557e-05	2.946221e-04
## SP3P	160824	0.76661402	8.777595e-05	2.949860e-04
## CHKA	1119	-0.20228029	8.783515e-05	2.951441e-04

## TMED3	23423	0.24908742	8.818912e-05	2.962925e-04
## B3GALT5-AS1	114041	0.75217992	8.829306e-05	2.965597e-04
## MUSTN1	389125	1.29575973	8.828378e-05	2.965597e-04
## RCN2	5955	-0.15240277	8.862190e-05	2.976231e-04
## SEMA7A	8482	0.37096146	8.876368e-05	2.980580e-04
## LBHD1	79081	0.27520919	8.886399e-05	2.983537e-04
## CDC42	998	-0.14018751	8.891547e-05	2.984853e-04
## RCAN2	10231	-0.21144833	8.898392e-05	2.986738e-04
## BHLHA15	168620	-0.66504522	8.901987e-05	2.987532e-04
## SCN3B	55800	0.39941960	8.908408e-05	2.989274e-04
## FXYD2	486	-0.39823671	8.924001e-05	2.994093e-04
## HAUS1	115106	0.23916396	8.952784e-05	3.003335e-04
## RPL36	25873	0.33949740	8.956206e-05	3.004068e-04
## GATAD2A	54815	-0.16735465	8.959443e-05	3.004740e-04
## LINC02128	102724940	-0.57472329	8.960695e-05	3.004745e-04
## KDM4A	9682	0.10069301	8.974304e-05	3.008883e-04
## DSCAML1	57453	-0.40628269	8.975511e-05	3.008883e-04
## SPRYD3	84926	-0.18972739	8.999226e-05	3.016416e-04
## SEC62	7095	-0.14624944	9.005498e-05	3.017686e-04
## NEK8	284086	-0.25147506	9.004896e-05	3.017686e-04
## QPCTL	54814	-0.16679005	9.032388e-05	3.026280e-04
## PKD1	5310	0.41343465	9.033922e-05	3.026376e-04
## ZNF770	54989	-0.17714733	9.047587e-05	3.030536e-04
## PRRT1B	642515	-0.60612618	9.051523e-05	3.031437e-04
## ACER3	55331	-0.19225831	9.060293e-05	3.033956e-04
## PPM1H	57460	-0.20911917	9.084957e-05	3.041796e-04
## PHF21B	112885	-0.46173547	9.103729e-05	3.047661e-04
## RPL4P1	650808	1.46610177	9.122052e-05	3.053374e-04
## PARAL1	101929371	2.44517961	9.128922e-05	3.055253e-04
## DNAJB5-DT	101926900	0.67958367	9.136184e-05	3.057263e-04
## ESR1	2099	0.32942461	9.166987e-05	3.067148e-04
## LINC02899	439936	1.04872503	9.173160e-05	3.068791e-04
## CDH22	64405	0.62635388	9.185290e-05	3.071580e-04
## SLCO4C1	353189	-0.35328039	9.185192e-05	3.071580e-04
## UGT2B17	7367	1.21638276	9.183350e-05	3.071580e-04
## KCNRG	283518	-0.55382274	9.195555e-05	3.074590e-04
## NEURL4	84461	-0.18843583	9.203320e-05	3.076399e-04
## RBM14	10432	-0.16319474	9.203497e-05	3.076399e-04
## SAMD12	401474	-0.27630200	9.206018e-05	3.076818e-04
## ZNF321P	399669	-0.47692302	9.233297e-05	3.085511e-04
## VEZF1	7716	-0.12781510	9.244332e-05	3.088774e-04
## LINC01176	100506516	-0.51321580	9.251328e-05	3.090686e-04
## TACR2	6865	0.64794853	9.260999e-05	3.093492e-04
## GSTA2	2939	0.74609718	9.304027e-05	3.107438e-04
## CXCL6	6372	0.83092554	9.311518e-05	3.109512e-04
## RPS11	6205	0.32630309	9.341607e-05	3.119132e-04
## GLIPR1-AS1	123706544	-0.39216486	9.345937e-05	3.120149e-04
## KRT23	25984	0.75586819	9.367346e-05	3.126866e-04
## ZNF337	26152	0.24140259	9.380712e-05	3.130898e-04
## TAC4	255061	1.41430552	9.424474e-05	3.145072e-04
## GATA1	2623	1.42975741	9.440960e-05	3.150141e-04
## EIF4E1B	253314	-1.37127073	9.445112e-05	3.151094e-04
## GUK1	2987	0.30789013	9.464996e-05	3.157294e-04
## LETM1	3954	-0.19115504	9.508180e-05	3.171264e-04

## GALNT6	11226	-0.42847322	9.531847e-05	3.178721e-04
## EXOSC10	5394	0.08459061	9.562644e-05	3.188554e-04
## ATCAY	85300	-0.98896941	9.581154e-05	3.194288e-04
## Clorf162	128346	0.51762305	9.586570e-05	3.195655e-04
## PAH	5053	0.68872469	9.597292e-05	3.198790e-04
## LINC01968	100507391	-1.36629048	9.610886e-05	3.202882e-04
## DNAJB1	3337	0.18196813	9.625304e-05	3.207247e-04
## PSMA7	5688	0.21368028	9.628274e-05	3.207797e-04
## FASTKD5	60493	-0.19370972	9.637974e-05	3.210588e-04
## DOLK	22845	-0.17037609	9.646328e-05	3.212931e-04
## PRAG1	157285	0.29969938	9.741648e-05	3.244234e-04
## CGGBP1	8545	-0.11212257	9.766010e-05	3.251902e-04
## PRDM16-DT	440556	-0.56064740	9.778751e-05	3.255699e-04
## CXXC4	80319	-0.34638794	9.783603e-05	3.256868e-04
## PLPP5	84513	-0.15276686	9.796628e-05	3.260757e-04
## MMP8	4317	1.29812770	9.808729e-05	3.263890e-04
## ZNF624	57547	0.19726492	9.807629e-05	3.263890e-04
## LINC01779	107985190	1.30078594	9.840968e-05	3.274170e-04
## B3GALT9	100288842	-0.21882811	9.845793e-05	3.275327e-04
## RIPOR3	140876	0.41370526	9.873250e-05	3.284011e-04
## AP1AR	55435	-0.19915664	9.886363e-05	3.287923e-04
## VAX2	25806	0.69705778	9.946772e-05	3.307560e-04
## B3GNT9	84752	0.30344395	9.958521e-05	3.311014e-04
## TRPV5	56302	-0.68187927	1.001393e-04	3.328981e-04
## BBS10	79738	0.14072106	1.002284e-04	3.331233e-04
## LRRC52-AS1	400794	-0.84359667	1.002344e-04	3.331233e-04
## RNASEH2B-AS1	100874255	0.66697986	1.005466e-04	3.341151e-04
## CPPED1	55313	-0.16380234	1.006068e-04	3.342694e-04
## PIGQ	9091	-0.23031461	1.006733e-04	3.344445e-04
## C13orf42	647166	-1.03572144	1.007295e-04	3.345856e-04
## LRTM1	57408	3.29633249	1.012338e-04	3.362148e-04
## RNF7	9616	0.23474093	1.013631e-04	3.365979e-04
## SMAD4	4089	-0.09725570	1.014859e-04	3.369600e-04
## STOX2	56977	-0.33640260	1.015167e-04	3.370160e-04
## TUBA1C	84790	-0.24743409	1.015466e-04	3.370692e-04
## ILK	3611	0.15997742	1.018606e-04	3.380654e-04
## IGKJ5	28946	1.54315288	1.019808e-04	3.384181e-04
## LIN7B	64130	0.36207756	1.020002e-04	3.384363e-04
## ENDOG	2021	-0.36775945	1.024025e-04	3.397247e-04
## DPYSL5	56896	1.49555496	1.027107e-04	3.407005e-04
## NSA2	10412	0.23496268	1.029909e-04	3.415834e-04
## API5	8539	-0.08587098	1.032270e-04	3.423199e-04
## SLK	9748	-0.19071113	1.033321e-04	3.425970e-04
## CLEC18C	283971	0.64503818	1.033388e-04	3.425970e-04
## NFIA-AS1	645030	1.06150060	1.034605e-04	3.429538e-04
## LINC02375	101927616	-1.54134045	1.037715e-04	3.439378e-04
## EIF5	1983	-0.19567725	1.039819e-04	3.445881e-04
## TAT	6898	-0.67007535	1.040308e-04	3.447030e-04
## SPACA9	11092	-0.22538443	1.042028e-04	3.452258e-04
## MBNL1	4154	0.18745864	1.043528e-04	3.456757e-04
## JAK2	3717	0.20485587	1.048451e-04	3.472591e-04
## TCL6	27004	0.68510653	1.050101e-04	3.477583e-04
## UNC5C-AS1	105377335	-0.35206890	1.051163e-04	3.480624e-04
## HABP4	22927	0.17825736	1.053126e-04	3.486652e-04

## CUL4A	8451	0.10401591	1.058344e-04	3.503449e-04
## TMEM176B	28959	-0.29470125	1.059527e-04	3.506887e-04
## ZKSCAN7	55888	0.22955265	1.062401e-04	3.515922e-04
## PRKCI	5584	-0.18521042	1.062797e-04	3.516753e-04
## DUBR	344595	0.22562010	1.064074e-04	3.520498e-04
## SMG1P4	100507526	0.81794227	1.064621e-04	3.521830e-04
## ABCA12	26154	0.84657603	1.066610e-04	3.527928e-04
## MTND4P35	107075117	-0.57487736	1.067125e-04	3.529153e-04
## MTCH1	23787	-0.20479283	1.067363e-04	3.529458e-04
## PRPS1	5631	0.13699472	1.071205e-04	3.541681e-04
## EOGT	285203	0.24872966	1.079777e-04	3.569535e-04
## MFSD2B	388931	0.93203651	1.087646e-04	3.595059e-04
## AKR1B10P1	340888	1.58186497	1.089864e-04	3.601903e-04
## CCR6	1235	1.17459207	1.091248e-04	3.605985e-04
## PPP1R3D	5509	-0.12021067	1.092662e-04	3.610169e-04
## RNF112	7732	-0.56918947	1.093820e-04	3.613501e-04
## CD109	135228	0.34490657	1.094315e-04	3.614647e-04
## RBM38	55544	0.34951415	1.095495e-04	3.618052e-04
## RFX5	5993	0.12992428	1.096627e-04	3.621299e-04
## FOXS1	2307	0.53013531	1.097612e-04	3.624059e-04
## POU6F2-AS1	100861520	-0.86338418	1.100213e-04	3.632153e-04
## LAMTOR2	28956	0.25408388	1.101006e-04	3.634276e-04
## COX19	90639	0.21238068	1.101802e-04	3.636409e-04
## MPPE1	65258	-0.13128024	1.102772e-04	3.639117e-04
## CIMAP1B	440836	0.58422587	1.106245e-04	3.650081e-04
## STK17A	9263	0.23917419	1.107504e-04	3.653740e-04
## FASTKD1	79675	-0.17868369	1.110036e-04	3.661597e-04
## ITGB1	3688	0.29076701	1.110405e-04	3.662318e-04
## LETR1	400456	0.35764461	1.113143e-04	3.670849e-04
## SHLD3	112441434	-0.23552581	1.120311e-04	3.693985e-04
## CCN2	1490	-0.37949249	1.120667e-04	3.694658e-04
## ZNF566	84924	0.16921976	1.123295e-04	3.702821e-04
## GUCY2C	2984	0.73241593	1.124004e-04	3.704653e-04
## XPNPEP1	7511	0.12270378	1.125043e-04	3.707577e-04
## RPL23A	6147	0.31362046	1.129055e-04	3.720294e-04
## CACNB2	783	-0.38290629	1.131763e-04	3.728711e-04
## ARHGAP5	394	-0.19760025	1.132389e-04	3.730268e-04
## HMGCLL1	54511	0.35519883	1.133687e-04	3.734036e-04
## USP30-AS1	100131733	0.62054168	1.135077e-04	3.738108e-04
## TMT1B	196410	0.46058384	1.135767e-04	3.739876e-04
## RNF144A	9781	0.29099225	1.135939e-04	3.739934e-04
## NCKAP5L	57701	0.25028075	1.136915e-04	3.742641e-04
## CLDN12	9069	-0.20348474	1.137276e-04	3.743322e-04
## NUP85	79902	0.15428144	1.139655e-04	3.750643e-04
## GSTO2	119391	-0.28340266	1.142428e-04	3.759261e-04
## TNIK	23043	0.27171682	1.142610e-04	3.759352e-04
## LINC02200	102467214	0.73619619	1.145162e-04	3.767238e-04
## IPO13	9670	0.18766779	1.147871e-04	3.775638e-04
## FEZF1-AS1	154860	1.42010953	1.148102e-04	3.775888e-04
## SPATA31F3	100129969	0.64095246	1.148406e-04	3.776377e-04
## ATF3	467	-0.50103701	1.149289e-04	3.778769e-04
## CD300H	100130520	0.97769408	1.156940e-04	3.803409e-04
## ERI3-IT1	100874278	0.83870141	1.160070e-04	3.813182e-04
## WWC1	23286	-0.29245339	1.161625e-04	3.817779e-04

## TMEM255B	348013	-0.32748358	1.163159e-04	3.822301e-04
## CIMAP1D	284451	0.76534201	1.163499e-04	3.822902e-04
## CACNA1C-AS2	100874235	0.76120370	1.163727e-04	3.823135e-04
## CR1L	1379	-0.50061836	1.172452e-04	3.851278e-04
## ALB	213	-0.73475414	1.179592e-04	3.874208e-04
## UQCRHL	440567	-0.30383746	1.179796e-04	3.874355e-04
## RWDD1	51389	0.20489550	1.180620e-04	3.876535e-04
## SYN3	8224	-0.47441993	1.183600e-04	3.885796e-04
## DIABLO	56616	0.35017769	1.185861e-04	3.892167e-04
## SYNM-AS2	125177379	-0.46682353	1.185745e-04	3.892167e-04
## PTPRA	5786	0.08008221	1.191822e-04	3.911204e-04
## SELENON	57190	-0.23761408	1.195350e-04	3.922253e-04
## MAD1L1	8379	0.50575749	1.196111e-04	3.924220e-04
## AKAP5	9495	0.42705542	1.196710e-04	3.925656e-04
## KRT80	144501	0.62892003	1.198773e-04	3.931890e-04
## HAMP	57817	0.95858958	1.199504e-04	3.933759e-04
## ERVV-1	147664	-1.77643411	1.204193e-04	3.948602e-04
## TTC33	23548	-0.15080506	1.209799e-04	3.966107e-04
## KRT27	342574	1.63910619	1.209858e-04	3.966107e-04
## SENP5	205564	0.17591221	1.210794e-04	3.968640e-04
## TWF1	5756	-0.13855357	1.212011e-04	3.971677e-04
## ZNF197	10168	0.17015195	1.212047e-04	3.971677e-04
## PRPF40B	25766	-0.21434419	1.216761e-04	3.986588e-04
## UTP25	27042	0.11780541	1.225020e-04	4.013106e-04
## RMDN2	151393	-0.18929391	1.227657e-04	4.021200e-04
## SORL1	6653	-0.33537135	1.231065e-04	4.031822e-04
## RTL8B	441518	-0.23828370	1.232150e-04	4.034830e-04
## SOSTDC1	25928	-0.43789123	1.234236e-04	4.041118e-04
## AGAP3	116988	0.21562944	1.235889e-04	4.045983e-04
## ASCC3	10973	0.20715325	1.237687e-04	4.050780e-04
## FAM238C	387644	0.65978412	1.237642e-04	4.050780e-04
## LINC00842	643650	1.70449101	1.239083e-04	4.054802e-04
## TMEM259	91304	-0.24020504	1.239688e-04	4.056235e-04
## DNMT3L	29947	0.76975817	1.240963e-04	4.059860e-04
## LINC01625	645434	0.46937215	1.243333e-04	4.067066e-04
## BSDC1	55108	0.09768940	1.243520e-04	4.067132e-04
## ILF3-DT	147727	-0.22125257	1.244277e-04	4.069059e-04
## CD27-AS1	678655	0.18691411	1.245208e-04	4.071554e-04
## CRB3	92359	-0.33905303	1.246625e-04	4.075639e-04
## C11orf91	100131378	-0.96298361	1.248884e-04	4.082476e-04
## ZNF576	79177	0.16571812	1.249290e-04	4.083255e-04
## KLK10	5655	0.98443014	1.250973e-04	4.088207e-04
## ARHGEF35	445328	-0.47115311	1.256921e-04	4.107091e-04
## VDAC2	7417	-0.22301870	1.259795e-04	4.115929e-04
## TICAM2-AS1	101927100	0.42142156	1.261016e-04	4.119365e-04
## LCE1C	353133	0.90104402	1.262254e-04	4.122856e-04
## DLGAP1	9229	0.60061801	1.267174e-04	4.138368e-04
## EEF1A1	1915	0.21670527	1.267520e-04	4.138943e-04
## LRCH4	4034	-0.25254166	1.269368e-04	4.144421e-04
## CHCHD2P7	100874509	-0.93150907	1.272396e-04	4.153748e-04
## SMCHD1	23347	0.23498785	1.273751e-04	4.157053e-04
## COX7A1	1346	0.55104580	1.273744e-04	4.157053e-04
## DSTNP2	171220	-0.18205665	1.274698e-04	4.159585e-04
## MFSD6	54842	-0.19927618	1.275554e-04	4.161822e-04

## EEF1B2	1933	0.28232845	1.277421e-04	4.167354e-04
## CREB3L2	64764	-0.18310643	1.281683e-04	4.180696e-04
## TBCC	6903	0.15214242	1.285751e-04	4.193402e-04
## TMEM145	284339	-0.62542340	1.292787e-04	4.215785e-04
## LINC02694	400359	0.56241985	1.296580e-04	4.227586e-04
## IGHAI1	3493	0.91326539	1.301163e-04	4.241958e-04
## LINC00645	100505967	-0.40612070	1.301430e-04	4.242262e-04
## DUSP15	128853	-0.38266630	1.304509e-04	4.251727e-04
## ZFTA	65998	0.15196239	1.305181e-04	4.253347e-04
## UHMK1	127933	-0.21054139	1.306902e-04	4.258383e-04
## RGPD8	727851	0.33609288	1.309826e-04	4.267340e-04
## THAP5	168451	-0.17535528	1.311919e-04	4.273584e-04
## ARL8A	127829	-0.14086773	1.313199e-04	4.277181e-04
## NOX4	50507	0.52551763	1.314157e-04	4.278933e-04
## ZNF134	7693	0.09686045	1.314265e-04	4.278933e-04
## EGLN2	112398	0.40012967	1.314208e-04	4.278933e-04
## CDYL	9425	0.11832706	1.321291e-04	4.301232e-04
## NMRK1	54981	0.25313742	1.323877e-04	4.309071e-04
## C1R	715	0.53543433	1.325243e-04	4.312941e-04
## TPM4P3	100129096	0.72433750	1.330276e-04	4.328742e-04
## PMS1	5378	0.16947237	1.335358e-04	4.344697e-04
## ANKRD33B	651746	-0.32154228	1.336401e-04	4.347508e-04
## TOM1	10043	-0.18199555	1.339245e-04	4.356177e-04
## BROX	148362	-0.13026724	1.340142e-04	4.358511e-04
## USP49	25862	0.35853757	1.341973e-04	4.363880e-04
## IFT140	9742	-0.15085041	1.342416e-04	4.364736e-04
## LINC00612	253128	-0.60623457	1.344008e-04	4.369328e-04
## AP2B1	163	-0.13910657	1.344665e-04	4.369713e-04
## PABPC3	5042	0.47638929	1.344514e-04	4.369713e-04
## JUN-DT	100131060	-0.28115759	1.344569e-04	4.369713e-04
## INO80D-AS1	122152328	-0.22790633	1.344924e-04	4.369967e-04
## AAK1	22848	-0.18526349	1.345443e-04	4.371072e-04
## MRPL17	63875	0.21803600	1.350517e-04	4.386970e-04
## HMSD	284293	1.05608382	1.353177e-04	4.395022e-04
## ZPBP	11055	-0.59215941	1.354086e-04	4.397387e-04
## ZIM2	23619	-0.93548625	1.355163e-04	4.400295e-04
## NXPH4	11247	-0.58845888	1.360969e-04	4.418558e-04
## NRCAM	4897	-0.33961759	1.363172e-04	4.424989e-04
## GLMN	11146	0.17576934	1.363314e-04	4.424989e-04
## GC	2638	-1.02620759	1.364869e-04	4.429444e-04
## ZBTB20-AS4	100874131	0.66254764	1.365651e-04	4.431390e-04
## AREG	374	-0.73916597	1.366374e-04	4.433146e-04
## LINC01750	643355	-0.60567364	1.370673e-04	4.446498e-04
## C5AR1	728	0.46836872	1.372865e-04	4.453014e-04
## ZNF660	285349	0.29169614	1.373498e-04	4.454473e-04
## ZNF843	283933	0.26935591	1.378001e-04	4.468482e-04
## CCDC170	80129	0.35770948	1.379109e-04	4.471478e-04
## DENND1B	163486	-0.23494281	1.384495e-04	4.488342e-04
## RBMX2	51634	0.14252190	1.386625e-04	4.494648e-04
## LINC00520	645687	1.96395310	1.387503e-04	4.496892e-04
## GRB14	2888	-0.28569373	1.389048e-04	4.501300e-04
## RPL39L	116832	0.36620516	1.392382e-04	4.511505e-04
## HOXB4	3214	-0.24442777	1.393521e-04	4.514591e-04
## VASN	114990	-0.42406210	1.394273e-04	4.516424e-04

## LILRA5	353514	0.68146854	1.398238e-04	4.528665e-04
## VPS33A	65082	0.10616409	1.398814e-04	4.529021e-04
## PGGT1B	5229	-0.15338751	1.398907e-04	4.529021e-04
## LINC01714	102724539	-0.67652686	1.398837e-04	4.529021e-04
## SUDS3	64426	-0.10039583	1.400684e-04	4.534171e-04
## FOXN2	3344	0.20873357	1.401896e-04	4.537489e-04
## ARK2C	494470	-0.50189948	1.406218e-04	4.550872e-04
## DIPK2B	79742	0.46583836	1.407527e-04	4.554504e-04
## RNF38	152006	-0.12746140	1.409823e-04	4.561324e-04
## BCDIN3D-AS1	100286844	0.26917340	1.410782e-04	4.563819e-04
## CAPRIN2	65981	0.24467534	1.416327e-04	4.581149e-04
## GPR61	83873	1.40081386	1.421856e-04	4.598420e-04
## RPL18	6141	0.33430681	1.427635e-04	4.615880e-04
## WWOX	51741	-0.18216244	1.427615e-04	4.615880e-04
## MBD4	8930	-0.13990066	1.427936e-04	4.616241e-04
## ITGA9	3680	0.27568138	1.429085e-04	4.619341e-04
## ARL1	400	-0.09956910	1.434537e-04	4.636345e-04
## GBP2	2634	0.43413814	1.437131e-04	4.644110e-04
## RPL14	9045	0.26201373	1.437370e-04	4.644266e-04
## AR	367	0.23877088	1.443445e-04	4.663276e-04
## DNAJC16	23341	-0.15412654	1.444275e-04	4.665335e-04
## SIGLEC7	27036	0.59425304	1.448075e-04	4.676989e-04
## IKZF4	64375	-0.17357806	1.449362e-04	4.680526e-04
## LINC00940	100271702	0.74509136	1.450569e-04	4.683801e-04
## IFI30	10437	0.95822462	1.455117e-04	4.697859e-04
## C12orf42	374470	0.89248311	1.465713e-04	4.731440e-04
## MED10	84246	0.16407887	1.469487e-04	4.742993e-04
## RPS6	6194	0.26994361	1.470051e-04	4.744183e-04
## IQSEC3	440073	0.45274512	1.477555e-04	4.767768e-04
## SLC22A4	6583	-0.40914580	1.478861e-04	4.771349e-04
## BRD7	29117	0.10476238	1.482639e-04	4.782902e-04
## AP5S1	55317	-0.16039977	1.487205e-04	4.796997e-04
## SLC1A2	6506	0.55637209	1.500001e-04	4.837628e-04
## STAT6	6778	-0.12266877	1.500898e-04	4.839878e-04
## PDYN-AS1	727993	-0.57780652	1.502713e-04	4.845090e-04
## IFITM4P	340198	1.00280972	1.504079e-04	4.848848e-04
## SLC5A10	125206	-0.49726707	1.504711e-04	4.850241e-04
## CYP2B6	1555	0.61672106	1.518547e-04	4.894194e-04
## THORLNC	100506797	0.63544497	1.519779e-04	4.897514e-04
## ACSBG1	23205	-0.60008475	1.520616e-04	4.899563e-04
## ITPR1-DT	100996539	-0.39629211	1.521256e-04	4.900974e-04
## DDOST	1650	-0.13260897	1.524373e-04	4.910364e-04
## FOXD2	2306	-0.32751838	1.526609e-04	4.916916e-04
## MAP3K3	4215	0.14020790	1.530343e-04	4.928287e-04
## MIR4307HG	101927081	1.33728513	1.539913e-04	4.958452e-04
## PANTR1	100506421	-0.48339985	1.540331e-04	4.959138e-04
## DDB1	1642	-0.13266831	1.544157e-04	4.970800e-04
## FRAS1	80144	0.31195104	1.550370e-04	4.990138e-04
## LINC01612	101928223	-0.38446113	1.553364e-04	4.999113e-04
## STRN	6801	-0.19075686	1.559247e-04	5.017381e-04
## CC2D2A	57545	0.18154745	1.560825e-04	5.021794e-04
## FIBP	9158	0.25639394	1.561432e-04	5.023083e-04
## SNX19	399979	-0.12012061	1.564564e-04	5.032490e-04
## NRIR	104326052	0.86605397	1.566929e-04	5.039431e-04

## TFAP2C	7022	-0.83587004	1.569400e-04	5.046709e-04
## MRPS9	64965	-0.15454879	1.573723e-04	5.059942e-04
## GPR153	387509	0.46678656	1.577108e-04	5.070153e-04
## RAB4A-AS1	105373159	-0.20530776	1.582522e-04	5.086888e-04
## RPGR	6103	-0.24408087	1.593821e-04	5.122530e-04
## SESN2	83667	0.27772362	1.595797e-04	5.128202e-04
## MAP3K5	4217	-0.19680855	1.598095e-04	5.134906e-04
## LINC03007	646588	0.61599405	1.598901e-04	5.136817e-04
## QKI	9444	0.19056641	1.600617e-04	5.141651e-04
## GDF3	9573	-1.13370272	1.600906e-04	5.141900e-04
## MSANTD3	91283	0.23525679	1.601179e-04	5.142096e-04
## CFDP1	10428	0.23373048	1.612130e-04	5.176581e-04
## CACNA2D4	93589	0.30761667	1.614839e-04	5.184597e-04
## CCSER1	401145	-0.29046139	1.617980e-04	5.193993e-04
## ZMYND8	23613	-0.18217008	1.621985e-04	5.206162e-04
## NKX2-3	159296	2.10074703	1.625750e-04	5.217558e-04
## UBIAD1	29914	-0.12155208	1.632773e-04	5.239406e-04
## PARP12	64761	0.20358468	1.635872e-04	5.247965e-04
## SIGLEC16	400709	0.72735037	1.635767e-04	5.247965e-04
## CHD4	1108	-0.15573051	1.636724e-04	5.250003e-04
## PCDHB17P	54661	-0.65491476	1.637499e-04	5.251796e-04
## CPQ	10404	0.17309382	1.641640e-04	5.264383e-04
## C15orf39	56905	0.30634962	1.643442e-04	5.269466e-04
## NUTF2	10204	0.22369996	1.647400e-04	5.281461e-04
## RNF146	81847	0.12975589	1.654478e-04	5.303451e-04
## FGF4	2249	-1.60508815	1.656598e-04	5.309546e-04
## RPL7AP39	646476	-0.56260050	1.662785e-04	5.328674e-04
## TENT4A	11044	0.19044401	1.663032e-04	5.328765e-04
## CEP83	51134	0.23181110	1.665656e-04	5.336467e-04
## TOR1AIP1	26092	0.10033846	1.673555e-04	5.361069e-04
## EDRF1	26098	0.21012397	1.691795e-04	5.418784e-04
## CRBN	51185	0.14043219	1.697599e-04	5.435939e-04
## CHMP4C	92421	-0.26603110	1.697440e-04	5.435939e-04
## CBY1	25776	0.14735656	1.700929e-04	5.445887e-04
## PTPRK	5796	-0.17652450	1.703493e-04	5.453376e-04
## MIATNB	102724827	0.22185462	1.708012e-04	5.466887e-04
## SLC25A53	401612	0.18497218	1.708163e-04	5.466887e-04
## EDN1	1906	-0.33930456	1.713807e-04	5.484229e-04
## PLD2	5338	0.20107052	1.722820e-04	5.512343e-04
## ZNF696	79943	0.14833696	1.726096e-04	5.522098e-04
## AADAT	51166	0.31086858	1.729458e-04	5.532124e-04
## AIFM1	9131	-0.28081416	1.738045e-04	5.558862e-04
## LNX2	222484	-0.15318637	1.740322e-04	5.565412e-04
## NMB	4828	0.36219735	1.756554e-04	5.616583e-04
## B4GALT7	11285	0.17187173	1.758441e-04	5.621136e-04
## C5orf46	389336	2.93006932	1.758301e-04	5.621136e-04
## LIN7A	8825	-0.21776770	1.764510e-04	5.639796e-04
## DIMT1	27292	0.14002480	1.774386e-04	5.670615e-04
## CETN3	1070	-0.18322192	1.775884e-04	5.674654e-04
## BANK1	55024	0.29952363	1.776510e-04	5.675908e-04
## MAGI1	9223	-0.18474661	1.777209e-04	5.676612e-04
## UBL4B	164153	1.37917673	1.777045e-04	5.676612e-04
## ZNF578	147660	0.28172950	1.777431e-04	5.676612e-04
## KLF6	1316	-0.30222494	1.787993e-04	5.709594e-04

## SHE	126669	-0.21804971	1.789404e-04	5.713349e-04
## GNPNAT1	64841	-0.12833274	1.795619e-04	5.731688e-04
## ZNF773	374928	0.15119116	1.795595e-04	5.731688e-04
## SFMBT2	57713	0.22580108	1.795879e-04	5.731766e-04
## C17orf114	119139905	0.53990052	1.799153e-04	5.741461e-04
## CUL3	8452	-0.09381950	1.800229e-04	5.744139e-04
## CSNK1E	1454	0.20620370	1.800867e-04	5.745422e-04
## ZNF785	146540	0.21781838	1.804569e-04	5.756475e-04
## CRB2	286204	-0.52979084	1.805352e-04	5.758217e-04
## LINC02182	101928880	-0.98476191	1.807087e-04	5.762994e-04
## KHDRBS1	10657	-0.08939854	1.808255e-04	5.765963e-04
## ASB15-AS1	102724555	0.79979980	1.808573e-04	5.766221e-04
## MAP3K4	4216	0.12488824	1.810151e-04	5.770496e-04
## PLXNA4	91584	0.40513999	1.811023e-04	5.772518e-04
## CIDEB	27141	-0.33165864	1.813944e-04	5.781068e-04
## POU3F4	5456	-0.51834488	1.815539e-04	5.785394e-04
## RCBTB2	1102	0.10668278	1.817885e-04	5.792111e-04
## RASSF9	9182	0.28881906	1.819784e-04	5.797401e-04
## LINC01273	101927541	0.42414616	1.821050e-04	5.800675e-04
## MRPL47	57129	-0.20445427	1.822306e-04	5.803596e-04
## RIC3	79608	-0.30734117	1.822445e-04	5.803596e-04
## NEPRO-AS1	102723430	0.28153761	1.823556e-04	5.806373e-04
## CNTN2	6900	-0.61999602	1.829098e-04	5.823256e-04
## TOP6BL	79703	-0.24209960	1.833275e-04	5.835788e-04
## TMTC4	84899	-0.16643884	1.834106e-04	5.837670e-04
## FKBP2	2286	-0.57537215	1.834446e-04	5.837987e-04
## GRM3	2913	-1.06587239	1.836225e-04	5.842885e-04
## IQSEC3-AS2	105369593	1.86919076	1.839794e-04	5.853473e-04
## CHRM3-AS1	100873984	0.56610328	1.841922e-04	5.859477e-04
## ANXA5	308	0.26733451	1.846037e-04	5.871800e-04
## TP53TG1	11257	0.30502777	1.846333e-04	5.871971e-04
## LINC02058	107984117	0.94423195	1.846856e-04	5.872865e-04
## PCID2	55795	0.11604708	1.847789e-04	5.875065e-04
## PRDM15	63977	0.20829557	1.849580e-04	5.879989e-04
## HSD17B7	51478	-0.23552567	1.858671e-04	5.908120e-04
## DPF2	5977	0.11277323	1.859905e-04	5.911269e-04
## RN7SL689P	106481111	0.34141251	1.862274e-04	5.918021e-04
## SNORC	389084	0.32776663	1.863395e-04	5.920037e-04
## PLA2G4E	123745	1.81391619	1.863370e-04	5.920037e-04
## LMX1B	4010	-0.49684623	1.865784e-04	5.926851e-04
## SYTL2	54843	0.24402718	1.871092e-04	5.942937e-04
## GTF2H5	404672	0.21217532	1.873200e-04	5.948856e-04
## KPNA4	3840	0.13796103	1.875801e-04	5.956335e-04
## TMEM178A	130733	-0.33887151	1.880561e-04	5.970671e-04
## EGFR	1956	-0.19548718	1.883102e-04	5.977956e-04
## NQO2	4835	0.40280081	1.884109e-04	5.980373e-04
## PTPN21	11099	0.17035296	1.889056e-04	5.995290e-04
## USP32	84669	-0.13887999	1.903308e-04	6.039735e-04
## IGLV7-46	28775	1.42014726	1.914164e-04	6.073391e-04
## HDGF	3068	-0.11869127	1.917891e-04	6.083627e-04
## SPATA8	145946	1.23236510	1.917661e-04	6.083627e-04
## UBE2W	55284	-0.16909878	1.924855e-04	6.104823e-04
## RPL5	6125	0.22210505	1.925075e-04	6.104823e-04
## KLHL18	23276	0.11531896	1.925509e-04	6.105402e-04

## ZNF284	342909	0.20237738	1.926781e-04	6.107839e-04
## ARHGAP28-AS1	101927168	0.59555343	1.926615e-04	6.107839e-04
## ARL14EP	120534	0.10289079	1.927914e-04	6.110636e-04
## NR1H3	10062	0.22827556	1.932477e-04	6.124299e-04
## ENTREP2	23359	0.34358670	1.933566e-04	6.126952e-04
## ZBBX	79740	0.68789914	1.935272e-04	6.131557e-04
## CYP51A1-AS1	613126	-0.42367375	1.936225e-04	6.133778e-04
## SBK2	646643	1.25046424	1.937431e-04	6.136797e-04
## LSG1	55341	-0.09805763	1.946307e-04	6.164109e-04
## CTU2	348180	0.24801960	1.950760e-04	6.176928e-04
## LINC02381	400043	-0.35894310	1.950863e-04	6.176928e-04
## RAB1A	5861	-0.13059348	1.952875e-04	6.182492e-04
## HEY2	23493	-0.23819210	1.953807e-04	6.184638e-04
## IP6K1	9807	-0.14132288	1.969008e-04	6.231944e-04
## COA3	28958	-0.27837724	1.979662e-04	6.264848e-04
## NIPAL1	152519	-0.36610345	1.982386e-04	6.272651e-04
## HDAC5	10014	0.20280565	1.982665e-04	6.272719e-04
## EIF4B	1975	0.13568821	1.984955e-04	6.279146e-04
## SLC11A1	6556	0.48607872	1.987252e-04	6.285594e-04
## FAF1	11124	-0.09635993	2.000555e-04	6.326846e-04
## LTBP4	8425	0.50184612	2.003263e-04	6.334586e-04
## TRUB1	142940	-0.14772252	2.005303e-04	6.340212e-04
## SEC14L4	284904	-0.59219883	2.009461e-04	6.352533e-04
## C1orf210	149466	-0.29586943	2.011713e-04	6.358823e-04
## TOR3A	64222	0.12103944	2.025788e-04	6.402482e-04
## VTI1A	143187	-0.10059158	2.028379e-04	6.409836e-04
## BMF	90427	0.31355616	2.029080e-04	6.411216e-04
## CERS6	253782	-0.15629903	2.031443e-04	6.417850e-04
## NAP1L1P1	729561	0.74461855	2.033216e-04	6.422615e-04
## OGDH	4967	-0.20481397	2.036533e-04	6.432258e-04
## SNAP25-AS1	100131208	0.69179190	2.038837e-04	6.438696e-04
## MRPL37	51253	0.22136311	2.043791e-04	6.453505e-04
## ECHS1	1892	0.33699965	2.051133e-04	6.475844e-04
## ERICH1	157697	-0.17164981	2.053757e-04	6.483288e-04
## SIPA1L2	57568	0.25843907	2.057109e-04	6.493026e-04
## DPY19L2P1	554236	0.97437266	2.058205e-04	6.495641e-04
## LINC02507	105377477	1.21843026	2.059126e-04	6.497705e-04
## OR7E14P	10819	-0.30634009	2.062134e-04	6.505791e-04
## GFOD3P	57212	0.15902718	2.062224e-04	6.505791e-04
## PELI2	57161	-0.20249989	2.070728e-04	6.531771e-04
## NACA	4666	0.23934782	2.078653e-04	6.555918e-04
## PCDHA3	56145	-0.40976155	2.079781e-04	6.558626e-04
## ATP6V0A1	535	-0.25126896	2.081612e-04	6.563546e-04
## COX17	10063	-0.27930947	2.086586e-04	6.578376e-04
## NANP	140838	0.12037736	2.093281e-04	6.598628e-04
## HAL	3034	-0.59318455	2.095527e-04	6.604850e-04
## CPN2	1370	-0.58256816	2.096593e-04	6.607354e-04
## RFC5	5985	-0.11213147	2.097430e-04	6.609134e-04
## GNAQ	2776	-0.14644347	2.102179e-04	6.623242e-04
## HLA-DQA2	3118	0.73054456	2.106856e-04	6.637117e-04
## SLC1A6	6511	-1.00478265	2.112454e-04	6.653887e-04
## LINC03044	105375674	1.45230794	2.116483e-04	6.664851e-04
## LINC01003	100128822	-0.27228268	2.116408e-04	6.664851e-04
## LINC02754	105369360	0.66260586	2.117060e-04	6.665803e-04

## METTL8	79828	0.17497757	2.120792e-04	6.676691e-04
## EMX2OS	196047	-0.23491302	2.121263e-04	6.677308e-04
## ACTR10	55860	-0.11249980	2.129150e-04	6.701265e-04
## DGCR5	26220	0.53128459	2.131216e-04	6.706900e-04
## ADGRA3	166647	0.12195719	2.135403e-04	6.719207e-04
## TIMP1	7076	0.59911627	2.137679e-04	6.725496e-04
## BATF2	116071	0.27758377	2.141028e-04	6.735161e-04
## FCGR1BP	2210	0.61845227	2.141579e-04	6.736023e-04
## TAAR6	319100	0.88975912	2.147828e-04	6.754803e-04
## GALNT7-DT	101930370	0.28477377	2.150945e-04	6.763730e-04
## GOLT1A	127845	-0.37289297	2.151604e-04	6.764929e-04
## GPR82	27197	0.48449980	2.156689e-04	6.780038e-04
## FUT10	84750	0.12193818	2.158411e-04	6.784573e-04
## LINC02648	101928150	1.08068196	2.166850e-04	6.810219e-04
## MAN2A1	4124	-0.18943590	2.173688e-04	6.830828e-04
## MTO1	25821	-0.12816930	2.176368e-04	6.838366e-04
## NKIRAS2	28511	0.13889098	2.178954e-04	6.845606e-04
## PRPSAP2	5636	-0.16432346	2.186413e-04	6.868152e-04
## TMPRSS12	283471	-0.99848242	2.187982e-04	6.872191e-04
## CLDN10-AS1	100874194	-0.68910698	2.189966e-04	6.877535e-04
## CLDN6	9074	0.80052991	2.193938e-04	6.889119e-04
## BCL9L	283149	0.29962957	2.196754e-04	6.897069e-04
## TSPAN4	7106	0.29956345	2.201657e-04	6.911572e-04
## MTCYBP22	107075221	-0.45921169	2.201987e-04	6.911713e-04
## HERC1	8925	0.22293980	2.203141e-04	6.914442e-04
## HDAC7	51564	0.28207734	2.205071e-04	6.919607e-04
## UBE3A	7337	-0.12009885	2.212644e-04	6.942476e-04
## ABCB4	5244	0.39973496	2.217163e-04	6.955756e-04
## HMGA2	8091	0.59000136	2.220728e-04	6.966041e-04
## TANK	10010	0.14345810	2.234748e-04	7.009113e-04
## AVPR1B	553	-0.42296110	2.240255e-04	7.025478e-04
## SLC26A2	1836	0.24996047	2.243625e-04	7.035139e-04
## TBC1D1	23216	-0.13126950	2.247015e-04	7.044862e-04
## ARF1	375	-0.15197491	2.247919e-04	7.046784e-04
## TESK2	10420	0.19327814	2.248832e-04	7.048737e-04
## XK	7504	-0.27326034	2.253236e-04	7.061630e-04
## EIF2AK4	440275	0.12108845	2.260146e-04	7.082373e-04
## PNMT	5409	-0.65419627	2.261040e-04	7.084261e-04
## ZNF530	348327	0.18611294	2.264220e-04	7.093311e-04
## SERPINB3	6317	0.90770390	2.267499e-04	7.101750e-04
## RAB11B	9230	-0.25838717	2.267465e-04	7.101750e-04
## ISG20L2	81875	0.08738477	2.268117e-04	7.102772e-04
## HINT3	135114	-0.12670581	2.270995e-04	7.110867e-04
## HYAL4	23553	0.92942306	2.272252e-04	7.113886e-04
## DVL3	1857	0.17613915	2.273176e-04	7.115865e-04
## RPA1	6117	0.11615823	2.278901e-04	7.132866e-04
## S100A14	57402	-0.43091536	2.279619e-04	7.134195e-04
## LSAMP	4045	0.51570610	2.284336e-04	7.147227e-04
## CARD17P	440068	1.66176145	2.284372e-04	7.147227e-04
## DNAH17	8632	-0.84318942	2.296165e-04	7.183201e-04
## RPS23	6228	0.27641774	2.300091e-04	7.194558e-04
## RAB40C	57799	-0.19890555	2.301256e-04	7.197275e-04
## HOXA9	3205	-0.18269648	2.302044e-04	7.198813e-04
## EAF1	85403	-0.13480557	2.306570e-04	7.212037e-04

## GRHL2	79977	-0.37291254	2.308299e-04	7.216514e-04
## CASP6	839	0.17886167	2.310636e-04	7.222892e-04
## TNKS2	80351	0.16483394	2.311979e-04	7.226161e-04
## CD47	961	0.15277677	2.312846e-04	7.227941e-04
## PTENP1-AS	101243555	0.88342524	2.314612e-04	7.232531e-04
## LBR	3930	-0.18330490	2.315057e-04	7.232990e-04
## SNHG18	100505806	0.27139130	2.317270e-04	7.238975e-04
## SPOCK3	50859	-0.64456138	2.318729e-04	7.242600e-04
## SPPL2B	56928	-0.28660888	2.320845e-04	7.248278e-04
## HAAO	23498	0.44323043	2.325115e-04	7.260681e-04
## WDR86	349136	0.54179321	2.335049e-04	7.290767e-04
## IL4I1	259307	0.61563669	2.337925e-04	7.298806e-04
## NDUFAF2	91942	0.23521572	2.345450e-04	7.321359e-04
## ZNF561	93134	0.10357622	2.352031e-04	7.340958e-04
## DDX50	79009	0.10190652	2.360099e-04	7.365193e-04
## PAK6	56924	-0.23617365	2.363559e-04	7.375045e-04
## PHACTR2	9749	0.23310476	2.372070e-04	7.400651e-04
## FAM177A1	283635	-0.16671538	2.374535e-04	7.407392e-04
## TBC1D7	51256	0.20363429	2.375371e-04	7.408948e-04
## IGHV5-78	28387	1.53063603	2.375644e-04	7.408948e-04
## ZNF804B	219578	0.55309900	2.378728e-04	7.417614e-04
## UMAD1	729852	-0.15430081	2.385619e-04	7.438147e-04
## TMOD2	29767	0.24253018	2.387602e-04	7.443376e-04
## SFT2D2	375035	-0.16435292	2.400861e-04	7.483750e-04
## GRIPAP1	56850	-0.11314045	2.401391e-04	7.484445e-04
## RPS3	6188	0.30272835	2.402016e-04	7.485432e-04
## TRAV38-2DV8	28643	0.83012161	2.407845e-04	7.502635e-04
## ZNF433-AS1	101928464	0.30068724	2.412933e-04	7.516560e-04
## MTND4P12	100293090	-0.29637913	2.412721e-04	7.516560e-04
## ZNF350-AS1	101669766	-0.46468599	2.415850e-04	7.524683e-04
## TPH1	7166	-0.63706962	2.422797e-04	7.545353e-04
## DDX6	1656	0.11255218	2.423227e-04	7.545724e-04
## DHX58	79132	0.19452565	2.425095e-04	7.549608e-04
## LINC00330	144817	-0.98510814	2.424924e-04	7.549608e-04
## H4C2	8366	1.32757484	2.436396e-04	7.583818e-04
## CNOT2	4848	0.08350642	2.436900e-04	7.584415e-04
## EARS2	124454	0.13615173	2.439853e-04	7.592632e-04
## TMEM156	80008	0.53826792	2.440583e-04	7.592959e-04
## SERPINB10	5273	1.24952434	2.440433e-04	7.592959e-04
## UBE2D3	7323	-0.08874506	2.445018e-04	7.604810e-04
## MBLAC1	255374	-0.32723743	2.444754e-04	7.604810e-04
## RPS5	6193	0.32643479	2.449487e-04	7.617737e-04
## HHIP-AS1	646576	0.33742765	2.450130e-04	7.618761e-04
## HNRNPA1P70	341333	1.43611938	2.457220e-04	7.639828e-04
## LINC02941	100507477	-0.93440461	2.469665e-04	7.677540e-04
## PCP4L1	654790	-0.57655512	2.473777e-04	7.689339e-04
## LINC02223	646241	2.37565504	2.477950e-04	7.701324e-04
## BAG3	9531	-0.22988407	2.488842e-04	7.734188e-04
## RPS15AP1	92682	0.44261510	2.494419e-04	7.750527e-04
## MYO9A	4649	-0.25564961	2.500313e-04	7.767847e-04
## ADGRF3	165082	-0.54917713	2.501882e-04	7.771728e-04
## ZSCAN32	54925	0.13260462	2.509359e-04	7.793958e-04
## STRADB	55437	0.30844019	2.529656e-04	7.855995e-04
## MSH3	4437	0.25639036	2.536760e-04	7.877050e-04

## KIAA2012-AS1	729224	1.49100892	2.551849e-04	7.922892e-04
## CD200	4345	0.28692539	2.554614e-04	7.930465e-04
## TSPAN6	7105	-0.21028786	2.556323e-04	7.934757e-04
## MAPK10	5602	0.22042717	2.569068e-04	7.973299e-04
## RPL15	6138	0.21698037	2.575604e-04	7.992563e-04
## GAA	2548	-0.28880860	2.576958e-04	7.995743e-04
## RPL36AP37	729362	0.39409209	2.578905e-04	8.000761e-04
## GFOD2	81577	-0.11974686	2.582682e-04	8.010166e-04
## NSMCE1-DT	400512	0.46948781	2.582366e-04	8.010166e-04
## LINC03057	127379715	-0.44655176	2.582925e-04	8.010166e-04
## WIPI1	55062	0.19974735	2.586957e-04	8.021646e-04
## OSM	5008	-0.78168913	2.588310e-04	8.024818e-04
## RPTOR	57521	-0.19751096	2.590700e-04	8.031202e-04
## ZNF263	10127	0.09770217	2.591236e-04	8.031839e-04
## ATPAF2	91647	0.18512949	2.592742e-04	8.035482e-04
## NHSL1	57224	0.21292775	2.596767e-04	8.046932e-04
## MBNL3	55796	-0.22931230	2.600071e-04	8.054090e-04
## RALGPS1	9649	-0.23874357	2.599576e-04	8.054090e-04
## THAP8	199745	0.22460703	2.599892e-04	8.054090e-04
## TCF12	6938	0.13725006	2.602162e-04	8.059539e-04
## HEG1	57493	0.29538189	2.604144e-04	8.064649e-04
## XBP1	7494	-0.20271735	2.604660e-04	8.065219e-04
## C14orf93	60686	-0.15091626	2.606392e-04	8.068525e-04
## OGFLR1	79627	0.23454773	2.606292e-04	8.068525e-04
## POGLUT3	143888	0.21090604	2.611606e-04	8.083638e-04
## ZNF44	51710	-0.25229161	2.613794e-04	8.089380e-04
## TSPAN17	26262	0.15139651	2.618569e-04	8.103127e-04
## BEX2	84707	-0.27683955	2.620717e-04	8.108741e-04
## APOOL	139322	-0.21596606	2.626842e-04	8.126656e-04
## ZNF446	55663	-0.15488673	2.629574e-04	8.134072e-04
## MYD88	4615	0.17969894	2.631507e-04	8.139017e-04
## C10orf67	256815	0.39804899	2.633373e-04	8.143752e-04
## SATL1	340562	-0.62960728	2.637413e-04	8.155208e-04
## FSHR	2492	0.93983630	2.639479e-04	8.160557e-04
## MESP1	55897	0.49638305	2.654041e-04	8.203654e-04
## HISLA	283587	0.76094923	2.654094e-04	8.203654e-04
## SCYL3	57147	-0.11281870	2.656265e-04	8.208446e-04
## LINC01010	154092	0.71057497	2.656320e-04	8.208446e-04
## PATZ1	23598	-0.12952593	2.662427e-04	8.226273e-04
## GADL1	339896	0.71735655	2.670999e-04	8.251708e-04
## CNGA1	1259	-0.35444278	2.674142e-04	8.260370e-04
## VPS37C	55048	-0.12707509	2.676427e-04	8.266377e-04
## URGCP	55665	-0.12864246	2.678675e-04	8.272268e-04
## IGKC	3514	0.88311799	2.679159e-04	8.272711e-04
## DISP3	57540	0.60264951	2.680036e-04	8.274370e-04
## C19orf53	28974	0.24607289	2.682368e-04	8.280517e-04
## CEP295NL	100653515	1.11722989	2.684224e-04	8.285194e-04
## NPSR1-AS1	404744	-0.45256152	2.687329e-04	8.293725e-04
## PRMT1	3276	0.18669588	2.687887e-04	8.294392e-04
## FKBP3	2287	0.21467864	2.688382e-04	8.294866e-04
## STK38L	23012	0.17636016	2.690881e-04	8.301524e-04
## UBXN4	23190	-0.11787184	2.705013e-04	8.344063e-04
## ZNHIT6	54680	0.15971236	2.710106e-04	8.357649e-04
## RPS27L	51065	0.27600735	2.709795e-04	8.357649e-04

## TRMT9B	57604	-0.40020235	2.710630e-04	8.358206e-04
## HTR3A	3359	-1.26769700	2.711486e-04	8.359783e-04
## RPS2	6187	0.35632749	2.712697e-04	8.362457e-04
## PBRM1	55193	0.17262859	2.714467e-04	8.366852e-04
## SLC7A3	84889	0.97794194	2.720524e-04	8.384458e-04
## LHX4	89884	-0.78141855	2.723934e-04	8.393903e-04
## MRPL46	26589	0.27198104	2.741022e-04	8.445490e-04
## MUC20	200958	-0.30384130	2.746259e-04	8.460554e-04
## KEAP1	9817	0.14498923	2.750085e-04	8.470193e-04
## LINC01703	105373113	0.44916477	2.750004e-04	8.470193e-04
## MOSPD2	158747	0.17520257	2.752200e-04	8.475631e-04
## TMEM64	169200	-0.15811504	2.759196e-04	8.496099e-04
## CLN3	1201	0.43391029	2.765465e-04	8.514324e-04
## PLCXD2	257068	0.27691466	2.771896e-04	8.533043e-04
## TLCD4	148534	0.22935649	2.774444e-04	8.539805e-04
## TMTC2	160335	-0.21617572	2.781057e-04	8.559076e-04
## ADSS2	159	-0.10953887	2.781431e-04	8.559144e-04
## BLOC1S6	26258	0.13910723	2.785760e-04	8.570293e-04
## HMGN3-AS1	100288198	-0.18459517	2.785457e-04	8.570293e-04
## NUDT12	83594	-0.22509790	2.786174e-04	8.570483e-04
## TCEAL4	79921	-0.13798471	2.803469e-04	8.622591e-04
## SEMA3B	7869	-0.28819277	2.807847e-04	8.634964e-04
## NCDN	23154	-0.21631322	2.810175e-04	8.641031e-04
## ZNF80	7634	1.31354576	2.812785e-04	8.647961e-04
## CYP4A22	284541	-0.62354495	2.817963e-04	8.661691e-04
## MTCO1P53	107075285	-0.53766334	2.817862e-04	8.661691e-04
## TRO	7216	0.29162886	2.818727e-04	8.662942e-04
## LONRF3	79836	-0.29225872	2.820052e-04	8.664821e-04
## PRR29	92340	0.38647099	2.819916e-04	8.664821e-04
## GMDS	2762	-0.20913619	2.822126e-04	8.670101e-04
## RNF223	401934	-0.84287468	2.827122e-04	8.684350e-04
## KLF15	28999	-0.34096196	2.828614e-04	8.687834e-04
## DLGAP3	58512	-0.43214027	2.829553e-04	8.689128e-04
## LNCTSI	128193292	0.68797134	2.829750e-04	8.689128e-04
## TCF15	6939	0.53411845	2.833560e-04	8.698627e-04
## TTC34	100287898	-0.36525760	2.833345e-04	8.698627e-04
## SEC11C	90701	-0.24972978	2.833982e-04	8.698826e-04
## MALT1	10892	-0.29398224	2.838223e-04	8.710741e-04
## USP44	84101	-0.33415148	2.838588e-04	8.710761e-04
## TCOF1	6949	0.12836466	2.850796e-04	8.746205e-04
## MT1IP	644314	-1.03489716	2.850857e-04	8.746205e-04
## ANXA13	312	0.64820988	2.852268e-04	8.749428e-04
## ZNF417	147687	0.22284999	2.863324e-04	8.782233e-04
## USO1	8615	0.13727122	2.869379e-04	8.799693e-04
## LINGO2	158038	0.39486975	2.871071e-04	8.803773e-04
## FOXE3	2301	-0.69028187	2.873088e-04	8.808845e-04
## NUP58	9818	-0.19654728	2.884514e-04	8.842762e-04
## MIR9-2HG	645323	-0.69940452	2.886320e-04	8.847181e-04
## SMG7	9887	-0.10858534	2.892812e-04	8.865962e-04
## PCAT18	728606	-0.74739167	2.902062e-04	8.893191e-04
## OXTR	5021	0.42902879	2.905200e-04	8.901686e-04
## PITPNM3	83394	-0.25718651	2.912194e-04	8.921989e-04
## MYMX	101929726	0.54157660	2.927230e-04	8.966925e-04
## LINC01778	105378622	1.47312458	2.929582e-04	8.972999e-04

## CSKMT	751071	0.22030877	2.938324e-04	8.998642e-04
## GART	2618	0.09188689	2.944890e-04	9.017613e-04
## PRCP	5547	-0.19490095	2.958780e-04	9.059003e-04
## PCDHB18P	54660	0.41358111	2.983587e-04	9.133807e-04
## ANO7	50636	-0.30106459	2.984333e-04	9.134940e-04
## TAPT1	202018	-0.13143139	2.984957e-04	9.135699e-04
## ZNF846	162993	0.25419386	2.987096e-04	9.141093e-04
## LINC02073	105371828	1.00580227	3.006660e-04	9.199803e-04
## ATRIP	84126	0.13496852	3.008679e-04	9.204824e-04
## PLCXD1	55344	0.31309068	3.009688e-04	9.206751e-04
## TICAM2	353376	0.74386998	3.011801e-04	9.212056e-04
## ZNF892	344065	0.32647709	3.018834e-04	9.232405e-04
## CDH24	64403	0.31726340	3.019964e-04	9.234699e-04
## MRPL2	51069	-0.18633936	3.026444e-04	9.253348e-04
## GTF2A1-AS1	101928504	-0.27920847	3.030261e-04	9.263855e-04
## SEMA3F-AS1	100129060	-0.50359758	3.046471e-04	9.312238e-04
## DNNTIP1	116092	0.15050423	3.048402e-04	9.316967e-04
## GLS2	27165	-0.26660210	3.053624e-04	9.331756e-04
## CFAP54	144535	0.49073837	3.062340e-04	9.357213e-04
## TMEM94	9772	-0.16701321	3.064529e-04	9.362724e-04
## PNKD	25953	-0.17154031	3.065467e-04	9.364413e-04
## CYB561D1	284613	0.10661134	3.066083e-04	9.365120e-04
## AQP4	361	-0.64577675	3.072077e-04	9.382248e-04
## ATF5	22809	0.21572232	3.078923e-04	9.401973e-04
## HEMGN	55363	1.21737431	3.080295e-04	9.404982e-04
## GPR62	118442	-0.46551347	3.080931e-04	9.405743e-04
## RPL10P16	284393	0.41684746	3.084129e-04	9.414321e-04
## ERICH3	127254	0.62662349	3.087565e-04	9.423626e-04
## PTK7	5754	0.30996173	3.089356e-04	9.427909e-04
## C9orf40	55071	0.20376792	3.091946e-04	9.434629e-04
## MYCBP2	23077	0.24524991	3.092381e-04	9.434772e-04
## CCDC112	153733	0.24626752	3.096899e-04	9.446624e-04
## GRTP1-AS1	100874068	0.94915492	3.097043e-04	9.446624e-04
## ZC3H3	23144	-0.24082572	3.099044e-04	9.451541e-04
## C6orf52	347744	-0.36082753	3.099872e-04	9.452880e-04
## TRDV2	28517	1.79915297	3.101657e-04	9.457135e-04
## CGNL1	84952	-0.29310428	3.103453e-04	9.461424e-04
## PPFIBP2	8495	-0.13904684	3.107711e-04	9.473217e-04
## SRRM3	222183	0.54443275	3.108393e-04	9.474106e-04
## AKR1B1	231	-0.45296762	3.119993e-04	9.508272e-04
## SENP1	29843	0.14154237	3.123485e-04	9.517720e-04
## MIR6512	102465255	1.12977887	3.125539e-04	9.522785e-04
## ASS1P13	341230	0.73544259	3.127228e-04	9.526734e-04
## GDAP1	54332	-0.14681895	3.135900e-04	9.551957e-04
## IQSEC1	9922	0.18735540	3.141771e-04	9.568641e-04
## SATB1	6304	0.20517877	3.143698e-04	9.573308e-04
## RPS27	6232	0.34693038	3.146167e-04	9.579627e-04
## APOO	79135	-0.22674076	3.147305e-04	9.581891e-04
## CTNNB1P1	56998	-0.16456308	3.149526e-04	9.587453e-04
## GABBR2	9568	0.84768023	3.150517e-04	9.589267e-04
## KAT5	10524	-0.11341831	3.153744e-04	9.597887e-04
## TANGO2	128989	-0.12457975	3.165869e-04	9.633581e-04
## AMOT	154796	0.19927798	3.167819e-04	9.638308e-04
## SRSF2	6427	-0.14930702	3.168472e-04	9.639089e-04

## PLP2	5355	0.40626621	3.185192e-04	9.688742e-04
## TGOLN2	10618	-0.18842567	3.197401e-04	9.724660e-04
## FBRSL1P1	100533621	-0.79482844	3.197907e-04	9.724982e-04
## CDH20	28316	-0.58462019	3.203148e-04	9.739704e-04
## HCG27	253018	0.47091068	3.204155e-04	9.740607e-04
## CCDC169	728591	0.35586522	3.204247e-04	9.740607e-04
## KRAS	3845	-0.14352954	3.213652e-04	9.767975e-04
## ZFYVE19	84936	0.14000328	3.217339e-04	9.777957e-04
## MAML3	55534	0.17525224	3.225699e-04	9.802139e-04
## PDE1B	5153	0.40908496	3.230226e-04	9.814670e-04
## TTC7A	57217	-0.19355945	3.233419e-04	9.823142e-04
## ARHGAP18	93663	-0.17695728	3.234103e-04	9.823991e-04
## LINC01476	101927728	1.33274719	3.240328e-04	9.841672e-04
## NWD2	57495	2.22484842	3.244641e-04	9.853538e-04
## PMPCA	23203	0.12328462	3.250897e-04	9.871306e-04
## OBSCN-AS1	574407	-0.35944791	3.266470e-04	9.917351e-04
## CLDN1	9076	0.41333229	3.276523e-04	9.946632e-04
## RB1	5925	-0.14898471	3.279468e-04	9.951841e-04
## CYB5R2	51700	0.25483930	3.278821e-04	9.951841e-04
## CARD9	64170	0.47215546	3.279197e-04	9.951841e-04
## SLC29A4	222962	-0.38490507	3.280555e-04	9.953898e-04
## VPS50	55610	0.12379215	3.285241e-04	9.966873e-04
## LINC00410	144776	0.67941958	3.289331e-04	9.978034e-04
## RPL35P5	441246	0.53805241	3.293973e-04	9.990868e-04
## TWSG1	57045	-0.17869454	3.327200e-04	1.009039e-03
## PANK1-AS1	105378421	-0.52406073	3.328097e-04	1.009185e-03
## ZNF221	7638	0.37305354	3.346373e-04	1.014600e-03
## RPL21P80	100133273	0.94608554	3.346862e-04	1.014622e-03
## MIR4539	100616374	1.99025292	3.348693e-04	1.015050e-03
## MST1L	11223	-0.52035747	3.353114e-04	1.016264e-03
## CACNB3	784	0.27687732	3.361397e-04	1.018647e-03
## DNAJC9	23234	0.11555505	3.362112e-04	1.018737e-03
## ZFAND1	79752	-0.13526177	3.369633e-04	1.020888e-03
## OR7E13P	10820	0.63189918	3.375206e-04	1.022449e-03
## VWA5A	4013	-0.18570185	3.378164e-04	1.023218e-03
## FAM32A	26017	0.14509604	3.379174e-04	1.023396e-03
## WDR54	84058	-0.23283300	3.385648e-04	1.025229e-03
## PFKFB3	5209	-0.48328400	3.389212e-04	1.026180e-03
## BTN2A3P	54718	0.40204389	3.405202e-04	1.030893e-03
## ECE1	1889	-0.21341584	3.417072e-04	1.034358e-03
## TMPPE	643853	-0.24358540	3.418282e-04	1.034596e-03
## CLEC7A	64581	0.50610728	3.420710e-04	1.035201e-03
## HYAL3	8372	0.29036186	3.426232e-04	1.036743e-03
## PTPN23	25930	-0.21321234	3.427401e-04	1.036968e-03
## PTCHD1	139411	0.70886921	3.428277e-04	1.037104e-03
## SLIT1	6585	0.49478383	3.443095e-04	1.041457e-03
## ORM1	5004	1.59218706	3.447887e-04	1.042776e-03
## CEP57L1	285753	0.19776852	3.450759e-04	1.043515e-03
## SRSF4	6429	-0.13555714	3.455100e-04	1.044698e-03
## SYT3	84258	-0.49337794	3.462184e-04	1.046710e-03
## CBFB	865	0.18139825	3.469496e-04	1.048790e-03
## EFCAB14	9813	-0.11403206	3.472677e-04	1.049616e-03
## DRAP1	10589	0.22149305	3.473092e-04	1.049616e-03
## EMSLR	101927746	-0.29188617	3.475522e-04	1.050220e-03

## SEC24AP1	100421166	0.91665964	3.481657e-04	1.051943e-03
## CFLAR	8837	-0.18621783	3.484857e-04	1.052778e-03
## SLC26A3	1811	0.93239228	3.504016e-04	1.058435e-03
## RAPGEF4	11069	-0.26868812	3.505515e-04	1.058756e-03
## ADGRB1	575	-0.68392777	3.511437e-04	1.060413e-03
## APOL1	8542	0.25971730	3.519724e-04	1.062784e-03
## SLC22A18AS	5003	0.50596884	3.523922e-04	1.063919e-03
## ISCA1	81689	-0.12721465	3.527237e-04	1.064655e-03
## CCNG2	901	0.16832749	3.527009e-04	1.064655e-03
## DLL3	10683	1.35388752	3.527677e-04	1.064656e-03
## ZNF384	171017	0.08658380	3.533178e-04	1.066184e-03
## TTF2	8458	0.18484001	3.535567e-04	1.066772e-03
## NUAK1	9891	0.30849010	3.558150e-04	1.073344e-03
## BIN3	55909	0.10855072	3.558232e-04	1.073344e-03
## IGF2BP1	10642	-0.37496746	3.561319e-04	1.074142e-03
## ANXA2R-OT1	648987	0.29711461	3.562464e-04	1.074354e-03
## SHANK2	22941	-0.26857520	3.567928e-04	1.075868e-03
## PRAP1	118471	0.62311488	3.575614e-04	1.078052e-03
## UGT2B7	7364	0.55538719	3.577961e-04	1.078626e-03
## MAMDC4	158056	-0.41597722	3.581449e-04	1.079544e-03
## CHORDC1P1	100128048	1.16557364	3.583770e-04	1.080109e-03
## DCXR	51181	0.45133487	3.585101e-04	1.080376e-03
## CCDC43	124808	0.16301702	3.591755e-04	1.082247e-03
## DCTD	1635	0.13708783	3.597226e-04	1.083761e-03
## RPL34	6164	0.31692261	3.599140e-04	1.084203e-03
## UBA5	79876	-0.12244561	3.602144e-04	1.084974e-03
## PFKFB4	5210	0.22253552	3.613343e-04	1.088212e-03
## SIMALR	105378020	1.65727817	3.633004e-04	1.093998e-03
## FHIP2B	64760	0.17630376	3.635704e-04	1.094589e-03
## NDUFAF8	284184	0.31523536	3.635868e-04	1.094589e-03
## MDC1	9656	-0.16223890	3.641043e-04	1.096011e-03
## TBC1D10A	83874	-0.19197617	3.641623e-04	1.096050e-03
## ALG10	84920	-0.15386427	3.645967e-04	1.097222e-03
## DYNC1LI2	1783	0.12999731	3.648150e-04	1.097743e-03
## ERI3	79033	0.23975668	3.649468e-04	1.097955e-03
## MATN3	4148	-0.44358012	3.649760e-04	1.097955e-03
## OSTF1	26578	0.13951614	3.652614e-04	1.098678e-03
## POMT2	29954	-0.11050303	3.658331e-04	1.100261e-03
## LINC02605	112935892	-0.71234612	3.659596e-04	1.100505e-03
## LINC01465	283416	-0.36801474	3.660788e-04	1.100728e-03
## IPO8	10526	-0.12010569	3.668666e-04	1.102960e-03
## MKLN1	4289	-0.14977895	3.674194e-04	1.104485e-03
## FOXP1-IT1	100506815	1.34230625	3.677759e-04	1.105420e-03
## DHH	50846	-0.51543401	3.682935e-04	1.106839e-03
## GTSF1	121355	1.01678392	3.697704e-04	1.111140e-03
## LINC00623	728855	0.25761757	3.703405e-04	1.112716e-03
## DAAM1	23002	0.16555243	3.712725e-04	1.115378e-03
## DNAJA4	55466	0.30777042	3.721510e-04	1.117780e-03
## TMEM125	128218	-0.32888021	3.721639e-04	1.117780e-03
## INTS13	55726	0.14102356	3.727919e-04	1.119527e-03
## SAV1	60485	-0.11068243	3.729590e-04	1.119891e-03
## USP53	54532	-0.28401755	3.753683e-04	1.126986e-03
## ACOT12	134526	-0.44953328	3.767832e-04	1.131094e-03
## TBL1XR1	79718	-0.14900110	3.773298e-04	1.132595e-03

## DUTP6	100873912	-0.65965230	3.778321e-04	1.133963e-03
## UHRF2	115426	0.17675763	3.779007e-04	1.134029e-03
## ENPP1	5167	0.25699669	3.779759e-04	1.134114e-03
## ZBED3-AS1	728723	-0.30503815	3.780353e-04	1.134153e-03
## LINC00922	283867	1.77250034	3.782634e-04	1.134697e-03
## H3-3B	3021	-0.15750633	3.789049e-04	1.136481e-03
## LINC00092	100188953	-0.43505354	3.790211e-04	1.136689e-03
## IGFBP4	3487	0.23699541	3.808399e-04	1.142003e-03
## TRHDE	29953	-0.26990412	3.815211e-04	1.143904e-03
## LDLRAD3	143458	0.33844801	3.819101e-04	1.144929e-03
## ZGLP1	100125288	0.54984384	3.821145e-04	1.145401e-03
## RAD54L	8438	0.50789163	3.833848e-04	1.149067e-03
## NFKBID	84807	0.37756039	3.835012e-04	1.149274e-03
## UNC50	25972	-0.11013290	3.835955e-04	1.149415e-03
## RASA4CP	401331	-0.31827226	3.848660e-04	1.153080e-03
## GTF2IRD1P1	729156	0.43391277	3.864104e-04	1.157564e-03
## SV2A	9900	-0.32738320	3.865654e-04	1.157885e-03
## PCLO	27445	-0.33279831	3.869974e-04	1.159037e-03
## NIPBL-DT	646719	-0.25927904	3.870919e-04	1.159177e-03
## MSN	4478	-0.19557530	3.888559e-04	1.164316e-03
## TNFSF12	8742	0.24812384	3.890109e-04	1.164636e-03
## DIP2C	22982	0.26023665	3.901230e-04	1.167822e-03
## POLR2J	5439	0.27914096	3.916401e-04	1.172075e-03
## CYB561D2	11068	-0.21072698	3.916359e-04	1.172075e-03
## PIK3IP1-DT	101929760	0.67209659	3.927687e-04	1.175216e-03
## FAM193B-DT	105377750	0.50046674	3.927866e-04	1.175216e-03
## CBX5	23468	-0.17938429	3.930059e-04	1.175728e-03
## DNASE1L1	1774	0.20535014	3.937208e-04	1.177697e-03
## SLC66A2	80148	-0.26926968	3.937611e-04	1.177697e-03
## FTO	79068	-0.11889417	3.948137e-04	1.180700e-03
## LDLRAP1	26119	0.13849892	3.954387e-04	1.182423e-03
## KDM5A	5927	0.15469538	3.955841e-04	1.182713e-03
## DGKZ	8525	0.19988739	3.962906e-04	1.184679e-03
## SLC35G1	159371	0.21545949	3.971216e-04	1.187017e-03
## ZNF217	7764	-0.15265354	3.993227e-04	1.193450e-03
## DUSP5	1847	-0.33771076	3.995388e-04	1.193949e-03
## BRINP3	339479	-0.37208210	3.997381e-04	1.194397e-03
## SKAP1	8631	-0.26381808	3.999516e-04	1.194889e-03
## SLC12A7	10723	-0.22696262	4.004168e-04	1.196131e-03
## CADM4	199731	-0.29271062	4.010337e-04	1.197827e-03
## RPS15P4	401019	0.40260722	4.011868e-04	1.198137e-03
## ABCA5	23461	-0.25571624	4.023598e-04	1.201493e-03
## ZBTB14	7541	0.12180143	4.028552e-04	1.202824e-03
## SLC22A10	387775	-0.74649101	4.033686e-04	1.204209e-03
## PROSER3	148137	-0.20120557	4.035687e-04	1.204658e-03
## SLC39A7	7922	-0.14794746	4.038145e-04	1.205244e-03
## VMO1	284013	0.52262642	4.055888e-04	1.210242e-03
## KLLN	100144748	0.20901156	4.055815e-04	1.210242e-03
## TTPAL	79183	-0.14250134	4.058405e-04	1.210845e-03
## FANCB	2187	0.37573421	4.060490e-04	1.211256e-03
## ALDH1A2-AS1	283665	-0.56930591	4.060779e-04	1.211256e-03
## CSPG4P13	100302666	0.48392464	4.065490e-04	1.212512e-03
## FOXP4	116113	-0.23324916	4.071720e-04	1.214221e-03
## MYOM3	127294	0.40979847	4.075859e-04	1.215306e-03

## C11orf68	83638	0.21711351	4.076578e-04	1.215371e-03
## IGDCC3	9543	0.40131981	4.080085e-04	1.216268e-03
## PLSCR2	57047	-0.47110695	4.082895e-04	1.216956e-03
## SGCE	8910	0.15953294	4.094031e-04	1.220126e-03
## ARHGAP21	57584	0.19272340	4.096902e-04	1.220831e-03
## LINC00635	151658	-0.56434372	4.114527e-04	1.225933e-03
## SLC13A3	64849	-0.53839240	4.117111e-04	1.226553e-03
## LGI4	163175	0.56346945	4.119316e-04	1.227059e-03
## LRRC19	64922	-0.35921894	4.120568e-04	1.227282e-03
## GLIS2-AS1	101926896	0.43519368	4.122820e-04	1.227802e-03
## SPG7	6687	0.11863171	4.125492e-04	1.228447e-03
## ZNF517	340385	0.15187370	4.129248e-04	1.229415e-03
## SLC7A8	23428	0.46940948	4.130295e-04	1.229494e-03
## CD34	947	0.31914727	4.130524e-04	1.229494e-03
## RPL31	6160	0.30537911	4.143686e-04	1.233260e-03
## SEL1L2	80343	0.97624259	4.148614e-04	1.234576e-03
## DLD	1738	-0.14752901	4.155176e-04	1.236377e-03
## RIOX1	79697	-0.12535798	4.158644e-04	1.237258e-03
## PRRT3	285368	-0.25138114	4.162485e-04	1.238249e-03
## UFL1	23376	-0.16041109	4.166803e-04	1.239382e-03
## NABP1	64859	0.36225169	4.173402e-04	1.241192e-03
## FIP1L1	81608	-0.09237674	4.184232e-04	1.244261e-03
## LINC00844	100507008	-0.56427724	4.211452e-04	1.252202e-03
## BCAS1	8537	0.74757399	4.213130e-04	1.252548e-03
## PPP1R14C	81706	0.31061291	4.217258e-04	1.253622e-03
## NOP10	55505	0.24763533	4.223546e-04	1.255337e-03
## CEP126	57562	0.27474524	4.226045e-04	1.255927e-03
## ZNF766	90321	0.12527179	4.234304e-04	1.258227e-03
## LINC01285	101928287	0.37858317	4.241799e-04	1.260300e-03
## PCDHB5	26167	-0.31226178	4.242686e-04	1.260410e-03
## COL4A4	1286	-0.24308183	4.247915e-04	1.261809e-03
## GJA8	2703	-0.80226345	4.249677e-04	1.262178e-03
## NSF	4905	-0.10613093	4.269351e-04	1.267866e-03
## TDRD5	163589	-0.39536982	4.274699e-04	1.269299e-03
## KAZN	23254	-0.19146983	4.276686e-04	1.269734e-03
## KAT8	84148	-0.10837937	4.280852e-04	1.270816e-03
## PRIM2	5558	0.14004935	4.283521e-04	1.271453e-03
## FAM120A	23196	-0.10457733	4.284463e-04	1.271577e-03
## RERG	85004	-0.21428101	4.292490e-04	1.273804e-03
## HAO1	54363	0.78187014	4.294945e-04	1.274377e-03
## SPINK6	404203	1.99121845	4.297618e-04	1.275014e-03
## OBI1	79596	0.11723123	4.303260e-04	1.276376e-03
## TOPBP1	11073	0.15704018	4.303221e-04	1.276376e-03
## LINC01366	257358	0.88785307	4.307392e-04	1.277446e-03
## NAT16	375607	-1.24314879	4.313996e-04	1.279249e-03
## STEAP4	79689	0.58140850	4.315400e-04	1.279509e-03
## LINC03058	127379758	0.57961829	4.318801e-04	1.280361e-03
## MCOLN2	255231	0.52008839	4.323401e-04	1.281568e-03
## NHLRC1	378884	0.25098021	4.325841e-04	1.282135e-03
## RBM5	10181	0.24276025	4.329567e-04	1.283083e-03
## ATP13A3	79572	-0.21877823	4.340805e-04	1.286257e-03
## TP53I11	9537	0.31953895	4.341886e-04	1.286420e-03
## KIF12	113220	-0.37709856	4.345510e-04	1.287337e-03
## ZNF792	126375	0.16175736	4.347708e-04	1.287831e-03

## MAPKAP1	79109	0.14256972	4.352625e-04	1.289130e-03
## RIPK3	11035	0.27188105	4.369075e-04	1.293845e-03
## YWHAQ	10971	-0.13535121	4.378826e-04	1.296574e-03
## RNF138	51444	-0.15885284	4.381885e-04	1.297164e-03
## CDRT15P4	117314529	0.86597292	4.381814e-04	1.297164e-03
## CRLF2	64109	1.59316960	4.382471e-04	1.297179e-03
## LRRC74B	400891	1.57132544	4.389983e-04	1.299245e-03
## SLC35F3	148641	0.34568979	4.395287e-04	1.300656e-03
## DTNB-AS1	101929272	1.42580934	4.400444e-04	1.302023e-03
## CAPN12	147968	-0.50512559	4.405497e-04	1.303360e-03
## RLN1	6013	-0.64953264	4.407592e-04	1.303662e-03
## ADCK2	90956	-0.19145259	4.407133e-04	1.303662e-03
## TM7SF3	51768	0.29252868	4.409453e-04	1.304054e-03
## LINC01139	339535	-0.29415479	4.412561e-04	1.304814e-03
## LCE2D	353141	0.83182443	4.414995e-04	1.305375e-03
## SYT10	341359	-0.42451156	4.419883e-04	1.306661e-03
## VAMP3	9341	0.11052126	4.426708e-04	1.308441e-03
## CHRNA3	1136	0.79728349	4.427495e-04	1.308441e-03
## HOMER1	9456	-0.25237819	4.427518e-04	1.308441e-03
## PAK1	5058	0.13831583	4.439976e-04	1.311963e-03
## CCL21	6366	0.60161291	4.441887e-04	1.312368e-03
## GBE1	2632	-0.15848940	4.460073e-04	1.317581e-03
## LINC02015	102724550	0.42878741	4.485703e-04	1.324992e-03
## TMEM17	200728	-0.17767326	4.507452e-04	1.331254e-03
## TMCO1	54499	-0.13294673	4.514185e-04	1.333081e-03
## SEC24C	9632	-0.09620143	4.517480e-04	1.333892e-03
## RIC8A	60626	0.10364001	4.523418e-04	1.335483e-03
## MCL1	4170	-0.14594021	4.530872e-04	1.337521e-03
## NMNAT3	349565	0.19781602	4.536429e-04	1.338999e-03
## HSPA12A-AS1	105378499	-1.02437705	4.546142e-04	1.341703e-03
## ZNF16	7564	0.11361564	4.550350e-04	1.342782e-03
## RNF32	140545	-0.28329839	4.553100e-04	1.343430e-03
## ERCC3	2071	0.11044767	4.558473e-04	1.344852e-03
## TRIM8-DT	121232369	-0.64528003	4.591561e-04	1.354449e-03
## DUOXA1	90527	0.64216459	4.593214e-04	1.354772e-03
## SERPINI2	5276	0.96480066	4.597252e-04	1.355767e-03
## MRPS18B	28973	-0.15342371	4.597702e-04	1.355767e-03
## RCHY1	25898	-0.11387645	4.606381e-04	1.358161e-03
## GSTM4	2948	-0.18698498	4.614806e-04	1.360480e-03
## EMC1-AS1	101927895	0.32800086	4.634669e-04	1.366171e-03
## PIGH	5283	-0.19449075	4.643229e-04	1.368460e-03
## ZP1	22917	1.64228080	4.643564e-04	1.368460e-03
## DHX33	56919	0.11544914	4.647663e-04	1.369502e-03
## POLR2E	5434	0.23091326	4.663397e-04	1.373971e-03
## PDE4DIPPP1	728920	1.67544450	4.663958e-04	1.373971e-03
## DHRS3	9249	0.24850693	4.676498e-04	1.377498e-03
## PTPRM	5797	-0.13860840	4.679708e-04	1.378276e-03
## SWT1	54823	0.15116127	4.681389e-04	1.378604e-03
## GEMIN7-AS1	105372419	0.26271824	4.700275e-04	1.383998e-03
## EYA2	2139	-0.27485977	4.713471e-04	1.387716e-03
## ETFA	2108	0.22046050	4.727987e-04	1.391821e-03
## LINC02409	105369929	0.99441021	4.731368e-04	1.392648e-03
## GJA4	2701	-0.33605442	4.739374e-04	1.394835e-03
## C15orf48	84419	0.44568232	4.741210e-04	1.395206e-03

## TMEM39B	55116	0.17946405	4.755734e-04	1.399141e-03
## CHROMR	101927027	0.27085825	4.755656e-04	1.399141e-03
## NEFH	4744	0.41062947	4.758863e-04	1.399892e-03
## CALML3-AS1	100132159	-0.64596023	4.762282e-04	1.400729e-03
## MIR4537	100616422	1.84451327	4.771195e-04	1.403181e-03
## SLC27A5	10998	0.29017107	4.780316e-04	1.405693e-03
## PYROXD2	84795	0.30213571	4.790957e-04	1.408651e-03
## ZMYM6	9204	-0.18703302	4.791939e-04	1.408770e-03
## ASB8	140461	0.16234291	4.804235e-04	1.412214e-03
## CTTN	2017	-0.12842281	4.821669e-04	1.417167e-03
## CCDC97	90324	0.17632756	4.829089e-04	1.419176e-03
## KATNA1	11104	0.10896317	4.837340e-04	1.421257e-03
## RPF2	84154	0.13366556	4.836799e-04	1.421257e-03
## DIXDC1	85458	-0.19678285	4.849582e-04	1.424682e-03
## AGTR2	186	0.96966248	4.851650e-04	1.425117e-03
## KICS2	144577	-0.15039196	4.867101e-04	1.429330e-03
## LCN12	286256	-0.43939426	4.867167e-04	1.429330e-03
## VNN3P	55350	0.98548856	4.868885e-04	1.429661e-03
## PYCR2	29920	-0.11388261	4.874767e-04	1.431216e-03
## CYSLTR2	57105	-0.44375049	4.886351e-04	1.434443e-03
## ZNF790	388536	0.14453349	4.898210e-04	1.437751e-03
## LINC00639	283547	0.81725499	4.899767e-04	1.438034e-03
## HOXC9	3225	0.29084341	4.902422e-04	1.438640e-03
## FAM91A1	157769	-0.17914126	4.908946e-04	1.440380e-03
## TRAF4	9618	-0.20848344	4.922787e-04	1.444267e-03
## MACROH2A1	9555	0.10439202	4.938411e-04	1.448676e-03
## TMEM150B	284417	0.40511980	4.953456e-04	1.452768e-03
## KRTAP5-AS1	338651	0.48899762	4.953556e-04	1.452768e-03
## IYD	389434	0.51739475	4.986351e-04	1.462210e-03
## RPS27P4	389112	0.45004987	4.992771e-04	1.463916e-03
## LINC02532	100422737	-0.31688822	4.996961e-04	1.464967e-03
## ADPRM	56985	0.19621723	4.999143e-04	1.465430e-03
## TTC8	123016	0.12617853	5.000224e-04	1.465570e-03
## GFI1B	8328	0.72810473	5.005394e-04	1.466909e-03
## LINC03110	102724745	1.47268721	5.008225e-04	1.467561e-03
## LYSDM2	256586	0.18432506	5.019647e-04	1.470731e-03
## SARDH	1757	0.47327904	5.042154e-04	1.477148e-03
## SHROOM2	357	-0.20449238	5.050149e-04	1.479311e-03
## SF3A1	10291	-0.13633165	5.055626e-04	1.480737e-03
## MS4A3	932	1.39386593	5.061134e-04	1.482172e-03
## PLEKHD1	400224	-0.46966855	5.068561e-04	1.484168e-03
## TEKT4	150483	0.66774618	5.072257e-04	1.485071e-03
## ICAM4	3386	0.51496950	5.082084e-04	1.487769e-03
## LSM3	27258	0.23752606	5.084512e-04	1.488301e-03
## YARS2	51067	0.12626078	5.100194e-04	1.492711e-03
## OR2S1P	392313	-0.41324749	5.101515e-04	1.492918e-03
## TMED10	10972	-0.11723067	5.115069e-04	1.496704e-03
## ELOA-AS1	100506963	0.27593492	5.117518e-04	1.497241e-03
## GDI2	2665	0.11639554	5.145756e-04	1.505321e-03
## FAM118A	55007	0.34002848	5.148110e-04	1.505828e-03
## RAB13	5872	-0.22132122	5.152503e-04	1.506932e-03
## GRIP2	80852	0.40185385	5.159943e-04	1.508926e-03
## SP140L	93349	0.22755638	5.162510e-04	1.509495e-03
## TSEN15	116461	0.15272608	5.169820e-04	1.511451e-03

## AVPR1B-DT	122455332	-0.90889510	5.182981e-04	1.515116e-03
## SLC35B3	51000	0.12773146	5.186511e-04	1.515966e-03
## ARL16	339231	0.21492758	5.189030e-04	1.516520e-03
## RNPEPL1	57140	0.25311534	5.204707e-04	1.520919e-03
## PSD4	23550	-0.23348634	5.215068e-04	1.523763e-03
## BLACAT1	101669762	-0.51718190	5.228490e-04	1.527501e-03
## LRRC66	339977	0.41281094	5.239001e-04	1.530388e-03
## SAFB	6294	-0.12892613	5.243358e-04	1.531476e-03
## SMIM15	643155	-0.10059069	5.248040e-04	1.532660e-03
## LINC01962	102577426	0.69532055	5.301400e-04	1.548057e-03
## ZBTB12	221527	0.28442099	5.316549e-04	1.552294e-03
## LINC02427	105377585	-0.59527574	5.318494e-04	1.552676e-03
## LRIG3	121227	0.20365645	5.350468e-04	1.561822e-03
## SORCS3	22986	0.38716569	5.362361e-04	1.565106e-03
## TRIM58	25893	0.36659461	5.372676e-04	1.567928e-03
## RPL27	6155	0.30902422	5.378210e-04	1.569355e-03
## LINC01954	101929733	-0.68091617	5.379037e-04	1.569408e-03
## GTSE1-DT	150384	-0.30410863	5.384601e-04	1.570843e-03
## SYS1	90196	-0.14708116	5.387552e-04	1.571515e-03
## GJB6	10804	0.78177581	5.397052e-04	1.574097e-03
## CLDN20	49861	-0.72413818	5.398646e-04	1.574373e-03
## CHCHD3	54927	-0.14364083	5.414678e-04	1.578859e-03
## KMT5C	84787	0.26675644	5.459049e-04	1.591541e-03
## GAS2L1P2	340508	0.63473459	5.459482e-04	1.591541e-03
## CNN1	1264	0.62271831	5.460641e-04	1.591688e-03
## GEMIN8P4	492303	-0.28871273	5.461327e-04	1.591697e-03
## KIF1C-AS1	102724009	0.77555875	5.462375e-04	1.591812e-03
## RPS18P5	100131863	0.41667433	5.470018e-04	1.593848e-03
## LINC01088	100505875	0.46296383	5.479729e-04	1.596486e-03
## TMEM106C	79022	0.20170045	5.493126e-04	1.600197e-03
## KDM4B	23030	-0.17947678	5.497092e-04	1.601161e-03
## NSD3	54904	0.12660553	5.502413e-04	1.602519e-03
## KRTAP17-1	83902	-1.40013540	5.504384e-04	1.602853e-03
## SRP54-AS1	100506157	-0.34276877	5.504882e-04	1.602853e-03
## OR2A7	401427	-0.44857236	5.513952e-04	1.605302e-03
## ZNF254	9534	-0.19722949	5.518852e-04	1.606536e-03
## HS6ST3	266722	-0.35254836	5.527245e-04	1.608787e-03
## H2BC26	128312	0.78559732	5.529562e-04	1.609268e-03
## SERF2	10169	0.24421628	5.533255e-04	1.610150e-03
## KANSL3	55683	0.09027412	5.537741e-04	1.611263e-03
## CATIP	375307	-0.28922118	5.542067e-04	1.612328e-03
## MEGF8	1954	-0.22819087	5.553582e-04	1.615485e-03
## HDHD5	27440	0.13872243	5.561420e-04	1.617571e-03
## FGF12	2257	0.30078915	5.571376e-04	1.620217e-03
## LINC02794	105379778	-0.70228921	5.571852e-04	1.620217e-03
## ZNF426	79088	0.14064906	5.576117e-04	1.621264e-03
## SCTR	6344	-0.56753313	5.582223e-04	1.622845e-03
## GARS1-DT	401320	0.32795289	5.588390e-04	1.624443e-03
## GAPDH	2597	0.25686907	5.639904e-04	1.639221e-03
## ZFAND4	93550	-0.13205857	5.645931e-04	1.640777e-03
## UMODL1-AS1	150147	-1.30377145	5.653483e-04	1.642775e-03
## OSTM1	28962	-0.15386214	5.667718e-04	1.646715e-03
## COL20A1	57642	-1.02070160	5.669136e-04	1.646930e-03
## DPF3	8110	0.34648920	5.674454e-04	1.648278e-03

## PRMT7	54496	0.15326735	5.685319e-04	1.651236e-03
## ELM02	63916	0.09089449	5.701263e-04	1.655669e-03
## ZBTB22	9278	-0.09464143	5.703107e-04	1.656007e-03
## CDH9	1007	-0.44342175	5.705420e-04	1.656480e-03
## ABITRAM	54942	0.13782534	5.718075e-04	1.659956e-03
## DGKK	139189	0.73687596	5.724525e-04	1.661630e-03
## N4BP2L1	90634	0.21544641	5.733005e-04	1.663893e-03
## ZFP14	57677	0.21602517	5.753165e-04	1.669545e-03
## SIK1	150094	-1.01472377	5.756801e-04	1.670400e-03
## EEIG1	399665	-0.20567414	5.759777e-04	1.671064e-03
## WDR53	348793	0.11220067	5.776709e-04	1.675777e-03
## PITHD1	57095	0.13012601	5.787109e-04	1.678593e-03
## RARRES2	5919	-0.33877828	5.795016e-04	1.680686e-03
## RTP5	285093	1.53847922	5.799713e-04	1.681848e-03
## LINC00294	283267	-0.19552726	5.802596e-04	1.682483e-03
## MSH6	2956	0.11276282	5.806424e-04	1.683392e-03
## LACTB2	51110	-0.27202706	5.814498e-04	1.685532e-03
## RPL21	6144	0.25401097	5.828382e-04	1.689355e-03
## C11orf71	54494	-0.21413755	5.845843e-04	1.694214e-03
## OSBPL7	114881	0.26674290	5.848967e-04	1.694917e-03
## SERTAD4-AS1	574036	0.33720905	5.867630e-04	1.700123e-03
## PEX13	5194	-0.14842145	5.880125e-04	1.703540e-03
## GPRC5B	51704	-0.17744152	5.892133e-04	1.706815e-03
## POP5	51367	0.21345252	5.899102e-04	1.708630e-03
## RPL27A	6157	0.30172380	5.907065e-04	1.710733e-03
## MPC2	25874	-0.21551275	5.917407e-04	1.713524e-03
## COPS3	8533	0.15340909	5.924926e-04	1.715497e-03
## CHL1	10752	-0.25657103	5.932468e-04	1.717476e-03
## PDGFB	5155	0.24066730	5.951187e-04	1.722690e-03
## FNDC1-IT1	100874312	1.79215812	5.974620e-04	1.729267e-03
## MTND4P24	100873254	-0.30238065	5.984073e-04	1.731797e-03
## RAB15	376267	-0.24534426	6.011673e-04	1.739577e-03
## GPR146	115330	0.25610297	6.043964e-04	1.748713e-03
## DPY19L4	286148	-0.17810516	6.051489e-04	1.750681e-03
## TIMM13	26517	0.26242468	6.055103e-04	1.751518e-03
## PSMD6	9861	-0.12865019	6.060638e-04	1.752911e-03
## USF2	7392	0.19414394	6.069046e-04	1.755010e-03
## FSCN1P1	145989	1.18510942	6.069339e-04	1.755010e-03
## SLC25A10	1468	0.41270551	6.101595e-04	1.764127e-03
## GUCA1B	2979	0.40234112	6.102926e-04	1.764302e-03
## ALDOB	229	0.55495861	6.110451e-04	1.766267e-03
## HAS3	3038	0.31230828	6.129965e-04	1.771697e-03
## LONP2	83752	-0.08550775	6.131651e-04	1.771974e-03
## LINC01678	105377138	0.92859498	6.139946e-04	1.774160e-03
## G6PC3	92579	-0.20427298	6.142299e-04	1.774628e-03
## KLF3	51274	0.12420924	6.143986e-04	1.774817e-03
## CYP7B1	9420	-0.21169364	6.144412e-04	1.774817e-03
## CRYZ	1429	-0.22503567	6.156791e-04	1.778181e-03
## LRWD1	222229	-0.18137157	6.172719e-04	1.782570e-03
## MYORG	57462	-0.26937407	6.174454e-04	1.782859e-03
## DCC	1630	0.46688279	6.182301e-04	1.784913e-03
## ADAMTSL3	57188	0.25221604	6.197659e-04	1.789134e-03
## TRAV8-2	28684	-0.48680806	6.203264e-04	1.790365e-03
## CYP4F26P	106478958	1.37231514	6.203397e-04	1.790365e-03

## ARHGEF10L	55160	0.17384757	6.231863e-04	1.798367e-03
## RANBP1P1	389842	0.65554588	6.232646e-04	1.798380e-03
## LAMA3	3909	0.39216877	6.236215e-04	1.799121e-03
## SYNM-AS1	105371016	1.41931944	6.236697e-04	1.799121e-03
## FZD6	8323	-0.20141031	6.238107e-04	1.799314e-03
## EIF2B1	1967	0.08788775	6.259403e-04	1.805243e-03
## HLA-DRA	3122	0.31815458	6.286732e-04	1.812909e-03
## RPL37P23	648217	0.68912066	6.287928e-04	1.813039e-03
## PPM1K-DT	105369192	-0.69874894	6.292989e-04	1.814283e-03
## RASGEF1B	153020	-0.22888170	6.311299e-04	1.819346e-03
## SEMA6B	10501	0.54499537	6.312399e-04	1.819447e-03
## H2AJ	55766	-0.27424892	6.314412e-04	1.819812e-03
## DUS4L	11062	-0.16883691	6.317877e-04	1.820594e-03
## PTPN2	5771	0.16124196	6.320647e-04	1.821177e-03
## CUEDC2	79004	0.16519664	6.336936e-04	1.825459e-03
## GPC3	2719	-0.30520319	6.337010e-04	1.825459e-03
## TET2-AS1	104384744	1.69606308	6.349924e-04	1.828962e-03
## C12orf4	<NA>	0.14181423	6.359273e-04	1.831437e-03
## SMIM29	221491	0.25787632	6.385838e-04	1.838837e-03
## AKR7L	246181	-0.44494663	6.386479e-04	1.838837e-03
## MAN1C1	57134	-0.30481316	6.390176e-04	1.839361e-03
## NABP2	79035	0.16413255	6.390569e-04	1.839361e-03
## TTLL3	26140	0.49158948	6.389932e-04	1.839361e-03
## CRTC1	23373	-0.20259474	6.427795e-04	1.849856e-03
## MOSMO	730094	-0.12862457	6.437665e-04	1.852477e-03
## DHRS7B	25979	-0.13056625	6.446209e-04	1.854716e-03
## FOXA2	3170	-1.43739709	6.447633e-04	1.854906e-03
## DGCR2	9993	-0.16259188	6.451120e-04	1.855690e-03
## SH2B2	10603	0.37196329	6.459562e-04	1.857898e-03
## ZNF583	147949	0.12777847	6.463182e-04	1.858719e-03
## CACNA1E	777	-0.49976452	6.481038e-04	1.863634e-03
## PRMT5-DT	101926933	-0.45156771	6.482289e-04	1.863773e-03
## RBM27	54439	-0.16275340	6.503834e-04	1.869746e-03
## TRDV3	28516	1.38058701	6.506493e-04	1.870290e-03
## PPP6R2	9701	-0.13849567	6.509883e-04	1.871043e-03
## UBR7	55148	-0.08263796	6.515435e-04	1.872417e-03
## TAS2R30	259293	1.61490722	6.516940e-04	1.872628e-03
## ZNF546	339327	0.16806280	6.520059e-04	1.873303e-03
## MROH8	140699	0.19175806	6.539587e-04	1.878469e-03
## RASGRF2-AS1	102524628	0.56814276	6.539183e-04	1.878469e-03
## NEK7	140609	0.19574868	6.541330e-04	1.878748e-03
## PTPN20	26095	-0.33106606	6.550709e-04	1.881219e-03
## NDUFB1P2	100380272	-1.07018092	6.567675e-04	1.885869e-03
## CCDC24	149473	-0.26065760	6.586404e-04	1.891023e-03
## KCNE3	10008	0.26943200	6.596095e-04	1.893582e-03
## ACP2	53	-0.17163634	6.601022e-04	1.894748e-03
## ZNF491	126069	0.26055687	6.601717e-04	1.894748e-03
## SNAP23	8773	0.09559806	6.603099e-04	1.894921e-03
## LRRC23	10233	0.22489575	6.615398e-04	1.898226e-03
## MICE	4280	0.49834334	6.631229e-04	1.902544e-03
## HMGN2	3151	0.14645025	6.632174e-04	1.902591e-03
## KLK5	25818	0.56026683	6.637434e-04	1.903875e-03
## EIF2AK3	9451	-0.16594653	6.671228e-04	1.913343e-03
## TADA1	117143	-0.12705544	6.674419e-04	1.914032e-03

## LMO7DN	729420	1.14493721	6.689375e-04	1.918094e-03
## PKN2-AS1	101927891	0.45718069	6.695743e-04	1.919694e-03
## HOXC-AS1	100874363	0.38534096	6.705193e-04	1.922176e-03
## HS3ST6	64711	-1.13995586	6.724469e-04	1.927475e-03
## ERG28	11161	-0.18766541	6.725597e-04	1.927571e-03
## STX1A	6804	0.27346357	6.745489e-04	1.933044e-03
## LINC02913	414318	-0.46487755	6.748438e-04	1.933661e-03
## FOCAD	54914	0.14506096	6.765630e-04	1.938175e-03
## LINC01565	23434	1.39752276	6.765789e-04	1.938175e-03
## FANCL	55120	0.17104427	6.772838e-04	1.939966e-03
## LAGE3	8270	0.30923224	6.779924e-04	1.941767e-03
## ZNF98	148198	-0.40131128	6.788921e-04	1.944115e-03
## SLC25A48	153328	-0.39945867	6.793935e-04	1.945321e-03
## RND3	390	0.28733755	6.796917e-04	1.945946e-03
## EFCAB7	84455	0.17361245	6.816229e-04	1.951245e-03
## APH1B	83464	-0.15479528	6.819950e-04	1.952080e-03
## GSTP1	2950	-0.29260228	6.821786e-04	1.952146e-03
## LRRC55	219527	0.56511015	6.821651e-04	1.952146e-03
## RAB19	401409	-0.33690764	6.829551e-04	1.954138e-03
## SIX3	6496	0.67609385	6.831344e-04	1.954421e-03
## STK19B	373159	-0.99260423	6.836316e-04	1.955613e-03
## PITPNAs-AS1	100306951	0.25095415	6.841725e-04	1.956930e-03
## LINC03021	101927815	0.38502262	6.843044e-04	1.957077e-03
## RAB36	9609	-0.16719000	6.854336e-04	1.959848e-03
## LINC00924	145820	0.35527430	6.854348e-04	1.959848e-03
## DDX28	55794	-0.12167501	6.882136e-04	1.967562e-03
## KLHDC7B	113730	0.56244189	6.886307e-04	1.968523e-03
## BRSK1	84446	0.45897464	6.905949e-04	1.973906e-03
## KRT17P7	339258	2.56949814	6.912131e-04	1.975440e-03
## TCEAL6	158931	-0.62127668	6.913587e-04	1.975624e-03
## ATP6V1C2	245973	-0.38052802	6.923028e-04	1.978089e-03
## CRYGS	1427	0.38752202	6.928109e-04	1.979309e-03
## FILNC1	100132735	-0.52535063	6.955409e-04	1.986874e-03
## ZCRB1	85437	0.16459167	6.960116e-04	1.987985e-03
## HADH	3033	0.26312144	6.986140e-04	1.995184e-03
## GCNT4	51301	-0.27819885	7.043270e-04	2.011263e-03
## APMAP	57136	-0.15833186	7.049890e-04	2.012681e-03
## HMGN2P15	100288165	0.50094218	7.049401e-04	2.012681e-03
## HSBP1L1	440498	-0.22429294	7.072743e-04	2.018968e-03
## FAM167A-AS1	83656	-0.64664247	7.076319e-04	2.019751e-03
## LINC02920	121832815	-0.84855161	7.097765e-04	2.025635e-03
## MIIP	60672	0.23364495	7.099752e-04	2.025964e-03
## HERC2P10	390561	0.98396768	7.103191e-04	2.026707e-03
## SNAP91	9892	0.78057342	7.109923e-04	2.028390e-03
## AMN1	196394	-0.16319362	7.115302e-04	2.029686e-03
## TRBJ2-2P	28627	1.56405647	7.120646e-04	2.030972e-03
## TNRC6C	57690	0.16863175	7.124617e-04	2.031866e-03
## RTN3	10313	-0.15829046	7.159673e-04	2.041624e-03
## TOMM5	401505	-0.23039847	7.161088e-04	2.041788e-03
## LINC02857	107986618	-0.83944653	7.171349e-04	2.044474e-03
## SHC3	53358	0.30769842	7.185143e-04	2.048166e-03
## FAM184A	79632	-0.31322391	7.186253e-04	2.048242e-03
## MIR4664	100616318	-0.49079009	7.218960e-04	2.057323e-03
## ATP6V0E2	155066	0.33810411	7.226850e-04	2.059330e-03

## NETO2	81831	0.24262680	7.252652e-04	2.066440e-03
## KCTD11	147040	0.18989593	7.253624e-04	2.066475e-03
## MATCAP2	23366	-0.20747316	7.259357e-04	2.067866e-03
## ZNF584-DT	123706526	-0.18791830	7.261903e-04	2.068349e-03
## COX7CP1	9386	-0.61602427	7.266155e-04	2.069317e-03
## GABRD	2563	0.58387637	7.269828e-04	2.070121e-03
## KRT81	3887	1.28045429	7.273604e-04	2.070953e-03
## SHCBP1	79801	0.40125914	7.278274e-04	2.072040e-03
## OR7E7P	392752	0.42503762	7.282793e-04	2.073084e-03
## NBPF10	100132406	0.36000879	7.301661e-04	2.078211e-03
## ST3GAL6	10402	-0.19476383	7.311346e-04	2.080688e-03
## ZNF57	126295	-0.19113810	7.312077e-04	2.080688e-03
## TCF25	22980	0.11916060	7.336113e-04	2.087283e-03
## CBR3-AS1	100506428	-0.26468578	7.338103e-04	2.087605e-03
## AAGAB	79719	-0.10475580	7.380698e-04	2.099477e-03
## RPL36P7	100271010	-0.61877459	7.383047e-04	2.099900e-03
## GACAT2	100287082	0.72296078	7.389316e-04	2.101437e-03
## FOXP1	27086	0.17873167	7.396071e-04	2.103112e-03
## LINC02898	400950	1.04419658	7.396967e-04	2.103120e-03
## ZRANB2-DT	100852410	-0.23257773	7.398947e-04	2.103437e-03
## NHLH2	4808	2.65166799	7.401615e-04	2.103950e-03
## ZDHHC14	79683	-0.23295665	7.419344e-04	2.108743e-03
## ATM	472	0.24536803	7.435017e-04	2.112950e-03
## CYP27B1	1594	0.66150278	7.437723e-04	2.113472e-03
## SCAMP2	10066	-0.15475625	7.443989e-04	2.115005e-03
## SETD5	55209	0.21584703	7.461841e-04	2.119829e-03
## NAP1L2	4674	-0.20277415	7.462928e-04	2.119890e-03
## NUFIP1	26747	-0.09377988	7.473507e-04	2.122647e-03
## ZNF283	284349	0.17033970	7.491011e-04	2.127370e-03
## ATP11C	286410	-0.16667399	7.512458e-04	2.133211e-03
## H2AC25	92815	0.41967364	7.518711e-04	2.134738e-03
## IGHJ4	28477	1.47519579	7.520058e-04	2.134871e-03
## PTER	9317	0.29554013	7.543231e-04	2.141199e-03
## TMEM26	219623	0.27787665	7.549197e-04	2.142642e-03
## TAGLN2	8407	0.26060134	7.571551e-04	2.148736e-03
## OBSL1	23363	-0.24454148	7.596184e-04	2.155475e-03
## JAKMIP2	9832	0.49476135	7.597943e-04	2.155516e-03
## LNCOC1	100288181	0.41050977	7.598102e-04	2.155516e-03
## CLLU1-AS1	574016	1.80466941	7.643093e-04	2.167822e-03
## DYNLL2	140735	-0.11861894	7.643267e-04	2.167822e-03
## URAHP	100130015	0.40425190	7.649862e-04	2.169440e-03
## CXorf38	159013	-0.13135489	7.655406e-04	2.170759e-03
## LINC01879	400661	-1.34161372	7.668059e-04	2.174093e-03
## HACL1	26061	0.21536668	7.670725e-04	2.174595e-03
## PTPRN	5798	0.91723969	7.709049e-04	2.185205e-03
## JARID2-DT	118597839	-0.39268348	7.719602e-04	2.187941e-03
## PLOD3	8985	-0.23833261	7.730038e-04	2.190643e-03
## TCEA1	6917	-0.09284319	7.742656e-04	2.193939e-03
## RNF212B	100507650	0.66576728	7.743474e-04	2.193939e-03
## HECW1	23072	0.49403838	7.764275e-04	2.199576e-03
## HOPX	84525	0.44861171	7.768810e-04	2.200604e-03
## SNX29	92017	-0.18940394	7.784995e-04	2.204834e-03
## PPIE	10450	0.11945544	7.785558e-04	2.204834e-03
## TFIP11	24144	0.09394138	7.789178e-04	2.205580e-03

## TUBB	203068	0.27341978	7.790007e-04	2.205580e-03
## EXOSC1	51013	0.16789695	7.792629e-04	2.206066e-03
## IRAK3	11213	0.29680747	7.799689e-04	2.207807e-03
## TUBA5P	730222	0.45201570	7.811327e-04	2.210844e-03
## FAM8A1	51439	-0.11050132	7.823280e-04	2.213969e-03
## OSCP1	127700	-0.17871456	7.828583e-04	2.215212e-03
## GPD2	2820	-0.16432230	7.842418e-04	2.218868e-03
## LUC7L2	51631	-0.13780765	7.850632e-04	2.220934e-03
## PTX4	390667	1.32207974	7.857358e-04	2.222578e-03
## LINC01443	400644	0.60906171	7.859951e-04	2.223053e-03
## HEYL	26508	-0.36701516	7.881293e-04	2.228829e-03
## ATAD3C	219293	-0.25211565	7.901832e-04	2.234378e-03
## RAB27A	5873	-0.25271750	7.905908e-04	2.235270e-03
## ARL6IP1	23204	-0.13703317	7.937825e-04	2.244033e-03
## COMMD5	28991	0.17643262	7.941192e-04	2.244724e-03
## A2M	2	0.30609838	7.951938e-04	2.247500e-03
## MIR93	407050	1.23900204	7.962737e-04	2.250291e-03
## GHRLOS	100126793	0.35784065	7.982524e-04	2.255620e-03
## RASL12	51285	0.38737665	7.986664e-04	2.256527e-03
## GEM	2669	0.35579293	7.988942e-04	2.256909e-03
## SLC5A5	6528	1.36349220	7.996586e-04	2.258805e-03
## SPIN4	139886	0.23463036	8.001158e-04	2.259834e-03
## FBXO33	254170	-0.11602336	8.034416e-04	2.268964e-03
## HOMER2	9455	0.32464858	8.043803e-04	2.271351e-03
## SLC01A2	6579	-0.91986417	8.063204e-04	2.276300e-03
## FGFBP3	143282	-0.26879878	8.062667e-04	2.276300e-03
## FBXO43	286151	0.56727110	8.068400e-04	2.277502e-03
## SLC3A1	6519	-0.32287626	8.082363e-04	2.281179e-03
## EIF4A2P1	646171	-0.35556100	8.088445e-04	2.282631e-03
## ABCC3	8714	-0.39202287	8.109303e-04	2.288251e-03
## YTHDC2	64848	-0.16269958	8.136635e-04	2.295697e-03
## RNF126P1	376412	-0.75471207	8.162782e-04	2.302807e-03
## NXF3	56000	-0.47556143	8.184094e-04	2.308551e-03
## TIPARP	25976	-0.41888266	8.191761e-04	2.310445e-03
## GCA	25801	-0.13863200	8.197221e-04	2.311717e-03
## SHOC2	8036	-0.10212960	8.216102e-04	2.316773e-03
## TNKS2-DT	100507633	0.45323937	8.221323e-04	2.317976e-03
## LSM4	25804	0.22811940	8.228469e-04	2.319722e-03
## FER1L4	80307	-0.65016292	8.235616e-04	2.321397e-03
## GAK	2580	-0.17734482	8.236320e-04	2.321397e-03
## RFTN2	130132	0.28642128	8.248175e-04	2.324468e-03
## AP2S1	1175	0.23885264	8.278902e-04	2.332182e-03
## ALDH3A2	224	0.29540711	8.278730e-04	2.332182e-03
## C2orf69	205327	-0.13023357	8.279099e-04	2.332182e-03
## MVP-DT	112268170	-0.34138599	8.279384e-04	2.332182e-03
## PPME1	51400	-0.12578441	8.306201e-04	2.339464e-03
## KMT5A	387893	0.16717450	8.311005e-04	2.340546e-03
## TPCN2	219931	-0.20207808	8.337422e-04	2.347714e-03
## ALOXE3	59344	-1.02953838	8.338856e-04	2.347845e-03
## USP3	9960	-0.07703623	8.344471e-04	2.349154e-03
## LIMS1	3987	0.16506555	8.381643e-04	2.359346e-03
## TMEM104	54868	-0.21178836	8.387429e-04	2.360701e-03
## TEKT4P2	100132288	0.35244052	8.391449e-04	2.361559e-03
## HIGD1AP1	100129086	-0.75450660	8.428850e-04	2.371810e-03

## RNF115	27246	0.14777885	8.440000e-04	2.374672e-03
## NQO2-AS1	105374888	0.72922032	8.441355e-04	2.374778e-03
## RPS9	6203	0.29001788	8.456278e-04	2.378701e-03
## MORN1	79906	-0.19458744	8.463715e-04	2.380518e-03
## MARCHF4	57574	0.69327996	8.491942e-04	2.388181e-03
## BMS1P10	728611	0.48577042	8.493455e-04	2.388330e-03
## ZNF800	168850	-0.11691909	8.519115e-04	2.395268e-03
## CCDC92B	101928991	-0.49968208	8.528337e-04	2.397584e-03
## OPCML	4978	-0.50909430	8.541314e-04	2.400954e-03
## THAP10	56906	-0.14519133	8.568078e-04	2.408182e-03
## LINC02037	101929337	-0.87148689	8.569008e-04	2.408182e-03
## ADCY9	115	-0.19692687	8.622162e-04	2.422839e-03
## HEBP2	23593	0.20153198	8.636024e-04	2.426454e-03
## BCAP31P1	100194425	1.38129670	8.655257e-04	2.431296e-03
## PICSAR	378825	2.18789277	8.654658e-04	2.431296e-03
## SIGLEC5	8778	1.12159015	8.669264e-04	2.434949e-03
## GDA	9615	0.49213646	8.672310e-04	2.435523e-03
## GTF2IP7	101927126	0.72502448	8.718843e-04	2.448308e-03
## HMGN1P13	100874439	1.63989701	8.750019e-04	2.456779e-03
## SLC9B1	150159	0.29601455	8.758286e-04	2.458532e-03
## TMEM202-AS1	105370888	-0.23168094	8.757764e-04	2.458532e-03
## RPL22	6146	0.13263464	8.813929e-04	2.473866e-03
## SLC5A12	159963	-0.51834900	8.825471e-04	2.476819e-03
## ZNF133	7692	0.18002076	8.833074e-04	2.478667e-03
## ZNF45	7596	0.12209414	8.846770e-04	2.482223e-03
## REN	5972	-0.71755846	8.849979e-04	2.482837e-03
## HSPB2	3316	0.92129436	8.879853e-04	2.490930e-03
## BRAP	8315	0.06907132	8.888581e-04	2.493091e-03
## PLA2R1	22925	-0.36481803	8.891079e-04	2.493504e-03
## RHEBP2	101060032	-0.54891010	8.892176e-04	2.493524e-03
## PKMP3	100419758	0.34957643	8.893407e-04	2.493581e-03
## ADM2	79924	0.34960151	8.906516e-04	2.496969e-03
## ANKFN1	162282	0.55849977	8.956599e-04	2.510720e-03
## PROK2	60675	0.86904230	8.964772e-04	2.512721e-03
## ARID1A	8289	-0.14191645	8.972369e-04	2.514561e-03
## KLRG2	346689	-0.66930698	9.012262e-04	2.525449e-03
## NDUFB9	4715	-0.27339816	9.018926e-04	2.526734e-03
## PPP1R26	9858	-0.16996550	9.018858e-04	2.526734e-03
## HOXD13	3239	1.25497333	9.026406e-04	2.528538e-03
## SPMIP6	84688	-0.33423503	9.031587e-04	2.529698e-03
## CYRIB	51571	0.15802176	9.047290e-04	2.533804e-03
## CNTN6	27255	0.47087571	9.083607e-04	2.543682e-03
## SPRY1	10252	0.24538856	9.119790e-04	2.553520e-03
## NCOA6	23054	-0.11075099	9.125259e-04	2.554757e-03
## COPS4	51138	0.12698865	9.135464e-04	2.557320e-03
## GVINP2	100128135	1.01768854	9.142988e-04	2.559131e-03
## ERCC5	2073	0.21252978	9.156084e-04	2.562501e-03
## OAZ2	4947	0.12517146	9.168429e-04	2.565661e-03
## CHRNA2	1135	-0.98030429	9.186645e-04	2.570167e-03
## HOXC-AS2	100874364	-0.28159201	9.186229e-04	2.570167e-03
## NUDT9	53343	-0.14055257	9.191719e-04	2.571290e-03
## SNORD17	692086	0.66504508	9.196178e-04	2.572241e-03
## SRPRB	58477	-0.14550291	9.202678e-04	2.573559e-03
## LINC00513	100506860	0.45135629	9.203008e-04	2.573559e-03

## IL21-AS1	100996941	1.61207795	9.207589e-04	2.574544e-03
## EPCAM-DT	101927043	0.33473217	9.223254e-04	2.578628e-03
## KNTC1	9735	0.20004698	9.226346e-04	2.579195e-03
## SNX6	58533	0.11577038	9.233754e-04	2.580969e-03
## ZNHIT1	10467	0.24320760	9.236520e-04	2.581445e-03
## MT2P1	4503	-0.75862135	9.239851e-04	2.582079e-03
## RIPK2	8767	0.16165821	9.241494e-04	2.582242e-03
## SH3PXD2A-AS1	100505839	0.95859393	9.255794e-04	2.585940e-03
## KLRF1	51348	0.38178942	9.264106e-04	2.587965e-03
## BMS1	9790	-0.08880566	9.267564e-04	2.588633e-03
## EBF4	57593	-0.32584088	9.269396e-04	2.588847e-03
## NTPCR	84284	0.12299088	9.271531e-04	2.589146e-03
## SEPTIN8	23176	0.17233397	9.273067e-04	2.589277e-03
## PRRT2	112476	0.55089831	9.279337e-04	2.590730e-03
## HERPUD1	9709	-0.16009030	9.282513e-04	2.591319e-03
## LINC02936	123464517	-0.31575166	9.308631e-04	2.598312e-03
## VAV3	10451	-0.23976386	9.325501e-04	2.602423e-03
## TMEM114	283953	1.83066524	9.324727e-04	2.602423e-03
## PDCD7	10081	0.08362024	9.328184e-04	2.602873e-03
## MED12L	116931	0.35943167	9.337627e-04	2.605209e-03
## RPA4	29935	1.03497758	9.342260e-04	2.606202e-03
## AGMAT	79814	0.47637532	9.357393e-04	2.609824e-03
## POU3F1	5453	-0.74519740	9.356867e-04	2.609824e-03
## RPL7AP6	326310	0.34478244	9.366458e-04	2.612053e-03
## EHMT2	10919	0.14385882	9.381970e-04	2.616079e-03
## ZNF629	23361	-0.12069490	9.403899e-04	2.621893e-03
## CYP8B1	1582	-0.48515185	9.427881e-04	2.628277e-03
## CCDC183	84960	-0.29878574	9.435971e-04	2.630231e-03
## PRKY	5616	0.98201042	9.447829e-04	2.633234e-03
## MDS2	259283	0.90968972	9.450900e-04	2.633788e-03
## MTMR14	64419	0.11582565	9.453098e-04	2.634098e-03
## LINC00621	100996930	-0.35756448	9.469593e-04	2.638392e-03
## ZMYND11	10771	-0.10008173	9.478292e-04	2.640513e-03
## TNXA	7146	1.36087463	9.496983e-04	2.645417e-03
## CENPN	55839	0.18454430	9.499686e-04	2.645867e-03
## SMOC1	64093	0.55172849	9.514523e-04	2.649695e-03
## PLCB4	5332	0.27069412	9.550914e-04	2.659525e-03
## DNAJB14	79982	-0.18008219	9.559982e-04	2.661745e-03
## AFG1L	246269	-0.14293160	9.582772e-04	2.667785e-03
## KRT86	3892	0.60897313	9.606917e-04	2.674200e-03
## PCGF2	7703	-0.16489840	9.608028e-04	2.674203e-03
## ICMT-DT	148645	0.50074870	9.633240e-04	2.680913e-03
## LINC00706	100652997	-1.05214716	9.658681e-04	2.687686e-03
## ZNF470	388566	0.16514547	9.661620e-04	2.688196e-03
## PGPEP1	54858	0.28706502	9.681158e-04	2.693324e-03
## XKR4	114786	0.45434472	9.690964e-04	2.695743e-03
## TRIM6	117854	-0.50166868	9.703982e-04	2.699055e-03
## RABEP2	79874	-0.21108100	9.740407e-04	2.708567e-03
## MIR3671	100500854	0.69584345	9.740149e-04	2.708567e-03
## RSRP1	57035	0.42128440	9.758446e-04	2.713272e-03
## CASK	8573	-0.12864810	9.760762e-04	2.713468e-03
## DDO	8528	0.30509115	9.761384e-04	2.713468e-03
## ZNF232	7775	0.22875915	9.808963e-04	2.726382e-03
## MEIOC	284071	-0.40452990	9.820582e-04	2.729300e-03

## KCTD5	54442	0.12756678	9.824089e-04	2.729962e-03
## MMUT	4594	-0.17814922	9.855869e-04	2.738480e-03
## FAM135B	51059	-0.50900249	9.866879e-04	2.741226e-03
## NUDT16-DT	339874	-0.42769746	9.871957e-04	2.742323e-03
## RAB17-DT	105373958	-0.33485360	9.894331e-04	2.748224e-03
## MTMR12	54545	-0.12178104	9.901665e-04	2.749947e-03
## SPART	23111	-0.11894557	9.942444e-04	2.760957e-03
## TSTD2	158427	0.08398245	9.977009e-04	2.770239e-03
## GRAP	10750	0.23915616	1.001865e-03	2.781482e-03
## ANO4	121601	0.43930882	1.003339e-03	2.785257e-03
## CAMK2N1	55450	-0.19947433	1.005530e-03	2.791020e-03
## XKR3	150165	1.29254424	1.007124e-03	2.795127e-03
## NOL9	79707	0.13397107	1.010755e-03	2.804884e-03
## PNLDCC1	154197	-0.86594652	1.014055e-03	2.813719e-03
## LINC00380	101930747	-0.82849591	1.016658e-03	2.820619e-03
## IL9R	3581	0.92220356	1.016890e-03	2.820941e-03
## MIGA1	374986	-0.20850070	1.019192e-03	2.826681e-03
## FAM53B	9679	0.14265884	1.019083e-03	2.826681e-03
## LINC01538	400654	1.14085069	1.020505e-03	2.830001e-03
## AP1B1	162	-0.15374433	1.021859e-03	2.833431e-03
## GPC1-AS1	100130449	-0.77804165	1.022430e-03	2.834693e-03
## GALNT9-AS1	100130238	-0.68928479	1.022592e-03	2.834817e-03
## POMK	84197	0.32933025	1.026569e-03	2.845516e-03
## H4C3	8364	0.78592282	1.026844e-03	2.845956e-03
## MIR1244-2	100422885	-0.31451291	1.027967e-03	2.848742e-03
## C3orf62	375341	0.16725770	1.028389e-03	2.849588e-03
## FAM221A	340277	-0.25398447	1.028986e-03	2.850917e-03
## METTL21EP	121952	0.62943943	1.029759e-03	2.852732e-03
## DFFA	1676	0.11889488	1.032575e-03	2.860208e-03
## ZKSCAN3	80317	0.13144541	1.033117e-03	2.861384e-03
## RPL24	6152	0.24869026	1.036322e-03	2.869933e-03
## ABCD4	5826	0.14683255	1.037842e-03	2.873815e-03
## SYTL3	94120	0.21456763	1.038762e-03	2.876035e-03
## HOXA10	3206	0.15691511	1.039087e-03	2.876607e-03
## LINC01128	643837	0.12997836	1.045292e-03	2.893454e-03
## SULF2	55959	0.27712458	1.046496e-03	2.896458e-03
## ABTB1	80325	0.19209369	1.048356e-03	2.901275e-03
## EIF4EP2	100131693	-0.31459316	1.048520e-03	2.901399e-03
## ODAD4	83538	-0.19933246	1.050504e-03	2.906559e-03
## STAT1	6772	0.30263347	1.051890e-03	2.910061e-03
## GPRC5A	9052	-0.27853578	1.053295e-03	2.913616e-03
## ZFAND3	60685	-0.08592609	1.055043e-03	2.918119e-03
## CCM2L	140706	-0.25241748	1.055732e-03	2.919694e-03
## MAPK1	5594	-0.09907063	1.060713e-03	2.933136e-03
## LINC01170	103724389	1.57162086	1.066663e-03	2.949252e-03
## C4orf46P2	101241901	-0.37086730	1.067664e-03	2.951684e-03
## CRTAC1	55118	-0.46920608	1.068448e-03	2.953514e-03
## NR2F1-AS1	441094	0.17893205	1.068882e-03	2.954378e-03
## TMEM220	388335	-0.22935199	1.069495e-03	2.955736e-03
## ZSCAN2-AS1	128193291	0.22418260	1.071408e-03	2.960686e-03
## CNIH1	10175	0.12220643	1.072022e-03	2.962047e-03
## DNM1P47	100216544	0.41971243	1.073229e-03	2.965045e-03
## NIPSNAP3B	55335	0.32149689	1.076225e-03	2.972985e-03
## GPD1	2819	0.41340843	1.077569e-03	2.976358e-03

## ZNF226	7769	0.16677384	1.081529e-03	2.986956e-03
## PAQR3	152559	-0.15032259	1.081918e-03	2.987692e-03
## HACE1	57531	-0.14596424	1.082416e-03	2.988728e-03
## LYRM1	57149	0.20305981	1.083246e-03	2.990680e-03
## NOC2LP1	643276	-0.40490336	1.084166e-03	2.992878e-03
## OSTC	58505	0.20365974	1.087255e-03	3.001066e-03
## ABCF3	55324	-0.10108544	1.087804e-03	3.002239e-03
## RPS15	6209	0.31753032	1.088282e-03	3.003217e-03
## UCK1	83549	0.14715121	1.090158e-03	3.008054e-03
## PCAT6	100506696	0.27277137	1.091331e-03	3.010950e-03
## C3orf70	285382	0.32802372	1.091534e-03	3.011166e-03
## SERPINA7	6906	-0.44821318	1.091663e-03	3.011181e-03
## SLC25A37	51312	0.20029378	1.092836e-03	3.014074e-03
## SH2D5	400745	-0.55514389	1.093488e-03	3.015529e-03
## DOCK9-DT	100861541	-0.29184429	1.095642e-03	3.021128e-03
## ECEL1	9427	0.63354219	1.097760e-03	3.026570e-03
## TNK2-AS1	100128262	0.88935405	1.097865e-03	3.026570e-03
## NPC1L1	29881	-0.51112300	1.100548e-03	3.033621e-03
## RRP12	23223	0.14403369	1.104049e-03	3.042928e-03
## HINFP	25988	0.13331127	1.104328e-03	3.043351e-03
## DPH5-DT	102606465	0.21343955	1.106128e-03	3.047966e-03
## C17orf80	<NA>	0.10071022	1.109765e-03	3.057641e-03
## SPIN2B	474343	0.16918001	1.111084e-03	3.060928e-03
## TACR3	6870	-0.49455883	1.113818e-03	3.068113e-03
## SLC2A7	155184	-1.17022027	1.115275e-03	3.071779e-03
## MAP3K21	84451	-0.27097670	1.116322e-03	3.074312e-03
## CTXN2	399697	-0.62639528	1.116731e-03	3.075091e-03
## TLCD5	219902	0.17939533	1.118197e-03	3.078779e-03
## GGCTP1	100528061	-0.40425222	1.118561e-03	3.079433e-03
## CRYAB	1410	-0.40954109	1.118803e-03	3.079749e-03
## PHYH	5264	0.30275237	1.126854e-03	3.101561e-03
## PART1	25859	-0.45033441	1.127246e-03	3.102288e-03
## CACNA1C	775	0.32808915	1.131135e-03	3.112638e-03
## PGLYRP2	114770	1.05429007	1.133671e-03	3.119263e-03
## GMPPB	29925	-0.15765941	1.134269e-03	3.120555e-03
## TRIM46	80128	0.47977229	1.135748e-03	3.124272e-03
## EPB41	2035	-0.16153278	1.138848e-03	3.132444e-03
## RAB3D	9545	-0.22512998	1.140920e-03	3.137787e-03
## PMCH	5367	1.81500959	1.141554e-03	3.139178e-03
## ARID5A	10865	0.28468126	1.143606e-03	3.144465e-03
## KCNJ8	3764	0.35516271	1.144630e-03	3.146922e-03
## ZNF586	54807	0.13772741	1.149673e-03	3.160430e-03
## OR7E102P	400984	-0.77515184	1.149984e-03	3.160927e-03
## RORB-AS1	103752585	0.79592606	1.151832e-03	3.165648e-03
## SLC7A2	6542	-0.25056640	1.156092e-03	3.176763e-03
## SLC22A9	114571	-0.61669109	1.156137e-03	3.176763e-03
## UBBP2	23668	0.74416431	1.158454e-03	3.182769e-03
## ZNF622	90441	-0.12407535	1.158612e-03	3.182844e-03
## EIF4EBP1	1978	0.25193743	1.158784e-03	3.182955e-03
## SDAD1P1	157489	0.21308745	1.161530e-03	3.190138e-03
## BCAP29	55973	-0.12401480	1.161808e-03	3.190540e-03
## SSRP1	6749	-0.08527598	1.167581e-03	3.206032e-03
## DDX49	54555	0.15253790	1.168344e-03	3.207765e-03
## PFN1	5216	0.22134669	1.169464e-03	3.210479e-03

## MMAB	326625	-0.17869202	1.171845e-03	3.216649e-03
## CFAP77	389799	0.89110074	1.172730e-03	3.218716e-03
## TBXA2R	6915	-0.29875702	1.172917e-03	3.218865e-03
## PCTP	58488	0.24286654	1.177730e-03	3.231708e-03
## EIF1AX	1964	-0.15752996	1.181502e-03	3.241694e-03
## BMP2	650	0.18878876	1.184067e-03	3.248365e-03
## MYL12B	103910	-0.15633864	1.185644e-03	3.252323e-03
## RCC1L	81554	0.13527526	1.186925e-03	3.255470e-03
## RPLP1	6176	0.34513420	1.188137e-03	3.258428e-03
## GCSHP5	100329108	0.48815697	1.188325e-03	3.258575e-03
## HLA-DMA	3108	0.27835847	1.190906e-03	3.265282e-03
## SLC28A1	9154	-0.36317223	1.191045e-03	3.265297e-03
## TMC7	79905	0.31050699	1.192993e-03	3.270268e-03
## RANBP1	5902	0.14397416	1.196096e-03	3.278405e-03
## PARP11-AS1	105369609	1.58234055	1.196353e-03	3.278738e-03
## MIPEP	4285	-0.14267984	1.197990e-03	3.282855e-03
## CABP1-DT	101928300	-0.52816082	1.201240e-03	3.291159e-03
## RNF213-AS1	100294362	-0.28075986	1.201291e-03	3.291159e-03
## MFSD9	84804	-0.12099867	1.210566e-03	3.316195e-03
## C3orf52	79669	-0.22964008	1.211001e-03	3.317013e-03
## LINC01412	101928455	0.97063989	1.211265e-03	3.317361e-03
## TAF6L	10629	-0.14722696	1.213751e-03	3.323421e-03
## ZNF385C	201181	0.32435978	1.213638e-03	3.323421e-03
## RSBN1	54665	-0.12253877	1.215819e-03	3.328599e-03
## CRIP2	1397	-0.35915840	1.215916e-03	3.328599e-03
## PSMA3	5684	-0.17401372	1.219814e-03	3.338894e-03
## TSR1	55720	0.08452822	1.220229e-03	3.339655e-03
## ARHGAP27	201176	-0.18782840	1.220494e-03	3.340002e-03
## MRPS30-DT	100506674	-0.21878208	1.222276e-03	3.344502e-03
## CPVL-AS2	100506497	-0.44011885	1.222440e-03	3.344574e-03
## POM121C	100101267	-0.18477305	1.223166e-03	3.346186e-03
## TRIM35	23087	-0.11037126	1.223489e-03	3.346692e-03
## DUSP16	80824	0.11353108	1.225247e-03	3.351122e-03
## TMEM150A	129303	0.23419067	1.225396e-03	3.351154e-03
## CAPZB	832	0.14802542	1.230124e-03	3.363705e-03
## ZNF724	440519	0.36953399	1.230284e-03	3.363764e-03
## MOSPD1	56180	0.10776820	1.230531e-03	3.364061e-03
## PGM5-AS1	572558	0.45939082	1.230767e-03	3.364328e-03
## WRAP73	49856	0.12909802	1.233176e-03	3.370532e-03
## CYP4F24P	388514	0.85492685	1.234548e-03	3.373902e-03
## EIF2AK2	5610	0.17125498	1.236286e-03	3.378272e-03
## PLS1	5357	-0.25137283	1.237166e-03	3.380298e-03
## LINC01622	285768	0.50027103	1.238111e-03	3.382500e-03
## GALM	130589	0.31737533	1.239008e-03	3.384188e-03
## LINC01748	105378763	1.12533132	1.238875e-03	3.384188e-03
## ADGRL3	23284	-0.38341249	1.239733e-03	3.385790e-03
## FALEC	100874054	0.79102767	1.240031e-03	3.385843e-03
## ADAMTS16-DT	101929176	0.44029586	1.239910e-03	3.385843e-03
## CHRNA6	8973	1.25013824	1.242264e-03	3.391558e-03
## RPL23AP49	653236	0.32486198	1.245473e-03	3.399937e-03
## RPL23AP53	644128	0.19459322	1.247672e-03	3.405556e-03
## ZNF436-AS1	148898	0.31902629	1.251925e-03	3.416783e-03
## GALE	2582	-0.20403413	1.252582e-03	3.418192e-03
## MSRB2	22921	0.21524817	1.254879e-03	3.424074e-03

## ZBTB11	27107	0.14595508	1.255760e-03	3.426094e-03
## ALDH1L1-AS2	100862662	-0.29070866	1.258371e-03	3.432833e-03
## GSG1L	146395	0.66286993	1.259737e-03	3.436173e-03
## PPP1R14B	26472	0.33324738	1.259951e-03	3.436373e-03
## CRTAP	10491	0.16997006	1.264771e-03	3.449004e-03
## UBA6-DT	550112	0.14431008	1.264867e-03	3.449004e-03
## TTPA	7274	0.43875762	1.268263e-03	3.457876e-03
## DNAJC19P9	644589	-0.68452822	1.268549e-03	3.458270e-03
## P4HA1	5033	0.24497465	1.269689e-03	3.460989e-03
## CAMP	820	1.00677452	1.270518e-03	3.462860e-03
## BDNF	627	0.45138299	1.270843e-03	3.463357e-03
## H1-9P	373861	0.96321097	1.273735e-03	3.470849e-03
## TAPBP	6892	-0.26218272	1.274905e-03	3.473648e-03
## ZMIZ2	83637	-0.16630446	1.278917e-03	3.484189e-03
## NPHS1	4868	-0.54302237	1.279336e-03	3.484939e-03
## EID2	163126	-0.11179205	1.279786e-03	3.485775e-03
## SNX18P12	131183826	0.73849920	1.282740e-03	3.493429e-03
## ENPP5	59084	-0.21634738	1.283104e-03	3.494029e-03
## PARTICL	100630918	-0.25552363	1.285565e-03	3.500338e-03
## HADHB	3032	-0.11609526	1.286556e-03	3.502645e-03
## CHM	1121	-0.14374442	1.287274e-03	3.504205e-03
## TTC13	79573	0.19694105	1.290973e-03	3.513881e-03
## FBN3	84467	-0.38776484	1.293792e-03	3.521161e-03
## VEGFC	7424	0.26194334	1.294424e-03	3.522485e-03
## DNAJA2	10294	-0.07404549	1.298441e-03	3.533021e-03
## CDC42EP1	11135	0.32970848	1.299533e-03	3.535597e-03
## TMEM250	90120	0.16598457	1.300450e-03	3.537696e-03
## VSTM5	387804	0.35908198	1.308296e-03	3.558641e-03
## CNNM1	26507	-0.57937014	1.312312e-03	3.569166e-03
## ZNF582-DT	386758	-0.19031648	1.313746e-03	3.572665e-03
## KRT17	3872	0.51964312	1.316612e-03	3.580058e-03
## METRNL	284207	-0.25907089	1.316873e-03	3.580367e-03
## RNU6-574P	106479820	-0.52786959	1.318305e-03	3.583862e-03
## IL17B	27190	0.60602716	1.321339e-03	3.591707e-03
## CFAP100	348807	0.64282392	1.321698e-03	3.592282e-03
## PRC1	9055	0.75986173	1.322101e-03	3.592975e-03
## NACAP8	101928685	-0.39260732	1.322588e-03	3.593896e-03
## ZNF783	100289678	0.22510419	1.324289e-03	3.598115e-03
## LINC02004	105374119	-0.57485770	1.325161e-03	3.600084e-03
## ZNF761	388561	0.17867183	1.327171e-03	3.604738e-03
## SLC49A3	84179	-0.30645514	1.327024e-03	3.604738e-03
## SYNE4	163183	-0.29611411	1.331563e-03	3.616263e-03
## RBM12	10137	-0.10627592	1.332642e-03	3.618789e-03
## RAD21	5885	-0.09893886	1.333217e-03	3.619946e-03
## NR0B1	190	1.32480555	1.336236e-03	3.627737e-03
## MIR200CHG	105369635	-0.37820355	1.336499e-03	3.628044e-03
## RIMOC1	285636	-0.11600447	1.338113e-03	3.632022e-03
## NOL12	79159	0.37911212	1.338945e-03	3.633872e-03
## NAV2-AS3	100874013	-0.70266051	1.339791e-03	3.635764e-03
## CAMTA2	23125	-0.13636373	1.340571e-03	3.637474e-03
## CASC16	643714	0.51971455	1.341774e-03	3.640332e-03
## PTDSS2	81490	-0.17992230	1.342388e-03	3.641592e-03
## SOX10	6663	-0.60162236	1.345470e-03	3.649545e-03
## SLC38A11	151258	-0.34857824	1.346596e-03	3.652191e-03

## WBP1	23559	0.27017349	1.347716e-03	3.654820e-03
## GTF3C2	2976	-0.06190221	1.350652e-03	3.662373e-03
## DDAH2	23564	0.22579534	1.351230e-03	3.663534e-03
## ZNF597	146434	0.10996661	1.351499e-03	3.663852e-03
## SULT1E1	6783	-0.61884811	1.352247e-03	3.665470e-03
## TPT1	7178	0.27066204	1.354167e-03	3.670267e-03
## HOMER3	9454	0.26395131	1.358723e-03	3.682203e-03
## IRS4	8471	-0.96562185	1.363337e-03	3.694297e-03
## EFCAB8	388795	0.83355896	1.368099e-03	3.706787e-03
## LNCAROD	101928687	1.24085768	1.369463e-03	3.710068e-03
## CIMIP2C	339778	-0.44294153	1.374543e-03	3.723418e-03
## XKRX	402415	0.60424479	1.376460e-03	3.728195e-03
## ITPKC	80271	-0.15825869	1.376865e-03	3.728875e-03
## CHST14	113189	0.24791327	1.379105e-03	3.734527e-03
## SEPTIN7	989	0.13208584	1.380469e-03	3.737803e-03
## NSUN3	63899	-0.10435106	1.383582e-03	3.745815e-03
## NAA10	8260	0.16861728	1.383821e-03	3.746044e-03
## ATP5F1C	509	-0.17821124	1.384550e-03	3.747343e-03
## TPM3P9	147804	-0.20746359	1.384610e-03	3.747343e-03
## SUFU	51684	0.13100282	1.386314e-03	3.751540e-03
## FGFR3	2261	-0.33213030	1.387482e-03	3.754280e-03
## CRYBB2P1	1416	0.22825956	1.388866e-03	3.757608e-03
## SHC1	6464	0.19221497	1.390299e-03	3.760588e-03
## GPC6	10082	0.24922781	1.390432e-03	3.760588e-03
## PPP3CB-AS1	101929145	-0.18885621	1.390149e-03	3.760588e-03
## USP33	23032	-0.09807670	1.397636e-03	3.779653e-03
## ADD3-AS1	100505933	0.31643798	1.398073e-03	3.780414e-03
## KIAA1755	85449	-0.37586246	1.398420e-03	3.780931e-03
## ACACB	32	-0.29333409	1.398986e-03	3.781847e-03
## GUCY1A1	2982	0.24553235	1.399070e-03	3.781847e-03
## VASH1-DT	120766139	0.97419388	1.399552e-03	3.782729e-03
## CCDC74A	90557	0.25175509	1.399912e-03	3.783194e-03
## DEFB124	245937	0.90538816	1.400035e-03	3.783194e-03
## C1DP5	106481729	1.05228750	1.400499e-03	3.784025e-03
## LINC01928	105371994	0.76773146	1.400977e-03	3.784895e-03
## AQR	9716	-0.09964902	1.401619e-03	3.786210e-03
## YTHDC1	91746	-0.11188424	1.403848e-03	3.791810e-03
## SLITRK6	84189	0.73206549	1.407550e-03	3.801385e-03
## NDUFA9	4704	-0.16802684	1.410178e-03	3.808061e-03
## PIEZO1	9780	-0.24953857	1.413318e-03	3.816116e-03
## CEP83-DT	144486	-0.34380346	1.414003e-03	3.817542e-03
## C10orf88B	399815	0.84527985	1.418303e-03	3.828725e-03
## TIRAP-AS1	105369557	-0.54093804	1.418521e-03	3.828889e-03
## LNCOG	105369848	1.21339737	1.419412e-03	3.830866e-03
## EIF4G3	8672	0.17139077	1.422138e-03	3.837798e-03
## TMEM30A-DT	100506804	-0.25741884	1.429823e-03	3.858109e-03
## RPL31P34	100271193	-0.55229971	1.430630e-03	3.859857e-03
## MRNIP	51149	0.21762780	1.431234e-03	3.861060e-03
## ZSCAN18	65982	-0.13883871	1.437038e-03	3.876287e-03
## BZW2	28969	0.23073806	1.437770e-03	3.877830e-03
## INO80C	125476	0.20538961	1.439755e-03	3.882752e-03
## AXIN1	8312	0.12876610	1.444966e-03	3.896373e-03
## IGKV1-9	28941	1.02121050	1.450816e-03	3.911297e-03
## RPL35AP26	100271630	-0.94684386	1.450822e-03	3.911297e-03

## ZNF841	284371	0.25159594	1.452267e-03	3.914758e-03
## SIVA1	10572	0.28690426	1.452656e-03	3.915372e-03
## MIR3659HG	105378653	1.20902094	1.452851e-03	3.915463e-03
## POLG2	11232	0.22116351	1.453452e-03	3.916648e-03
## ABRAXAS2	23172	-0.07282922	1.454711e-03	3.919608e-03
## MGST1	4257	0.30920882	1.456420e-03	3.923777e-03
## PRKAG2-AS1	100505483	-0.26972488	1.457709e-03	3.926814e-03
## CTDSPL	10217	-0.09639378	1.462269e-03	3.938660e-03
## PARD6B	84612	-0.25729261	1.468308e-03	3.954489e-03
## PCDHGB1	56104	-0.30488938	1.469577e-03	3.957468e-03
## BCL6B	255877	0.31471836	1.471622e-03	3.962537e-03
## SATB1-AS1	101927777	0.43611381	1.474413e-03	3.969612e-03
## AMMECR1L	83607	0.08538929	1.474862e-03	3.970380e-03
## PRNP	5621	-0.20551378	1.475365e-03	3.971294e-03
## GMPS	8833	-0.06789559	1.476189e-03	3.973073e-03
## KCNA4	3739	-0.47508465	1.476510e-03	3.973495e-03
## EDN2	1907	-0.62425314	1.477616e-03	3.976032e-03
## ZNF235	9310	0.16913513	1.478589e-03	3.978211e-03
## CEACAM8	1088	1.24017191	1.479402e-03	3.979956e-03
## ASS1P10	455	0.59666475	1.484516e-03	3.993271e-03
## RPL24P8	100270964	0.43837125	1.491945e-03	4.012812e-03
## PRR5	55615	0.25679413	1.492878e-03	4.014878e-03
## RHCE	6006	0.42250823	1.496396e-03	4.023892e-03
## CCN6	8838	-0.34029441	1.498639e-03	4.029480e-03
## PRKACB	5567	0.12504799	1.498945e-03	4.029855e-03
## SLC9A5	6553	0.41970497	1.502788e-03	4.039741e-03
## AUH	549	-0.19548095	1.503581e-03	4.041424e-03
## TEX55	152405	-0.63720684	1.504433e-03	4.043268e-03
## FARP2	9855	0.09393067	1.509975e-03	4.057713e-03
## YBX1	4904	0.18811704	1.511344e-03	4.060944e-03
## CABIN1	23523	-0.12400519	1.512054e-03	4.062402e-03
## PCDHB1	29930	-0.38912310	1.513308e-03	4.065322e-03
## PPEF2	5470	0.86032450	1.514845e-03	4.069001e-03
## ALG1	56052	-0.16217111	1.516109e-03	4.071946e-03
## PARD3-DT	100505601	0.42773327	1.517322e-03	4.074754e-03
## DGCR6	8214	0.37486965	1.517686e-03	4.075281e-03
## MTAPP2	100420621	-0.87716437	1.522177e-03	4.086889e-03
## SLC22A8	9376	0.56335143	1.523449e-03	4.089852e-03
## KCNJ5	3762	-0.61200040	1.526842e-03	4.098509e-03
## SRP9	6726	-0.12862751	1.527976e-03	4.101097e-03
## RPL29P4	387101	0.59022394	1.528956e-03	4.103276e-03
## CCL15-CCL14	348249	0.42705844	1.529552e-03	4.104422e-03
## TCEAL1	9338	-0.14869119	1.531654e-03	4.109607e-03
## SLC22A16	85413	0.99916229	1.533539e-03	4.114211e-03
## NR2F2	7026	-0.15502933	1.534099e-03	4.115259e-03
## ZDHHC23	254887	-0.22852953	1.540567e-03	4.132156e-03
## LINC01237	101927289	0.60174396	1.541420e-03	4.133987e-03
## DBI	1622	-0.25270052	1.542797e-03	4.137221e-03
## RDM1P5	100131347	0.45929390	1.543740e-03	4.139294e-03
## GLIPR1L2	144321	-0.31458927	1.544969e-03	4.142132e-03
## LRRC77P	646168	0.71063602	1.545161e-03	4.142190e-03
## BIRC2	329	0.11168296	1.547821e-03	4.148863e-03
## TNFRSF14	8764	0.21702812	1.548115e-03	4.149193e-03
## BACE1	23621	0.12987586	1.549059e-03	4.151266e-03

## FBRS	64319	-0.17266662	1.555003e-03	4.166735e-03
## LZTFL1	54585	-0.11448319	1.556837e-03	4.171191e-03
## RPL37	6167	0.26636041	1.557992e-03	4.173825e-03
## NPR2	4882	0.20262596	1.559162e-03	4.176498e-03
## TIGD2	166815	-0.16363010	1.563130e-03	4.186495e-03
## NBPF9	400818	0.20122612	1.563238e-03	4.186495e-03
## SPC24	147841	0.37933715	1.564193e-03	4.188589e-03
## MAMDC2-AS1	100507244	-0.29833069	1.565506e-03	4.191645e-03
## DNPEP	23549	0.12736340	1.574173e-03	4.214385e-03
## NPM1P18	10829	0.81161166	1.575626e-03	4.217810e-03
## ZKSCAN8P1	651302	0.38119653	1.576841e-03	4.220599e-03
## MTIF2	4528	-0.12002533	1.579726e-03	4.227855e-03
## LY86-AS1	285780	-0.37539294	1.584750e-03	4.240834e-03
## ALDOA	226	-0.33400301	1.587378e-03	4.247397e-03
## CCL7	6354	1.15072863	1.587914e-03	4.248366e-03
## MRPL20-AS1	148413	0.09900782	1.588611e-03	4.249762e-03
## ANKRD22	118932	-0.36365347	1.589119e-03	4.250654e-03
## LINC00967	100505659	1.19079922	1.589777e-03	4.251945e-03
## RPL23AP97	102723647	0.50935716	1.591391e-03	4.255794e-03
## GGTLC5P	653590	-1.17897899	1.591811e-03	4.256449e-03
## SMG8	55181	0.07595143	1.592308e-03	4.257309e-03
## CYC1	1537	-0.21833095	1.593095e-03	4.258943e-03
## EHMT1	79813	0.11024630	1.595766e-03	4.265614e-03
## STON2	85439	-0.17194513	1.596396e-03	4.266831e-03
## RAVER1	125950	-0.30984812	1.600937e-03	4.278498e-03
## TRIM44	54765	-0.12039892	1.601825e-03	4.280399e-03
## ANKRD28	23243	-0.13017987	1.605414e-03	4.289518e-03
## SLC38A1	81539	-0.23793318	1.606304e-03	4.290480e-03
## ERO1A	30001	-0.13685071	1.606022e-03	4.290480e-03
## LINC02585	102724368	1.18846203	1.606264e-03	4.290480e-03
## LRRC40	55631	-0.12488641	1.607314e-03	4.292707e-03
## NBDY	550643	0.18698468	1.610218e-03	4.299990e-03
## RPP30	10556	0.11415519	1.612588e-03	4.305846e-03
## ANAPC15	25906	0.20060599	1.618205e-03	4.320369e-03
## PLXNB3-AS1	102723591	1.59537417	1.621162e-03	4.327788e-03
## SSR1	6745	-0.11790459	1.624760e-03	4.336918e-03
## HNRNPC	3183	-0.09099701	1.625035e-03	4.337175e-03
## HACD1	9200	0.45519699	1.630439e-03	4.351120e-03
## C22orf15	150248	0.64122045	1.630724e-03	4.351403e-03
## HMGCL	3155	0.22133658	1.634478e-03	4.360942e-03
## MTBP	27085	0.23656344	1.635193e-03	4.362369e-03
## DDIT4L	115265	0.57607640	1.636805e-03	4.366192e-03
## LNMIICC	123706532	0.99604795	1.644991e-03	4.387546e-03
## SAT2	112483	0.29620956	1.645264e-03	4.387793e-03
## GCAT	23464	-0.33430508	1.646756e-03	4.391290e-03
## TMEM43	79188	0.17209055	1.648195e-03	4.394643e-03
## PPM1J	333926	0.38190696	1.650640e-03	4.400680e-03
## CEMP1	752014	-0.48901359	1.652030e-03	4.403902e-03
## CFAP97D1	284067	-0.80148351	1.656959e-03	4.416559e-03
## RBMXP4	100132580	0.54842443	1.659210e-03	4.422074e-03
## MINDY4	84182	0.25052640	1.664058e-03	4.434508e-03
## LINC02505	105374400	1.16892399	1.667223e-03	4.442454e-03
## PPP2R2A	5520	0.08027223	1.669229e-03	4.447312e-03
## SPACA6	147650	-0.25919401	1.671130e-03	4.451888e-03

## MITF	4286	-0.11634317	1.673806e-03	4.458529e-03
## MEP1A	4224	2.03291583	1.675743e-03	4.463200e-03
## MYCBP	26292	-0.14668253	1.676056e-03	4.463544e-03
## PEX14	5195	-0.15598297	1.676858e-03	4.465189e-03
## ZNF140	7699	0.12284558	1.678921e-03	4.470194e-03
## ECI2	10455	0.25067845	1.681605e-03	4.476850e-03
## HNF4G	3174	0.38289950	1.684912e-03	4.485163e-03
## MTR	4548	-0.20113888	1.690513e-03	4.499579e-03
## ACSM3	6296	0.30175174	1.691026e-03	4.500453e-03
## PSORS1C1	170679	0.51119916	1.692169e-03	4.503001e-03
## ZNF25	219749	0.20948487	1.692471e-03	4.503310e-03
## PIK3CD-AS1	644997	1.10043750	1.692938e-03	4.504060e-03
## ELL2	22936	-0.25268560	1.693458e-03	4.504951e-03
## IPO9-AS1	100873949	0.49963457	1.698006e-03	4.516556e-03
## PRDM1	639	0.29003438	1.700138e-03	4.521329e-03
## NLK	51701	-0.11994116	1.700173e-03	4.521329e-03
## GPR179	440435	0.64580470	1.700987e-03	4.522998e-03
## CCDC77	84318	0.12911065	1.709522e-03	4.545195e-03
## INTS8	55656	0.13424435	1.711187e-03	4.549127e-03
## MBOAT7	79143	-0.22295112	1.713391e-03	4.554487e-03
## NPTN-IT1	101241892	0.42977056	1.715843e-03	4.560507e-03
## CHMP2B	25978	-0.09840312	1.716130e-03	4.560770e-03
## HOXD-AS2	100506783	0.29882735	1.717172e-03	4.563041e-03
## ZNF20	7568	-0.32091115	1.722285e-03	4.575624e-03
## GALNT2	2590	-0.21560739	1.722150e-03	4.575624e-03
## SIL1	64374	-0.16399242	1.723090e-03	4.577263e-03
## CLDN10	9071	-0.28966800	1.723302e-03	4.577325e-03
## RANBP6	26953	-0.08852009	1.724201e-03	4.578854e-03
## SLC44A3-AS1	101928079	-0.22206859	1.724254e-03	4.578854e-03
## UNC5D	137970	-0.36546805	1.725888e-03	4.582361e-03
## RHPN1-AS1	78998	-0.19788571	1.725952e-03	4.582361e-03
## HKDC1	80201	-0.32766908	1.727123e-03	4.584971e-03
## ZNF668	79759	0.29912016	1.727380e-03	4.585151e-03
## FOXP1-DT	126568846	0.70828833	1.728175e-03	4.586761e-03
## SMPDL3B	27293	-0.27054385	1.729987e-03	4.591068e-03
## MYCL-AS1	105378668	2.01354487	1.732193e-03	4.596422e-03
## ATP10B	23120	-0.69441289	1.733188e-03	4.598558e-03
## TCL1B	9623	1.03901109	1.742016e-03	4.621478e-03
## PANK2-AS1	107985395	-0.32213520	1.743033e-03	4.623672e-03
## PLCH1	23007	-0.23291692	1.759870e-03	4.667315e-03
## BRD10	158358	0.17121966	1.759792e-03	4.667315e-03
## SOCS5	9655	0.15054749	1.760370e-03	4.667621e-03
## ZNF829	374899	0.20451947	1.760321e-03	4.667621e-03
## LINC01114	284998	-0.56081204	1.760899e-03	4.668516e-03
## ZNF250	58500	0.13826339	1.762589e-03	4.672484e-03
## CXCL5	6374	0.87213291	1.764492e-03	4.677021e-03
## RNF44	22838	-0.13851144	1.768012e-03	4.685327e-03
## PAXIP1-DT	202781	-0.18862213	1.767881e-03	4.685327e-03
## PXDNL	137902	-0.53483310	1.775070e-03	4.703519e-03
## USP6	9098	0.99621008	1.776067e-03	4.705149e-03
## PRR13P5	440525	-0.44981397	1.776072e-03	4.705149e-03
## ACSBG2	81616	0.47604554	1.778696e-03	4.711587e-03
## LINC02294	101927062	0.50446547	1.779018e-03	4.711927e-03
## DPEP3	64180	0.81557164	1.779561e-03	4.712849e-03

## ISL1-DT	642366	1.55934938	1.781330e-03	4.717021e-03
## KLK14	43847	0.63836217	1.784536e-03	4.724996e-03
## WFIKKN2	124857	0.45618338	1.785536e-03	4.727129e-03
## MPI	4351	0.15610747	1.788897e-03	4.735511e-03
## PCDHB2	56133	0.30390833	1.791550e-03	4.742017e-03
## MIEF1	54471	-0.10866993	1.791987e-03	4.742657e-03
## NUDCD2	134492	0.13406947	1.797081e-03	4.755621e-03
## TUBD1	51174	0.14566246	1.800904e-03	4.765220e-03
## PCED1A	64773	0.16897222	1.805406e-03	4.776611e-03
## TMEM258	746	0.24930574	1.814615e-03	4.800453e-03
## DLG3-AS1	100873930	-0.65275280	1.816345e-03	4.804506e-03
## LINC00501	100820709	-0.31401483	1.818459e-03	4.809574e-03
## DNMBP-AS1	100188954	0.39246398	1.820120e-03	4.813445e-03
## FAM174C	55009	0.30254776	1.820572e-03	4.814115e-03
## IGKV1-17	28937	0.89966233	1.821160e-03	4.815147e-03
## CNOT6L	246175	-0.13864649	1.823861e-03	4.821764e-03
## SNRK-AS1	100873954	-0.40205295	1.826400e-03	4.827951e-03
## CKS2	1164	0.33912502	1.826926e-03	4.828815e-03
## ATP1A1-AS1	84852	-0.24564648	1.827422e-03	4.829601e-03
## SELP	6403	0.33432399	1.828358e-03	4.831025e-03
## PYCR1-AS1	132069525	1.01902923	1.828231e-03	4.831025e-03
## TRAPPC3L	100128327	0.37008892	1.830092e-03	4.835081e-03
## TMEM176A	55365	-0.29021120	1.831938e-03	4.839431e-03
## FLVCR2	55640	0.18959996	1.833824e-03	4.843885e-03
## GATA6	2627	-0.34773025	1.838532e-03	4.855268e-03
## TCEA2	6919	0.21397633	1.838349e-03	4.855268e-03
## WIPI2	26100	0.09074285	1.839492e-03	4.857275e-03
## TMC3	342125	1.01436988	1.841583e-03	4.862267e-03
## MTHFSD	64779	0.09039315	1.842581e-03	4.864373e-03
## MDFIC	29969	0.18933109	1.844494e-03	4.868896e-03
## UGGT1	56886	-0.14864498	1.845958e-03	4.872232e-03
## SLC5A7	60482	-0.45656025	1.847469e-03	4.875689e-03
## NOSTRIN	115677	-0.19365305	1.849895e-03	4.881031e-03
## ADRA1B	147	-0.25947634	1.849812e-03	4.881031e-03
## KANK1	23189	-0.11485160	1.850294e-03	4.881554e-03
## C9orf50	375759	-0.37566052	1.852819e-03	4.887685e-03
## PRDM6	93166	0.32413875	1.864858e-03	4.918909e-03
## PITPNC1	26207	0.15872326	1.866612e-03	4.923001e-03
## TTC27	55622	0.08823782	1.867270e-03	4.923669e-03
## RPL7	6129	0.19739209	1.867194e-03	4.923669e-03
## SLC25A28	81894	0.14001449	1.872571e-03	4.937110e-03
## NOS2	4843	-0.32171335	1.878562e-03	4.951532e-03
## KLHL2	11275	-0.11751320	1.878652e-03	4.951532e-03
## LMOD1	25802	0.43848321	1.878438e-03	4.951532e-03
## FKBP1A	2280	0.18275365	1.878949e-03	4.951778e-03
## RAB11B-AS1	100507567	-0.24031652	1.880558e-03	4.955480e-03
## CYB5R1	51706	0.19368848	1.881230e-03	4.956715e-03
## CHORDC1	26973	0.20290886	1.885001e-03	4.965572e-03
## CCNA1	8900	0.50729646	1.884825e-03	4.965572e-03
## CXCL1	2919	-0.55440208	1.885322e-03	4.965880e-03
## SDF2L1	23753	-0.31867764	1.885705e-03	4.966350e-03
## CEP72	55722	0.18972516	1.886011e-03	4.966617e-03
## RP9	6100	0.16410829	1.889594e-03	4.975516e-03
## FRG2C	100288801	-1.01158048	1.891972e-03	4.981237e-03

## DNAJC13	23317	0.13509420	1.894318e-03	4.986871e-03
## JAG1	182	-0.23241494	1.896565e-03	4.992248e-03
## PARK7	11315	0.17010957	1.896786e-03	4.992288e-03
## TTYH1	57348	-0.64783149	1.899746e-03	4.999537e-03
## LAT	27040	0.72744139	1.901276e-03	5.003022e-03
## MTNR1A	4543	-0.48391720	1.902368e-03	5.005353e-03
## DNAJA1	3301	0.12305555	1.902863e-03	5.006113e-03
## PLAA	9373	-0.07847946	1.905062e-03	5.011356e-03
## KCTD9	54793	-0.11281610	1.909861e-03	5.023438e-03
## NOL4	8715	0.37938734	1.913544e-03	5.032579e-03
## FAM50B	26240	-0.20722996	1.916015e-03	5.038534e-03
## MECR	51102	0.15464254	1.919224e-03	5.046425e-03
## GGA3	23163	0.11661343	1.919474e-03	5.046538e-03
## PCK2	5106	0.45514019	1.921544e-03	5.051431e-03
## GGCT	79017	0.18134604	1.924385e-03	5.058355e-03
## TMPRSS9	360200	1.09502563	1.926832e-03	5.064238e-03
## BICRA-AS1	106144534	-1.09347840	1.931843e-03	5.076858e-03
## NDUFA6-DT	100132273	0.17622246	1.936197e-03	5.087752e-03
## ZNF815P	401303	0.18826099	1.940143e-03	5.097532e-03
## LINC00605	100131366	-0.34202940	1.940339e-03	5.097532e-03
## GCHFR	2644	0.34794602	1.943206e-03	5.104513e-03
## TBPL1	9519	0.12588188	1.946876e-03	5.113601e-03
## ZBTB7B	51043	-0.13389306	1.950372e-03	5.122230e-03
## DOCK8	81704	-0.17981153	1.952033e-03	5.126037e-03
## NFE2L1-DT	116435298	0.36939154	1.958234e-03	5.141766e-03
## BIN1	274	0.33443098	1.962697e-03	5.152928e-03
## AK9	221264	-0.16040551	1.964292e-03	5.156558e-03
## WDPCP	51057	0.11686489	1.973890e-03	5.181194e-03
## SOCAR	105373557	0.72562523	1.974708e-03	5.182783e-03
## CEP170B	283638	-0.21320333	1.984549e-03	5.208048e-03
## COL6A4P1	344875	0.61835722	1.986611e-03	5.212897e-03
## RP9P	441212	0.22619378	1.994329e-03	5.232514e-03
## CCR5AS	102724297	0.73597029	1.994518e-03	5.232514e-03
## LDHB	3945	-0.28627963	2.003104e-03	5.254049e-03
## GPR20	2843	-0.45953186	2.003159e-03	5.254049e-03
## TGFB1	7040	0.36551436	2.010383e-03	5.272428e-03
## SCAF1	58506	-0.23686098	2.011250e-03	5.274131e-03
## ACIN1	22985	0.13662613	2.015178e-03	5.283863e-03
## C11orf86	254439	0.60475124	2.016280e-03	5.286183e-03
## LINC00265	349114	0.32058874	2.018308e-03	5.290929e-03
## LINC01142	284688	1.98106899	2.021498e-03	5.298720e-03
## SLC35G2	80723	0.27206585	2.023828e-03	5.304255e-03
## UPF2	26019	0.14580199	2.030574e-03	5.321361e-03
## CES3	23491	0.43564075	2.034626e-03	5.331406e-03
## GRIK4	2900	0.58493776	2.037840e-03	5.339250e-03
## OTUD7B	56957	-0.10017574	2.046309e-03	5.360863e-03
## ITCH	83737	-0.11017233	2.047719e-03	5.363978e-03
## ADAMTSL1	92949	0.29299996	2.048550e-03	5.364998e-03
## IPO4	79711	-0.32519782	2.048471e-03	5.364998e-03
## TTBK1	84630	-0.42394070	2.051437e-03	5.371979e-03
## ZNF726	730087	-0.27636251	2.055136e-03	5.381086e-03
## NAV2-AS2	100874014	1.04427403	2.056576e-03	5.384276e-03
## CPXM2	119587	0.29578227	2.060341e-03	5.393553e-03
## ARFGAP1	55738	0.13824600	2.061137e-03	5.395056e-03

## SHMT1	6470	-0.28143438	2.065203e-03	5.405114e-03
## AK3	50808	-0.12484510	2.065799e-03	5.406093e-03
## LEAP2	116842	0.38543818	2.067005e-03	5.408085e-03
## ECSCR	641700	0.30365426	2.066989e-03	5.408085e-03
## MAN1B1	11253	0.11000574	2.078040e-03	5.436370e-03
## BLNK	29760	-0.19235029	2.079052e-03	5.438432e-03
## CDH5	1003	0.26989911	2.080520e-03	5.441688e-03
## RNF167	26001	-0.11995604	2.080879e-03	5.442041e-03
## PSD	5662	0.27443874	2.088997e-03	5.462095e-03
## TGIF2	60436	0.09947775	2.088959e-03	5.462095e-03
## DEF8	54849	0.09536198	2.093752e-03	5.473941e-03
## UQCRC1	7384	-0.17498277	2.094071e-03	5.474185e-03
## WBP4	11193	0.10840595	2.095589e-03	5.477194e-03
## LPGAT1	9926	-0.18102525	2.095673e-03	5.477194e-03
## STX8	9482	0.17875568	2.096128e-03	5.477794e-03
## YWHAZ	7534	-0.09457994	2.097979e-03	5.482041e-03
## SIRT5	23408	-0.11565624	2.100037e-03	5.486830e-03
## STOX1	219736	-0.25342863	2.102506e-03	5.492691e-03
## PLEKHG2	64857	0.26409790	2.104193e-03	5.496506e-03
## YKT6	10652	0.10017016	2.105863e-03	5.500277e-03
## ZNF81	347344	0.21198180	2.109680e-03	5.509655e-03
## CAMK4	814	0.47676045	2.122451e-03	5.541902e-03
## IGHV1-46	28465	0.97076959	2.122484e-03	5.541902e-03
## MRGPRF	116535	0.38737276	2.122837e-03	5.542229e-03
## RSPH3	83861	-0.14735387	2.123371e-03	5.543027e-03
## MPND	84954	0.22663599	2.124259e-03	5.544750e-03
## NSUN6	221078	0.17933345	2.126164e-03	5.549126e-03
## RPS24	6229	0.21714285	2.126752e-03	5.550063e-03
## PKMP1	643586	-0.55845058	2.132305e-03	5.563958e-03
## LINC02884	105378909	0.41819920	2.134014e-03	5.567820e-03
## SCAT1	101928710	1.14717800	2.135226e-03	5.570384e-03
## WDR48	57599	0.09146421	2.140868e-03	5.584503e-03
## KIF17	57576	-0.21749781	2.142857e-03	5.589020e-03
## MAP3K7	6885	0.11260707	2.143060e-03	5.589020e-03
## ZBED1	9189	0.10427413	2.146873e-03	5.598364e-03
## KIF28P	100130097	0.80070602	2.149840e-03	5.605500e-03
## HP1BP3	50809	-0.09994204	2.151689e-03	5.609719e-03
## SNORD62B	692093	0.56125632	2.156651e-03	5.622053e-03
## TNFRSF1A	7132	-0.23879525	2.160062e-03	5.630341e-03
## NSRP1	84081	-0.11199739	2.163400e-03	5.638437e-03
## OLIG2	10215	-1.08155019	2.169965e-03	5.654942e-03
## SEC61A2	55176	-0.19644101	2.173322e-03	5.662618e-03
## USP22	23326	0.08553128	2.173377e-03	5.662618e-03
## STRA8	346673	-0.57054247	2.177993e-03	5.674035e-03
## RBM25-AS1	105370560	-0.30546060	2.180762e-03	5.680641e-03
## GPRIN2	9721	-0.39352296	2.181519e-03	5.681016e-03
## TMEM220-AS1	101101775	0.18597844	2.181553e-03	5.681016e-03
## RENO1	119545628	0.33867226	2.181607e-03	5.681016e-03
## SCGB2A1	4246	-0.47929632	2.184266e-03	5.687330e-03
## CMSS1	84319	0.14914304	2.186620e-03	5.692848e-03
## ATP6V1G1	9550	-0.14000628	2.187647e-03	5.694912e-03
## SRPRA	6734	-0.10477818	2.191594e-03	5.704576e-03
## LINC03036	125177373	0.60173884	2.193456e-03	5.708810e-03
## PRR7	80758	0.54079585	2.195033e-03	5.712304e-03

## LINC01559	283422	-1.26339647	2.197137e-03	5.717167e-03
## PRK RIP1	79706	0.11479554	2.202312e-03	5.730019e-03
## CRISPLD2	83716	0.40318546	2.202946e-03	5.730443e-03
## GTF2A1	2957	-0.12667302	2.202875e-03	5.730443e-03
## ITPKB-IT1	100506443	1.16133112	2.203969e-03	5.732489e-03
## ZNF155	7711	0.12810269	2.206388e-03	5.738168e-03
## CHMP3	51652	0.08431072	2.206644e-03	5.738218e-03
## HOOK2	29911	-0.17065467	2.210804e-03	5.748421e-03
## ZNF702P	79986	-0.24997253	2.213777e-03	5.755537e-03
## SVBP	374969	0.20757551	2.215010e-03	5.758124e-03
## ADGRE1	2015	0.52952467	2.216989e-03	5.762653e-03
## RAI1	10743	-0.19081828	2.217963e-03	5.764570e-03
## NDUFA4P1	360165	-0.38381102	2.222448e-03	5.775608e-03
## RPL13AP26	729212	0.29942056	2.224717e-03	5.780887e-03
## PIPOX	51268	0.46140274	2.226297e-03	5.784374e-03
## MED25	81857	-0.16686003	2.227196e-03	5.785473e-03
## NFE2L2	4780	0.11267450	2.227178e-03	5.785473e-03
## CYREN	78996	-0.09610764	2.227852e-03	5.786557e-03
## ALKBH2	121642	0.16203160	2.228618e-03	5.787928e-03
## C8orf88	100127983	-0.20580892	2.234618e-03	5.802890e-03
## MMP7	4316	0.49571804	2.236617e-03	5.807460e-03
## LRCH3	84859	0.10711018	2.238106e-03	5.810707e-03
## SLC14A2-AS1	101927980	0.51311281	2.238762e-03	5.811788e-03
## AFF1	4299	-0.17984643	2.241906e-03	5.819329e-03
## CEP15	57415	0.19928710	2.243420e-03	5.822637e-03
## LYPD8	646627	0.72537217	2.244456e-03	5.824703e-03
## RPS3A	6189	0.21272225	2.246520e-03	5.829438e-03
## CAPS	828	-0.26965483	2.247865e-03	5.832305e-03
## TMSB15C	122394733	0.87601490	2.251581e-03	5.841322e-03
## PSMB8	5696	0.23185754	2.251884e-03	5.841486e-03
## MSH4	4438	0.65598911	2.254179e-03	5.846814e-03
## LYSMD3	116068	-0.12465297	2.254821e-03	5.847855e-03
## PFDN4	5203	0.20139711	2.255393e-03	5.848715e-03
## MYRIP	25924	-0.22642170	2.260790e-03	5.862085e-03
## SORBS2-AS1	125177376	1.43564887	2.262729e-03	5.866487e-03
## ALDH16A1	126133	-0.27118855	2.265293e-03	5.871881e-03
## FAM89A	375061	-0.23354154	2.265202e-03	5.871881e-03
## AVP	551	-0.82418831	2.266018e-03	5.873134e-03
## IL17RE	132014	-0.25756216	2.269510e-03	5.881557e-03
## CDHR1	92211	-0.51051642	2.270377e-03	5.883176e-03
## IL6R-AS1	101928101	0.44557866	2.270624e-03	5.883189e-03
## ZNF296	162979	0.34137410	2.274069e-03	5.891487e-03
## FAM133A	286499	0.70588987	2.274695e-03	5.891854e-03
## DHRS4L2	317749	0.35518727	2.274510e-03	5.891854e-03
## XXYL1-AS1	100874528	-0.76415777	2.275863e-03	5.894251e-03
## GEN1	348654	0.23397338	2.278549e-03	5.900577e-03
## POM121L1P	25812	-0.85713245	2.282713e-03	5.910730e-03
## TTN-AS1	100506866	0.26164283	2.283147e-03	5.911224e-03
## SPMIP8	374739	-0.47055701	2.283969e-03	5.912724e-03
## RPL18AP3	390354	0.44445679	2.285219e-03	5.915329e-03
## FRK	2444	-0.21423172	2.290847e-03	5.929265e-03
## ZNF566-AS1	728752	-0.18290756	2.296356e-03	5.942891e-03
## TMA16	55319	0.11319309	2.297794e-03	5.945980e-03
## SUGCT	79783	0.33266055	2.305991e-03	5.966188e-03

## LINC01829	644838	0.36395599	2.306095e-03	5.966188e-03
## TMEM178B	100507421	0.27802392	2.307327e-03	5.968741e-03
## KCNH6	81033	-0.49024826	2.308561e-03	5.971297e-03
## C3orf20	84077	0.41084063	2.308913e-03	5.971572e-03
## BTN1A1	696	1.29108530	2.309854e-03	5.973370e-03
## DRC1	92749	0.64121339	2.310271e-03	5.973813e-03
## METTL6	131965	0.11023257	2.317084e-03	5.990793e-03
## RASGRP2	10235	0.31217681	2.321251e-03	6.000929e-03
## AADACL2	344752	1.71209978	2.322458e-03	6.003411e-03
## SPATA20	64847	0.16826085	2.323381e-03	6.004518e-03
## AGFG1	3267	-0.08934808	2.323207e-03	6.004518e-03
## POLE2	5427	0.31271116	2.324577e-03	6.006970e-03
## CUL7	9820	0.11370157	2.324961e-03	6.007324e-03
## PROK1	84432	0.76083327	2.327132e-03	6.011933e-03
## IRF2BP1	26145	-0.27162215	2.327240e-03	6.011933e-03
## TMEM158	25907	0.38884193	2.327738e-03	6.012582e-03
## MAF1	84232	0.16435733	2.329376e-03	6.016173e-03
## SNX3	8724	0.14058199	2.332643e-03	6.023969e-03
## EMID1	129080	0.24979848	2.337470e-03	6.035795e-03
## CCDC194	110806280	0.88245031	2.340187e-03	6.042168e-03
## ABCG4	64137	-0.44352518	2.342372e-03	6.047168e-03
## LINC01186	101927574	-0.47799952	2.342886e-03	6.047850e-03
## SULT1B1	27284	0.36702457	2.345831e-03	6.054168e-03
## NET1	10276	-0.19662422	2.345610e-03	6.054168e-03
## NAAA	27163	-0.19433769	2.348877e-03	6.061383e-03
## BBLN	79095	0.37571058	2.356044e-03	6.079234e-03
## RNU4-62P	106479586	1.03427193	2.360622e-03	6.090401e-03
## SPACA6-AS1	102238594	0.52987588	2.361183e-03	6.091202e-03
## FASTKD2	22868	-0.09117119	2.361471e-03	6.091297e-03
## SNCG	6623	0.29825024	2.361853e-03	6.091635e-03
## EEF1D	1936	0.22247810	2.362556e-03	6.092801e-03
## CCNJ	54619	0.16996757	2.366354e-03	6.101878e-03
## UGT2B11	10720	1.04821801	2.366577e-03	6.101878e-03
## GATA2	2624	-0.22305771	2.371912e-03	6.114984e-03
## SLC26A4	5172	-0.50873367	2.372717e-03	6.116410e-03
## FRRS1L	23732	0.61949270	2.373347e-03	6.117384e-03
## SUPT5H	6829	-0.08959583	2.379135e-03	6.131653e-03
## CPNE2	221184	0.17696088	2.384105e-03	6.143812e-03
## ISL1	3670	1.74878944	2.387039e-03	6.150720e-03
## MTHFD2P1	100287639	0.55613332	2.394607e-03	6.169566e-03
## AZIN1	51582	0.10615443	2.394995e-03	6.169911e-03
## FRG2B	441581	-1.14543347	2.395996e-03	6.171835e-03
## TGFBR3L	100507588	0.53151575	2.405548e-03	6.195784e-03
## TMEM80	283232	-0.17388041	2.410077e-03	6.206792e-03
## ENPP7P8	100421860	0.42748546	2.417946e-03	6.226397e-03
## ANKLE1	126549	0.50866171	2.426505e-03	6.247774e-03
## ATP6V1C1	528	-0.13828359	2.431626e-03	6.260298e-03
## RHBDD2	57414	-0.22424490	2.437619e-03	6.274743e-03
## PDE3A	5139	0.18296365	2.437754e-03	6.274743e-03
## CUL2	8453	0.10530750	2.441243e-03	6.283061e-03
## AGL	178	0.24807527	2.453600e-03	6.314194e-03
## UBE2B	7320	0.13376026	2.456092e-03	6.319937e-03
## EMC2	9694	-0.11513796	2.458493e-03	6.325446e-03
## CDC123	8872	0.11588801	2.459848e-03	6.328261e-03

## ERCC1	2067	0.16283238	2.462724e-03	6.334992e-03
## S100Z	170591	0.83009260	2.463423e-03	6.336119e-03
## RAB9A	9367	-0.11268157	2.464962e-03	6.339405e-03
## SLC5A8	160728	-0.48643033	2.466881e-03	6.343669e-03
## MIR23AHG	284454	0.41624686	2.468937e-03	6.348283e-03
## TFPI	7035	-0.16301897	2.471325e-03	6.353752e-03
## ODAD2P1	101060171	-0.57047057	2.473070e-03	6.357566e-03
## BCAR3	8412	-0.11417378	2.477276e-03	6.367704e-03
## UGT2A1	10941	0.71226051	2.477695e-03	6.368109e-03
## SYBU	55638	-0.40365865	2.483431e-03	6.382175e-03
## NLRP7	199713	1.45088276	2.488730e-03	6.395118e-03
## CRPPA	729920	-0.16973365	2.495180e-03	6.410337e-03
## FENDRR	400550	0.63953387	2.494945e-03	6.410337e-03
## PRKCQ-AS1	439949	-0.37132402	2.498848e-03	6.419080e-03
## ACRBP	84519	0.21339072	2.501183e-03	6.424400e-03
## COX20	116228	-0.15023938	2.503857e-03	6.430589e-03
## TOGARAM1	23116	0.14648883	2.507591e-03	6.439498e-03
## FAM157D	125775238	0.90928254	2.516344e-03	6.461294e-03
## LINC03000	105377703	0.72168204	2.520525e-03	6.471345e-03
## ARHGAP23	57636	0.22698779	2.521836e-03	6.474027e-03
## TPP2	7174	0.10863316	2.526930e-03	6.486420e-03
## GPR12	2835	1.17775515	2.528358e-03	6.489400e-03
## OTUD4	54726	0.15970428	2.530352e-03	6.493832e-03
## AKR1C2	1646	0.59587423	2.536364e-03	6.508572e-03
## METTL15	196074	-0.11513505	2.540307e-03	6.518001e-03
## OCIAD2	132299	0.27967864	2.541961e-03	6.520869e-03
## LINC01934	101927156	0.65890231	2.541819e-03	6.520869e-03
## SPATA25	128497	-0.43132841	2.542468e-03	6.521482e-03
## CNNM3	26505	-0.14559699	2.545516e-03	6.528610e-03
## SLC26A5-AS1	101927870	-0.80900763	2.546139e-03	6.529520e-03
## EWSAT1	283673	-0.36181357	2.553235e-03	6.547025e-03
## CSRP1-AS1	107985246	-0.21715814	2.558549e-03	6.559959e-03
## LINC02683	101928132	-0.95320860	2.560801e-03	6.565041e-03
## NHP2	55651	0.20660843	2.567430e-03	6.581341e-03
## PVALB	5816	-0.37772832	2.569995e-03	6.587220e-03
## CALCRL-AS1	105373786	-0.26257335	2.570995e-03	6.589090e-03
## NIPAL2	79815	0.15918609	2.574274e-03	6.596516e-03
## RPS16	6217	0.28208692	2.574436e-03	6.596516e-03
## DCAF12	25853	0.08848356	2.575082e-03	6.597478e-03
## SMARCC1	6599	0.11774213	2.575355e-03	6.597481e-03
## TRAPPC8	22878	-0.11075582	2.583998e-03	6.618924e-03
## ZZZ3	26009	0.12579302	2.589570e-03	6.632499e-03
## RPS20	6224	0.27268439	2.591320e-03	6.636280e-03
## RPL7AP50	87688	0.31331940	2.600805e-03	6.659870e-03
## CRELD1	78987	-0.13587849	2.606001e-03	6.672473e-03
## MTX2	10651	-0.12759265	2.606786e-03	6.673761e-03
## TRAF7	84231	0.13469346	2.607328e-03	6.673761e-03
## GASAL1	401472	-0.29964739	2.607322e-03	6.673761e-03
## BMP2K	55589	0.15750690	2.608131e-03	6.675113e-03
## NPRL2	10641	0.11819553	2.609135e-03	6.676979e-03
## LINC01230	102800446	-0.34612867	2.615156e-03	6.691683e-03
## PRSS2	5645	1.87390950	2.618080e-03	6.698459e-03
## TRIM3	10612	0.13475592	2.625582e-03	6.716946e-03
## EEF1A1P30	402420	0.86127361	2.626792e-03	6.719333e-03

## DDX5	1655	-0.13680482	2.628277e-03	6.722424e-03
## MRPL20-DT	116435301	0.30923034	2.630393e-03	6.727129e-03
## AQP11	282679	0.32783146	2.630796e-03	6.727451e-03
## HNRNPUL2	221092	-0.08548618	2.637473e-03	6.743815e-03
## CSTB	1476	0.24964954	2.637955e-03	6.744340e-03
## ZNF32	7580	0.16631991	2.641678e-03	6.753148e-03
## ELF2P1	100101917	1.01942100	2.645097e-03	6.761175e-03
## FGD5	152273	-0.13822586	2.651175e-03	6.775998e-03
## POLRMT	5442	-0.18595967	2.659778e-03	6.797272e-03
## ZNF557	79230	0.16196438	2.662031e-03	6.801600e-03
## MR1	3140	0.14670438	2.662012e-03	6.801600e-03
## DENND5B	160518	0.21393071	2.665274e-03	6.809169e-03
## POLR2L	5441	0.26769521	2.672092e-03	6.825872e-03
## MOXD1	26002	0.44476016	2.677959e-03	6.840139e-03
## LINC02404	105369900	-0.73731658	2.686686e-03	6.861709e-03
## CCR10	2826	0.54868704	2.703042e-03	6.902755e-03
## SLC35D1	23169	-0.18334706	2.704337e-03	6.905338e-03
## C19orf12	83636	0.16026937	2.705176e-03	6.906753e-03
## HSD11B2	3291	-0.29270927	2.711781e-03	6.922889e-03
## LINC03041	100129385	-0.53896495	2.719731e-03	6.942457e-03
## CPN1	1369	0.46026574	2.722662e-03	6.949209e-03
## BMPR1B-DT	100507012	-0.37846157	2.723233e-03	6.949935e-03
## DNAJA3	9093	-0.10528414	2.723872e-03	6.950835e-03
## EFR3A	23167	-0.11602017	2.730354e-03	6.966645e-03
## EPB41L1-AS1	100130373	0.63526153	2.731856e-03	6.969745e-03
## SLC25A22	79751	-0.19755720	2.738841e-03	6.986834e-03
## DCDC2B	149069	1.40908145	2.740725e-03	6.990906e-03
## FUBP3	8939	-0.07652619	2.746946e-03	7.005872e-03
## MIR106B	406900	0.97060309	2.747169e-03	7.005872e-03
## YIPF2	78992	-0.17020137	2.749335e-03	7.010659e-03
## THEM6	51337	-0.22039310	2.760192e-03	7.037607e-03
## FBXL21P	26223	-0.39643416	2.764143e-03	7.046941e-03
## MMP28	79148	0.33123651	2.765771e-03	7.050351e-03
## SLC17A4	10050	0.47937037	2.766190e-03	7.050679e-03
## SCOC-AS1	100129858	0.26547538	2.766584e-03	7.050945e-03
## LYPLAL1	127018	0.20843231	2.770329e-03	7.059749e-03
## NUDT3	11165	-0.09306250	2.771095e-03	7.060960e-03
## KIF9-AS1	285352	0.15536500	2.771546e-03	7.061369e-03
## PRSS27	83886	-0.34509167	2.777253e-03	7.075168e-03
## PWWP2B	170394	-0.29862084	2.778918e-03	7.078667e-03
## DNM1P46	196968	0.39639339	2.792703e-03	7.113035e-03
## LRRN4	164312	-0.47297827	2.794024e-03	7.114966e-03
## RPL37A	6168	0.26565790	2.794046e-03	7.114966e-03
## SCGB3A1	92304	-0.59846288	2.795171e-03	7.117084e-03
## MYBPC3	4607	-0.51667520	2.799160e-03	7.126495e-03
## RIOX2	84864	-0.09199486	2.801978e-03	7.132922e-03
## GUCA2B	2981	0.82033971	2.810663e-03	7.154282e-03
## B3GALT5	10317	0.56289097	2.820254e-03	7.177941e-03
## SYBU-AS1	100132813	-1.20025392	2.825605e-03	7.190808e-03
## BLOC1S1	2647	0.25628118	2.831229e-03	7.204366e-03
## ZNF14	7561	0.12608284	2.837120e-03	7.218601e-03
## CDK2AP1	8099	0.22361926	2.838431e-03	7.221181e-03
## DCAF8	50717	-0.10177309	2.838760e-03	7.221260e-03
## DYM-AS1	100129878	-0.50503772	2.848688e-03	7.245758e-03

## NSL1	25936	0.09494432	2.854565e-03	7.259946e-03
## ADARB1	104	0.19242500	2.855871e-03	7.262508e-03
## KCNJ3	3760	-0.25276479	2.865155e-03	7.285353e-03
## FGGY	55277	0.17831040	2.868009e-03	7.291850e-03
## TBL3	10607	-0.21158309	2.874163e-03	7.306730e-03
## MIR3677HG	106660606	0.29005667	2.876317e-03	7.311441e-03
## PPP2R5A	5525	-0.09758558	2.880367e-03	7.320971e-03
## ZNF747	65988	-0.09930320	2.880872e-03	7.321488e-03
## MAPRE3-AS1	100129724	0.94938638	2.881185e-03	7.321518e-03
## SORCS1	114815	-0.51403550	2.891329e-03	7.346527e-03
## TIMM8B	26521	0.23288337	2.894134e-03	7.352885e-03
## RPS2P46	125208	0.39604621	2.905916e-03	7.382047e-03
## GJB3	2707	0.73699597	2.914069e-03	7.401986e-03
## ZNF580	51157	-0.23392086	2.924576e-03	7.427897e-03
## LDHAP7	100190800	-0.88824767	2.929886e-03	7.440607e-03
## SUSD6	9766	-0.13587320	2.930557e-03	7.441533e-03
## COA8	84334	0.18171793	2.932011e-03	7.444447e-03
## TOMM70	9868	-0.09037540	2.933226e-03	7.446753e-03
## NEK2-DT	91548	0.64543917	2.934646e-03	7.449580e-03
## CYP27A1	1593	0.24975932	2.942787e-03	7.469466e-03
## PPHLN1	51535	0.08096760	2.943877e-03	7.471453e-03
## FAM111A-DT	101927204	0.15404373	2.951043e-03	7.488857e-03
## DCLRE1C	64421	0.19218760	2.952961e-03	7.492942e-03
## SSBP4	170463	0.32606551	2.958975e-03	7.507419e-03
## BTF3	689	0.16602066	2.959887e-03	7.508173e-03
## KRBOX4	55634	0.15295096	2.960199e-03	7.508173e-03
## GRAMD1A-AS1	118827804	-0.97273038	2.959922e-03	7.508173e-03
## SCPPPQ1	105377321	-1.44087741	2.964302e-03	7.517794e-03
## SERPINB12	89777	2.718777616	2.966318e-03	7.522122e-03
## LINC00680	106660612	0.21228604	2.967883e-03	7.525305e-03
## IFT70B	150737	-0.11603628	2.970808e-03	7.531937e-03
## ZFP37	7539	0.16770968	2.972664e-03	7.535856e-03
## LINC01917	101928167	-0.65800894	2.973258e-03	7.536576e-03
## CDH6	1004	-0.41621535	2.976144e-03	7.543104e-03
## CIAO2A	84191	-0.16719524	2.983661e-03	7.561368e-03
## ZNHIT3	9326	0.15065716	2.985461e-03	7.565140e-03
## GSDMD	79792	-0.18405655	2.990438e-03	7.576962e-03
## SYCE1	93426	0.59203170	2.998993e-03	7.597846e-03
## LINC02805	100505824	0.90466337	3.001737e-03	7.604003e-03
## LINC00938	400027	-0.14647633	3.002700e-03	7.605651e-03
## ASAP1-IT2	100507117	0.82818002	3.003103e-03	7.605877e-03
## ARPC1A	10552	-0.15693874	3.005234e-03	7.610483e-03
## RPL26P19	441073	0.36286397	3.005849e-03	7.611248e-03
## MPL	4352	-0.31002746	3.008759e-03	7.617029e-03
## ALG10B	144245	-0.17812567	3.008728e-03	7.617029e-03
## PDE4A	5141	0.28126311	3.009895e-03	7.619110e-03
## PXMP4	11264	0.09989195	3.011857e-03	7.623282e-03
## ITIH4	3700	0.62586549	3.013784e-03	7.627365e-03
## KDSR-DT	118827811	0.29933288	3.015129e-03	7.629975e-03
## MORC3	23515	0.13276600	3.015575e-03	7.630308e-03
## MED17	9440	0.14995691	3.019738e-03	7.640046e-03
## TRBV7-4	28594	1.42169965	3.026947e-03	7.657488e-03
## FOLH1B	219595	0.50615669	3.028537e-03	7.660714e-03
## PINK1	65018	0.15495860	3.029630e-03	7.662680e-03

## LLCFC1	135927	-1.26388236	3.031371e-03	7.666287e-03
## LINC00638	<NA>	0.25080549	3.033580e-03	7.671075e-03
## NAIAPP3	643784	0.93562903	3.039330e-03	7.684816e-03
## NOP16	51491	0.17743332	3.042024e-03	7.690826e-03
## DBX2	440097	0.66709628	3.047111e-03	7.702886e-03
## CTPS1	1503	0.14969475	3.048110e-03	7.704610e-03
## ORC3	23595	0.08344922	3.049269e-03	7.706738e-03
## CNOT4	4850	0.07080983	3.052991e-03	7.715344e-03
## CYP2W1	54905	-0.74277509	3.054136e-03	7.717434e-03
## ADI1	55256	0.24408641	3.058656e-03	7.728053e-03
## TLE4	7091	0.11974760	3.060627e-03	7.732227e-03
## DEFA3	1668	1.26125626	3.062050e-03	7.735019e-03
## APOA1	335	0.50025617	3.069536e-03	7.752316e-03
## MGAM2	93432	0.56466550	3.069407e-03	7.752316e-03
## CRELD2	79174	-0.18514469	3.071490e-03	7.756447e-03
## IGLC7	28834	1.34716845	3.072420e-03	7.757989e-03
## CDKL5	6792	-0.17067517	3.075416e-03	7.764746e-03
## EXOSC10-AS1	105376736	0.45433312	3.080116e-03	7.775804e-03
## MIF4GD-DT	100287042	-0.24281145	3.083014e-03	7.782312e-03
## AMBP	259	-0.37880800	3.089506e-03	7.797889e-03
## RBL1	5933	0.15799749	3.090031e-03	7.798406e-03
## GTF3C6P2	644563	0.63184691	3.092867e-03	7.804753e-03
## CD8B2	927	-0.60595420	3.094959e-03	7.809221e-03
## UAP1L1	91373	-0.17979890	3.095429e-03	7.809594e-03
## LINC00641	283624	-0.24142061	3.097795e-03	7.814752e-03
## UBA6	55236	0.14210561	3.100046e-03	7.818809e-03
## ATAD5	79915	0.32912120	3.099743e-03	7.818809e-03
## RALY-AS1	101926888	-0.17242040	3.100441e-03	7.818994e-03
## BCAS3-AS1	107984992	-0.53195738	3.104165e-03	7.827573e-03
## BCAR1	9564	-0.21795697	3.107483e-03	7.835125e-03
## ERP27	121506	-0.26247516	3.107864e-03	7.835274e-03
## THUMPD3-AS1	440944	0.23801204	3.109574e-03	7.838770e-03
## TSKU	25987	-0.40649103	3.110563e-03	7.840452e-03
## UNK	85451	-0.11664344	3.116012e-03	7.853371e-03
## H2AC11	8969	0.53154336	3.116728e-03	7.854361e-03
## UBE2D3-AS1	105377348	0.22913494	3.120446e-03	7.862916e-03
## NUDT5	11164	-0.09949932	3.124195e-03	7.871545e-03
## UGT1A7	54577	0.55730924	3.141322e-03	7.913879e-03
## PDGFRA	5156	0.28940958	3.141984e-03	7.914724e-03
## RSPH4A	345895	0.32359575	3.144121e-03	7.916826e-03
## SCAPER	49855	-0.12734246	3.143997e-03	7.916826e-03
## KLRC4-KLRK1	100528032	1.27266574	3.143882e-03	7.916826e-03
## LINC02341	105370177	0.67034934	3.143866e-03	7.916826e-03
## UBE2N	7334	-0.10942098	3.144725e-03	7.917526e-03
## HORMAD2	150280	-0.53222954	3.147156e-03	7.922825e-03
## CD14	929	0.38763184	3.149425e-03	7.927717e-03
## SNAPIN	23557	0.16852985	3.157055e-03	7.946100e-03
## DARS2	55157	-0.13318654	3.158374e-03	7.948596e-03
## SNHG3	8420	0.20557394	3.159831e-03	7.951439e-03
## RPS14	6208	0.27326546	3.164219e-03	7.961657e-03
## KIF16B	55614	-0.14730719	3.165425e-03	7.963867e-03
## ZFP62	643836	0.13509392	3.167946e-03	7.969386e-03
## IMMP2L	83943	-0.15155946	3.172343e-03	7.979621e-03
## GSTK1	373156	0.16378554	3.183612e-03	8.007137e-03

## CHRNA5	1138	0.37793573	3.187325e-03	8.015647e-03
## LANCL1	10314	-0.10546730	3.188092e-03	8.016744e-03
## MRPS11	64963	0.14964214	3.191050e-03	8.021749e-03
## PFDN6	10471	-0.14236279	3.190727e-03	8.021749e-03
## LRRC24	441381	-0.36472518	3.191072e-03	8.021749e-03
## CFHR3	10878	-0.75106038	3.193724e-03	8.027585e-03
## CFAP20	29105	0.09973677	3.194425e-03	8.028517e-03
## SYT8	90019	-0.65414947	3.198315e-03	8.037462e-03
## HMGCS2	3158	-0.38877086	3.204272e-03	8.051600e-03
## SENP8	123228	-0.14200016	3.213722e-03	8.074509e-03
## KIDINS220	57498	-0.13718351	3.220125e-03	8.088388e-03
## HAUS2	55142	0.09927829	3.219859e-03	8.088388e-03
## HMGN2P40	100874484	0.71918795	3.220244e-03	8.088388e-03
## ZW10	9183	0.07228572	3.227960e-03	8.106093e-03
## RPL17P7	100132742	0.32803713	3.227630e-03	8.106093e-03
## ATG14	22863	0.13659201	3.229031e-03	8.107945e-03
## FMO3	2328	0.36526738	3.232365e-03	8.115477e-03
## SNAI3-AS1	197187	0.17704592	3.239895e-03	8.133542e-03
## ARHGEF34P	728377	-0.29671079	3.241115e-03	8.135765e-03
## PRLR	5618	-0.33973029	3.241692e-03	8.136372e-03
## IER3-AS1	105379695	0.28242250	3.249846e-03	8.155996e-03
## GATD1	347862	0.12299621	3.252005e-03	8.160572e-03
## ATP5MC1	516	-0.23253562	3.255212e-03	8.167776e-03
## RIMKLA	284716	0.21201166	3.263823e-03	8.188536e-03
## IRAK1	3654	0.15175130	3.265119e-03	8.190942e-03
## CBX2	84733	0.38564008	3.272966e-03	8.209445e-03
## RPL10P6	285176	0.74138685	3.273170e-03	8.209445e-03
## ADAM9	8754	-0.18542191	3.279532e-03	8.224553e-03
## UST	10090	0.21339138	3.280768e-03	8.226802e-03
## DFFB	1677	0.20251671	3.287875e-03	8.243773e-03
## CLEC4OP	102724279	1.35528474	3.289115e-03	8.246031e-03
## AHSA1	10598	0.13253134	3.291320e-03	8.250709e-03
## PLEKHG4B	153478	-0.61829105	3.291999e-03	8.251560e-03
## S100A13	6284	0.30393780	3.301918e-03	8.275569e-03
## EPHB1	2047	0.33438607	3.303103e-03	8.277684e-03
## ITIH5	80760	0.25766243	3.308946e-03	8.291472e-03
## ZNF212	7988	0.07583969	3.313375e-03	8.301715e-03
## PLAC4	191585	0.87281047	3.315903e-03	8.307191e-03
## RXYLT1	10329	0.09732520	3.318773e-03	8.313526e-03
## DDX4	54514	0.68238071	3.325097e-03	8.327650e-03
## EPHA1-AS1	285965	0.63704639	3.324911e-03	8.327650e-03
## PFDN5	5204	0.21878793	3.327076e-03	8.331746e-03
## TMEM123	114908	-0.12731946	3.327557e-03	8.332093e-03
## PELT1	57162	-0.13402657	3.331193e-03	8.340338e-03
## LINC00839	84856	-0.32745866	3.331615e-03	8.340535e-03
## TUBG2	27175	0.17662587	3.335579e-03	8.349599e-03
## BAP1	8314	0.07286094	3.336873e-03	8.351978e-03
## RPL23AP42	647099	0.36332091	3.341659e-03	8.363094e-03
## FCGR1A	2209	0.47572376	3.342059e-03	8.363235e-03
## SMC1A	8243	-0.12994755	3.345315e-03	8.369660e-03
## LINC03002	101928304	-0.28697584	3.345182e-03	8.369660e-03
## EFCAB12	90288	0.22892278	3.349917e-03	8.380309e-03
## MED18	54797	0.11781598	3.353020e-03	8.387208e-03
## NMRAL2P	344887	0.45561090	3.355595e-03	8.392787e-03

## SLC35A3	23443	-0.16326660	3.357609e-03	8.396959e-03
## MFSD8	256471	-0.14489801	3.361507e-03	8.405844e-03
## TRPM7	54822	-0.20981061	3.368822e-03	8.423268e-03
## CUL4B	8450	0.07895866	3.370049e-03	8.425468e-03
## ASPH	444	0.13989085	3.388173e-03	8.469909e-03
## FAM149A	25854	0.20088559	3.399612e-03	8.497244e-03
## CEP104	9731	-0.10970984	3.400157e-03	8.497244e-03
## MOGAT2	80168	0.51006535	3.400020e-03	8.497244e-03
## PCDHB16	57717	-0.27619492	3.407037e-03	8.513563e-03
## STEAP3	55240	-0.25450978	3.408192e-03	8.515575e-03
## G2E3P1	100130550	-0.71258624	3.410671e-03	8.520892e-03
## MON2	23041	-0.14502934	3.411380e-03	8.521786e-03
## POLR3F	10621	-0.10017788	3.412207e-03	8.522976e-03
## REEP1	65055	0.29700455	3.413621e-03	8.525633e-03
## EIF3KP1	134505	-0.51770389	3.414538e-03	8.527047e-03
## SCAMP3	10067	-0.14320251	3.416184e-03	8.530279e-03
## CTH	1491	-0.25031138	3.416952e-03	8.531320e-03
## SERBP1	26135	-0.07022360	3.417799e-03	8.532560e-03
## CDYL2	124359	-0.12993900	3.419428e-03	8.535749e-03
## FBXO36	130888	-0.18002976	3.419953e-03	8.536182e-03
## N4BP3	23138	-0.30729767	3.422809e-03	8.542433e-03
## USP19	10869	-0.08884068	3.426067e-03	8.549687e-03
## SLC39A6	25800	-0.14195789	3.430309e-03	8.558516e-03
## ZNF837	116412	-0.34133635	3.429967e-03	8.558516e-03
## LINC01322	103695433	0.40200253	3.436414e-03	8.572868e-03
## RPP14	11102	0.12853815	3.437568e-03	8.574865e-03
## GAREM1	64762	-0.16318909	3.439777e-03	8.579496e-03
## CEBPE	1053	0.72777304	3.440990e-03	8.581641e-03
## PHKB	5257	0.09088390	3.442000e-03	8.582397e-03
## PSKH1	5681	-0.11297728	3.441856e-03	8.582397e-03
## ERN1	2081	-0.14299178	3.447673e-03	8.595660e-03
## PCDHB3	56132	-0.25410016	3.448604e-03	8.597099e-03
## TMEM248	55069	-0.07037266	3.459108e-03	8.622401e-03
## VWA3A	146177	0.56153826	3.463264e-03	8.631874e-03
## MIR133B	442890	2.44608112	3.463809e-03	8.632347e-03
## TBX6	6911	-0.25833901	3.465697e-03	8.636168e-03
## PTPN3	5774	-0.15178214	3.474861e-03	8.658050e-03
## TRBJ2-7	28622	1.71907283	3.475191e-03	8.658050e-03
## LINC02518	105377957	1.54616096	3.479410e-03	8.667673e-03
## EBP	10682	-0.24106848	3.485285e-03	8.681419e-03
## POLE4	56655	0.22381952	3.489853e-03	8.691906e-03
## COX11	1353	-0.11624023	3.495478e-03	8.705022e-03
## PHF5A	84844	0.13955570	3.497225e-03	8.706697e-03
## LRRC4B	94030	-0.47200770	3.496832e-03	8.706697e-03
## TSPAN5-DT	105377342	0.45171528	3.497057e-03	8.706697e-03
## POMT1	10585	-0.13795768	3.502678e-03	8.718485e-03
## TOP1MT	116447	0.12734223	3.502596e-03	8.718485e-03
## RSRC1	51319	-0.08262646	3.508703e-03	8.732588e-03
## STYX	6815	0.11282588	3.520386e-03	8.760768e-03
## PRKCZ-AS1	100506504	-0.28839396	3.525528e-03	8.772665e-03
## TXNDC9	10190	-0.14302812	3.531585e-03	8.786838e-03
## PDXDC1	23042	-0.11222015	3.532383e-03	8.787923e-03
## MRPL28	10573	-0.16674345	3.535891e-03	8.795750e-03
## C8orf48	157773	0.18116038	3.546929e-03	8.822305e-03

## CCDC9B	388115	0.30279248	3.551894e-03	8.833751e-03
## FLII	2314	0.14209086	3.556929e-03	8.845368e-03
## ANKRD13A	88455	-0.12557580	3.565240e-03	8.865128e-03
## BTG1	694	-0.13627017	3.566607e-03	8.867619e-03
## NQO1-DT	119139903	0.36564303	3.567439e-03	8.868782e-03
## LINC00989	100506035	0.34567072	3.568112e-03	8.869547e-03
## C1QL3	389941	0.85679434	3.571179e-03	8.876263e-03
## GNG3	2785	-0.46590820	3.571974e-03	8.877331e-03
## ATP10A	57194	-0.24635961	3.575269e-03	8.884611e-03
## ANKRD36	375248	0.42408483	3.580793e-03	8.897428e-03
## CT75	440934	0.43157165	3.588944e-03	8.916771e-03
## ADAMTS19	171019	-0.42391111	3.591527e-03	8.921489e-03
## ILVBL-AS1	118827806	0.66816147	3.591578e-03	8.921489e-03
## PARLP2	100131471	-0.21390404	3.592001e-03	8.921629e-03
## RNU1-72P	106481955	-1.16568992	3.594577e-03	8.927113e-03
## EPB41L4A	64097	-0.12258341	3.611397e-03	8.967971e-03
## LIPH	200879	-0.30844850	3.615276e-03	8.975822e-03
## PNMA3	29944	-0.37676231	3.615298e-03	8.975822e-03
## FAF2	23197	-0.07417538	3.620188e-03	8.986127e-03
## PKD1P1	339044	1.01703320	3.620186e-03	8.986127e-03
## DST-AS1	101930010	0.72332474	3.622810e-03	8.990947e-03
## LINC01963	150967	-0.18078145	3.622870e-03	8.990947e-03
## RAB30-DT	100506233	-0.19999516	3.627032e-03	9.000359e-03
## TCF24	100129654	-0.49871378	3.627809e-03	9.001367e-03
## CWC22	57703	0.12000138	3.646461e-03	9.046034e-03
## TRAPPC9	83696	-0.15054040	3.646556e-03	9.046034e-03
## EOLA2	541578	0.11744524	3.650318e-03	9.054442e-03
## LINC01515	101928913	0.21327839	3.664967e-03	9.089852e-03
## ABHD17B	51104	-0.14315845	3.668421e-03	9.097488e-03
## WASHC5	9897	0.07829500	3.679057e-03	9.122936e-03
## FLVCR1-DT	642946	0.31949039	3.683661e-03	9.133419e-03
## DMKN	93099	-0.24068667	3.688412e-03	9.144267e-03
## MAGI3	260425	-0.14472628	3.689046e-03	9.144905e-03
## AP1S1	1174	0.21291153	3.691379e-03	9.149754e-03
## ZSCAN29	146050	0.13240400	3.699676e-03	9.169386e-03
## ADAM10	102	-0.16084532	3.705331e-03	9.182465e-03
## U2AF2	11338	-0.08555508	3.732357e-03	9.248497e-03
## AIFM3	150209	0.29915341	3.744974e-03	9.278815e-03
## COL6A4P2	646300	0.61378096	3.750071e-03	9.290495e-03
## THAP11	57215	0.14140269	3.755548e-03	9.303116e-03
## MTCO1P42	107075283	-0.52127242	3.761972e-03	9.318080e-03
## LRP2	4036	-0.35379004	3.764929e-03	9.324453e-03
## RNF157-AS1	100507218	-0.30730609	3.769005e-03	9.333598e-03
## RYR3-DT	101928134	-0.51806836	3.774098e-03	9.345258e-03
## GABRA4	2557	-0.52249555	3.774991e-03	9.346515e-03
## MAP2	4133	-0.21248620	3.782694e-03	9.364634e-03
## REL	5966	0.25492978	3.783421e-03	9.365479e-03
## ITPR3	3710	-0.30458635	3.783848e-03	9.365583e-03
## GRB10	2887	0.19141369	3.789295e-03	9.378111e-03
## HOXA2	3199	-0.29421043	3.795536e-03	9.392598e-03
## RASA4DP	100133005	0.56550685	3.798307e-03	9.398498e-03
## TOX3	27324	-0.22488857	3.800301e-03	9.402475e-03
## KIN	22944	0.13555211	3.804162e-03	9.411070e-03
## LRCH1	23143	-0.09985273	3.813622e-03	9.433512e-03

## OS9	10956	-0.14686318	3.816326e-03	9.439241e-03
## SCAND3	114821	-0.25425830	3.819093e-03	9.445124e-03
## AHSP	51327	1.16646230	3.820492e-03	9.447621e-03
## FBXO4	26272	0.13888077	3.827344e-03	9.463603e-03
## UTP6	55813	0.07753446	3.833829e-03	9.478673e-03
## FARSA	2193	-0.14754139	3.841887e-03	9.497628e-03
## RPL31P49	100129882	0.83300534	3.846486e-03	9.508030e-03
## GLIS3-AS1	84850	-0.81814875	3.852068e-03	9.520862e-03
## LINC01960	100128905	0.79040598	3.858203e-03	9.535055e-03
## B9D1	27077	-0.15189898	3.858720e-03	9.535364e-03
## LRFN3	79414	-0.26502430	3.861755e-03	9.541893e-03
## TSPEAR-AS2	114043	0.54659770	3.864353e-03	9.547341e-03
## DNAJB12	54788	-0.09513833	3.866395e-03	9.551414e-03
## C1orf21-DT	118827814	-0.76663307	3.876516e-03	9.575444e-03
## LINC02324	100128233	1.06609712	3.879500e-03	9.581841e-03
## COPA	1314	-0.09891208	3.881553e-03	9.585938e-03
## IQCD	115811	-0.17343305	3.883643e-03	9.590123e-03
## LIX1	167410	0.40800265	3.892560e-03	9.611165e-03
## RBMLX2	27288	-0.73787514	3.895858e-03	9.618331e-03
## ZNF83	55769	0.23987908	3.898211e-03	9.623163e-03
## TRAPPC2L	51693	0.17529032	3.902277e-03	9.632224e-03
## CCNG1	900	0.15816460	3.908106e-03	9.645631e-03
## RNF141	50862	-0.10289249	3.913188e-03	9.657193e-03
## CASTOR2	729438	0.21257646	3.913741e-03	9.657577e-03
## C11orf58	10944	-0.06587084	3.914363e-03	9.658132e-03
## LINC02828	105374978	1.08766997	3.916510e-03	9.662447e-03
## IL12A-AS1	101928376	1.12654289	3.925596e-03	9.683881e-03
## HLA-DQB2	3120	0.52579575	3.927098e-03	9.686603e-03
## SFPQ	6421	-0.10742421	3.929706e-03	9.692052e-03
## DMRT2	10655	-0.29109308	3.931446e-03	9.695360e-03
## STX7	8417	0.11335922	3.936209e-03	9.703165e-03
## CECR2	27443	0.30601192	3.935474e-03	9.703165e-03
## BBS5	129880	0.13447243	3.935928e-03	9.703165e-03
## RYK	6259	0.10167722	3.936029e-03	9.703165e-03
## LINC02846	105376323	-0.33887453	3.937459e-03	9.705262e-03
## PSMD8	5714	0.15067473	3.939658e-03	9.709699e-03
## ASB9P1	728619	-0.80854074	3.940361e-03	9.710447e-03
## SMIM32	389332	-0.36572038	3.944980e-03	9.720842e-03
## ARHGAP24	83478	-0.14281999	3.949030e-03	9.729838e-03
## SLC5A1	6523	-0.54851890	3.949887e-03	9.730962e-03
## AHI1-DT	100131814	-0.20841522	3.952915e-03	9.737435e-03
## ZNF740	283337	0.08944120	3.957686e-03	9.748200e-03
## CLEC4D	338339	0.64215728	3.959128e-03	9.749775e-03
## PTP4A3	11156	0.39578426	3.959032e-03	9.749775e-03
## HGH1	51236	0.15538053	3.960843e-03	9.753008e-03
## CELF1	10658	-0.09254279	3.967207e-03	9.767690e-03
## SS18L2	51188	0.18267374	3.973105e-03	9.781220e-03
## CCL26	10344	0.55236587	3.975425e-03	9.785940e-03
## RACGAP1	29127	0.14246824	3.983824e-03	9.805623e-03
## REPIN1	29803	-0.15205976	3.986820e-03	9.812002e-03
## SETX	23064	0.14048314	3.988570e-03	9.815315e-03
## BARX1	56033	1.63277048	3.997597e-03	9.836535e-03
## LRRFIP1	9208	-0.15008233	4.000996e-03	9.843901e-03
## IGF2BP2	10644	0.14689421	4.004590e-03	9.851746e-03

## SCCPDH	51097	-0.14316525	4.010311e-03	9.864820e-03
## RPSA	3921	0.22128919	4.019082e-03	9.885177e-03
## CACNA1C-AS1	100652846	0.60272899	4.019400e-03	9.885177e-03
## USP10	9100	-0.07423698	4.022180e-03	9.891013e-03
## LY75	4065	-0.24398180	4.024688e-03	9.896179e-03
## FRG2EP	647476	-1.09610476	4.028305e-03	9.904071e-03
## SYT5	6861	1.11978964	4.032126e-03	9.912462e-03
## TMEM117	84216	0.16600023	4.036586e-03	9.922423e-03
## DCTN6-DT	118597835	0.33066576	4.039613e-03	9.928859e-03
## DNAAF10	116143	0.09319670	4.044615e-03	9.940148e-03
## RSPRY1	89970	0.08063441	4.049749e-03	9.951098e-03
## PAQR8	85315	-0.35169379	4.050299e-03	9.951098e-03
## SH3D21	79729	-0.29726848	4.050258e-03	9.951098e-03
## SETBP1	26040	-0.16000702	4.056184e-03	9.964551e-03
## PEX12	5193	0.09979297	4.063168e-03	9.980697e-03
## ATXN7L3	56970	0.09061844	4.069936e-03	9.996312e-03
## TOB2P1	222699	-0.37051204	4.074105e-03	1.000554e-02
## AP2M1	1173	0.11482013	4.081192e-03	1.002193e-02
## LINC02288	283575	-0.64010086	4.088569e-03	1.003903e-02
## JDP2-AS1	101928377	0.25906429	4.092824e-03	1.004847e-02
## SH3GLB2	56904	-0.17142324	4.094068e-03	1.005050e-02
## TMEM161A	54929	-0.20354180	4.097246e-03	1.005729e-02
## CNTNAP2	26047	0.38601597	4.097696e-03	1.005738e-02
## MESTIT1	317751	0.33739211	4.113539e-03	1.009524e-02
## WBP1LP2	100506330	0.33745004	4.117790e-03	1.010466e-02
## ZGRF1	55345	0.29858774	4.122432e-03	1.011503e-02
## ZC3H8	84524	0.21798830	4.124575e-03	1.011926e-02
## RPSAP70	105377595	0.23471830	4.126071e-03	1.012191e-02
## IGLV3-16	28799	1.60111251	4.132375e-03	1.013635e-02
## GPN1	11321	0.10855082	4.146257e-03	1.016938e-02
## EBI3	10148	0.38610135	4.149720e-03	1.017621e-02
## ST8SIA6	338596	-0.44461722	4.149881e-03	1.017621e-02
## SH3RF3	344558	0.18839627	4.150428e-03	1.017653e-02
## RETN	56729	0.95763865	4.151290e-03	1.017659e-02
## TYRO3P	7302	0.86381105	4.151270e-03	1.017659e-02
## RPL3P2	116935	0.31873822	4.158062e-03	1.019216e-02
## KITLG	4254	-0.23085009	4.164375e-03	1.020660e-02
## DDC	1644	0.39935259	4.173547e-03	1.022805e-02
## LINC00847	729678	0.12063447	4.179002e-03	1.024039e-02
## MCRS1	10445	0.10436640	4.182173e-03	1.024712e-02
## GRK6P1	2871	0.84827825	4.187883e-03	1.026008e-02
## LINC03099	101927476	0.52209484	4.188500e-03	1.026056e-02
## COMT	1312	-0.18736179	4.189903e-03	1.026296e-02
## LINC02484	105374394	-0.77186874	4.190390e-03	1.026312e-02
## ZNF441	126068	0.18193525	4.197446e-03	1.027937e-02
## DPY19L2P2	349152	0.25616636	4.199894e-03	1.028432e-02
## C4orf50	389197	0.67151596	4.210651e-03	1.030962e-02
## ZCCHC10	54819	0.12096712	4.216434e-03	1.032275e-02
## LINC02207	101927153	-0.72931474	4.226108e-03	1.034539e-02
## ASB16-AS1	339201	0.16309832	4.228609e-03	1.035047e-02
## SNAPC2	6618	0.22272854	4.232637e-03	1.035928e-02
## GSTA7P	730152	0.53156910	4.233479e-03	1.036030e-02
## MXI1	4601	-0.11679524	4.235140e-03	1.036332e-02
## RAB2A	5862	-0.08321632	4.237249e-03	1.036744e-02

## NUP50-DT	100506714	-0.18820080	4.244851e-03	1.038499e-02
## SNX22	79856	-0.27056757	4.245773e-03	1.038612e-02
## LINC02352	102725022	-0.27821461	4.246167e-03	1.038612e-02
## RAB33A	9363	0.50947779	4.259085e-03	1.041630e-02
## EGLN1	54583	-0.28008273	4.259363e-03	1.041630e-02
## TLR9	54106	0.98950094	4.261462e-03	1.042038e-02
## SORL1-AS1	105369536	0.87579425	4.264133e-03	1.042587e-02
## ASAH2B	653308	-0.16741006	4.276714e-03	1.045558e-02
## INAFM2	100505573	-0.14665663	4.279166e-03	1.046052e-02
## CXorf58	254158	-0.39529400	4.283608e-03	1.047032e-02
## CASP10	843	0.11574061	4.286967e-03	1.047748e-02
## ZNF541	84215	0.36718349	4.288910e-03	1.048117e-02
## RABL6	55684	0.15282060	4.294055e-03	1.049269e-02
## LRRC8E	80131	-0.19575047	4.299486e-03	1.050491e-02
## DANCR	57291	-0.21855475	4.307812e-03	1.052419e-02
## TMEM238	388564	-0.43153459	4.309704e-03	1.052776e-02
## SFTPC	6440	-1.39219076	4.322036e-03	1.055682e-02
## ODR4	54953	-0.14470740	4.326032e-03	1.056552e-02
## NKPD1	284353	0.69420254	4.330202e-03	1.057464e-02
## PAFAH1B3	5050	-0.23536837	4.332445e-03	1.057905e-02
## APOC2	344	0.70654002	4.338838e-03	1.059360e-02
## TAT-AS1	100132529	-0.44793244	4.344429e-03	1.060619e-02
## LINC01111	101926978	-0.90937219	4.347305e-03	1.061214e-02
## ATP2A2	488	0.20688254	4.351724e-03	1.062186e-02
## RHPN1	114822	-0.26287245	4.361366e-03	1.064326e-02
## GPR52	9293	1.27650653	4.361003e-03	1.064326e-02
## ZBTB33	10009	0.11756277	4.362504e-03	1.064497e-02
## EIF2B5	8893	-0.06484511	4.370953e-03	1.066451e-02
## NCLN	56926	-0.20722119	4.378081e-03	1.068083e-02
## FAM86B1	85002	-0.22724904	4.381432e-03	1.068793e-02
## KIF3B	9371	-0.13502015	4.383197e-03	1.069117e-02
## LINC01031	101929184	-0.36948598	4.386511e-03	1.069817e-02
## TMEM11	8834	0.17635582	4.387057e-03	1.069843e-02
## DTWD2	285605	-0.15219192	4.388080e-03	1.069985e-02
## MAP4K3	8491	-0.14453043	4.392373e-03	1.070924e-02
## NUCKS1	64710	-0.09634018	4.394402e-03	1.071233e-02
## UQCRH	7388	-0.22089789	4.394520e-03	1.071233e-02
## LINC00323	284835	-0.47686048	4.401068e-03	1.072722e-02
## SELENOO-AS1	105373095	-0.45226192	4.410912e-03	1.075013e-02
## TMC5	79838	-0.38483491	4.419849e-03	1.077083e-02
## FMO1	2326	0.39909368	4.422282e-03	1.077568e-02
## LINC02419	105370078	-0.80258860	4.423861e-03	1.077845e-02
## INSYN2B	100131897	-0.35093405	4.425167e-03	1.078055e-02
## MRPS36	<NA>	-0.20175043	4.427305e-03	1.078468e-02
## LYPLA2	11313	-0.16772764	4.435137e-03	1.080267e-02
## JAK1	3716	-0.12750108	4.440030e-03	1.081351e-02
## PARK7P1	100422296	0.80841813	4.448256e-03	1.083246e-02
## DDX31	64794	-0.10582066	4.463365e-03	1.086816e-02
## NCKAP5	344148	-0.24589944	4.464481e-03	1.086979e-02
## MMP21	118856	0.51946669	4.478293e-03	1.090232e-02
## EPHX4	253152	0.35921299	4.493584e-03	1.093736e-02
## TSPAN19	144448	-0.53615226	4.493320e-03	1.093736e-02
## ZYG11A	440590	0.42213816	4.495921e-03	1.094195e-02
## MKNK1-AS1	100507423	-0.54331417	4.496934e-03	1.094280e-02

## LINC02019	107986085	0.31927198	4.497169e-03	1.094280e-02
## DCAF17	80067	-0.12995005	4.502161e-03	1.095385e-02
## NSD1	64324	0.13825470	4.511252e-03	1.097486e-02
## RPL38	6169	0.26062208	4.520448e-03	1.099614e-02
## TMT1A	25840	-0.19253061	4.525920e-03	1.100835e-02
## PRDM2	7799	0.13552084	4.529639e-03	1.101629e-02
## ZNF579	163033	-0.29308531	4.530663e-03	1.101768e-02
## TRGV5	6978	0.70121295	4.536628e-03	1.103108e-02
## RBM33-DT	100506302	-0.26459870	4.538363e-03	1.103419e-02
## LPCAT1	79888	0.19539334	4.550764e-03	1.106324e-02
## PNKP	11284	-0.17492183	4.553324e-03	1.106725e-02
## SLFN13	146857	0.26837562	4.552902e-03	1.106725e-02
## CFAP57	149465	-0.25939810	4.554335e-03	1.106860e-02
## ZNF7	7553	0.12662825	4.557827e-03	1.107597e-02
## COL22A1	169044	0.42314762	4.565928e-03	1.109455e-02
## TERF2IP	54386	-0.07203241	4.577332e-03	1.112115e-02
## USP46	64854	-0.11255555	4.578855e-03	1.112374e-02
## DPY19L2P3	442524	-0.29316618	4.603185e-03	1.118173e-02
## OXR1-AS1	105375700	0.63970233	4.604511e-03	1.118271e-02
## SH3GL1P1	6458	0.42909948	4.604474e-03	1.118271e-02
## ABALON	103021294	-0.53395056	4.610606e-03	1.119640e-02
## UGT2A3P7	100422023	1.02241395	4.624404e-03	1.122878e-02
## ABHD17AP5	91219	1.34448466	4.625950e-03	1.123141e-02
## TEX38	374973	-0.48777982	4.627363e-03	1.123372e-02
## DBT	1629	-0.17994248	4.628134e-03	1.123393e-02
## CDKN2AIP	55602	-0.11988062	4.628374e-03	1.123393e-02
## WWC2	80014	-0.16466027	4.629396e-03	1.123529e-02
## PRKCE	5581	-0.20737227	4.632745e-03	1.124230e-02
## PSMD2	5708	0.09847373	4.635422e-03	1.124767e-02
## DMRTA1	63951	0.20216754	4.640052e-03	1.125778e-02
## NDUFS2	4720	-0.13118901	4.643534e-03	1.126510e-02
## CLIC6	54102	0.30586329	4.644795e-03	1.126704e-02
## LINC00862	554279	0.46835087	4.650832e-03	1.128055e-02
## SLC25A38	54977	0.11070553	4.654165e-03	1.128751e-02
## FAM133B	257415	0.13826913	4.662421e-03	1.130641e-02
## XAB2	56949	-0.12620525	4.665348e-03	1.131238e-02
## GOLGA7	51125	0.10111898	4.665943e-03	1.131269e-02
## LINC02870	170393	0.83498616	4.673108e-03	1.132893e-02
## ASS1P11	340274	0.93311646	4.673629e-03	1.132906e-02
## ENTPD1-AS1	728558	0.17499992	4.684302e-03	1.135380e-02
## COX7B	1349	-0.21604709	4.688132e-03	1.136195e-02
## ABCC6P2	730013	0.33567327	4.695094e-03	1.137769e-02
## RPS19BP1	91582	0.20886940	4.698311e-03	1.138435e-02
## RBPM2S2	348093	-0.22793593	4.707257e-03	1.140489e-02
## CINP	51550	0.12092427	4.711285e-03	1.141351e-02
## PARAIL	101929709	0.24264807	4.714758e-03	1.142079e-02
## LINC02709	440028	0.32657474	4.718919e-03	1.142973e-02
## NCBP2-AS1	100874001	0.94704653	4.726379e-03	1.144666e-02
## PUS10	150962	0.16514188	4.727809e-03	1.144804e-02
## NDUFB1P1	100190952	-0.72114668	4.727893e-03	1.144804e-02
## MARK4	57787	-0.12025334	4.730154e-03	1.145237e-02
## ID2	3398	-0.19575782	4.737525e-03	1.146908e-02
## RTF1	23168	0.07662657	4.741855e-03	1.147842e-02
## ZNF816	125893	0.14696412	4.742675e-03	1.147926e-02

## WDR89	112840	-0.09331205	4.745265e-03	1.148438e-02
## HEATR1	55127	0.10806512	4.748430e-03	1.149090e-02
## GNB3	2784	0.46303009	4.750186e-03	1.149316e-02
## HEXA	3073	0.10154278	4.750309e-03	1.149316e-02
## CTDP1	9150	-0.13318955	4.773853e-03	1.154897e-02
## FBXO28	23219	0.11738030	4.776707e-03	1.155472e-02
## RNF217	154214	0.18606106	4.779646e-03	1.156068e-02
## TYMP	1890	0.41302103	4.784069e-03	1.157023e-02
## KRT18P31	646723	0.65757793	4.784872e-03	1.157102e-02
## CNP	1267	-0.16772395	4.785670e-03	1.157180e-02
## VDR	7421	-0.28861320	4.797338e-03	1.159872e-02
## THSD4	79875	-0.26487758	4.797757e-03	1.159872e-02
## DEDD	9191	0.08738672	4.809558e-03	1.162572e-02
## LINC02149	101929454	-0.43694023	4.809886e-03	1.162572e-02
## ELOF1	84337	0.17331529	4.813082e-03	1.163215e-02
## CSDC2	27254	-0.31553828	4.813502e-03	1.163215e-02
## DISP2	85455	-0.51089419	4.820773e-03	1.164856e-02
## PPP3R1	5534	0.11726659	4.822507e-03	1.165159e-02
## POLR3G	10622	0.21282741	4.823600e-03	1.165308e-02
## CDIPTOSP	440356	-0.53145146	4.824137e-03	1.165322e-02
## SNORA3B	677826	0.56605552	4.832758e-03	1.167288e-02
## TBC1D16	125058	-0.21024988	4.835146e-03	1.167749e-02
## NBPF19	101060226	0.89120585	4.839903e-03	1.168781e-02
## TSPAN31	6302	-0.11872336	4.841962e-03	1.169162e-02
## MIR181A1HG	100131234	1.04860388	4.845723e-03	1.169954e-02
## LINC02061	105374714	0.54294424	4.847509e-03	1.170269e-02
## SLITRK2	84631	-0.31902024	4.849091e-03	1.170535e-02
## TAFA5	25817	-0.35976900	4.850017e-03	1.170642e-02
## ERMN	57471	0.52048452	4.852932e-03	1.171230e-02
## PKIB	5570	0.23512091	4.853648e-03	1.171286e-02
## LINC02538	401286	-0.44052502	4.856755e-03	1.171919e-02
## NRP1	8829	-0.23159692	4.861273e-03	1.172777e-02
## COBL	23242	-0.16253360	4.861163e-03	1.172777e-02
## TULP3P1	100128017	-0.86595533	4.863228e-03	1.173132e-02
## CDC7	8317	0.33263780	4.877208e-03	1.176387e-02
## LINC00649	100506334	0.26006494	4.888371e-03	1.178963e-02
## CLXN	79645	0.43592219	4.889200e-03	1.178972e-02
## SENP2	59343	0.09571320	4.889378e-03	1.178972e-02
## NFYA	4800	0.10395196	4.891714e-03	1.179301e-02
## CMTM6	54918	-0.10281256	4.891305e-03	1.179301e-02
## TRIM73	375593	0.67301647	4.901296e-03	1.181494e-02
## PEX11A	8800	-0.13724112	4.926172e-03	1.187373e-02
## ATP5MG	10632	-0.20116884	4.931078e-03	1.188437e-02
## PAM16	51025	0.26486581	4.933392e-03	1.188877e-02
## TMEM204	79652	-0.23633264	4.936557e-03	1.189522e-02
## CDH17	1015	0.39130038	4.939358e-03	1.190079e-02
## PUS1-AS1	107984455	-0.45489988	4.948844e-03	1.192246e-02
## H3-3A-DT	118568813	0.41002405	4.950408e-03	1.192505e-02
## MKKS	8195	-0.11664498	4.951828e-03	1.192610e-02
## NIPSNAP1	8508	0.21384035	4.951642e-03	1.192610e-02
## MSLN	10232	0.48668748	4.977349e-03	1.198638e-02
## ZNF852	285346	0.22578038	4.980466e-03	1.199270e-02
## MAPK8IP3-AS1	101929480	-0.32185991	4.984384e-03	1.200094e-02
## EN2	2020	0.77233372	4.987591e-03	1.200748e-02

## POU2F1	5451	-0.13932805	4.990383e-03	1.201301e-02
## LGALS4	3960	-0.67901621	4.992592e-03	1.201713e-02
## AIRE	326	0.55903427	4.993257e-03	1.201754e-02
## MOGS	7841	-0.11386609	5.006249e-03	1.204762e-02
## DSC1	1823	-0.74760661	5.009852e-03	1.205510e-02
## PRDM11	56981	-0.12884372	5.010765e-03	1.205610e-02
## PTGS2	5743	-0.32326588	5.011676e-03	1.205710e-02
## HFM1	164045	-0.42246105	5.013114e-03	1.205936e-02
## ANGPT4	51378	-0.60658661	5.013682e-03	1.205953e-02
## ABCB11	8647	0.96536899	5.021803e-03	1.207668e-02
## CFL1P1	142913	0.34847543	5.021434e-03	1.207668e-02
## SPRY3	10251	0.15688967	5.034318e-03	1.210558e-02
## GLRB	2743	-0.23300238	5.035215e-03	1.210654e-02
## M1AP	130951	-0.36582204	5.047640e-03	1.213521e-02
## JHY	79864	0.17354542	5.055655e-03	1.215328e-02
## FRMD1	79981	0.35749347	5.058225e-03	1.215825e-02
## CD99P1	401577	0.19174435	5.067109e-03	1.217840e-02
## RAMP3	10268	-0.17783091	5.068596e-03	1.218077e-02
## GRM2	2912	0.39108352	5.076176e-03	1.219778e-02
## CNGB1	1258	0.67491003	5.078879e-03	1.220307e-02
## CCDC9	26093	-0.15511078	5.079522e-03	1.220341e-02
## MRFAP1	93621	-0.10543388	5.080159e-03	1.220373e-02
## MCAM	4162	0.34596647	5.082743e-03	1.220873e-02
## STX3	6809	0.20231376	5.087681e-03	1.221939e-02
## CYP2B7P	1556	0.56738168	5.098013e-03	1.224299e-02
## COMMD7	149951	0.14862322	5.099458e-03	1.224525e-02
## HHIPL2	79802	0.86146503	5.111601e-03	1.227320e-02
## KCNQ1OT1	10984	0.37724382	5.125672e-03	1.230577e-02
## ARHGAP42	143872	-0.14822567	5.139923e-03	1.233876e-02
## DLGAP1-AS1	649446	-0.20248008	5.142975e-03	1.234487e-02
## DDX27	55661	-0.05988286	5.147121e-03	1.235360e-02
## ZNF575	284346	0.23800723	5.147789e-03	1.235398e-02
## POU2AF3	120376	-0.20734421	5.149378e-03	1.235592e-02
## LINC02897	388759	-0.30067945	5.149612e-03	1.235592e-02
## PTK2B	2185	0.10714003	5.160523e-03	1.238087e-02
## SRD5A1	6715	-0.12004383	5.167342e-03	1.239601e-02
## ABCC2	1244	0.35441442	5.172463e-03	1.240707e-02
## GHRL	51738	0.36690999	5.179423e-03	1.242204e-02
## U2AF1L4	199746	-0.26477430	5.179727e-03	1.242204e-02
## RMST	196475	0.42882029	5.181260e-03	1.242449e-02
## UBE2M	9040	-0.15881315	5.198849e-03	1.246544e-02
## MOB1B	92597	-0.19159358	5.212547e-03	1.249705e-02
## RICTOR	253260	-0.18328676	5.214932e-03	1.250030e-02
## ACTA2-AS1	100132116	0.59172728	5.214911e-03	1.250030e-02
## KLF1	10661	1.01375278	5.219399e-03	1.250978e-02
## NPIPBP11	728888	0.34037941	5.228701e-03	1.253084e-02
## SAMD14	201191	0.21849497	5.241529e-03	1.256034e-02
## BTNL9	153579	-0.31829778	5.251412e-03	1.258278e-02
## TNFRSF19	55504	0.18301682	5.253235e-03	1.258591e-02
## OXA1L	5018	0.11831480	5.253994e-03	1.258648e-02
## PHF2	5253	0.13165648	5.254812e-03	1.258720e-02
## LIPE-AS1	100996307	0.27333770	5.259669e-03	1.259760e-02
## FRS3	10817	0.18736109	5.270131e-03	1.262141e-02
## ASS1P9	454	0.51537992	5.290287e-03	1.266839e-02

## LINC01956	124905956	1.64179426	5.290792e-03	1.266839e-02
## USP6NL	9712	-0.08600757	5.293903e-03	1.267460e-02
## CARMIL3	90668	-0.27619854	5.313635e-03	1.272058e-02
## SMIM10L2A	399668	0.20238346	5.324641e-03	1.274568e-02
## HHIP	64399	0.31434391	5.325359e-03	1.274614e-02
## RPL23AP32	56969	0.83827467	5.325894e-03	1.274616e-02
## PPFIA1	8500	-0.09594801	5.326636e-03	1.274669e-02
## SDR42E1	93517	-0.17456063	5.339131e-03	1.277533e-02
## SMARCD1	6602	-0.06809531	5.346271e-03	1.279115e-02
## SCRN1	9805	-0.15918294	5.354728e-03	1.281012e-02
## PCGF3	10336	0.16007055	5.357742e-03	1.281607e-02
## LAMTOR3	8649	-0.09914885	5.359412e-03	1.281754e-02
## PCDHA4	56144	-0.32464869	5.359130e-03	1.281754e-02
## GGT5	2687	0.33698370	5.371579e-03	1.284538e-02
## PPCDC	60490	0.12582386	5.374286e-03	1.285059e-02
## PLAG1	5324	-0.24922502	5.379059e-03	1.285947e-02
## ZNF502	91392	0.15069999	5.378959e-03	1.285947e-02
## LINC01239	441389	0.40705215	5.381297e-03	1.286356e-02
## GPC4	2239	-0.17766426	5.411995e-03	1.293566e-02
## EFNB3	1949	0.34295513	5.414438e-03	1.294023e-02
## ZNF607	84775	0.10076177	5.419735e-03	1.295057e-02
## TUBBP9	442210	0.58708150	5.419832e-03	1.295057e-02
## RNF32-AS1	101927858	-0.40265252	5.421552e-03	1.295341e-02
## AATF	26574	-0.10516362	5.430801e-03	1.297423e-02
## CEP170P1	645455	1.01085701	5.432223e-03	1.297635e-02
## EMP2	2013	0.21890521	5.433119e-03	1.297722e-02
## WT1	7490	-0.29712604	5.435975e-03	1.298276e-02
## CD44-DT	100507144	0.92246303	5.441449e-03	1.299456e-02
## MTMR9LP	339483	0.38725330	5.442098e-03	1.299483e-02
## PLEKHM1	9842	0.11807828	5.445780e-03	1.300235e-02
## FGF10-AS1	101927075	0.91576562	5.467671e-03	1.305333e-02
## RPL39P5	553117	-1.02666014	5.471626e-03	1.306149e-02
## UBXN2B	137886	-0.11716579	5.472377e-03	1.306200e-02
## FTCD	10841	0.43118371	5.481641e-03	1.308283e-02
## TOMM40L	84134	-0.11359100	5.484674e-03	1.308878e-02
## MGAT4C	25834	0.38804060	5.497126e-03	1.311721e-02
## SCAF4	57466	-0.08072915	5.502749e-03	1.312934e-02
## DEFB132	400830	0.65742652	5.504413e-03	1.313202e-02
## NUP107	57122	0.09128959	5.505357e-03	1.313298e-02
## TMEM246-AS1	101928470	0.39822316	5.509684e-03	1.314201e-02
## PDE4DIPP7	102723955	-0.84336455	5.513810e-03	1.315056e-02
## PFKP-DT	101927824	-0.31797353	5.526831e-03	1.318033e-02
## CMC1	152100	-0.18505989	5.531076e-03	1.318915e-02
## TFF1	7031	-1.57273450	5.539480e-03	1.320790e-02
## MTHFS	10588	-0.25348205	5.542584e-03	1.321400e-02
## ZBTB8B	728116	0.37619450	5.543228e-03	1.321424e-02
## ZFP1	162239	0.10445063	5.546957e-03	1.322183e-02
## SCN8A	6334	0.30761850	5.549759e-03	1.322722e-02
## GJB2	2706	-0.30545440	5.561761e-03	1.325452e-02
## F10	2159	0.35045322	5.575629e-03	1.328627e-02
## GOS2	50486	0.32700417	5.591441e-03	1.332264e-02
## FREM2	341640	-0.25372364	5.610337e-03	1.336504e-02
## LINC02732	105369486	0.44573703	5.610252e-03	1.336504e-02
## AATBC	284837	0.47807610	5.611534e-03	1.336658e-02

## RABL3	285282	-0.08766564	5.619786e-03	1.338493e-02
## OTUD6B	51633	-0.13857183	5.624503e-03	1.339485e-02
## MORF4L1P1	326591	0.09861442	5.630201e-03	1.340710e-02
## TIFA	92610	-0.18474232	5.635886e-03	1.341933e-02
## RPS3AP47	146053	0.42561110	5.654635e-03	1.346265e-02
## BRIX1	55299	-0.10290919	5.658319e-03	1.347010e-02
## GATD1-DT	171391	0.22859405	5.662767e-03	1.347937e-02
## TTC36-AS1	101929089	-0.23184329	5.663436e-03	1.347964e-02
## LAMTOR5	10542	0.24376254	5.664471e-03	1.348079e-02
## LINC01765	105378916	0.92346947	5.665051e-03	1.348085e-02
## PCSK4	54760	-0.28395822	5.668008e-03	1.348656e-02
## NRL	4901	-0.16364632	5.669583e-03	1.348899e-02
## VPS9D1	9605	-0.13598245	5.672214e-03	1.349393e-02
## AGMO	392636	-0.26934024	5.678040e-03	1.350646e-02
## KRT12	3859	2.05102898	5.681373e-03	1.351307e-02
## MTND5P13	100873272	-0.73955296	5.693291e-03	1.354009e-02
## LINC01151	104266958	-1.01962609	5.695891e-03	1.354495e-02
## SNX4	8723	-0.13679125	5.697229e-03	1.354681e-02
## CYP4F22	126410	0.62952335	5.710293e-03	1.357654e-02
## COCH	1690	0.30541614	5.720898e-03	1.360043e-02
## MATN2	4147	0.20923244	5.727087e-03	1.361381e-02
## DAW1	164781	0.47896622	5.727910e-03	1.361443e-02
## CALCB	797	0.64889068	5.729617e-03	1.361716e-02
## SPAG1	6674	-0.15292602	5.730834e-03	1.361872e-02
## GPR88	54112	-0.51902821	5.734313e-03	1.362565e-02
## MAMLD1	10046	0.22797128	5.747702e-03	1.365613e-02
## LINC00342	150759	0.45145013	5.750254e-03	1.366086e-02
## NTN1	9423	0.32146082	5.751322e-03	1.366206e-02
## KLHDC9	126823	-0.18565208	5.757202e-03	1.367469e-02
## RGS1	5996	-0.56384268	5.761749e-03	1.368415e-02
## GNAS-AS1	149775	0.35590595	5.765272e-03	1.369118e-02
## FAM157C	100996541	0.58194690	5.774844e-03	1.371257e-02
## LRP11	84918	-0.22597200	5.777224e-03	1.371421e-02
## DRD2	1813	0.65289757	5.776499e-03	1.371421e-02
## LINC01948	102467147	-0.30928260	5.777133e-03	1.371421e-02
## SERINC3	10955	-0.10288921	5.778691e-03	1.371635e-02
## COP1	64326	0.06792421	5.780327e-03	1.371889e-02
## XPO7	23039	0.11058058	5.784062e-03	1.372642e-02
## GPATCH4	54865	-0.11233799	5.796093e-03	1.375362e-02
## IL9RP3	729486	0.78900671	5.818099e-03	1.380449e-02
## PDCD10	11235	-0.12303374	5.819598e-03	1.380670e-02
## PHYKPL	85007	-0.14498369	5.830587e-03	1.383007e-02
## MIRLET7A1HG	112903833	0.30225668	5.830073e-03	1.383007e-02
## AGXT	189	0.55531555	5.834191e-03	1.383727e-02
## ARRDC3-AS1	100129716	-0.26597642	5.838728e-03	1.384668e-02
## PAK1IP1	55003	0.13623953	5.841274e-03	1.385137e-02
## LINC02715	105369482	1.08941343	5.844079e-03	1.385666e-02
## CFAP95	138255	-0.40538935	5.846740e-03	1.386027e-02
## RNF148	378925	-0.44183031	5.846654e-03	1.386027e-02
## CSNK2A2	1459	0.07179882	5.849887e-03	1.386638e-02
## RHEX	440712	-0.29357505	5.859681e-03	1.388824e-02
## LITATS1	728431	0.16969053	5.869964e-03	1.391125e-02
## PPIH	10465	0.13577816	5.880488e-03	1.393348e-02
## MAP4K1-AS1	105372397	1.61365613	5.880352e-03	1.393348e-02

## DAGLB	221955	0.11639384	5.887876e-03	1.394962e-02
## BCL10	8915	0.08470385	5.888719e-03	1.395026e-02
## GJA3	2700	-0.39712294	5.895082e-03	1.396261e-02
## LINC00668	400643	0.84520740	5.895073e-03	1.396261e-02
## MMP25-AS1	100507419	0.28033016	5.902657e-03	1.397919e-02
## MTCO3P11	107075153	-0.68217977	5.905117e-03	1.398365e-02
## NMUR2	56923	-1.34093911	5.909635e-03	1.399299e-02
## GAPDHP1	2616	0.24108768	5.911598e-03	1.399627e-02
## LSM14B	149986	-0.08880619	5.927143e-03	1.403171e-02
## CPEB1	64506	0.29071359	5.933400e-03	1.404515e-02
## DUSP2	1844	0.46973379	5.940401e-03	1.406036e-02
## SUCLA2	8803	-0.11597957	5.944870e-03	1.406956e-02
## UCN3	114131	0.41649847	5.957965e-03	1.409918e-02
## SNRPD2	6633	0.19398668	5.959016e-03	1.410030e-02
## YEATS4	8089	-0.13495006	5.971746e-03	1.412904e-02
## MEPCE	56257	-0.11526136	5.980715e-03	1.414889e-02
## EIF3J-DT	645212	-0.12951165	5.982978e-03	1.415286e-02
## HOXD11	3237	-0.28838732	5.984527e-03	1.415515e-02
## WNT5A	7474	0.28105641	5.992023e-03	1.417030e-02
## SRSF8CP	647145	-0.34393803	5.992097e-03	1.417030e-02
## LINC02809	100506571	0.90961859	5.994610e-03	1.417486e-02
## IER3IP1	51124	-0.15502987	6.000946e-03	1.418846e-02
## AMPH	273	0.38795638	6.004400e-03	1.419525e-02
## RPL12P4	116149	0.43270636	6.010087e-03	1.420731e-02
## UNC79	57578	0.29468126	6.014288e-03	1.421585e-02
## LINC00628	127841	-0.53346618	6.025038e-03	1.423988e-02
## BMS1P23	728034	0.18853153	6.028505e-03	1.424669e-02
## SLC35A4	113829	-0.12063806	6.029134e-03	1.424679e-02
## IFT46	56912	0.12451716	6.031141e-03	1.425015e-02
## LINC02963	123706542	-0.44677964	6.050835e-03	1.429529e-02
## SLU7	10569	0.10226669	6.054775e-03	1.430321e-02
## SHPK	23729	-0.22587990	6.057541e-03	1.430835e-02
## AGR3	155465	0.45093298	6.064131e-03	1.432252e-02
## PEX19	5824	-0.10529374	6.069788e-03	1.433449e-02
## BMI1	648	-0.11713268	6.074103e-03	1.434329e-02
## HEXB	3074	-0.15462095	6.076346e-03	1.434719e-02
## MIRLET7G	406890	0.90795921	6.078504e-03	1.434950e-02
## RFPL4A	342931	0.65346082	6.078478e-03	1.434950e-02
## BTBD7P1	441548	0.65861708	6.090238e-03	1.437580e-02
## CDC20	991	0.30568778	6.116159e-03	1.443558e-02
## FBXL9P	26231	0.21716607	6.118338e-03	1.443933e-02
## VPS36	51028	-0.10221200	6.123696e-03	1.445057e-02
## COMMD6	170622	0.20836069	6.125540e-03	1.445352e-02
## CCDC192	728586	0.82296225	6.136235e-03	1.447734e-02
## PREX2	80243	0.21153769	6.138945e-03	1.448093e-02
## ULBP1	80329	-0.40940787	6.138550e-03	1.448093e-02
## PHYHIP	9796	-0.32751872	6.139628e-03	1.448113e-02
## GPAT4-AS1	102723729	0.35017014	6.144803e-03	1.449193e-02
## ENKD1	84080	-0.16664856	6.158476e-03	1.452277e-02
## LINC01825	124908063	1.11349262	6.159695e-03	1.452423e-02
## SGSH	6448	-0.14865697	6.166055e-03	1.453782e-02
## HSD3B7	80270	-0.24959632	6.171222e-03	1.454859e-02
## KIF23	9493	0.31607502	6.174610e-03	1.455517e-02
## FRMD6-AS2	100874185	1.26664258	6.178191e-03	1.456219e-02

## CCDC92	80212	0.10177514	6.187365e-03	1.458240e-02
## FAM83C	128876	-0.51849876	6.191515e-03	1.459044e-02
## C3P1	388503	-1.21782687	6.191977e-03	1.459044e-02
## ALOX15P1	100652883	0.56337894	6.196346e-03	1.459932e-02
## RRP7BP	91695	0.28331445	6.200438e-03	1.460755e-02
## HM13-IT1	106480432	0.47061478	6.204945e-03	1.461675e-02
## MTND5P24	100873262	-0.61758077	6.217702e-03	1.464538e-02
## ERC2	26059	-0.25677230	6.225345e-03	1.466196e-02
## ASPDH	554235	0.47598593	6.228248e-03	1.466738e-02
## PDLIM4	8572	0.36193034	6.232281e-03	1.467545e-02
## ARHGAP1	392	0.18248218	6.234211e-03	1.467857e-02
## KYAT3	56267	-0.12583335	6.263983e-03	1.474724e-02
## BCL2L10	10017	-0.23598979	6.271469e-03	1.476344e-02
## SLC39A1	27173	-0.23887862	6.275032e-03	1.477039e-02
## ZNF813	126017	0.17285641	6.288576e-03	1.480084e-02
## PPP2R1A	5518	-0.12782586	6.303568e-03	1.483469e-02
## GABPB1	2553	0.10682598	6.304910e-03	1.483641e-02
## TMEM40	55287	0.61515062	6.309785e-03	1.484644e-02
## DEAF1	10522	0.13847074	6.311730e-03	1.484958e-02
## MELTF-AS1	100507057	0.40260766	6.313278e-03	1.485179e-02
## RAP1A	5906	-0.09080718	6.315413e-03	1.485537e-02
## CRHR2	1395	0.92652641	6.324682e-03	1.487501e-02
## BUD13	84811	0.08168490	6.324987e-03	1.487501e-02
## TLR5	7100	-0.20382651	6.328530e-03	1.488190e-02
## GPAT2P1	643219	0.77465464	6.348473e-03	1.492736e-02
## HERC4	26091	0.10331099	6.354523e-03	1.494014e-02
## CACUL1	143384	0.09677849	6.374290e-03	1.498371e-02
## DCLRE1CP1	105376432	1.64947985	6.373978e-03	1.498371e-02
## ITPRID2-DT	119863860	-0.28049919	6.379826e-03	1.499528e-02
## CTSL	1514	-0.13526725	6.393751e-03	1.502655e-02
## PDZK1P1	100034743	-0.47381207	6.395513e-03	1.502924e-02
## DAP3	7818	0.10474903	6.401537e-03	1.504194e-02
## MOCOS	55034	0.18382432	6.419180e-03	1.508194e-02
## IGHV3-43	28426	0.92200628	6.427838e-03	1.510082e-02
## OLFM5P	101927763	0.44153699	6.443133e-03	1.513529e-02
## OXSM	54995	-0.12145833	6.444584e-03	1.513724e-02
## ZKSCAN7-AS1	112840933	-0.34279709	6.468892e-03	1.519286e-02
## CCDC160	347475	-0.25820035	6.480030e-03	1.521608e-02
## FIS1	51024	0.18399740	6.479463e-03	1.521608e-02
## LINC02614	101927056	0.23730261	6.485575e-03	1.522763e-02
## MRPS16	51021	-0.11444980	6.489314e-03	1.523346e-02
## HERPUD2-AS1	101930085	-0.11074681	6.489154e-03	1.523346e-02
## CASC11	100270680	0.85130613	6.493211e-03	1.524114e-02
## RAB28	9364	-0.08004015	6.494878e-03	1.524358e-02
## RIN2	54453	0.10153807	6.503553e-03	1.526247e-02
## UQCRRFS1	7386	-0.16717894	6.510158e-03	1.527649e-02
## SLC37A4	2542	-0.25330275	6.515101e-03	1.528515e-02
## CKAP5	9793	0.09824564	6.515104e-03	1.528515e-02
## STAT5A	6776	0.15180244	6.519638e-03	1.529418e-02
## UBAC1	10422	0.16575833	6.520214e-03	1.529418e-02
## EDDM3A	10876	-0.39248650	6.524941e-03	1.530379e-02
## TMEM175	84286	-0.19717523	6.533150e-03	1.532157e-02
## TIMM10B	26515	-0.08218818	6.541718e-03	1.533870e-02
## NPM1P6	4875	0.49773598	6.541540e-03	1.533870e-02

## ASA1	427	-0.13082087	6.565442e-03	1.539284e-02
## FAM98A	25940	0.08866769	6.583028e-03	1.543258e-02
## ARL2BP	23568	0.11042277	6.585293e-03	1.543641e-02
## KRT2	3849	-0.65853118	6.587587e-03	1.544029e-02
## ZNF248	57209	0.15503714	6.588569e-03	1.544110e-02
## TMUB2	79089	-0.07392559	6.598837e-03	1.546293e-02
## SLX4	84464	0.15151525	6.599156e-03	1.546293e-02
## ZMYM3	9203	0.09480489	6.608168e-03	1.548256e-02
## ARHGDIA	396	-0.22875792	6.616762e-03	1.550120e-02
## MIR4477B	100616194	1.29737612	6.618161e-03	1.550298e-02
## CNTNAP5	129684	-0.49608827	6.619836e-03	1.550541e-02
## RGL2	5863	0.14545812	6.622437e-03	1.551001e-02
## LINC01012	100507173	0.71975770	6.640387e-03	1.555055e-02
## CLEC18B	497190	0.36989097	6.644312e-03	1.555824e-02
## PRDM5	11107	0.20640126	6.646448e-03	1.556174e-02
## CRTC2	200186	-0.08043085	6.647212e-03	1.556203e-02
## PRKACB-DT	118597836	0.34239430	6.656712e-03	1.558277e-02
## GLDCP1	2732	0.40278963	6.657947e-03	1.558416e-02
## LINC02554	100507657	0.40256872	6.669053e-03	1.560865e-02
## LINC02871	728434	0.71608207	6.684034e-03	1.564221e-02
## PRODH2	58510	0.46860462	6.695220e-03	1.566688e-02
## UTP18	51096	-0.08584789	6.705483e-03	1.568790e-02
## XXYLT1	152002	0.17573244	6.705496e-03	1.568790e-02
## TTC14-DT	101928856	-0.73116079	6.711198e-03	1.569973e-02
## FAM153A	285596	-0.44511326	6.728908e-03	1.573965e-02
## NME4	4833	0.21931732	6.731731e-03	1.574253e-02
## HDHD2	84064	-0.14322193	6.732083e-03	1.574253e-02
## HSPA8P7	100420080	0.75894682	6.732002e-03	1.574253e-02
## MINDY2	54629	-0.19654576	6.749394e-03	1.578149e-02
## ENTPD4-DT	121009645	0.45108740	6.750190e-03	1.578183e-02
## PTPRO	5800	-0.37409260	6.756449e-03	1.579495e-02
## MAGOHB	55110	-0.12800851	6.758431e-03	1.579654e-02
## LGALS8-AS1	100287902	-0.38220421	6.758353e-03	1.579654e-02
## ABCA11P	79963	-0.34415751	6.765405e-03	1.581132e-02
## TOMM7	54543	0.22813425	6.784159e-03	1.585363e-02
## BTBD6P1	646330	1.43486725	6.788471e-03	1.586218e-02
## TCIRG1	10312	0.32236249	6.793704e-03	1.587288e-02
## MRPL51	51258	0.16827632	6.799216e-03	1.588270e-02
## SUCLG2	8801	-0.15035629	6.799051e-03	1.588270e-02
## UFSP2	55325	-0.10772213	6.802225e-03	1.588820e-02
## LINC02712	101929497	-1.04256995	6.805205e-03	1.589364e-02
## LINC01747	105372566	0.66806953	6.810038e-03	1.590339e-02
## CERS6-AS1	100861402	-0.75949151	6.829192e-03	1.594659e-02
## FUOM	282969	0.31783608	6.830559e-03	1.594825e-02
## AATK	9625	-0.40865003	6.843517e-03	1.597697e-02
## ANAPC11	51529	0.21675108	6.862357e-03	1.601942e-02
## MTUS2	23281	0.55163242	6.865573e-03	1.602538e-02
## TTC23L-AS1	101929704	-0.18975229	6.877641e-03	1.605201e-02
## WASF1	8936	-0.13867381	6.878725e-03	1.605300e-02
## IARS1	3376	-0.08005211	6.887738e-03	1.607249e-02
## ICAM1	3383	-0.32995860	6.897366e-03	1.609341e-02
## MPO	4353	0.52972747	6.914241e-03	1.612814e-02
## ZSWIM9	374920	-0.15575394	6.912927e-03	1.612814e-02
## TSPY26P	128854	-0.14016177	6.913624e-03	1.612814e-02

## FAM86JP	100125556	0.15310110	6.928417e-03	1.615966e-02
## SYPL1P2	100132972	0.51229330	6.940958e-03	1.618735e-02
## MSRA	4482	0.29512157	6.943612e-03	1.619199e-02
## IER5L-AS1	105376290	0.29974041	6.944317e-03	1.619208e-02
## DOCK9-AS1	100874096	0.89199577	6.951019e-03	1.620615e-02
## NSDHL	50814	-0.14642539	6.952424e-03	1.620787e-02
## RBBP8NL	140893	-0.37553671	6.960292e-03	1.622466e-02
## CENPQ	55166	0.16666496	6.962886e-03	1.622915e-02
## PRNCR1	101867536	0.99559590	6.979504e-03	1.626632e-02
## MYH16	84176	1.23894551	6.986280e-03	1.628055e-02
## DENND11	57189	0.18302723	6.992132e-03	1.629263e-02
## MISFA	100506540	-0.20096213	6.997522e-03	1.630362e-02
## OCIAD1	54940	-0.09102192	7.000614e-03	1.630926e-02
## KCNJ4	3761	-0.81829606	7.001655e-03	1.631012e-02
## MTATP6P1	106480796	-0.22893259	7.013012e-03	1.633501e-02
## PLCE1	51196	-0.26680005	7.019731e-03	1.634910e-02
## PRXL2A	84293	-0.15208791	7.027656e-03	1.636599e-02
## RAF1	5894	-0.07404122	7.047791e-03	1.641130e-02
## SNORA28	677811	0.85100319	7.050487e-03	1.641601e-02
## PTPN5	84867	-0.64694219	7.054889e-03	1.642468e-02
## ZC2HC1A	51101	-0.14508017	7.064391e-03	1.644523e-02
## TBX4	9496	0.97632871	7.071673e-03	1.646061e-02
## H1-3	3007	-1.14169605	7.076486e-03	1.647023e-02
## ADNP-AS1	101927631	-0.19624728	7.078681e-03	1.647376e-02
## MYO5C	55930	-0.19656521	7.079765e-03	1.647471e-02
## RAP1B	5908	0.10713253	7.085659e-03	1.648684e-02
## PMM1	5372	-0.17190384	7.088072e-03	1.649052e-02
## TMEM86B	255043	0.20779499	7.088596e-03	1.649052e-02
## ERCC6	2074	0.12863522	7.111087e-03	1.654126e-02
## HSP90AB3P	3327	0.27112484	7.116458e-03	1.655217e-02
## OLFM3	118427	-0.55142489	7.121099e-03	1.656138e-02
## PTPRZ1	5803	-0.40302454	7.132271e-03	1.658577e-02
## ADORA2BP1	137	0.53830345	7.144108e-03	1.661171e-02
## HMGXB4	10042	0.10598787	7.147656e-03	1.661837e-02
## LINC01473	101927217	0.28443788	7.157184e-03	1.663893e-02
## LYPD1	116372	0.37435576	7.162874e-03	1.664897e-02
## MPC1-DT	119545625	-0.37748257	7.162684e-03	1.664897e-02
## PKD2L1	9033	0.57000023	7.171895e-03	1.666835e-02
## MAFTRR	102467146	0.38088067	7.174626e-03	1.667310e-02
## DHX40	79665	-0.06258213	7.195875e-03	1.672088e-02
## UBE2U	148581	0.86064124	7.207644e-03	1.674663e-02
## BRINP1	1620	0.39083794	7.214342e-03	1.676059e-02
## WARS1	7453	0.15421023	7.217886e-03	1.676722e-02
## STUB1	10273	0.18507687	7.228308e-03	1.678982e-02
## MACROD2	140733	-0.16742541	7.231731e-03	1.679617e-02
## COPB1	1315	-0.07428753	7.256489e-03	1.685206e-02
## ACVR1	90	0.11924964	7.264283e-03	1.686855e-02
## NIPSNAP3A	25934	-0.11895578	7.272169e-03	1.688524e-02
## YDJC	150223	-0.24359934	7.273875e-03	1.688759e-02
## KDM4A-AS1	100132774	0.36163457	7.275921e-03	1.689073e-02
## OR7E29P	26644	0.71327836	7.283257e-03	1.690615e-02
## NAT9	26151	0.09421847	7.285576e-03	1.690991e-02
## EDAR	10913	-0.29318868	7.309180e-03	1.696308e-02
## CDC42BPB	9578	-0.10525848	7.311262e-03	1.696629e-02

## CHST12	55501	-0.14863395	7.312067e-03	1.696654e-02
## SMIM8	57150	-0.14173581	7.318619e-03	1.698012e-02
## ZXDB	158586	-0.08440025	7.326133e-03	1.699593e-02
## ZC3HAV1L	92092	0.28751320	7.332827e-03	1.700984e-02
## ZNF500	26048	0.11496367	7.341602e-03	1.702856e-02
## NDUFV2-AS1	101927275	0.19849336	7.349216e-03	1.704460e-02
## SNRPB2	6629	-0.14705188	7.362079e-03	1.707280e-02
## MRFAP1L1	114932	-0.06586802	7.364963e-03	1.707786e-02
## ZNF592	9640	0.08194977	7.370185e-03	1.708834e-02
## RPS4X	6191	0.20918519	7.387619e-03	1.712549e-02
## MIDEAS-AS1	100506476	0.26662998	7.386994e-03	1.712549e-02
## TGFBR2	7048	0.14966506	7.398107e-03	1.714817e-02
## ITSN2	50618	-0.12512481	7.403244e-03	1.715844e-02
## HSPE1P18	106480257	1.17766827	7.404602e-03	1.715995e-02
## CLDN8	9073	-0.29351793	7.415446e-03	1.718344e-02
## UQCR11	10975	0.23294587	7.423566e-03	1.720062e-02
## GEMIN6	79833	0.13095140	7.427940e-03	1.720779e-02
## LINC02701	105369364	-0.41372178	7.428079e-03	1.720779e-02
## ZNF573	126231	0.22732862	7.433635e-03	1.721902e-02
## FMO5	2330	-0.31374167	7.444567e-03	1.724270e-02
## MTND5P3	100873210	-0.60830208	7.447261e-03	1.724730e-02
## RN7SKP160	106479166	0.58128002	7.448113e-03	1.724763e-02
## EPHB6	2051	-0.24325383	7.450719e-03	1.725202e-02
## EEF1A1P12	644604	0.43741428	7.456870e-03	1.726461e-02
## CDKAL1	54901	-0.07646909	7.460233e-03	1.727076e-02
## PEAK3	374872	-0.42133401	7.495567e-03	1.735090e-02
## E2F4	1874	0.09228298	7.501364e-03	1.736267e-02
## NUDT2	318	0.17964040	7.507603e-03	1.737545e-02
## LINC02999	102546229	-1.11158121	7.517478e-03	1.739665e-02
## NOM1	64434	0.11288042	7.537463e-03	1.744124e-02
## SLITRK5	26050	0.41549843	7.546362e-03	1.746017e-02
## LASP1	3927	0.14778135	7.556493e-03	1.748194e-02
## EEF1A1P9	441032	0.47143035	7.558988e-03	1.748605e-02
## TSPO	706	0.30209030	7.575990e-03	1.752371e-02
## GPHN	10243	-0.17903440	7.594712e-03	1.756535e-02
## RNF113A	7737	0.10958676	7.598039e-03	1.757137e-02
## CBLN2	147381	-0.67743004	7.600921e-03	1.757636e-02
## WFDC3	140686	0.30282060	7.620720e-03	1.762047e-02
## SLC38A10	124565	-0.19810769	7.627123e-03	1.763359e-02
## ACAP3	116983	0.20509274	7.631854e-03	1.764285e-02
## GRHL1	29841	-0.18463659	7.640774e-03	1.766179e-02
## EFNA4	1945	0.14764479	7.649662e-03	1.768066e-02
## CLCN7	1186	-0.17797498	7.659019e-03	1.769915e-02
## SLC7A13	157724	0.66222298	7.659121e-03	1.769915e-02
## RNF40	9810	-0.09732982	7.665705e-03	1.771268e-02
## SOCS6	9306	-0.09055373	7.667138e-03	1.771431e-02
## CREB3L3	84699	0.55825700	7.669436e-03	1.771794e-02
## FER1L6	654463	0.38028030	7.672715e-03	1.772383e-02
## NPFFR1	64106	0.62201260	7.692633e-03	1.776533e-02
## DEDD2	162989	0.13293946	7.692621e-03	1.776533e-02
## IGHV1-58	28464	1.33321294	7.692874e-03	1.776533e-02
## ZNF230-DT	101928063	0.19817118	7.693716e-03	1.776558e-02
## TMEM102	284114	-0.17829548	7.698212e-03	1.777259e-02
## TRAV18	28665	1.12392583	7.697875e-03	1.777259e-02

## TMEM231	79583	0.09500251	7.701989e-03	1.777962e-02
## CEP135	9662	0.22249124	7.705899e-03	1.778695e-02
## EPC2	26122	0.10118335	7.740313e-03	1.786469e-02
## RPL31P17	653773	-0.72567772	7.746277e-03	1.787676e-02
## SFXN5	94097	-0.17329807	7.754514e-03	1.789407e-02
## LINC03064	105371264	0.32094606	7.755593e-03	1.789486e-02
## GNA13	10672	-0.10629398	7.757944e-03	1.789858e-02
## GPR22	2845	-1.41372183	7.760756e-03	1.790337e-02
## COPS5	10987	0.11846347	7.769459e-03	1.792175e-02
## UGT1A6	54578	-0.33511359	7.778888e-03	1.794180e-02
## DLL4	54567	-0.20779083	7.782558e-03	1.794856e-02
## RSAD1	55316	0.11686456	7.801675e-03	1.799094e-02
## AQP10	89872	1.07854108	7.804953e-03	1.799679e-02
## MYO15B	80022	-0.23809809	7.807772e-03	1.800158e-02
## ITIH2	3698	-0.50096484	7.814077e-03	1.801441e-02
## KNSTRN	90417	0.16664051	7.816420e-03	1.801810e-02
## ABCC5	10057	-0.19399512	7.838912e-03	1.806823e-02
## ZNF319	57567	0.13404511	7.847643e-03	1.808664e-02
## DDX52	11056	-0.09574437	7.857152e-03	1.810684e-02
## ZFP69	339559	0.13849829	7.870723e-03	1.813640e-02
## PREPL	9581	-0.10896520	7.874009e-03	1.814142e-02
## NR6A1	2649	-0.20032501	7.874397e-03	1.814142e-02
## ZBTB25	7597	0.15488196	7.890676e-03	1.817720e-02
## SSR2	6746	0.16474962	7.896896e-03	1.818981e-02
## CTBP1-DT	92070	0.08301370	7.903019e-03	1.820219e-02
## CCDC144NL	339184	1.21308553	7.911113e-03	1.821910e-02
## OR5B2	390190	0.89983178	7.920025e-03	1.823617e-02
## HSPD1P11	100359396	-0.57616522	7.919579e-03	1.823617e-02
## UBTFL10	106480293	0.58684057	7.924648e-03	1.824509e-02
## TOP1	7150	-0.09773661	7.926937e-03	1.824863e-02
## LINC01214	101928022	-0.77270229	7.933931e-03	1.826300e-02
## AP1M2	10053	-0.24961267	7.953410e-03	1.830610e-02
## FETUB	26998	-0.80154050	7.954570e-03	1.830704e-02
## ELANE	1991	0.60476504	7.957356e-03	1.831172e-02
## ZNF562	54811	0.10372902	7.965896e-03	1.832963e-02
## FRMD7	90167	0.27730346	7.969566e-03	1.833634e-02
## KIAA1143	57456	0.09885804	7.971334e-03	1.833867e-02
## MROH2A	339766	-0.47820763	7.979651e-03	1.835607e-02
## LINC02363	728175	0.51921424	7.985948e-03	1.836881e-02
## TANGO6	79613	0.11990905	7.989406e-03	1.837386e-02
## MGAT1	4245	0.17049598	7.989654e-03	1.837386e-02
## PET117	100303755	-0.23755761	8.008961e-03	1.841652e-02
## CCDC71	64925	0.08973072	8.016040e-03	1.843105e-02
## APLN	8862	0.25603598	8.017963e-03	1.843373e-02
## SBF2-AS1	283104	-0.16139582	8.020143e-03	1.843700e-02
## OTUD1	220213	0.11805085	8.024667e-03	1.844565e-02
## TEX14	56155	0.48880431	8.030009e-03	1.845618e-02
## MARCHF7	64844	-0.08481875	8.031043e-03	1.845682e-02
## TRMT11	60487	-0.11744248	8.037990e-03	1.847103e-02
## LSM2	57819	0.19092594	8.044400e-03	1.848402e-02
## SNHG7	84973	0.22324528	8.045436e-03	1.848465e-02
## DCT	1638	-0.36260696	8.050815e-03	1.849526e-02
## STARD13	90627	-0.13366764	8.066309e-03	1.852910e-02
## MED16	10025	-0.21858715	8.097723e-03	1.859950e-02

## HARS1	3035	-0.07617528	8.098977e-03	1.860063e-02
## NADK	65220	0.09892437	8.103856e-03	1.861007e-02
## TMC6	11322	0.25051395	8.110014e-03	1.862246e-02
## SGSM2	9905	0.12886884	8.125335e-03	1.865577e-02
## NLRP2B	286430	0.83704166	8.126056e-03	1.865577e-02
## SNORA79B	109616976	-0.54267913	8.162420e-03	1.873748e-02
## PDIA2	64714	0.58108696	8.166451e-03	1.874496e-02
## AVIL	10677	0.37412633	8.167842e-03	1.874639e-02
## ABCA10	10349	0.40378363	8.177126e-03	1.876592e-02
## PCDHB15	56121	-0.20787035	8.180845e-03	1.877268e-02
## BTBD1	53339	0.11484873	8.187088e-03	1.878524e-02
## CPSF1	29894	0.13118002	8.192429e-03	1.879572e-02
## PCDHGA2	56113	-0.25350324	8.200841e-03	1.881146e-02
## BRME1	79173	0.20506067	8.200761e-03	1.881146e-02
## ACOT9	23597	0.10632157	8.205652e-03	1.882072e-02
## GABRG3	2567	-0.62246450	8.221405e-03	1.885507e-02
## BORCS8	729991	-0.13988388	8.234982e-03	1.888443e-02
## TLK2P1	646202	0.51411393	8.244766e-03	1.890508e-02
## BTNL8	79908	-0.44117222	8.264415e-03	1.894835e-02
## GAS2L1	10634	-0.22546877	8.284368e-03	1.899231e-02
## F10-AS1	104413892	-0.41960017	8.290230e-03	1.900395e-02
## SPIN3	169981	0.14225993	8.292009e-03	1.900623e-02
## ITGB8	3696	-0.25397735	8.296954e-03	1.901453e-02
## PEX1	5189	-0.11296635	8.297192e-03	1.901453e-02
## ZFC3H1	196441	0.20937977	8.299681e-03	1.901844e-02
## CCDC81	60494	0.40756680	8.302876e-03	1.902397e-02
## PRDM10-DT	440072	-0.57726135	8.309105e-03	1.903644e-02
## OR51B4	79339	0.89608963	8.320084e-03	1.905980e-02
## LINC03108	130512932	0.66642169	8.357442e-03	1.914357e-02
## CHADL	150356	0.25973909	8.360765e-03	1.914938e-02
## SHROOM4	57477	0.12984459	8.364796e-03	1.915681e-02
## EIF4A2	1974	0.10823771	8.366450e-03	1.915879e-02
## CD1D	912	0.33207123	8.376825e-03	1.918074e-02
## PGF	5228	0.29660290	8.379991e-03	1.918618e-02
## PRR18	285800	-0.59346976	8.387363e-03	1.920010e-02
## VTRNA1-3	56662	-1.12128465	8.387650e-03	1.920010e-02
## ANK3	288	-0.18660216	8.389052e-03	1.920150e-02
## LINC01555	439927	-0.46009208	8.396477e-03	1.921519e-02
## PRIM1	5557	0.14998321	8.396614e-03	1.921519e-02
## SLC25A23	79085	-0.10988231	8.398528e-03	1.921776e-02
## ADPRS	54936	0.12552130	8.401861e-03	1.922358e-02
## HYDIN2	100288805	0.35370678	8.408673e-03	1.923735e-02
## PPP1R14A	94274	-0.35609387	8.424987e-03	1.927286e-02
## TMEM213	155006	-0.25257755	8.431818e-03	1.928667e-02
## PSMA4	5685	0.11803432	8.442853e-03	1.931010e-02
## CTF1	1489	-0.18270377	8.451100e-03	1.932714e-02
## CSN1S1	1446	2.03982543	8.471611e-03	1.937222e-02
## LINC01588	283551	0.19344408	8.480474e-03	1.939067e-02
## LINC02026	647323	-0.52545015	8.494563e-03	1.942105e-02
## RPS13	6207	0.22521856	8.516172e-03	1.946679e-02
## CISD1	55847	-0.14760457	8.515990e-03	1.946679e-02
## PANK3	79646	-0.14130176	8.519307e-03	1.947213e-02
## GK3	2713	0.59407273	8.521189e-03	1.947460e-02
## NKAIN2	154215	0.45629525	8.523387e-03	1.947779e-02

## EOGT-DT	121676928	0.27481925	8.537351e-03	1.950787e-02
## EPB41L1	2036	-0.11843353	8.544773e-03	1.952299e-02
## CLVS2	134829	1.22867064	8.549555e-03	1.953208e-02
## GRM4	2914	0.79653610	8.554893e-03	1.954244e-02
## KCTD21-AS1	100289388	0.26268812	8.557660e-03	1.954692e-02
## VSTM1	284415	0.78493996	8.559867e-03	1.955013e-02
## LINC02575	111216286	0.71416281	8.562275e-03	1.955379e-02
## PDLIM2	64236	0.21941194	8.564658e-03	1.955739e-02
## MTMR11	10903	0.15881717	8.565907e-03	1.955841e-02
## B4GALNT2	124872	-0.41146633	8.570790e-03	1.956709e-02
## MTA1	9112	0.15263688	8.571319e-03	1.956709e-02
## CEP76	79959	0.08786753	8.580263e-03	1.958566e-02
## EIF1AD	84285	0.06483487	8.590608e-03	1.960744e-02
## C7orf57	136288	0.44842184	8.595832e-03	1.961752e-02
## RPL32P1	6163	0.74554599	8.596887e-03	1.961808e-02
## CREB1	1385	0.11790664	8.623209e-03	1.967630e-02
## FZD7	8324	-0.21280247	8.638649e-03	1.970968e-02
## AFF4	27125	-0.13339988	8.645335e-03	1.972123e-02
## NRAV	100506668	0.11397499	8.644834e-03	1.972123e-02
## EIF4H	7458	-0.09928146	8.649806e-03	1.972958e-02
## TAPBPL	55080	-0.15720769	8.651963e-03	1.973265e-02
## RNF208	727800	-0.28663331	8.653693e-03	1.973474e-02
## DYNLL1	8655	0.17567134	8.658878e-03	1.974471e-02
## CHMP4BP1	100307126	-0.67799970	8.663379e-03	1.975312e-02
## C18orf21	83608	0.15387396	8.678679e-03	1.978615e-02
## PPP4C	5531	0.10838947	8.680050e-03	1.978636e-02
## LINC00973	105374003	0.96124188	8.680398e-03	1.978636e-02
## NEMP2-DT	105376748	-0.26405077	8.681907e-03	1.978794e-02
## MACORIS	101929951	0.60306222	8.696237e-03	1.981874e-02
## KDM1A	23028	0.04825382	8.719428e-03	1.986652e-02
## NGF	4803	-0.27764618	8.719652e-03	1.986652e-02
## TRNAU1AP	54952	0.11533853	8.718353e-03	1.986652e-02
## CCSER2	54462	0.10511369	8.731825e-03	1.989199e-02
## NAA80	24142	0.15766225	8.732471e-03	1.989199e-02
## OACYLP	390858	0.94635252	8.734245e-03	1.989417e-02
## DYRK3	8444	0.09940196	8.748672e-03	1.992443e-02
## LINC00899	100271722	0.26869669	8.749168e-03	1.992443e-02
## OSMR	9180	-0.29226825	8.764255e-03	1.995691e-02
## SOD3	6649	-0.28909578	8.779773e-03	1.999037e-02
## OR2A9P	441295	-0.36080024	8.789662e-03	2.001102e-02
## GRB7	2886	-0.21538951	8.794388e-03	2.001990e-02
## THRB-IT1	100874274	0.89598925	8.803926e-03	2.003974e-02
## SLC25A30	253512	-0.14040606	8.806509e-03	2.004374e-02
## PSMC1	5700	0.10802209	8.818155e-03	2.006836e-02
## FOXD4L1	200350	-0.52755046	8.825271e-03	2.008268e-02
## PLCD1	5333	-0.12669017	8.827498e-03	2.008586e-02
## DCTN6	10671	-0.14219768	8.829544e-03	2.008864e-02
## HID1-AS1	102723641	0.34924427	8.857250e-03	2.014979e-02
## RNF6	6049	-0.10327490	8.859027e-03	2.015194e-02
## FUCA2	2519	-0.11039756	8.860540e-03	2.015350e-02
## RPL7AP43	644236	-0.35396224	8.864282e-03	2.016012e-02
## CTSV	1515	-0.40348481	8.875445e-03	2.018362e-02
## NONO	4841	0.05821400	8.887182e-03	2.020808e-02
## UFD1-AS1	105372860	-0.21324090	8.887865e-03	2.020808e-02

## SLC10A6	345274	0.44302056	8.893616e-03	2.021927e-02
## ZNF280C	55609	0.17508562	8.906220e-03	2.024603e-02
## PAF1	54623	-0.08146942	8.907714e-03	2.024753e-02
## PPIL1	51645	-0.13138086	8.917933e-03	2.026886e-02
## ZBTB24	9841	-0.09825434	8.923748e-03	2.028018e-02
## NXPE2	120406	0.61103295	8.938749e-03	2.031237e-02
## TEX14BP	<NA>	0.64710501	8.952877e-03	2.034258e-02
## ZNF550	162972	0.22297135	8.960294e-03	2.035753e-02
## RPL35P2	646766	0.51853915	8.975983e-03	2.039126e-02
## DAPK3	1613	0.20284238	8.978485e-03	2.039504e-02
## RP1L1	94137	-0.39281605	8.990142e-03	2.041961e-02
## OR2A20P	401428	-0.28488586	9.024631e-03	2.049603e-02
## ZNF236-DT	100131655	0.37973763	9.027707e-03	2.050110e-02
## RCAN2-DT	101926898	-0.34599143	9.039250e-03	2.052540e-02
## KCTD6	200845	-0.15722127	9.042261e-03	2.053032e-02
## CHMP5	51510	-0.10476810	9.045559e-03	2.053397e-02
## GATA3-AS1	399717	-0.26145381	9.045419e-03	2.053397e-02
## GLRXP3	100132510	-0.79971273	9.047114e-03	2.053558e-02
## HINT2	84681	-0.28553212	9.063870e-03	2.057169e-02
## RRAGC	64121	0.12185283	9.067941e-03	2.057901e-02
## ATP6V0C	527	0.37888557	9.085630e-03	2.061723e-02
## HNF1A-AS1	283460	0.29346302	9.100459e-03	2.064895e-02
## SNX5	27131	0.15067037	9.102817e-03	2.065237e-02
## TEKT5	146279	0.82299440	9.108864e-03	2.066416e-02
## HCRTR1	3061	-0.65916842	9.116391e-03	2.067738e-02
## DPH1-AS1	123706529	-0.87759288	9.116244e-03	2.067738e-02
## LINC00896	150197	0.96636834	9.122964e-03	2.069035e-02
## SNORA77	677843	0.94012074	9.124875e-03	2.069276e-02
## PIK3AP1	118788	-0.21524644	9.131786e-03	2.070650e-02
## FAM136A	84908	0.10184237	9.140489e-03	2.072430e-02
## RPLP2	6181	0.28631466	9.145423e-03	2.073355e-02
## TRMT61A-DT	123706535	-0.24436467	9.151305e-03	2.074495e-02
## PDHB	5162	-0.10117933	9.156961e-03	2.075584e-02
## RTP2	344892	2.04176332	9.171389e-03	2.078660e-02
## CTNNAL1	8727	-0.10239091	9.186716e-03	2.081940e-02
## RN7SKP80	106479130	0.66647086	9.194183e-03	2.083437e-02
## CDC26	246184	0.15050523	9.210161e-03	2.086864e-02
## KCNN3	3782	-0.25172217	9.216950e-03	2.088207e-02
## PLCB3	5331	0.15788482	9.222236e-03	2.089210e-02
## MIR31HG	554202	0.52051660	9.269138e-03	2.099640e-02
## H1-2	3006	-0.25578715	9.270800e-03	2.099820e-02
## MTCYBP18	107075130	-0.21320713	9.283494e-03	2.102499e-02
## MIR4538	100616276	1.74203664	9.285740e-03	2.102812e-02
## RPS29	6235	0.26534474	9.308920e-03	2.107865e-02
## SPSB1	80176	-0.30688004	9.310636e-03	2.108057e-02
## DDX56	54606	0.09457990	9.313297e-03	2.108463e-02
## HIKESHI	51501	0.19929436	9.324747e-03	2.110859e-02
## ZNF776	284309	-0.09629465	9.327442e-03	2.111272e-02
## CNN3-DT	729970	0.16596183	9.341243e-03	2.114199e-02
## ZNF461	92283	0.11066447	9.343732e-03	2.114565e-02
## PARVA	55742	0.12551836	9.348237e-03	2.115388e-02
## RPL7AP34	441154	0.71523514	9.350315e-03	2.115661e-02
## CCDC39	339829	0.85589801	9.362588e-03	2.118241e-02
## MIXL1	83881	0.93304128	9.375964e-03	2.121070e-02

## OTULINL	54491	0.19323502	9.385720e-03	2.123079e-02
## IL17RD	54756	0.16540690	9.405235e-03	2.127295e-02
## GTPBP2	54676	0.12643343	9.409145e-03	2.127982e-02
## HAUS4	54930	-0.13813479	9.410763e-03	2.128150e-02
## LINC02932	105375392	-0.48404737	9.415692e-03	2.129017e-02
## LINC01213	101927992	-0.30617232	9.416350e-03	2.129017e-02
## MRTFB	57496	0.13986775	9.421096e-03	2.129892e-02
## TOMM20L	387990	-0.27209830	9.424762e-03	2.130522e-02
## TMEM167B	56900	-0.06927525	9.438842e-03	2.133507e-02
## LGALS9B	284194	1.52476428	9.444376e-03	2.134360e-02
## LINC00648	100506433	0.56933517	9.444156e-03	2.134360e-02
## TOB1-AS1	400604	-0.21094094	9.451425e-03	2.135755e-02
## EIF4A3	9775	-0.09563114	9.459139e-03	2.137299e-02
## PLN	5350	0.34009856	9.466238e-03	2.138704e-02
## WWP1P1	339843	0.55437989	9.488711e-03	2.143583e-02
## CIAO1	9391	0.07507912	9.490466e-03	2.143780e-02
## MRPS17	51373	-0.11489412	9.520737e-03	2.150418e-02
## GLO1	2739	-0.08817801	9.526791e-03	2.151387e-02
## LRRTM2	26045	0.50673251	9.526801e-03	2.151387e-02
## SRSF3	6428	-0.09391331	9.530826e-03	2.152096e-02
## C10orf90	118611	0.54741953	9.533720e-03	2.152550e-02
## PNMA6A	84968	-0.24832543	9.542401e-03	2.154310e-02
## ERLEC1	27248	0.08247920	9.546848e-03	2.155113e-02
## APLP1	333	-0.25784404	9.556504e-03	2.157093e-02
## GGT8P	645367	0.45243033	9.561821e-03	2.157892e-02
## MIR5690	100847048	-0.98297700	9.561736e-03	2.157892e-02
## PTCD1	26024	-0.10586940	9.571382e-03	2.159849e-02
## COPS8	10920	0.09236280	9.573104e-03	2.160037e-02
## CLOCK	9575	-0.13397842	9.581424e-03	2.161714e-02
## ADAD2	161931	-0.58004425	9.588213e-03	2.163045e-02
## RASA2	5922	0.17787853	9.592764e-03	2.163871e-02
## RRAGB	10325	0.06949331	9.599152e-03	2.165110e-02
## DPY19L1	23333	0.14305599	9.615488e-03	2.168594e-02
## CUL5	8065	-0.12795208	9.624665e-03	2.170462e-02
## CRNKL1	51340	0.06790385	9.644297e-03	2.174687e-02
## SLC35C1	55343	0.17470882	9.670852e-03	2.180473e-02
## PIGO-AS1	121847984	-0.54918055	9.681201e-03	2.182604e-02
## KIF1C	10749	0.11909160	9.688832e-03	2.184122e-02
## XRCC1	7515	0.09097306	9.708694e-03	2.188193e-02
## ST20-MTHFS	100528021	-0.45119848	9.708250e-03	2.188193e-02
## SYNGR2	9144	-0.16950707	9.712650e-03	2.188882e-02
## ABCB10	23456	-0.10066982	9.718373e-03	2.189968e-02
## REV1	51455	0.16012617	9.719586e-03	2.190039e-02
## RPS6KA3	6197	0.11615282	9.729071e-03	2.191972e-02
## RHOG2P	392489	-0.72894460	9.733637e-03	2.192798e-02
## MCHR1	2847	0.70099139	9.755047e-03	2.197417e-02
## KCNE2	9992	-0.43178898	9.774513e-03	2.201598e-02
## DLG2	1740	0.19773988	9.775937e-03	2.201715e-02
## MSANTD3P1	100420848	-0.66945947	9.787462e-03	2.204106e-02
## MXRA7	439921	0.23932854	9.843123e-03	2.216254e-02
## PPP1R3E	90673	0.14255742	9.843230e-03	2.216254e-02
## DNAJC5	80331	-0.08471685	9.865333e-03	2.221025e-02
## THRB	7068	-0.14213551	9.870263e-03	2.221929e-02
## DNAI4	79819	-0.15286087	9.875077e-03	2.222807e-02

## MRPS35	60488	-0.11034525	9.879378e-03	2.223569e-02
## RUSF1	64755	-0.10606716	9.889649e-03	2.225675e-02
## SPINK4	27290	-1.14461937	9.896043e-03	2.226907e-02
## ZNF382	84911	0.16589732	9.929550e-03	2.234241e-02
## TAF1C	9013	-0.19780542	9.937927e-03	2.235919e-02
## TYW1	55253	-0.06854371	9.949126e-03	2.238231e-02
## VAC14	55697	-0.10505836	9.951984e-03	2.238667e-02
## CENPX	201254	0.19447628	9.959802e-03	2.240218e-02
## ACBD5	91452	-0.11663130	9.971833e-03	2.242716e-02
## RPS6KA4	8986	0.18915795	9.974102e-03	2.243019e-02
## NTMT1	28989	0.12896455	9.983762e-03	2.244984e-02
## PLXNA3	55558	0.22720346	9.992651e-03	2.246775e-02
## LTBP3	4054	0.28870906	9.999505e-03	2.248108e-02
## PDE10A	10846	-0.20684068	1.001560e-02	2.251519e-02
## GATA4	2626	1.57082237	1.002218e-02	2.252790e-02
## LINC03051	127138867	0.50921096	1.003321e-02	2.255060e-02
## GULP1	51454	-0.14425343	1.003953e-02	2.256271e-02
## VOPP1	81552	0.18202043	1.005007e-02	2.258430e-02
## CYP1B1	1545	-0.23279598	1.005402e-02	2.259110e-02
## TNFRSF10B	8795	0.13946900	1.005742e-02	2.259666e-02
## ZFPM1	161882	-0.32898262	1.007143e-02	2.262604e-02
## SLC1A1	6505	-0.23385679	1.007720e-02	2.263691e-02
## LINC03033	400221	-0.45980127	1.009042e-02	2.266451e-02
## RTL8A	26071	-0.15053370	1.009815e-02	2.267977e-02
## DNAAF2	55172	-0.09011950	1.011397e-02	2.271319e-02
## DBH-AS1	138948	0.34925212	1.012264e-02	2.273058e-02
## KLHL22	84861	0.10006961	1.012443e-02	2.273250e-02
## BLOC1S5	63915	-0.11898581	1.013243e-02	2.274835e-02
## MRPL16	54948	0.11834234	1.014754e-02	2.278018e-02
## TIMM9	26520	0.13299689	1.015436e-02	2.279339e-02
## REC8	9985	-0.24683121	1.016575e-02	2.281683e-02
## CARD6	84674	0.23527317	1.017669e-02	2.283929e-02
## MLLT6	4302	-0.13349829	1.019735e-02	2.288355e-02
## GPC5	2262	-0.38127137	1.019874e-02	2.288455e-02
## EPOP	100170841	0.21269944	1.020226e-02	2.289032e-02
## MOCS2	4338	-0.12454190	1.020618e-02	2.289702e-02
## SPMAP1	388381	0.92496523	1.021082e-02	2.290530e-02
## DNAJB11	51726	-0.10894408	1.022374e-02	2.293217e-02
## AQP5	362	-0.29353725	1.022532e-02	2.293359e-02
## VEZT	55591	0.09687302	1.025523e-02	2.299855e-02
## THRA	7067	-0.12380302	1.026787e-02	2.302478e-02
## GNRH1	2796	0.35868778	1.027336e-02	2.303350e-02
## ANKRD65	441869	0.24797640	1.027366e-02	2.303350e-02
## ZNF454	285676	0.20110765	1.028074e-02	2.304725e-02
## SEMA4G	57715	-0.23021768	1.028778e-02	2.306092e-02
## GGTA2P	121328	0.60072152	1.032296e-02	2.313763e-02
## ZNF230	7773	0.09892453	1.032990e-02	2.315106e-02
## CWC15	51503	0.14680824	1.033854e-02	2.316828e-02
## KIF1B	23095	0.14499015	1.034157e-02	2.317295e-02
## TLE6	79816	-0.24740879	1.035289e-02	2.319615e-02
## LINC02817	400804	0.84725887	1.035771e-02	2.320483e-02
## PGRMC2	10424	-0.10810594	1.035914e-02	2.320589e-02
## SHISA6	388336	-0.33780175	1.036382e-02	2.321423e-02
## MTCO2P12	107075310	-0.21933151	1.036822e-02	2.322195e-02

## RPAP3-DT	105369748	0.19774795	1.037265e-02	2.322973e-02
## FLAD1	80308	0.11331112	1.039984e-02	2.328848e-02
## PDZD11	51248	0.13824890	1.042714e-02	2.334745e-02
## RNVU1-1	101954273	0.59685322	1.043085e-02	2.335360e-02
## MRPL24	79590	0.13752919	1.044295e-02	2.337856e-02
## PLEKHG7	440107	-0.31801196	1.045684e-02	2.340749e-02
## NTS	4922	-0.60702596	1.046268e-02	2.341841e-02
## STXBP1	6812	-0.13517411	1.047292e-02	2.343726e-02
## AFG3L2	10939	-0.09293088	1.047378e-02	2.343726e-02
## FBXW10B	374286	0.70540709	1.047400e-02	2.343726e-02
## ZPR1	8882	0.09177489	1.048505e-02	2.345983e-02
## SLC25A3	5250	-0.13180827	1.049783e-02	2.348627e-02
## ZSWIM1	90204	0.09072766	1.050040e-02	2.348985e-02
## ITPR2	3709	-0.15821221	1.050298e-02	2.349345e-02
## PRKCSH	5589	-0.14965060	1.051581e-02	2.351999e-02
## RPS6KB1	6198	0.10696946	1.051950e-02	2.352607e-02
## HAGLR	401022	-0.12855035	1.053083e-02	2.354925e-02
## ZSWIM7	125150	0.17447263	1.054044e-02	2.356857e-02
## BAZ1A-AS1	112268124	0.20223637	1.054767e-02	2.358257e-02
## OPN3	23596	-0.11668097	1.054995e-02	2.358548e-02
## RPS12	6206	0.23521808	1.055478e-02	2.359413e-02
## NPY2R-AS1	107986321	0.69354265	1.056016e-02	2.360397e-02
## DNM3	26052	-0.20107436	1.056497e-02	2.361256e-02
## DPAGT1	1798	-0.12440971	1.056776e-02	2.361661e-02
## ZFX-AS1	100873922	-0.81482516	1.057958e-02	2.364087e-02
## SAMD13	148418	0.21561273	1.058701e-02	2.365529e-02
## TKTL1	8277	-0.51680449	1.060400e-02	2.368890e-02
## CLUHP3	100132341	0.33469529	1.060331e-02	2.368890e-02
## RNF5	6048	-0.16675424	1.060949e-02	2.369899e-02
## KALRN	8997	-0.14032942	1.061059e-02	2.369925e-02
## ALKBH1	8846	0.08929691	1.062347e-02	2.372492e-02
## PEG10	23089	0.12520015	1.062403e-02	2.372492e-02
## PMM2	5373	-0.15493935	1.062921e-02	2.373431e-02
## STARD6	147323	-0.91779393	1.063213e-02	2.373865e-02
## LGALSL	29094	0.11092476	1.064151e-02	2.375740e-02
## LINC02499	728040	0.51365095	1.065877e-02	2.379374e-02
## CYSTM1	84418	-0.15308388	1.068615e-02	2.385267e-02
## MT1F	4494	-0.37062336	1.068864e-02	2.385605e-02
## TIMM29	90580	-0.11657261	1.069484e-02	2.386769e-02
## MCPH1	79648	-0.07540719	1.071052e-02	2.390049e-02
## XNDC1N	100133315	-0.16960889	1.073372e-02	2.395005e-02
## BEST4	266675	0.33001551	1.075290e-02	2.399065e-02
## NACC2	138151	-0.11650497	1.076022e-02	2.400477e-02
## PAPPA2	60676	0.34649771	1.076591e-02	2.401528e-02
## IFI27L2	83982	0.30537488	1.076886e-02	2.401964e-02
## IRF2BP2	359948	-0.09381806	1.077350e-02	2.402779e-02
## RPS2P5	100130562	0.31427789	1.077768e-02	2.403491e-02
## QTRT2	79691	-0.07100234	1.078725e-02	2.405405e-02
## ZNF600	162966	0.12860924	1.078987e-02	2.405768e-02
## EIF5B	9669	-0.12680136	1.080283e-02	2.408438e-02
## ZP3	7784	0.33738953	1.080808e-02	2.409325e-02
## LINC01204	101927528	1.97941566	1.080979e-02	2.409325e-02
## BTG2-DT	730227	-0.86230064	1.080930e-02	2.409325e-02
## EEF1A1P6	221838	0.23846121	1.081552e-02	2.410381e-02

## CIC	23152	-0.17205296	1.081871e-02	2.410870e-02
## CUL1	8454	0.07055417	1.082668e-02	2.412426e-02
## DAPK1	1612	0.15605065	1.083490e-02	2.414035e-02
## CHST11	50515	0.22783452	1.084034e-02	2.415026e-02
## CNR1	1268	0.45647413	1.084165e-02	2.415097e-02
## CAMTA1-DT	110841581	-0.30562209	1.084481e-02	2.415580e-02
## LINC02943	107985484	-0.97549497	1.085048e-02	2.416621e-02
## MGRN1	23295	-0.16959127	1.088151e-02	2.423309e-02
## ARHGAP10	79658	0.11723133	1.091487e-02	2.430294e-02
## IRS4-AS1	101928358	-0.81966751	1.091428e-02	2.430294e-02
## TUSC2	11334	0.12463487	1.091724e-02	2.430599e-02
## CCHCR1	54535	-0.13095069	1.092925e-02	2.433050e-02
## STAG2	10735	-0.10557325	1.093368e-02	2.433813e-02
## OAF	220323	0.18211423	1.093845e-02	2.434652e-02
## ATP5PB	515	-0.11651222	1.095119e-02	2.437263e-02
## CHST2	9435	-0.16979002	1.095263e-02	2.437362e-02
## HPS5	11234	-0.08093618	1.098178e-02	2.443414e-02
## KCNJ11	3767	0.33172891	1.098184e-02	2.443414e-02
## ACP5	54	0.32359379	1.098875e-02	2.444728e-02
## PMAIP1	5366	0.33784599	1.099248e-02	2.445333e-02
## GTPBP1	9567	-0.09246858	1.102503e-02	2.452351e-02
## H2BC8	8339	-0.37979524	1.103487e-02	2.454315e-02
## RSRC2	65117	-0.11280279	1.103617e-02	2.454378e-02
## ISY1	57461	0.08674290	1.107453e-02	2.462684e-02
## ITPK1	3705	-0.12862196	1.108111e-02	2.463922e-02
## TMEM277P	<NA>	0.56826718	1.109411e-02	2.466586e-02
## DDX42	11325	0.06736883	1.109634e-02	2.466856e-02
## ANKDD1A	348094	0.22115002	1.110683e-02	2.468964e-02
## KCTD3	51133	-0.09282598	1.111681e-02	2.470957e-02
## RASSF8-AS1	100506451	0.19421510	1.112067e-02	2.471587e-02
## FAU	2197	0.21516463	1.113854e-02	2.475333e-02
## HMGA1	3159	0.21589326	1.116642e-02	2.481303e-02
## TJP2	9414	-0.27387826	1.118004e-02	2.483651e-02
## CHD3	1107	0.15647114	1.118006e-02	2.483651e-02
## CFAP91	89876	-0.23455085	1.117938e-02	2.483651e-02
## ANO7L1	101927546	-0.25325786	1.118427e-02	2.484359e-02
## NSUN4	387338	-0.08858899	1.120515e-02	2.488770e-02
## FAM131B-AS2	100507507	0.26357737	1.121839e-02	2.491483e-02
## FAM110D	79927	-0.24438302	1.122018e-02	2.491652e-02
## SMG1P6	100422558	0.56515648	1.122447e-02	2.492377e-02
## CFAP96	441054	-0.22267329	1.122838e-02	2.493019e-02
## NPLOC4	55666	-0.10749399	1.123030e-02	2.493218e-02
## S1PR1	1901	-0.20170387	1.123330e-02	2.493656e-02
## RAB22A	57403	0.06415814	1.124476e-02	2.495972e-02
## DOHH	83475	-0.24956106	1.125746e-02	2.498562e-02
## CHRM4	1132	0.51256707	1.125884e-02	2.498639e-02
## IGSF9B	22997	0.26645343	1.126803e-02	2.500222e-02
## SLC2A12	154091	-0.19288821	1.126722e-02	2.500222e-02
## LGSN	51557	-0.51926286	1.126944e-02	2.500307e-02
## TEAD3	7005	-0.12558614	1.127079e-02	2.500372e-02
## CWF19L1	55280	0.07937081	1.127179e-02	2.500372e-02
## ALPK3	57538	0.24905684	1.127441e-02	2.500725e-02
## KHDRBS3	10656	0.10451076	1.128581e-02	2.503026e-02
## SDHD	6392	-0.14583961	1.129297e-02	2.504384e-02

## GOT1-DT	101927300	0.33459451	1.129895e-02	2.505482e-02
## SLFN11-AS1	100507178	0.39613069	1.131068e-02	2.507854e-02
## ST7	7982	0.12061896	1.131820e-02	2.509065e-02
## FOXD4	2298	-0.32712634	1.131786e-02	2.509065e-02
## CNPY3	10695	0.15486970	1.132679e-02	2.510740e-02
## GMNC	647309	-0.44743094	1.134244e-02	2.513979e-02
## DENND1A	57706	-0.13407857	1.134921e-02	2.515251e-02
## ALG5	29880	-0.11638248	1.135624e-02	2.516578e-02
## CYP3A43	64816	-0.66564924	1.136096e-02	2.517394e-02
## CFAP61-AS1	101929575	0.65054526	1.136269e-02	2.517548e-02
## LINC02406	105369730	-0.75797797	1.139745e-02	2.525020e-02
## CDIP1	29965	-0.14461504	1.141054e-02	2.527690e-02
## CXCL16	58191	0.22041873	1.142071e-02	2.529713e-02
## TDH-AS1	100129129	0.71334603	1.142312e-02	2.530016e-02
## HOXA1	3198	0.17967793	1.143092e-02	2.531511e-02
## FAM193A	8603	0.08049551	1.143736e-02	2.532707e-02
## KRT17P5	339240	1.50654649	1.143968e-02	2.532989e-02
## BAIAP2	10458	-0.21801886	1.144262e-02	2.533411e-02
## CNOT6LP1	729530	0.64823832	1.144380e-02	2.533442e-02
## CST9	128822	-0.64581318	1.144714e-02	2.533949e-02
## ADRB3	155	1.08675491	1.146163e-02	2.536927e-02
## TBC1D2	55357	0.14905507	1.146362e-02	2.537135e-02
## RORA-AS1	101928784	-0.28781430	1.148511e-02	2.541660e-02
## CCDC181	57821	0.22275306	1.149620e-02	2.543883e-02
## NSMCE4A	54780	0.11086023	1.150178e-02	2.544886e-02
## GIMAP1	170575	0.16442748	1.150743e-02	2.545903e-02
## AVPR2	554	-0.27285590	1.152409e-02	2.549125e-02
## ZNF471	57573	0.17861605	1.152312e-02	2.549125e-02
## TRMT44	152992	0.09494262	1.152514e-02	2.549125e-02
## UBAP1L	390595	0.28134631	1.154398e-02	2.553061e-02
## PRKCH-AS1	121233923	0.27115511	1.154675e-02	2.553441e-02
## PXMP2	5827	0.30973843	1.155470e-02	2.554967e-02
## DACT3	147906	0.30772660	1.156014e-02	2.555937e-02
## EML2-AS1	100287177	0.42914184	1.156167e-02	2.556041e-02
## ZBED2	79413	0.43676145	1.156338e-02	2.556188e-02
## LINC01436	100996609	0.66007311	1.158412e-02	2.560539e-02
## RELCH	57614	-0.10555771	1.159024e-02	2.561660e-02
## LINC02672	105378309	-0.31166620	1.159720e-02	2.562965e-02
## AIMP2	7965	-0.13508484	1.162076e-02	2.567938e-02
## DHFR2	200895	-0.10838527	1.162194e-02	2.567960e-02
## GP6-AS1	107985325	0.59604237	1.162298e-02	2.567960e-02
## SNHG30	105371743	-0.16330051	1.163301e-02	2.569943e-02
## C18orf54	162681	0.21729719	1.163836e-02	2.570891e-02
## IGLV3-24	28794	-0.88923107	1.164428e-02	2.571965e-02
## SMIM27	100129250	0.19048383	1.165400e-02	2.573879e-02
## EIF3I	8668	0.12001906	1.166213e-02	2.575440e-02
## JMY	133746	-0.13690577	1.167104e-02	2.577174e-02
## MXD4	10608	0.15400825	1.167325e-02	2.577428e-02
## PSMD5	5711	0.08639976	1.167743e-02	2.578116e-02
## USP2	9099	-0.26900787	1.169001e-02	2.580425e-02
## ORC4	5000	-0.08927649	1.168956e-02	2.580425e-02
## MIR194-2HG	105369343	0.43667674	1.169200e-02	2.580629e-02
## GYG2	8908	0.21767410	1.169685e-02	2.581465e-02
## COP1-DT	121832809	-0.36068058	1.170646e-02	2.583352e-02

## NOCT	25819	0.26318954	1.172516e-02	2.587243e-02
## UNC5B-AS1	728978	0.54530146	1.173552e-02	2.589295e-02
## ZNF513	130557	-0.12862690	1.177971e-02	2.598598e-02
## GPRIN3	285513	-0.18871693	1.177983e-02	2.598598e-02
## MAML2	84441	0.13024041	1.178231e-02	2.598911e-02
## KRT13	3860	0.99871434	1.180427e-02	2.603282e-02
## FAM210A	125228	-0.08968764	1.180417e-02	2.603282e-02
## LIPT2	387787	-0.16477914	1.181799e-02	2.605921e-02
## ADAT2	134637	0.22677997	1.181838e-02	2.605921e-02
## IFNGR1	3459	0.11140289	1.182075e-02	2.606207e-02
## LMO2	4005	-0.12100675	1.182929e-02	2.607853e-02
## SKOR1	390598	-0.30602515	1.183775e-02	2.609481e-02
## IGSF3P2	100289350	0.39756128	1.186160e-02	2.614502e-02
## ATP5MF	9551	0.18773097	1.189455e-02	2.621525e-02
## IL23A	51561	0.30939314	1.190669e-02	2.623964e-02
## MTCO1P25	107075167	-0.80877480	1.191233e-02	2.624968e-02
## ZBTB49	166793	0.15882628	1.191585e-02	2.625269e-02
## NBPF11	200030	0.22111826	1.191492e-02	2.625269e-02
## TRBJ1-2	28634	1.31230170	1.191714e-02	2.625314e-02
## GPATCH11	253635	0.10718040	1.193485e-02	2.628978e-02
## ZNF672	79894	-0.12251683	1.194325e-02	2.630588e-02
## PLCG2	5336	-0.18666522	1.196352e-02	2.634815e-02
## LAGE3P1	646808	0.56580001	1.196777e-02	2.635513e-02
## HSD17B2	3294	0.48572462	1.197460e-02	2.636777e-02
## UNGP3	319122	-0.41603974	1.197729e-02	2.637131e-02
## AKR1A1	10327	0.23328058	1.199498e-02	2.640786e-02
## SKIDA1	387640	0.16868261	1.201073e-02	2.644014e-02
## ADCK1	57143	-0.11182218	1.201255e-02	2.644175e-02
## CHST9	83539	-0.32274457	1.202029e-02	2.645639e-02
## ALDH1L1	10840	-0.24499904	1.202257e-02	2.645901e-02
## NFILZ	105372267	1.37020900	1.202749e-02	2.646745e-02
## TMUB1	83590	-0.22963373	1.203444e-02	2.648035e-02
## LINC02952	123466213	0.89538179	1.204536e-02	2.650198e-02
## NMNAT1	64802	0.11189143	1.205341e-02	2.651728e-02
## SPHK2	56848	-0.20498834	1.206153e-02	2.653274e-02
## ASS1P2	447	0.50335142	1.209551e-02	2.660509e-02
## EPN1	29924	-0.20843760	1.209815e-02	2.660850e-02
## PTGDS	5730	0.29243334	1.211789e-02	2.664950e-02
## WDR44	54521	0.09741141	1.213788e-02	2.669104e-02
## HPS4	89781	0.08383432	1.214961e-02	2.671441e-02
## CPNE6	9362	-0.67323664	1.215843e-02	2.673139e-02
## HERC6	55008	0.18083762	1.216361e-02	2.674035e-02
## TCEAL9	51186	-0.11115211	1.217992e-02	2.677378e-02
## PARP6	56965	0.14151798	1.219011e-02	2.679376e-02
## IGSF1	3547	0.27017825	1.221191e-02	2.683925e-02
## TRBV23-1	28564	1.56526290	1.221620e-02	2.684624e-02
## HUS1B	135458	-0.90210977	1.223878e-02	2.689345e-02
## HELB	92797	0.20642193	1.225590e-02	2.692620e-02
## DENND6A-AS1	106144528	0.64606917	1.225539e-02	2.692620e-02
## LAMA1	284217	-0.23143507	1.227209e-02	2.695689e-02
## HCFC1-AS1	100873990	1.04921347	1.227206e-02	2.695689e-02
## TRIM74	378108	0.73683388	1.227674e-02	2.696467e-02
## PPP4R3B	57223	0.09793500	1.227856e-02	2.696623e-02
## BCAS2P2	100421045	0.75636970	1.229763e-02	2.700567e-02

## C12orf75-AS1	105369954	0.40299737	1.230152e-02	2.701176e-02
## POLR2I	5438	0.21644150	1.230977e-02	2.702740e-02
## FCSK	197258	-0.12902358	1.231086e-02	2.702740e-02
## ZNF662	389114	0.21955316	1.231696e-02	2.703835e-02
## FSTL4	23105	-0.26266378	1.232176e-02	2.704643e-02
## IGHV6-1	28385	0.79773359	1.232983e-02	2.706171e-02
## C2CD4A	145741	0.53746494	1.237611e-02	2.716083e-02
## XRCC5	7520	-0.08182841	1.240024e-02	2.721134e-02
## MAP3K9	4293	-0.17323058	1.246025e-02	2.734055e-02
## MIR25	407014	0.56227925	1.246791e-02	2.735489e-02
## ATP13A5-AS1	100874218	1.71323995	1.246957e-02	2.735606e-02
## HGS	9146	-0.12497740	1.247428e-02	2.736392e-02
## KCNIP2-AS1	100289509	-0.34080451	1.248094e-02	2.737605e-02
## CLUL1	27098	-0.28800053	1.251528e-02	2.744891e-02
## FAM170B	170370	0.82326066	1.253732e-02	2.749476e-02
## AAMDC	28971	0.17525207	1.255779e-02	2.753717e-02
## USP45	85015	-0.13871006	1.256795e-02	2.755695e-02
## HSD17B1-AS1	108783654	-0.15074045	1.257779e-02	2.757605e-02
## N4BP2	55728	0.19614705	1.258728e-02	2.759435e-02
## VAMP8	8673	-0.18310463	1.259162e-02	2.760138e-02
## ASPSCR1	79058	0.16439139	1.259851e-02	2.761400e-02
## ELOB	6923	0.20985090	1.261500e-02	2.764516e-02
## SCUBE3	222663	0.26203847	1.261477e-02	2.764516e-02
## UBE2E2	7325	0.12262714	1.262025e-02	2.765416e-02
## ZNF426-DT	101928238	-0.24301392	1.262415e-02	2.766021e-02
## SLC12A5-AS1	109729184	1.13493454	1.264796e-02	2.770988e-02
## NDUFB4P11	107075247	0.34938471	1.266359e-02	2.774162e-02
## MKRN1	23608	-0.04999791	1.269835e-02	2.781528e-02
## EPS8	2059	-0.10921928	1.271862e-02	2.785715e-02
## FAM168B	130074	-0.06753022	1.272365e-02	2.786567e-02
## ATP1A3	478	0.82015009	1.272715e-02	2.787083e-02
## WFS1	7466	-0.21386674	1.273019e-02	2.787497e-02
## EQTN	54586	-0.65812360	1.273171e-02	2.787578e-02
## PICART1	284080	-0.31699409	1.275782e-02	2.793042e-02
## MTND1P23	100887749	-0.20922835	1.275918e-02	2.793089e-02
## PPOX	5498	0.10628054	1.277931e-02	2.797245e-02
## C1QTNF12	388581	0.32954876	1.278650e-02	2.798566e-02
## FBF1	85302	0.14672462	1.280416e-02	2.802178e-02
## AJAP1	55966	0.22171272	1.281770e-02	2.804889e-02
## ZNF302	55900	0.13091010	1.283420e-02	2.807994e-02
## FCRL5	83416	0.65176414	1.283379e-02	2.807994e-02
## C17orf78	284099	-0.59821657	1.284590e-02	2.810301e-02
## MROH7	374977	-0.40491677	1.285408e-02	2.811837e-02
## FDXR	2232	0.15863317	1.288225e-02	2.817745e-02
## OSBPL1A	114876	-0.09776845	1.288798e-02	2.818745e-02
## CCDC73	493860	-0.36243888	1.289342e-02	2.819681e-02
## GAL3ST2	64090	-0.43537077	1.289996e-02	2.820858e-02
## SEC63	11231	-0.07748641	1.290822e-02	2.822410e-02
## GATAD1	57798	0.11140824	1.293111e-02	2.827161e-02
## LINC01606	100507651	-0.30991409	1.294214e-02	2.829318e-02
## ATP6V0D1-DT	101927837	0.21674683	1.294514e-02	2.829720e-02
## PIR	8544	0.20185338	1.294772e-02	2.829978e-02
## TIMP4	7079	0.45164634	1.294865e-02	2.829978e-02
## NLRP14	338323	-0.28451708	1.297583e-02	2.835662e-02

## TMEM163	81615	-0.32158790	1.298221e-02	2.836801e-02
## SDAD1	55153	0.08494480	1.298698e-02	2.837588e-02
## LINC02240	101927460	1.41348640	1.299331e-02	2.838717e-02
## LINC02417	101930162	-0.50715882	1.299504e-02	2.838839e-02
## CAMKK2	10645	0.10400628	1.299790e-02	2.839208e-02
## GPANK1	7918	0.13450501	1.300003e-02	2.839418e-02
## THAP9-AS1	100499177	-0.21274156	1.300667e-02	2.840613e-02
## DHRS2	10202	-0.31827367	1.301312e-02	2.841767e-02
## TIMM17A	10440	-0.12431431	1.301635e-02	2.842216e-02
## DSCR8	84677	0.82724999	1.303581e-02	2.845990e-02
## TAS2R19	259294	0.61206359	1.303597e-02	2.845990e-02
## LAMP1	3916	-0.14567238	1.304722e-02	2.848189e-02
## STK16	8576	0.13430715	1.304921e-02	2.848369e-02
## ZCCHC9	84240	0.12288329	1.305726e-02	2.849869e-02
## LIN37	55957	0.19672007	1.309390e-02	2.857609e-02
## D2HGDH	728294	0.21422526	1.311448e-02	2.861799e-02
## TRBV21-1	28566	1.59284554	1.311545e-02	2.861799e-02
## RASEF	158158	-0.19168707	1.312067e-02	2.862681e-02
## IMPG2	50939	-0.33911085	1.313535e-02	2.864856e-02
## DIS3	22894	-0.07801752	1.313457e-02	2.864856e-02
## DOCK8-AS1	157983	0.36077749	1.313355e-02	2.864856e-02
## IGHV3-66	28412	0.76910364	1.313445e-02	2.864856e-02
## GON4L	54856	0.13113856	1.315437e-02	2.868538e-02
## UBE2E4P	286480	0.52023260	1.315460e-02	2.868538e-02
## SLC22A1	6580	0.29523075	1.316642e-02	2.870859e-02
## SPTY2D1	144108	-0.09261256	1.317846e-02	2.873227e-02
## MED20	9477	0.05789532	1.319605e-02	2.876803e-02
## TSPAN13	27075	0.20120379	1.321849e-02	2.881436e-02
## LINC01446	401337	0.98621424	1.322029e-02	2.881571e-02
## NPDC1	56654	0.30548672	1.322558e-02	2.882464e-02
## TRAV33	28649	0.58599974	1.326630e-02	2.891081e-02
## SPATA9	83890	0.39836603	1.326978e-02	2.891580e-02
## C1orf52	148423	0.11244258	1.328897e-02	2.895501e-02
## C14orf119	55017	0.11001235	1.329152e-02	2.895798e-02
## ZNF84	7637	0.14295529	1.331142e-02	2.899873e-02
## ADPGK-AS1	100287559	0.72911598	1.333550e-02	2.904857e-02
## MMADHC	27249	-0.09249966	1.334011e-02	2.905601e-02
## RRN3P1	730092	0.27439560	1.334544e-02	2.906502e-02
## RUSC1-AS1	284618	-0.24524753	1.335340e-02	2.907885e-02
## PTENP1	11191	0.34638389	1.335418e-02	2.907885e-02
## CENPT	80152	0.16983958	1.339036e-02	2.915502e-02
## GALR2	8811	-0.58393935	1.339764e-02	2.916824e-02
## MKRN2OS	100129480	0.39453778	1.339896e-02	2.916850e-02
## IKBKB	3551	0.10644128	1.344793e-02	2.927250e-02
## TTYH3	80727	0.22595954	1.346117e-02	2.929870e-02
## ZNF253	56242	0.11763049	1.347115e-02	2.931779e-02
## PBDC1	51260	0.09588064	1.347295e-02	2.931907e-02
## HES4	57801	-0.38231973	1.349562e-02	2.936316e-02
## KMT2B	9757	-0.14451691	1.349469e-02	2.936316e-02
## GMPPA	29926	-0.12192010	1.350544e-02	2.938190e-02
## CLCN2	1181	-0.16171786	1.351127e-02	2.939193e-02
## CNOT1	23019	-0.07284600	1.351373e-02	2.939467e-02
## ZNF646	9726	0.09861172	1.352190e-02	2.940980e-02
## UBE4B	10277	0.07319916	1.352648e-02	2.941450e-02

## EIF3FP3	339799	0.36042148	1.352611e-02	2.941450e-02
## CARM1	10498	0.14359580	1.353499e-02	2.943038e-02
## ACAD8	27034	0.12871855	1.354604e-02	2.945175e-02
## C2orf74-DT	339803	0.11732672	1.354819e-02	2.945379e-02
## ZFAND2A	90637	0.17257155	1.355491e-02	2.946577e-02
## DLEC1	9940	0.23634139	1.355825e-02	2.946776e-02
## LINC01940	401039	1.02918851	1.355715e-02	2.946776e-02
## TMEM260	54916	-0.10202934	1.356001e-02	2.946894e-02
## EXOSC2	23404	0.07465960	1.359871e-02	2.955041e-02
## LINC01594	102724774	-0.49656873	1.360353e-02	2.955824e-02
## MCM2	4171	0.15007549	1.361556e-02	2.958175e-02
## EEF1AKMT3	25895	-0.18554421	1.363482e-02	2.962093e-02
## NDUFB6	4712	-0.14994521	1.364527e-02	2.964100e-02
## SS18L1	26039	-0.15353694	1.367453e-02	2.970190e-02
## SMAD2	4087	-0.05842297	1.367723e-02	2.970510e-02
## ZSCAN2	54993	0.09881066	1.370823e-02	2.976977e-02
## MTND4LP5	107075235	-0.55023206	1.371080e-02	2.977268e-02
## ZSWIM8	23053	-0.11321246	1.371867e-02	2.978446e-02
## FRMD3-AS1	102723989	-0.23247517	1.371779e-02	2.978446e-02
## SND1	27044	-0.11309214	1.373158e-02	2.980983e-02
## CDIPT	10423	-0.13276540	1.374202e-02	2.982982e-02
## TAC1	6863	-0.50979592	1.374947e-02	2.984332e-02
## SAR1A	56681	0.07456963	1.376053e-02	2.986467e-02
## WDR17	116966	-0.26077035	1.377597e-02	2.989551e-02
## LINC03046	125775240	-0.37048338	1.378117e-02	2.990411e-02
## SPATA7	55812	0.12545409	1.378720e-02	2.991341e-02
## TNRC6A	27327	0.17961959	1.378914e-02	2.991341e-02
## SOCS7	30837	0.11683815	1.378798e-02	2.991341e-02
## CFAP418	157657	-0.13491734	1.381970e-02	2.997702e-02
## BICRA	29998	-0.20612912	1.383326e-02	3.000109e-02
## EML5	161436	-0.21119763	1.383312e-02	3.000109e-02
## C8orf58	541565	0.10487472	1.384418e-02	3.002208e-02
## TBCK	93627	0.08432751	1.385695e-02	3.004709e-02
## GGN	199720	-0.37684470	1.386535e-02	3.006263e-02
## RAPGEF1	2889	0.10659629	1.389955e-02	3.013253e-02
## ZNF777	27153	-0.12129277	1.390007e-02	3.013253e-02
## RNASET2	8635	0.22431808	1.390861e-02	3.014566e-02
## ADORA2A-AS1	646023	0.32503542	1.390827e-02	3.014566e-02
## MMADHCP2	100216355	0.79120959	1.394787e-02	3.022806e-02
## MFSD5	84975	-0.13062116	1.396450e-02	3.025975e-02
## SOCS5P4	100132415	0.36082853	1.396499e-02	3.025975e-02
## CXCL8	3576	-0.43986151	1.397358e-02	3.027568e-02
## POLR2A	5430	-0.11856215	1.398311e-02	3.029161e-02
## CHML	1122	-0.16268522	1.398343e-02	3.029161e-02
## ZCCHC7	84186	0.10110265	1.398824e-02	3.029934e-02
## RPL32P20	392271	0.86883527	1.402276e-02	3.037140e-02
## GPR107	57720	-0.10583299	1.404800e-02	3.042321e-02
## TNRC6B-DT	114841040	-0.47473585	1.404918e-02	3.042321e-02
## SNAPC1	6617	-0.12539746	1.406300e-02	3.044770e-02
## GGNBP2	79893	-0.06540557	1.406188e-02	3.044770e-02
## GIRGL	100506098	0.25405378	1.408899e-02	3.050126e-02
## SLC25A46	91137	-0.10102483	1.411731e-02	3.055983e-02
## RNPS1	10921	0.09024687	1.412302e-02	3.056947e-02
## WFDC5	149708	-0.96949708	1.415008e-02	3.062259e-02

## UNC5C	8633	-0.19021326	1.414980e-02	3.062259e-02
## ARMC1	55156	-0.08563951	1.416280e-02	3.064739e-02
## WDR3	10885	0.06696271	1.417429e-02	3.066953e-02
## TACC2	10579	-0.17947168	1.417716e-02	3.067301e-02
## TMEM52B	120939	-0.27610452	1.418047e-02	3.067470e-02
## APRT	353	0.19994267	1.417998e-02	3.067470e-02
## SLC2A4	6517	0.37366160	1.420036e-02	3.071500e-02
## BYSL	705	0.11434144	1.421305e-02	3.073970e-02
## LMCD1-AS1	100288428	0.18782907	1.429405e-02	3.091214e-02
## PLD5	200150	0.33482199	1.432362e-02	3.097058e-02
## NOG	9241	0.33666230	1.432355e-02	3.097058e-02
## SLC16A14P1	100128685	-1.14020116	1.434845e-02	3.102151e-02
## PMS2P12	392713	0.46746529	1.436357e-02	3.105144e-02
## DIP2B	57609	-0.10760359	1.436583e-02	3.105356e-02
## ZNF599	148103	0.09214427	1.436948e-02	3.105868e-02
## FBXL15	79176	-0.28806467	1.440246e-02	3.112720e-02
## CALM1	801	-0.12321822	1.441416e-02	3.114970e-02
## LMNTD2	256329	-0.26049588	1.441659e-02	3.115220e-02
## SERPINA4	5267	-0.34164511	1.443501e-02	3.118923e-02
## SERPINA10	51156	-0.48877994	1.448264e-02	3.128934e-02
## CIRBP	1153	-0.13798534	1.449371e-02	3.131049e-02
## MIR503	574506	0.79709418	1.450010e-02	3.132151e-02
## NOP53	29997	0.19746443	1.451157e-02	3.134350e-02
## MYC	4609	0.29342885	1.458635e-02	3.150220e-02
## HEATR5A-DT	101927124	-0.34134257	1.463332e-02	3.160085e-02
## LAP3	51056	-0.17026134	1.464652e-02	3.162653e-02
## FOXL1	2300	-0.28278556	1.464861e-02	3.162825e-02
## TAAR1	134864	-0.62655814	1.466213e-02	3.165462e-02
## LINC02336	105370309	0.44414888	1.468237e-02	3.169551e-02
## C1orf35	79169	0.14221676	1.468502e-02	3.169559e-02
## LINC01018	255167	-0.25614507	1.468475e-02	3.169559e-02
## KLF2	10365	-0.28203718	1.469522e-02	3.171479e-02
## RPL21P94	100271425	0.77746851	1.471028e-02	3.174447e-02
## ALOX12B	242	-0.29344207	1.474697e-02	3.182082e-02
## MT1H	4496	-0.42956018	1.478180e-02	3.189315e-02
## GPRASP1	9737	-0.14769555	1.481206e-02	3.195560e-02
## DNAJC15	29103	-0.11962407	1.482776e-02	3.198380e-02
## RPL12P10	392872	1.10967387	1.482771e-02	3.198380e-02
## LINC01069	101927176	-0.79710715	1.483817e-02	3.200341e-02
## RELL2	285613	-0.21162523	1.484500e-02	3.201529e-02
## C11orf97	643037	0.36855946	1.484713e-02	3.201704e-02
## ATP5F1AP3	645443	-0.42593370	1.484972e-02	3.201979e-02
## FMO2	2327	-0.22415910	1.485417e-02	3.202655e-02
## SNRNP35	11066	-0.08875584	1.486046e-02	3.203727e-02
## OXT	5020	-0.52973200	1.486484e-02	3.204103e-02
## GLOD5	392465	0.28152291	1.486480e-02	3.204103e-02
## FER1L5	90342	-0.33074021	1.491568e-02	3.214775e-02
## MUC20P1	651714	-0.29182892	1.493309e-02	3.218243e-02
## SEC16A	9919	-0.09463489	1.493453e-02	3.218267e-02
## MCFD2	90411	-0.06823609	1.494818e-02	3.220924e-02
## NDNF	79625	-0.35427588	1.495013e-02	3.221057e-02
## UTP3	57050	-0.07410246	1.497175e-02	3.225430e-02
## ZDHHC16	84287	-0.11668690	1.498012e-02	3.226947e-02
## ELP3	55140	-0.07249690	1.499781e-02	3.230472e-02

## REXO1	57455	-0.14503672	1.500546e-02	3.231832e-02
## TMX1	81542	-0.09428861	1.500856e-02	3.232214e-02
## ZFAND2A-DT	101927021	0.18186117	1.501844e-02	3.234055e-02
## MIR762	100313837	-0.57086069	1.502288e-02	3.234725e-02
## PIK3R4	30849	-0.06781556	1.502527e-02	3.234953e-02
## TMEM181	57583	0.11849770	1.505719e-02	3.241251e-02
## IQANK1	642574	-0.18987416	1.505599e-02	3.241251e-02
## ZSCAN16-AS1	100129195	0.16123299	1.506571e-02	3.242798e-02
## BLVRB	645	0.18256200	1.506721e-02	3.242833e-02
## GATAD2B	57459	-0.07484180	1.507178e-02	3.243530e-02
## RAPGEF2	9693	-0.12125411	1.507948e-02	3.244898e-02
## LINC00239	145200	0.47555564	1.508928e-02	3.246720e-02
## SSBP2	23635	0.12339378	1.510683e-02	3.250209e-02
## LINC02348	101927505	-0.54231806	1.514262e-02	3.257621e-02
## CD68	968	0.52557324	1.515871e-02	3.260793e-02
## NAB1	4664	0.11011605	1.516861e-02	3.262634e-02
## TMF1	7110	-0.11829699	1.519650e-02	3.267779e-02
## FABP1	2168	-0.45718061	1.519635e-02	3.267779e-02
## GOLM2	113201	0.10143008	1.519657e-02	3.267779e-02
## SLC35B1	10237	-0.13388939	1.519930e-02	3.268077e-02
## LINC01831	101927331	-1.07105887	1.521920e-02	3.272068e-02
## OSER1-DT	100505783	0.12253089	1.523265e-02	3.274669e-02
## PCBP2P1	101060045	0.85921875	1.523954e-02	3.275860e-02
## SERF1A	8293	0.95040274	1.525325e-02	3.278519e-02
## CHCHD10	400916	-0.22784741	1.526314e-02	3.280353e-02
## CUX1	1523	0.09227469	1.527839e-02	3.283340e-02
## MFSD12	126321	-0.19683357	1.534177e-02	3.296671e-02
## CFAP97	57587	-0.09927220	1.535481e-02	3.299180e-02
## ENO1-AS1	100505975	-0.39451415	1.536650e-02	3.301400e-02
## SNX13	23161	-0.09939446	1.539146e-02	3.306471e-02
## RPL39	6170	0.29088726	1.539911e-02	3.307821e-02
## LCMT1	51451	0.11687810	1.540744e-02	3.309318e-02
## TEDC1	283643	0.25664528	1.542759e-02	3.313352e-02
## FAM215A	23591	-0.56680877	1.543342e-02	3.314311e-02
## SPG21	51324	0.11656783	1.544184e-02	3.315535e-02
## LINC01607	101927067	-0.40318306	1.544154e-02	3.315535e-02
## H3P16	644914	0.71960641	1.546042e-02	3.319229e-02
## SHQ1	55164	0.06736680	1.546324e-02	3.319542e-02
## SNIP1	79753	0.06280764	1.550821e-02	3.328902e-02
## MTMR3	8897	0.07487825	1.551919e-02	3.330964e-02
## MIF4GD	57409	0.13725739	1.552087e-02	3.331030e-02
## ARHGAP42-AS1	100128386	-0.41843334	1.556006e-02	3.339147e-02
## EEF1A1P5	158078	0.16947968	1.556823e-02	3.340606e-02
## MRPS9-AS2	102724691	0.33033975	1.559548e-02	3.346158e-02
## LINC02705	105369319	1.04532173	1.560706e-02	3.348347e-02
## CCDC107	203260	0.14257985	1.562834e-02	3.352616e-02
## HRAS	3265	0.16293322	1.564834e-02	3.356609e-02
## FRMD4B	23150	-0.11666435	1.565611e-02	3.357979e-02
## UBAP1	51271	-0.06739766	1.568310e-02	3.363472e-02
## DHRS7	51635	-0.10244718	1.568820e-02	3.363973e-02
## LINC02988	105371433	0.37355369	1.568724e-02	3.363973e-02
## GNB1L	54584	0.21944583	1.569388e-02	3.364893e-02
## ATAT1	79969	0.11906508	1.570438e-02	3.366848e-02
## KDELR1	10945	-0.13064169	1.570822e-02	3.367374e-02

## QRICH1	54870	0.04836473	1.571131e-02	3.367739e-02
## CEP63	80254	0.07256356	1.571546e-02	3.368331e-02
## CFAP92	57501	0.25675168	1.572381e-02	3.369823e-02
## HAND1	9421	1.64922762	1.573249e-02	3.371387e-02
## AKAP3	10566	-0.19455403	1.573823e-02	3.372319e-02
## GPAT4	137964	-0.10562434	1.575596e-02	3.375822e-02
## DNAAF11	23639	-0.15241481	1.581268e-02	3.387675e-02
## DERL2	51009	-0.09646579	1.583981e-02	3.393188e-02
## GLB1L3	112937	-0.39668921	1.585699e-02	3.396569e-02
## C1D	10438	-0.09161419	1.586952e-02	3.398953e-02
## CALY	50632	0.74846700	1.589227e-02	3.403526e-02
## SOX4	6659	0.23205235	1.590560e-02	3.406079e-02
## EOLA1	91966	-0.10983670	1.590955e-02	3.406626e-02
## C15orf61	145853	0.17499514	1.592413e-02	3.409148e-02
## LINC00626	79100	0.47720842	1.592398e-02	3.409148e-02
## IGHV3-69-1	28402	0.96811278	1.595849e-02	3.416201e-02
## FGD6	55785	0.15349405	1.596559e-02	3.417421e-02
## FBXW8	26259	0.09765845	1.598310e-02	3.420867e-02
## ITGA8	8516	-0.22213892	1.600888e-02	3.426084e-02
## OGFOD1	55239	-0.09204369	1.602479e-02	3.429186e-02
## OGFR-AS1	101409261	-0.37364139	1.602715e-02	3.429390e-02
## CACFD1	11094	-0.13991918	1.604340e-02	3.432564e-02
## LINC00113	54088	-0.42469916	1.609136e-02	3.442522e-02
## RBM45	129831	-0.07616884	1.609813e-02	3.443667e-02
## FRGCA	106481742	-1.10462731	1.612280e-02	3.448642e-02
## ANKRD45	339416	-0.21488878	1.612639e-02	3.449105e-02
## NHSL1-AS1	441172	0.20362121	1.613777e-02	3.451236e-02
## KIAA1614-AS1	103344928	0.20805098	1.614084e-02	3.451588e-02
## MARCHF11	441061	0.58890241	1.615894e-02	3.455156e-02
## TTC5	91875	0.07350251	1.618191e-02	3.459763e-02
## AJUBA-DT	107984660	-0.19774807	1.621805e-02	3.467184e-02
## CDC20-DT	105378687	-0.23394661	1.622424e-02	3.468201e-02
## CCDC42	146849	0.67223565	1.626777e-02	3.477202e-02
## CERNA1	100129973	-0.24347467	1.628354e-02	3.480267e-02
## GIPC1	10755	-0.14246859	1.628952e-02	3.481238e-02
## RNF216	54476	0.07065561	1.629186e-02	3.481308e-02
## LIPT2-AS1	100287896	0.12941996	1.629271e-02	3.481308e-02
## MID1	4281	-0.15747137	1.631434e-02	3.485622e-02
## MAP6	4135	-0.14043624	1.632063e-02	3.486433e-02
## LINC01942	105377736	0.39973431	1.632100e-02	3.486433e-02
## UNC45A	55898	-0.09397958	1.635126e-02	3.492589e-02
## CABP7	164633	0.82706705	1.635972e-02	3.494089e-02
## IL12RB2	3595	0.32071050	1.637568e-02	3.497191e-02
## CADPS	8618	0.46982703	1.639655e-02	3.501340e-02
## ANAPC16	119504	-0.10456714	1.641235e-02	3.504188e-02
## PISD	23761	-0.09009143	1.641277e-02	3.504188e-02
## TAL2	6887	0.34136574	1.642284e-02	3.506030e-02
## CEP164	22897	0.13373025	1.643006e-02	3.507264e-02
## SQOR	58472	0.13870543	1.645851e-02	3.513028e-02
## GPR89B	51463	0.20736902	1.649242e-02	3.519956e-02
## TAF9	6880	0.13563589	1.652673e-02	3.526970e-02
## LINC02985	100506691	0.26519274	1.653260e-02	3.527912e-02
## TSPAN18	90139	-0.21511875	1.653872e-02	3.528909e-02
## IGHG	3495	0.60310511	1.654380e-02	3.529684e-02

## COX7A2	1347	-0.19896329	1.655148e-02	3.531011e-02
## PGM5	5239	0.18287037	1.657695e-02	3.536135e-02
## CSTF2	1478	-0.06344423	1.658488e-02	3.537516e-02
## LINC02981	441204	-0.17425516	1.662180e-02	3.545079e-02
## UBE2A	7319	0.07692618	1.663922e-02	3.548483e-02
## LINC01725	101927587	-0.28386692	1.666755e-02	3.554213e-02
## GALT	2592	0.14573546	1.667180e-02	3.554807e-02
## VENTX	27287	0.33707923	1.667372e-02	3.554904e-02
## SUOX	6821	-0.14066391	1.6676705e-02	3.574489e-02
## MEAF6	64769	0.07302086	1.677484e-02	3.575685e-02
## GRB2	2885	0.05652579	1.677560e-02	3.575685e-02
## ID2-AS1	100506299	-0.22073795	1.677847e-02	3.575983e-02
## NR2C2AP	126382	0.11543841	1.678137e-02	3.576288e-02
## ANAPC13	25847	-0.12166791	1.680841e-02	3.581736e-02
## LRRC3B	116135	0.86341913	1.681892e-02	3.583661e-02
## IZUMO1	284359	-0.59494922	1.687906e-02	3.596161e-02
## SELENOF	9403	-0.08722812	1.689020e-02	3.597903e-02
## BMS1P7	100133265	0.76431894	1.688911e-02	3.597903e-02
## ZNF211	10520	0.10801436	1.689357e-02	3.598306e-02
## PRKAG1	5571	0.09279304	1.690627e-02	3.600694e-02
## ACACA	31	0.14875941	1.694413e-02	3.608442e-02
## LINC00964	157381	-0.33700575	1.696258e-02	3.612053e-02
## SLC52A2	79581	-0.19362151	1.696754e-02	3.612794e-02
## ZNF678	339500	-0.14019730	1.697323e-02	3.613689e-02
## FBL	2091	0.15486480	1.697667e-02	3.614104e-02
## NPY6R	4888	0.25268254	1.698575e-02	3.615720e-02
## EIF2B3	8891	0.11557793	1.699115e-02	3.616554e-02
## COX5A	9377	-0.18898887	1.703164e-02	3.624565e-02
## HAR1A	768096	0.38742647	1.703311e-02	3.624565e-02
## IGKV1-27	28935	0.83241293	1.703326e-02	3.624565e-02
## ZNF204P	7754	-0.21133714	1.704636e-02	3.627034e-02
## IGHV3-23	28442	0.58930221	1.705023e-02	3.627540e-02
## RPS4XP11	441550	0.32509861	1.705436e-02	3.628101e-02
## JAGN1	84522	-0.13551039	1.705806e-02	3.628570e-02
## AUP1	550	-0.10267879	1.707459e-02	3.631768e-02
## UGT1A2P	54580	0.64888242	1.708518e-02	3.633703e-02
## TESC-AS1	101928244	-1.04109241	1.710699e-02	3.638024e-02
## RPS17	6218	0.21875921	1.711343e-02	3.638952e-02
## LINC01081	101154687	-0.49389324	1.711435e-02	3.638952e-02
## NYAP1	222950	-0.42239658	1.715131e-02	3.646173e-02
## NSMCE1	197370	0.13308484	1.715061e-02	3.646173e-02
## MTHFR	4524	-0.13247905	1.715345e-02	3.646309e-02
## MMACHC	25974	-0.10375009	1.716701e-02	3.648871e-02
## TNFSF15	9966	0.24122902	1.717696e-02	3.650667e-02
## ANKIB1	54467	0.13409711	1.717964e-02	3.650917e-02
## TUT7	79670	0.12312925	1.719489e-02	3.653840e-02
## TNFRSF14-AS1	115110	-0.19336684	1.719989e-02	3.654581e-02
## WIPF3	644150	-0.18882403	1.721140e-02	3.656709e-02
## PRKCG	5582	1.28158200	1.724052e-02	3.662575e-02
## CDK17	5128	-0.09531377	1.725826e-02	3.666023e-02
## USPL1	10208	0.13295639	1.726571e-02	3.667284e-02
## KRT16	3868	0.79963344	1.728741e-02	3.671573e-02
## SLC22A2	6582	0.22255338	1.728937e-02	3.671668e-02
## SAP30-DT	105377540	0.18151954	1.731480e-02	3.676747e-02

## PIH1D2	120379	-0.15330332	1.733740e-02	3.681224e-02
## ZNF774	342132	0.16860838	1.734220e-02	3.681923e-02
## MIR4645	100616285	0.82667227	1.735526e-02	3.684374e-02
## KLK6	5653	-0.37575431	1.736264e-02	3.685618e-02
## ETFB	2109	0.18955693	1.736501e-02	3.685800e-02
## ADAMTS9	56999	-0.15751209	1.737799e-02	3.688231e-02
## ENPEP	2028	-0.29730379	1.739164e-02	3.690806e-02
## LINC02577	111216280	1.27966159	1.739498e-02	3.691192e-02
## DNAH1	25981	0.33466399	1.742263e-02	3.696737e-02
## OSBPL9	114883	-0.07732762	1.744044e-02	3.700194e-02
## RPLP0P9	441114	0.26200341	1.744429e-02	3.700687e-02
## LINC01670	105379487	-0.42757739	1.746601e-02	3.704971e-02
## ERI2	112479	-0.11894687	1.752538e-02	3.717242e-02
## DAP	1611	-0.10387938	1.753384e-02	3.718710e-02
## HILPDA	29923	0.17813465	1.754162e-02	3.720036e-02
## CCDC17	149483	0.26890894	1.757767e-02	3.727355e-02
## RPS15AP17	391656	0.57652490	1.761809e-02	3.735601e-02
## ATP5F1CP1	645560	-0.51106224	1.762384e-02	3.736494e-02
## RAD9B	144715	0.26651946	1.762775e-02	3.736997e-02
## MST1P2	11209	-0.39579936	1.765439e-02	3.742319e-02
## PAM	5066	0.10209247	1.767059e-02	3.745426e-02
## ZBTB48	3104	0.11697348	1.767582e-02	3.746207e-02
## HSD3B1	3283	1.73816294	1.768608e-02	3.747803e-02
## RPL18P10	100271286	0.72078960	1.768643e-02	3.747803e-02
## ADCY6-DT	100506125	-0.29920154	1.769354e-02	3.748982e-02
## GPR137B	7107	0.22428558	1.769856e-02	3.749718e-02
## RBBP4	5928	-0.03809173	1.774011e-02	3.758193e-02
## RPL24P2	140760	0.44775799	1.776055e-02	3.762195e-02
## SLC2A2	6514	-0.35741847	1.778146e-02	3.766172e-02
## TAF3	83860	-0.07709426	1.778242e-02	3.766172e-02
## SYNE1-AS1	100505475	-0.40043245	1.780514e-02	3.770656e-02
## RPL4P5	158345	0.34494352	1.781332e-02	3.772059e-02
## CCDC146	57639	0.20137399	1.782302e-02	3.773784e-02
## LINC02065	101928741	1.47669022	1.782753e-02	3.774411e-02
## DDX12P	440081	0.43491535	1.783097e-02	3.774810e-02
## HCG15	414761	-0.35366519	1.787402e-02	3.783594e-02
## PSMD6-AS2	100507062	0.35959550	1.788399e-02	3.784438e-02
## C1QTNF1-AS1	100507410	-0.44229499	1.788424e-02	3.784438e-02
## LINC01842	101928845	0.69848091	1.788278e-02	3.784438e-02
## CCL3L3	414062	0.67339736	1.788117e-02	3.784438e-02
## PCDHA11	56138	-0.27484355	1.789522e-02	3.786432e-02
## ZBTB20	26137	0.27106210	1.790181e-02	3.787496e-02
## NACC1	112939	-0.12689933	1.794379e-02	3.796048e-02
## BICDL2	146439	-0.30371207	1.797799e-02	3.802952e-02
## UBQLN4	56893	0.10255185	1.797971e-02	3.802985e-02
## FBXL20	84961	0.09992851	1.798499e-02	3.803771e-02
## EIF2AK1	27102	-0.05587327	1.798949e-02	3.804342e-02
## CTDNEP1	23399	0.14787172	1.799082e-02	3.804342e-02
## HMOX1	3162	-0.26540819	1.799930e-02	3.805804e-02
## LINC01507	101927477	-0.18606289	1.800434e-02	3.806539e-02
## ATG4D	84971	-0.16236408	1.800701e-02	3.806772e-02
## GPR180	160897	0.11684926	1.801556e-02	3.808247e-02
## ARL13B	200894	-0.10160141	1.801995e-02	3.808844e-02
## NMUR1	10316	0.26685141	1.804583e-02	3.813982e-02

## DCUN1D2	55208	0.14369821	1.804743e-02	3.813990e-02
## KDM4D	55693	-0.12661291	1.805156e-02	3.814530e-02
## LGALS8	3964	-0.08207358	1.805784e-02	3.815525e-02
## FTSJ3	117246	-0.07431255	1.806160e-02	3.815987e-02
## ARHGEF39	84904	0.26422691	1.806913e-02	3.817247e-02
## GRK2	156	0.13632741	1.809747e-02	3.822902e-02
## TMPO-AS1	100128191	-0.16813122	1.810445e-02	3.824044e-02
## DCAF11	80344	-0.09058989	1.811268e-02	3.825450e-02
## TEX9	374618	-0.15811350	1.813166e-02	3.829126e-02
## PTGR3	284273	-0.08437328	1.817642e-02	3.838245e-02
## ZNF621	285268	0.14284682	1.818722e-02	3.840192e-02
## ITGA2B	3674	0.35519685	1.821893e-02	3.846553e-02
## CACNA1A	773	0.25753545	1.822090e-02	3.846634e-02
## LINC01085	152742	-0.45208873	1.822387e-02	3.846927e-02
## KISS1	3814	-0.57973978	1.824065e-02	3.850134e-02
## ZNF652	22834	-0.09861157	1.825066e-02	3.851914e-02
## COMMD1	150684	0.14092736	1.825924e-02	3.853388e-02
## TBC1D13	54662	0.15318576	1.829151e-02	3.859864e-02
## SNURF	8926	-0.36388445	1.829374e-02	3.860000e-02
## OR51E2	81285	-0.32657324	1.829677e-02	3.860305e-02
## ARHGEF1	9138	0.15423374	1.830387e-02	3.860949e-02
## CMAHP	8418	-0.22220434	1.830618e-02	3.860949e-02
## NPAS4	266743	-0.71502344	1.830517e-02	3.860949e-02
## LINC01374	105378425	0.61312426	1.830247e-02	3.860949e-02
## TFAP2A-AS1	100130275	-0.31028925	1.831626e-02	3.862740e-02
## SPRY4-AS1	101926941	0.36877340	1.832040e-02	3.863276e-02
## MTCO3P12	107075270	-0.21268445	1.836538e-02	3.872427e-02
## ILRUN	64771	-0.09036891	1.838816e-02	3.876892e-02
## BCKDHA	593	-0.32325063	1.839386e-02	3.877758e-02
## COG8	84342	-0.08652362	1.840227e-02	3.879194e-02
## WAPL	23063	-0.07975245	1.840682e-02	3.879816e-02
## LINC00311	197196	0.78680899	1.842285e-02	3.882858e-02
## CES5AP1	649264	-1.20895340	1.844160e-02	3.886475e-02
## KCNK15	60598	0.39399573	1.847444e-02	3.893058e-02
## RNU6-418P	106481310	-0.59377729	1.848018e-02	3.893929e-02
## GMCL1	64395	-0.09830271	1.848614e-02	3.894847e-02
## CLEC4M	10332	0.44576972	1.848886e-02	3.895083e-02
## SLC25A41	284427	0.44798869	1.850689e-02	3.898544e-02
## RAD51AP2	729475	0.69274506	1.854399e-02	3.906019e-02
## RPL7AP16	100270896	0.40671330	1.855333e-02	3.907648e-02
## FLRT3	23767	-0.19998251	1.856126e-02	3.908979e-02
## ARB2A	83989	-0.07272799	1.857552e-02	3.911644e-02
## KLF8	11279	-0.19638090	1.863485e-02	3.923798e-02
## SLC39A3	29985	-0.19434576	1.870382e-02	3.937297e-02
## FAM110B	90362	0.14358133	1.870240e-02	3.937297e-02
## ANTXRL	195977	-0.93431753	1.870264e-02	3.937297e-02
## ANKRD30B	374860	-0.60463689	1.873732e-02	3.944007e-02
## TSPAN5	10098	-0.15445706	1.874417e-02	3.945108e-02
## RAB11FIP2	22841	-0.12450571	1.875781e-02	3.947635e-02
## NR2C2	7182	0.10629754	1.876530e-02	3.948871e-02
## CMTR1	23070	0.05349276	1.877286e-02	3.949778e-02
## ARHGAP12	94134	-0.09764706	1.877209e-02	3.949778e-02
## IGHV3-30	28439	0.57540962	1.881099e-02	3.957458e-02
## RBM4	5936	-0.12237400	1.883041e-02	3.960857e-02

## AP2A2	161	-0.09359456	1.882886e-02	3.960857e-02
## CHPF2	54480	0.15661268	1.883901e-02	3.962323e-02
## MTCYBP16	107075126	-0.34377386	1.884514e-02	3.963269e-02
## FBXO6	26270	0.14477924	1.890641e-02	3.975810e-02
## FKBP9	11328	0.17979729	1.893577e-02	3.980950e-02
## SPATS2L	26010	0.12258860	1.893254e-02	3.980950e-02
## RNA5SP40	100873279	-1.12446556	1.893544e-02	3.980950e-02
## ANKRD40	91369	0.08833945	1.894620e-02	3.982799e-02
## MTIF3	219402	0.12947526	1.897702e-02	3.988933e-02
## PTOV1-AS1	100506033	-0.15264554	1.899543e-02	3.992457e-02
## PLGLA	285189	0.55962693	1.899973e-02	3.993015e-02
## EFCAB2	84288	-0.17331035	1.906761e-02	4.006936e-02
## WDR7	23335	-0.09088295	1.908003e-02	4.009199e-02
## ZNF749	388567	0.11097858	1.911998e-02	4.017246e-02
## PROKR1	10887	0.93271954	1.912674e-02	4.018319e-02
## OGG1	4968	0.17296715	1.914312e-02	4.021411e-02
## ZNF676	163223	-0.30068665	1.920366e-02	4.033780e-02
## ARMT1	79624	-0.12588418	1.921005e-02	4.034774e-02
## B3GALT4	8705	-0.17160758	1.922919e-02	4.038446e-02
## SPCS2P4	653566	-0.28933104	1.927833e-02	4.048416e-02
## TP53BP1	7158	0.11138633	1.928042e-02	4.048505e-02
## LUZP2	338645	0.45181399	1.928386e-02	4.048866e-02
## RPS15AP11	644790	0.63946771	1.928547e-02	4.048866e-02
## GRIA3	2892	0.27144825	1.932347e-02	4.056493e-02
## DCUN1D2-AS	100874229	-1.08439615	1.934602e-02	4.060876e-02
## KLKB1	3818	0.30357936	1.936370e-02	4.064236e-02
## KLC1	3831	0.19311061	1.945110e-02	4.081966e-02
## PTPN14	5784	-0.13878807	1.945153e-02	4.081966e-02
## DDX43	55510	0.34568149	1.946791e-02	4.085050e-02
## CTDSP1	58190	0.10123542	1.947809e-02	4.086833e-02
## DBR1	51163	-0.05971334	1.949150e-02	4.089295e-02
## TAF8	129685	0.08478753	1.950355e-02	4.091470e-02
## IST1	9798	-0.04669629	1.953464e-02	4.097637e-02
## SLC35C2	51006	0.09131495	1.953811e-02	4.098012e-02
## H2BC11	8970	0.50739399	1.954432e-02	4.098960e-02
## KLHDC7A	127707	-0.20301327	1.954680e-02	4.099127e-02
## C16orf95	100506581	0.26322671	1.956037e-02	4.101618e-02
## SDHA	6389	-0.12159098	1.958886e-02	4.107239e-02
## SBDSP1	155370	-0.09569835	1.960870e-02	4.111042e-02
## MICALL2-DT	107986756	0.59430814	1.961082e-02	4.111133e-02
## IPO5P1	100132815	-0.15443229	1.961252e-02	4.111135e-02
## TPR	7175	0.12538772	1.962376e-02	4.112866e-02
## ZFYVE1	53349	0.09963524	1.962416e-02	4.112866e-02
## RAB51F	55969	-0.30408355	1.963132e-02	4.113359e-02
## TIMMDC1	51300	0.10136794	1.962976e-02	4.113359e-02
## STAU2-AS1	100128126	0.82960174	1.963159e-02	4.113359e-02
## CLMAT3	101927096	1.10230374	1.963761e-02	4.114264e-02
## SLC25A15	10166	0.15787247	1.965852e-02	4.118290e-02
## SLC30A2	7780	-0.33667229	1.967898e-02	4.122222e-02
## INSIG2	51141	-0.07588799	1.968484e-02	4.123094e-02
## LIMD1	8994	0.10047536	1.968780e-02	4.123358e-02
## ISCU	23479	0.12181792	1.969076e-02	4.123623e-02
## ETS1	2113	0.14407266	1.969759e-02	4.124698e-02
## TRAV8-5	28681	1.24569573	1.970451e-02	4.125792e-02

## IGLV3-12	28802	1.04488317	1.971377e-02	4.127019e-02
## THRAP3P1	391524	0.63050846	1.971236e-02	4.127019e-02
## CRK	1398	-0.05941207	1.975417e-02	4.135119e-02
## ZNF605	100289635	0.18043511	1.975966e-02	4.135556e-02
## RPL10P3	619445	0.69215778	1.975906e-02	4.135556e-02
## TRPC4AP	26133	0.07101557	1.976759e-02	4.136860e-02
## RITA1	84934	0.13908853	1.977243e-02	4.137310e-02
## TUBB8	347688	-0.51540235	1.977314e-02	4.137310e-02
## CCDC174	51244	0.07821921	1.978608e-02	4.139660e-02
## SLC10A5	347051	0.31644954	1.981180e-02	4.144684e-02
## TMEM19	55266	0.13573945	1.981501e-02	4.144998e-02
## IGLC3	3539	0.57806542	1.982314e-02	4.146342e-02
## MAD2L1-DT	121009649	0.36027989	1.982931e-02	4.147276e-02
## CYB5R4	51167	-0.10383500	1.986318e-02	4.154002e-02
## RALGAPA2	57186	-0.09605444	1.988028e-02	4.157221e-02
## RRAS	6237	0.20291754	1.998488e-02	4.159917e-02
## ALPI	248	-0.49723540	1.992358e-02	4.165559e-02
## VCAM1	7412	-0.28483470	1.993389e-02	4.167357e-02
## DPH3	285381	0.08517922	1.993925e-02	4.168119e-02
## ARF4	378	0.12633988	1.994826e-02	4.169642e-02
## URM1	81605	0.12174060	1.996946e-02	4.173714e-02
## DNER	92737	0.26097602	1.998060e-02	4.175684e-02
## SIMC1P1	202181	0.32878166	1.998474e-02	4.175830e-02
## LINC02198	101928885	-0.43221836	1.998462e-02	4.175830e-02
## HTR7P1	93164	0.16858872	2.000954e-02	4.180653e-02
## RIMS2	9699	-0.29605212	2.002777e-02	4.184104e-02
## EPC1	80314	0.08897139	2.003467e-02	4.185184e-02
## AMDHD2	51005	0.17320380	2.004950e-02	4.187571e-02
## SOCS4	122809	-0.10617712	2.004954e-02	4.187571e-02
## LINC02454	105369807	0.97749182	2.005911e-02	4.189210e-02
## ADAM7-AS1	101929294	0.96988594	2.006818e-02	4.190745e-02
## VN2R19P	100033407	-0.68706187	2.007949e-02	4.192746e-02
## DCBLD2	131566	0.12261175	2.008191e-02	4.192891e-02
## WDR33	55339	-0.04385902	2.008506e-02	4.193187e-02
## PSIP1	11168	0.08042668	2.012652e-02	4.201482e-02
## DDX54	79039	-0.12587399	2.014813e-02	4.205272e-02
## ABCA1	19	0.16657330	2.014781e-02	4.205272e-02
## LINC00379	100874150	-0.30724125	2.019906e-02	4.215540e-02
## ARL6IP5	10550	0.13080233	2.024898e-02	4.225595e-02
## ZNF654	55279	-0.11688390	2.025688e-02	4.226879e-02
## SFTPB	6439	-0.37128413	2.027141e-02	4.229548e-02
## NAIPP1	728535	0.62110041	2.027499e-02	4.229933e-02
## SLC9A4	389015	-0.24374923	2.028011e-02	4.230637e-02
## PDCD5	9141	0.14651462	2.028633e-02	4.231209e-02
## CAPN14	440854	-0.41181120	2.028622e-02	4.231209e-02
## RPS6KA1	6195	-0.11860408	2.030182e-02	4.234076e-02
## ELF5	2001	-0.31997483	2.034757e-02	4.242525e-02
## TSC22D3	1831	-0.24699606	2.034606e-02	4.242525e-02
## ZNF641	121274	0.08511614	2.034615e-02	4.242525e-02
## KCNS1	3787	0.39800865	2.035239e-02	4.243166e-02
## PARD6G	84552	-0.11998583	2.036376e-02	4.244808e-02
## ZNF569	148266	0.11458214	2.036325e-02	4.244808e-02
## VWA8	23078	-0.13876827	2.038235e-02	4.248015e-02
## PAXIP1-AS2	100132707	0.13616925	2.038397e-02	4.248015e-02

## CA3-AS1	100996348	-0.15443729	2.038439e-02	4.248015e-02
## RAP1BL	643752	0.28354910	2.041319e-02	4.253652e-02
## SART1	9092	-0.09978249	2.042867e-02	4.256285e-02
## LINC02436	101928877	-0.71937030	2.042933e-02	4.256285e-02
## TNKS	8658	0.09727847	2.046040e-02	4.262394e-02
## DCLK2	166614	-0.16221932	2.046859e-02	4.263735e-02
## SAXO3	101059948	-0.57642309	2.048457e-02	4.266697e-02
## PM20D2	135293	-0.13501348	2.049461e-02	4.268367e-02
## TRH	7200	0.82131347	2.049610e-02	4.268367e-02
## MRPL18	29074	0.11284525	2.050925e-02	4.270709e-02
## CCT8P1	644131	-0.23771078	2.051086e-02	4.270709e-02
## PROKR2	128674	1.47944312	2.057372e-02	4.283431e-02
## CREBZF	58487	-0.19536302	2.059008e-02	4.286349e-02
## KIF23-AS1	145694	0.22625889	2.059127e-02	4.286349e-02
## ACTMAP	284325	-0.08791483	2.061484e-02	4.290888e-02
## RBBP9	10741	0.10765105	2.065488e-02	4.298854e-02
## SBF2	81846	0.09461787	2.067570e-02	4.302481e-02
## PTPRT	11122	0.38850448	2.067585e-02	4.302481e-02
## ROBO2	6092	0.22620384	2.068601e-02	4.304228e-02
## GLRX3	10539	0.09310125	2.070042e-02	4.306121e-02
## KCNF1	3754	0.31532075	2.069847e-02	4.306121e-02
## CCDC8	83987	-0.21043846	2.069988e-02	4.306121e-02
## CLIC5	53405	-0.27887309	2.070491e-02	4.306382e-02
## YPEL2	388403	-0.14517254	2.070522e-02	4.306382e-02
## HEPACAM2	253012	-0.28564184	2.072887e-02	4.310931e-02
## HECTD3	79654	-0.08722991	2.073327e-02	4.311476e-02
## KRT19	3880	-0.23165841	2.074321e-02	4.313175e-02
## GUSB	2990	0.09895871	2.080467e-02	4.325585e-02
## STXBP5-AS1	729178	-0.22501050	2.081684e-02	4.327743e-02
## PARP16	54956	0.06730101	2.084980e-02	4.333892e-02
## GUSBP11	91316	0.34542035	2.084998e-02	4.333892e-02
## MIR22HG	84981	-0.16312567	2.086997e-02	4.337307e-02
## HNRNPUP1	319134	-0.54175107	2.086851e-02	4.337307e-02
## PFN4	375189	-0.22657677	2.091832e-02	4.346981e-02
## FKBP9P1	360132	0.31229170	2.092125e-02	4.347219e-02
## ARIH2	10425	0.07118568	2.092424e-02	4.347470e-02
## USP54	159195	0.11381673	2.095972e-02	4.354468e-02
## ERI1	90459	0.10015155	2.097400e-02	4.357063e-02
## TOR1AIP2	163590	-0.05997634	2.099003e-02	4.360019e-02
## LINC02016	101927123	1.88752116	2.103831e-02	4.369676e-02
## KLK3	354	-0.39194678	2.105451e-02	4.371919e-02
## RAPH1	65059	0.12722484	2.105429e-02	4.371919e-02
## EEF1B2P3	644820	0.27360907	2.105395e-02	4.371919e-02
## TRPC2	7221	0.43077977	2.108009e-02	4.376856e-02
## NOA1	84273	0.08618115	2.111875e-02	4.384509e-02
## TENM1	10178	-0.29423935	2.113485e-02	4.387102e-02
## SPINK7	84651	-0.78127623	2.113408e-02	4.387102e-02
## CYCSP45	352852	-0.71235107	2.114098e-02	4.387999e-02
## JPT1	51155	0.20957248	2.116177e-02	4.391939e-02
## HOTAIR	100124700	0.36990035	2.116948e-02	4.393164e-02
## UBE3C	9690	-0.06070993	2.118718e-02	4.396462e-02
## HBQ1	3049	1.18769935	2.120601e-02	4.399993e-02
## GDE1	51573	0.06675164	2.124559e-02	4.407830e-02
## SAMD12-AS1	552860	-0.26061882	2.127015e-02	4.412548e-02

## SLC43A2	124935	-0.18391704	2.127254e-02	4.412667e-02
## RELA-DT	105369347	0.19515892	2.130382e-02	4.418779e-02
## GMEB2	26205	-0.10315756	2.132008e-02	4.421775e-02
## SNORD59A	26789	-0.55104146	2.136705e-02	4.431137e-02
## NSA2P2	400061	0.69475124	2.139437e-02	4.436424e-02
## MNX1	3110	0.65600076	2.143507e-02	4.444485e-02
## LINC02801	101927844	1.63649784	2.148560e-02	4.454582e-02
## GCATP1	319140	0.41423345	2.151143e-02	4.459556e-02
## FAM13A	10144	-0.12124746	2.151844e-02	4.460631e-02
## LINC00184	100302691	0.68455203	2.152459e-02	4.461525e-02
## C5orf15	56951	-0.09285268	2.158817e-02	4.474321e-02
## NUP42	11097	0.08696924	2.159033e-02	4.474388e-02
## LINC00310	114036	0.35132380	2.160511e-02	4.477069e-02
## SLC9A7P1	121456	-0.17950992	2.162625e-02	4.481067e-02
## BST1	683	0.21930276	2.163759e-02	4.483035e-02
## SLC37A3	84255	-0.10101460	2.166139e-02	4.487582e-02
## IRGQ	126298	-0.09487888	2.166344e-02	4.487625e-02
## KIAA1614	57710	-0.12898225	2.168296e-02	4.491012e-02
## DSTNP3	100287016	0.51962079	2.168349e-02	4.491012e-02
## TRMT112	51504	0.14351139	2.168561e-02	4.491069e-02
## HNRNPF	3185	-0.05672962	2.168907e-02	4.491403e-02
## SCRN3	79634	0.08081236	2.171014e-02	4.495383e-02
## SPATC1	375686	0.51849688	2.173070e-02	4.499256e-02
## FAM180A	389558	0.32113832	2.173750e-02	4.500280e-02
## NFIB	4781	0.11715056	2.174064e-02	4.500547e-02
## KLHL28	54813	0.11759569	2.174575e-02	4.501223e-02
## POLR1H	30834	0.12626273	2.175759e-02	4.503290e-02
## SCG3	29106	0.40990136	2.177355e-02	4.506209e-02
## WDR37	22884	0.05152613	2.178206e-02	4.507294e-02
## METTL26	84326	0.20906175	2.178250e-02	4.507294e-02
## MCOLN3	55283	-0.18991480	2.178984e-02	4.508064e-02
## C8orf34-AS1	286189	-0.87903937	2.178993e-02	4.508064e-02
## OLFM2	93145	0.43473367	2.179680e-02	4.509100e-02
## PARM1	25849	-0.14345095	2.180833e-02	4.511101e-02
## CYYR1-AS1	100996571	0.51185357	2.181341e-02	4.511769e-02
## IRAG1	10335	0.17760866	2.188493e-02	4.526176e-02
## RPL3P4	326307	0.21283101	2.193764e-02	4.536690e-02
## CFAP300	85016	0.17755321	2.200822e-02	4.550899e-02
## ZNF787	126208	-0.19410502	2.208613e-02	4.566621e-02
## SKOR1-AS1	101929076	-0.80443211	2.212526e-02	4.574324e-02
## DEK	7913	0.08545894	2.215734e-02	4.580566e-02
## LTA4H	4048	0.08021706	2.217823e-02	4.584494e-02
## ARHGEF7	8874	0.07926857	2.220431e-02	4.589496e-02
## CTSE	1510	0.53368604	2.223882e-02	4.596236e-02
## SNORD104	692227	-0.35031314	2.226160e-02	4.600554e-02
## C2orf49-DT	100506473	-0.21206196	2.228866e-02	4.605755e-02
## CEP350	9857	0.16305900	2.230871e-02	4.609506e-02
## LINC02773	102723761	0.46359021	2.231846e-02	4.611127e-02
## RBM20	282996	0.24820934	2.232050e-02	4.611157e-02
## GPR33	2856	1.21082328	2.234837e-02	4.616524e-02
## FLT1P1	391533	-0.58831729	2.235304e-02	4.616984e-02
## TRPC7-AS2	106478968	0.43816839	2.235440e-02	4.616984e-02
## NRIP3	56675	0.22305976	2.236039e-02	4.617829e-02
## CBL	867	0.13416713	2.238648e-02	4.622824e-02

## RPS11P5	727826	0.30367173	2.239265e-02	4.623704e-02
## LINC01983	101929697	-0.33635045	2.241884e-02	4.628719e-02
## TRAF3IP1	26146	0.06916302	2.242420e-02	4.629433e-02
## RPL32P3	132241	0.22533440	2.243394e-02	4.631051e-02
## SULT1C4	27233	0.16999665	2.248557e-02	4.641314e-02
## RFXAP	5994	-0.13247671	2.253985e-02	4.652122e-02
## GLTP	51228	-0.12075420	2.256410e-02	4.656337e-02
## IRAIN	104472848	-0.34550614	2.256333e-02	4.656337e-02
## PRADC1	84279	0.17234793	2.259665e-02	4.662658e-02
## SYT15B	102724488	0.48307268	2.260312e-02	4.663596e-02
## ADAM21	8747	-0.29227679	2.261239e-02	4.665114e-02
## ING3	54556	-0.08208558	2.262656e-02	4.667374e-02
## GRID2	2895	-0.43608181	2.262719e-02	4.667374e-02
## ANKRD52	283373	-0.10092117	2.263372e-02	4.668324e-02
## C1orf122	127687	0.21531820	2.268574e-02	4.678658e-02
## ZNF648	127665	0.53068508	2.268899e-02	4.678931e-02
## OGFRP1	388906	-0.11600901	2.270091e-02	4.680991e-02
## SNHG14	104472715	-0.18847749	2.270866e-02	4.682192e-02
## XPO1	7514	0.10079254	2.271933e-02	4.683597e-02
## MPDU1	9526	-0.13680748	2.271750e-02	4.683597e-02
## CATSPER2P1	440278	0.15274964	2.272462e-02	4.683894e-02
## IGKV3D-20	28874	0.81689605	2.272395e-02	4.683894e-02
## RN7SKP276	106479218	1.76670055	2.277408e-02	4.693689e-02
## ENGASE	64772	0.19741982	2.277789e-02	4.694076e-02
## LYPD3	27076	-0.27191763	2.278331e-02	4.694795e-02
## SERTM2	401613	0.52253847	2.280075e-02	4.697990e-02
## PPIAP31	439953	0.57654413	2.283200e-02	4.704031e-02
## TMEM174	134288	0.35775934	2.285478e-02	4.708326e-02
## ZNF271P	10778	0.09113203	2.288740e-02	4.714646e-02
## PHACTR4	65979	-0.11179011	2.294188e-02	4.725467e-02
## IGFBPL1	347252	-0.23264499	2.294604e-02	4.725924e-02
## MEF2B	100271849	0.48763713	2.294889e-02	4.726111e-02
## UBXN1	51035	0.12568138	2.295376e-02	4.726712e-02
## ERLIN1	10613	0.08152365	2.296545e-02	4.728719e-02
## LINC02883	101929679	0.50629029	2.296800e-02	4.728844e-02
## RAD17	5884	-0.07873207	2.298242e-02	4.731411e-02
## PRR34	55267	0.18690382	2.299074e-02	4.732724e-02
## PKD1P4	353512	0.40219224	2.303056e-02	4.740518e-02
## ZNF609	23060	0.10338378	2.303599e-02	4.741235e-02
## NDUFA8	4702	-0.13477665	2.306434e-02	4.746668e-02
## UPP1	7378	-0.21690559	2.307412e-02	4.748278e-02
## DACT3-AS1	100506068	0.45804252	2.310117e-02	4.753442e-02
## COPS9	150678	0.18831668	2.312339e-02	4.757611e-02
## HEXD	284004	-0.17526085	2.313498e-02	4.759594e-02
## DNMT3A	1788	0.12394681	2.314079e-02	4.759983e-02
## DGAT1	8694	-0.15918768	2.314015e-02	4.759983e-02
## SMC5-DT	100507299	-0.17655307	2.314325e-02	4.760085e-02
## LINC02596	105376834	0.41342420	2.314569e-02	4.760184e-02
## SYK	6850	0.13855345	2.316074e-02	4.762876e-02
## RGS12	6002	0.08604383	2.317035e-02	4.764449e-02
## DNMT3B	1789	0.19351373	2.319629e-02	4.769381e-02
## PDGFA-DT	441307	-0.31273078	2.320039e-02	4.769819e-02
## C17orf49	124944	0.37381200	2.321199e-02	4.771800e-02
## BLMH	642	0.07559512	2.322820e-02	4.774729e-02

## LUNAR1	104564224	-0.53643159	2.324350e-02	4.777470e-02
## LINC02487	441178	-0.44346961	2.326442e-02	4.781366e-02
## RN7SKP16	106480837	-0.39663000	2.327429e-02	4.782989e-02
## PFDN1	5201	0.09780160	2.328058e-02	4.783877e-02
## ATXN2	6311	-0.07643989	2.329888e-02	4.787233e-02
## FOLR1	2348	0.21832883	2.331950e-02	4.791065e-02
## RFNG	5986	0.15902167	2.336202e-02	4.799394e-02
## WTIP	126374	0.17314049	2.339304e-02	4.805129e-02
## HS2ST1	9653	-0.08692471	2.339388e-02	4.805129e-02
## ZNF568	374900	0.09803899	2.341933e-02	4.809950e-02
## SEMA6A-AS2	105379132	0.28256870	2.343416e-02	4.812587e-02
## SF3B1	23451	-0.08971451	2.346675e-02	4.818708e-02
## FAM216A	29902	0.14070388	2.346792e-02	4.818708e-02
## FBXL8	55336	-0.19321382	2.348730e-02	4.822278e-02
## MIEN1	84299	-0.16716545	2.349068e-02	4.822566e-02
## HECTD2	143279	0.18195875	2.351917e-02	4.828007e-02
## CCDC15-DT	105369547	0.26122617	2.360508e-02	4.845231e-02
## INTS7	25896	0.08561452	2.361044e-02	4.845588e-02
## LINC01736	101927532	-0.64563818	2.361080e-02	4.845588e-02
## LINC03032	105370361	1.37942835	2.362562e-02	4.848221e-02
## SLC13A4	26266	0.50490546	2.365133e-02	4.853085e-02
## ALMS1	7840	0.14398768	2.367472e-02	4.857064e-02
## MRPL48	51642	-0.11948915	2.367344e-02	4.857064e-02
## FABP6	2172	0.55870716	2.369216e-02	4.860233e-02
## CFAP298	56683	-0.10889938	2.369513e-02	4.860432e-02
## UBAP2L	9898	0.06279352	2.370140e-02	4.861307e-02
## NRAS	4893	-0.09719739	2.376218e-02	4.873363e-02
## GALNS	2588	0.11370304	2.377406e-02	4.875255e-02
## LINC03034	283710	0.88629600	2.377542e-02	4.875255e-02
## ZNF793-AS1	101927720	-0.18755855	2.379170e-02	4.878181e-02
## SMIM3	85027	-0.18478576	2.379745e-02	4.878950e-02
## SMPD2	6610	-0.12729582	2.380369e-02	4.879817e-02
## GPATCH1	55094	0.07354789	2.380819e-02	4.880327e-02
## CA14	23632	0.35897930	2.381906e-02	4.881762e-02
## RPS6KB2	6199	0.12505227	2.381921e-02	4.881762e-02
## MAOB	4129	-0.16684860	2.384631e-02	4.886905e-02
## PHB2	11331	0.10785242	2.385412e-02	4.888093e-02
## NRDE2	55051	-0.08576439	2.387472e-02	4.891901e-02
## NBPF26	101060684	0.26350125	2.388482e-02	4.893559e-02
## ZNF34	80778	0.09023215	2.390393e-02	4.897061e-02
## PEX7	5191	-0.11838107	2.391215e-02	4.898333e-02
## LPIN2	9663	-0.11061699	2.392281e-02	4.900063e-02
## ADH6	130	0.31934248	2.392463e-02	4.900063e-02
## HPS3	84343	-0.09056812	2.393499e-02	4.901772e-02
## NBPF3	84224	0.15723618	2.396336e-02	4.907167e-02
## DNAJB9	4189	-0.14421858	2.397851e-02	4.909858e-02
## KHDC4	22889	0.17813948	2.398793e-02	4.911371e-02
## GRM5	2915	-0.33570004	2.399174e-02	4.911738e-02
## PAICS	10606	-0.06686417	2.399877e-02	4.912764e-02
## CBLL1-AS1	101927974	0.157171418	2.400245e-02	4.913102e-02
## NFKBIB	4793	-0.12121088	2.400534e-02	4.913281e-02
## LINC01839	105374251	1.20526308	2.406826e-02	4.925744e-02
## LIN54	132660	-0.13464486	2.408768e-02	4.929303e-02
## SMIM44	122405565	-0.63424851	2.409357e-02	4.930093e-02

## MSRA-DT	105379234	0.55750595	2.414161e-02	4.939508e-02
## ESS2	8220	0.09138964	2.416637e-02	4.943828e-02
## SEM1P1	153842	-1.15892015	2.416680e-02	4.943828e-02
## ATG2B	55102	-0.10626332	2.416948e-02	4.943960e-02
## TMEM187	8269	-0.13530895	2.417265e-02	4.944193e-02
## DGCR6L	85359	0.20137985	2.417949e-02	4.944760e-02
## KRT17P8	100130074	0.84731274	2.417913e-02	4.944760e-02
## HAUS6	54801	0.09693198	2.418178e-02	4.944812e-02
## GOLGA8K	653125	0.86936562	2.418853e-02	4.945777e-02
## WDR5-DT	118568806	-0.30164249	2.420025e-02	4.947757e-02
## GLP2R	9340	0.93357094	2.420423e-02	4.948152e-02
## CRYZL1	9946	-0.09091069	2.421472e-02	4.949881e-02
## MCTP2	55784	0.13547230	2.422569e-02	4.951708e-02
## BCO2	83875	0.24014594	2.426487e-02	4.959298e-02
## POLG-DT	119545629	-0.29217808	2.427508e-02	4.960967e-02
## FGF14-AS2	283481	-0.15418998	2.428153e-02	4.961869e-02
## SYNGAP1	8831	0.18333301	2.428763e-02	4.962698e-02
## LINC02028	285389	0.28120793	2.430519e-02	4.965868e-02
## RASIP1	54922	-0.21248490	2.431731e-02	4.967928e-02
## MARF1	9665	0.08681742	2.433637e-02	4.971403e-02
## ADGRL2	23266	-0.11157546	2.436293e-02	4.976411e-02
## RIMBP3B	440804	0.98154589	2.436789e-02	4.977005e-02
## NRAD1	121838	-0.49629431	2.437956e-02	4.978970e-02
## SAR1B	51128	-0.11072355	2.439682e-02	4.982078e-02
## MAPRE3	22924	0.15236801	2.441776e-02	4.985934e-02
## SOWAHD	347454	0.29692223	2.442804e-02	4.987614e-02
## YBEY	54059	0.14431801	2.445076e-02	4.991833e-02
## BCL10-AS1	646626	0.40937164	2.446141e-02	4.993355e-02
## RAP2C-AS1	101928578	-0.15114160	2.446232e-02	4.993355e-02
## GPC5-AS1	100873969	-0.42464399	2.448363e-02	4.997284e-02
## LGR4-AS1	105376671	0.30407603	2.448671e-02	4.997494e-02
## APOH	350	0.43369034	2.450276e-02	5.000031e-02
## RNF122	79845	0.15082095	2.450326e-02	5.000031e-02
## SNORD6	692075	-0.48696146	2.451109e-02	5.001209e-02
## PEF1	553115	-0.10864435	2.457112e-02	5.013037e-02
## DSP-AS1	101928076	0.19770599	2.457319e-02	5.013038e-02
## PALS1	64398	-0.13111394	2.461003e-02	5.020132e-02
## RAB10	10890	-0.06567886	2.465859e-02	5.029420e-02
## CER1	9350	-0.54497172	2.465970e-02	5.029420e-02
## ATXN2L	11273	-0.09658853	2.472156e-02	5.041613e-02
## PCARE	388939	-0.31135309	2.473909e-02	5.044764e-02
## PCCA-DT	105370333	-0.15405012	2.476362e-02	5.049343e-02
## HEPFAL	124905036	0.52306464	2.478318e-02	5.052907e-02
## MRFAP1L2	93622	-0.10206817	2.480390e-02	5.056707e-02
## C19orf73	55150	0.21568686	2.486208e-02	5.068144e-02
## SLC25A24	29957	-0.09061104	2.486525e-02	5.068365e-02
## SLC25A44	9673	-0.12066247	2.490826e-02	5.076707e-02
## LEMD2	221496	-0.06538965	2.491490e-02	5.077634e-02
## SYNJ2	8871	0.16685498	2.494200e-02	5.082509e-02
## HSPE1P3	100507046	0.42679036	2.494301e-02	5.082509e-02
## LAMB3	3914	-0.17914235	2.497539e-02	5.088680e-02
## MCUR1	63933	-0.11648461	2.501229e-02	5.095772e-02
## IL17F	112744	0.72877578	2.502398e-02	5.097727e-02
## NPHP1	4867	0.11975050	2.503672e-02	5.099894e-02

## RERE-AS1	102724552	0.32484685	2.504064e-02	5.100265e-02
## ROCK2	9475	0.11919356	2.504506e-02	5.100738e-02
## ENDOV	284131	0.09052967	2.505842e-02	5.103030e-02
## HEIH	100859930	-0.09851617	2.506110e-02	5.103149e-02
## MLF2	8079	-0.10694426	2.506666e-02	5.103853e-02
## PANCR	110231149	-0.37303326	2.510512e-02	5.111256e-02
## DUS2	54920	0.08324662	2.512283e-02	5.114433e-02
## OCEL1	79629	-0.17242714	2.518364e-02	5.126383e-02
## KIF24	347240	0.11565586	2.519200e-02	5.127656e-02
## RIMBP3C	150221	0.96191169	2.519599e-02	5.128037e-02
## SERPIND1	3053	0.38126440	2.520545e-02	5.129534e-02
## OR1L8	138881	0.36711564	2.524460e-02	5.137071e-02
## GNPTG	84572	0.10832983	2.532419e-02	5.152836e-02
## RN7SL3	378707	0.74864486	2.533304e-02	5.154204e-02
## CASC19	103021165	-0.53149323	2.533593e-02	5.154361e-02
## NDUFAF2P1	727919	0.34705797	2.534040e-02	5.154839e-02
## RWDD3-DT	101928118	0.26733660	2.534833e-02	5.156020e-02
## NUP37	79023	0.08158571	2.537533e-02	5.161081e-02
## SEL1L3	23231	-0.16512209	2.544386e-02	5.174084e-02
## GRPEL2	134266	-0.07016472	2.544342e-02	5.174084e-02
## SIPA1L1	26037	-0.09913029	2.544565e-02	5.174084e-02
## MRPL49	740	-0.08105067	2.547124e-02	5.178854e-02
## CRTC3	64784	0.10058260	2.548780e-02	5.181788e-02
## CSF2	1437	1.33927620	2.550789e-02	5.185005e-02
## NAPA-AS1	100505681	0.18339345	2.550647e-02	5.185005e-02
## ZNF184	7738	0.12265985	2.554581e-02	5.192278e-02
## PARD6G-AS1	100130522	0.17808062	2.556791e-02	5.195902e-02
## GRIN2B	2904	0.34054915	2.556686e-02	5.195902e-02
## LINC02973	123706551	-0.54825873	2.558691e-02	5.199326e-02
## SMO	6608	-0.10448373	2.561046e-02	5.203678e-02
## RIPPLY1	92129	0.31271779	2.562621e-02	5.206443e-02
## NCOA2	10499	-0.11312744	2.563669e-02	5.208137e-02
## CFAP73	387885	-0.31104361	2.566313e-02	5.213072e-02
## ZNF280D	54816	0.12728849	2.566586e-02	5.213191e-02
## TSG101	7251	-0.07932948	2.567586e-02	5.214785e-02
## S100A9	6280	0.39675782	2.570149e-02	5.219502e-02
## ZNF709	163051	-0.23363697	2.570338e-02	5.219502e-02
## HBS1L	10767	0.07064935	2.574008e-02	5.226447e-02
## MACO1	55219	0.07174579	2.574188e-02	5.226447e-02
## TMEM87A	25963	-0.09000615	2.577084e-02	5.231891e-02
## PEX6	5190	0.13806917	2.577336e-02	5.231964e-02
## CORO2A	7464	-0.23998996	2.579182e-02	5.235274e-02
## NECAB2	54550	0.41420712	2.581203e-02	5.238940e-02
## NOP14	8602	0.06489812	2.581543e-02	5.239191e-02
## ZNF555	148254	0.10361343	2.583385e-02	5.242492e-02
## EDC4	23644	-0.10300438	2.585637e-02	5.246623e-02
## XPC	7508	0.09491423	2.587086e-02	5.249126e-02
## SAP30L-AS1	386627	0.23338112	2.594090e-02	5.262897e-02
## PCDHB6	56130	-0.21497573	2.596776e-02	5.267906e-02
## TMPRSS6	164656	-0.49551400	2.597471e-02	5.268876e-02
## GGT2P	728441	-0.48846727	2.597972e-02	5.269453e-02
## KMT2A	4297	0.15444148	2.603136e-02	5.279487e-02
## ASCC2	84164	0.06512324	2.603975e-02	5.280748e-02
## ZXDC	79364	-0.08691730	2.605807e-02	5.283837e-02

## CSAG3	389903	0.88749699	2.605948e-02	5.283837e-02
## MIR222HG	104457406	0.29112390	2.606151e-02	5.283837e-02
## TM2D3	80213	-0.05267088	2.607021e-02	5.285159e-02
## TMTC3	160418	-0.11223242	2.607327e-02	5.285339e-02
## LRRC8C-DT	400761	-0.15633419	2.608658e-02	5.287596e-02
## XPC-AS1	107986063	0.28704789	2.610238e-02	5.290358e-02
## NINL	22981	0.16349971	2.610731e-02	5.290519e-02
## IGLV2-11	28816	0.65575930	2.610753e-02	5.290519e-02
## IGKV6-21	28906	1.25214348	2.610986e-02	5.290551e-02
## RAP1GDS1	5910	-0.06653896	2.614307e-02	5.296396e-02
## ASS1P14	459	0.68529913	2.614242e-02	5.296396e-02
## CTNNBL1	56259	-0.07449413	2.614693e-02	5.296470e-02
## COX10-DT	100874058	0.13832753	2.614779e-02	5.296470e-02
## MFSD13A	79847	-0.15536301	2.615582e-02	5.297654e-02
## SON	6651	-0.08041299	2.617873e-02	5.301854e-02
## UBQLNL	143630	0.28407683	2.619493e-02	5.304691e-02
## TMEM51-AS1	200197	0.23768607	2.621299e-02	5.307906e-02
## RN7SKP97	106480463	0.83774029	2.628270e-02	5.321579e-02
## TCTE1	202500	0.38938907	2.628886e-02	5.322384e-02
## FAM20C	56975	0.17668633	2.633868e-02	5.332025e-02
## GPATCH2L	55668	0.13835260	2.635714e-02	5.335318e-02
## IL15	3600	0.13862375	2.638078e-02	5.339657e-02
## TRPV4	59341	0.18050124	2.639271e-02	5.341183e-02
## C14orf28	122525	0.09491082	2.639249e-02	5.341183e-02
## SETD1A	9739	-0.10739014	2.639589e-02	5.341382e-02
## SURF4	6836	0.10500410	2.646992e-02	5.355916e-02
## MYT1L	23040	0.63725239	2.650388e-02	5.362342e-02
## NCBP1	4686	0.07100559	2.651427e-02	5.363996e-02
## TMEM109	79073	-0.13431315	2.654095e-02	5.368946e-02
## SNORA74B	677841	0.93718620	2.655436e-02	5.371212e-02
## APP-DT	118568803	-0.20328100	2.656661e-02	5.373244e-02
## APPL1	26060	-0.07874347	2.657780e-02	5.375060e-02
## DCK	1633	0.12016354	2.660971e-02	5.381065e-02
## LMBR1L	55716	0.16696957	2.661675e-02	5.382042e-02
## ABHD5	51099	-0.08431645	2.663209e-02	5.384694e-02
## PDXP-DT	101927051	0.85625702	2.665559e-02	5.388997e-02
## ERMAP	114625	0.07181760	2.667016e-02	5.391278e-02
## DGUOK-AS1	100874048	-0.35836655	2.667131e-02	5.391278e-02
## SCRIB	23513	-0.16488959	2.667723e-02	5.392027e-02
## PTCD2	79810	0.07503524	2.671102e-02	5.398408e-02
## CASP2	835	0.10396185	2.671595e-02	5.398954e-02
## HPSE2	60495	-0.36472716	2.674730e-02	5.404840e-02
## COPG2	26958	0.08967735	2.675130e-02	5.405199e-02
## HRH4	59340	0.51500657	2.676603e-02	5.407277e-02
## TLE1-DT	101927502	0.72061160	2.676542e-02	5.407277e-02
## VAMP7	6845	-0.07242182	2.678795e-02	5.411255e-02
## CEP192	55125	0.15953326	2.682273e-02	5.417830e-02
## RTN4RL1	146760	-0.24339051	2.682695e-02	5.418233e-02
## URB2	9816	0.09175485	2.684389e-02	5.421203e-02
## MRPS7	51081	0.12041316	2.685103e-02	5.421744e-02
## SMARCA5	8467	0.07310685	2.685072e-02	5.421744e-02
## RNF181	51255	0.16201525	2.686551e-02	5.424217e-02
## E2F3	1871	-0.13291440	2.690231e-02	5.431196e-02
## GSN-AS1	57000	0.85141819	2.692238e-02	5.434796e-02

## MAP2K4P1	139201	0.47112672	2.695490e-02	5.440908e-02
## HIBCH	26275	0.21140109	2.695760e-02	5.441001e-02
## ATOH8	84913	-0.26805690	2.697882e-02	5.444832e-02
## NR2F1	7025	0.14351893	2.698492e-02	5.445611e-02
## UROD	7389	0.10543413	2.701315e-02	5.450855e-02
## MEF2D	4209	0.13412722	2.703841e-02	5.455500e-02
## PRAL	109245082	1.06950244	2.707055e-02	5.461532e-02
## MRPS25	64432	0.09674142	2.707415e-02	5.461804e-02
## DMGDH	29958	0.24706148	2.708522e-02	5.463584e-02
## RPLP1P6	729416	0.21683126	2.709572e-02	5.465248e-02
## PGBD4	161779	-0.13393470	2.710228e-02	5.466118e-02
## RPL9	6133	0.17061968	2.710469e-02	5.466150e-02
## KRI1	65095	0.06842586	2.710828e-02	5.466421e-02
## CAPN15	6650	-0.19055216	2.711758e-02	5.467843e-02
## ENSA	2029	-0.07372007	2.712533e-02	5.468951e-02
## CYTH2	9266	-0.08173142	2.714759e-02	5.472802e-02
## NGLY1	55768	0.06490299	2.714894e-02	5.472802e-02
## HTRA2	27429	0.08802051	2.717874e-02	5.478356e-02
## AGPAT1	10554	0.11332035	2.719373e-02	5.480922e-02
## SURF2	6835	-0.14383690	2.719876e-02	5.481033e-02
## HOXC10	3226	-0.11263944	2.719879e-02	5.481033e-02
## RPS6KA5	9252	0.13140909	2.721621e-02	5.484089e-02
## UQCC2	84300	0.14229238	2.727547e-02	5.495189e-02
## SAMD4B	55095	-0.09343464	2.727582e-02	5.495189e-02
## CTXN3	613212	0.37141284	2.731384e-02	5.502392e-02
## PDE11A	50940	-0.26965019	2.734124e-02	5.507456e-02
## INSR	3643	-0.14471920	2.735384e-02	5.509537e-02
## RPS25	6230	0.16884500	2.735929e-02	5.510178e-02
## MCCC1	56922	-0.12837482	2.736512e-02	5.510895e-02
## SIRPD	128646	0.81145054	2.744637e-02	5.526800e-02
## MTERF3	51001	0.09081448	2.746404e-02	5.529688e-02
## B3GAT1-DT	283177	0.25168236	2.746526e-02	5.529688e-02
## INTS9	55756	0.06406612	2.749458e-02	5.535133e-02
## NOC4L	79050	-0.17603070	2.751345e-02	5.538472e-02
## SERF1B	728492	0.21039708	2.751632e-02	5.538591e-02
## DLX4	1748	0.49791690	2.752903e-02	5.540690e-02
## NEMF	9147	-0.09330653	2.754787e-02	5.544023e-02
## WASH6P	653440	-0.17663974	2.756919e-02	5.547855e-02
## UNG	7374	-0.08500274	2.760884e-02	5.555373e-02
## S100A10	6281	0.20604104	2.761977e-02	5.557112e-02
## ARCN1	372	-0.06891537	2.765191e-02	5.563118e-02
## ALPK2	115701	0.22392237	2.768279e-02	5.568870e-02
## REL1	768211	0.15446502	2.769622e-02	5.571111e-02
## NR1I2	8856	0.39786403	2.771144e-02	5.573711e-02
## NDUFA1	4694	-0.15915911	2.775049e-02	5.581102e-02
## NKAPL	222698	0.17752898	2.779492e-02	5.589577e-02
## HMGN1P17	100874443	-0.49634598	2.780131e-02	5.589936e-02
## LINC02752	105376550	0.69611384	2.780121e-02	5.589936e-02
## SERPINC1	462	0.39755089	2.783981e-02	5.597213e-02
## ECT2	1894	0.15417716	2.786361e-02	5.601535e-02
## FAM218A	152756	-0.20108647	2.791155e-02	5.610709e-02
## CARNMT1	138199	0.11866047	2.793896e-02	5.615754e-02
## GLI4	2738	-0.17037623	2.794312e-02	5.616126e-02
## TMEM63C	57156	0.28746672	2.794619e-02	5.616278e-02

## MID2	11043	0.09601244	2.795092e-02	5.616764e-02
## PRDX5	25824	-0.14148834	2.795532e-02	5.617185e-02
## TDRD7	23424	0.07746324	2.796121e-02	5.617902e-02
## LCA5	167691	0.12498944	2.797198e-02	5.619603e-02
## AFAP1L2	84632	-0.14754128	2.802636e-02	5.630062e-02
## HELZ2	85441	0.18911409	2.806111e-02	5.636576e-02
## GTF2H3	2967	0.08257908	2.807257e-02	5.638413e-02
## ZNF730	100129543	0.42023447	2.810725e-02	5.644912e-02
## SLC51A	200931	0.33525472	2.810964e-02	5.644925e-02
## DHRS11	79154	0.13834876	2.812634e-02	5.647811e-02
## KIAA1217	56243	-0.10045933	2.813548e-02	5.648917e-02
## OCM	654231	0.57123992	2.813649e-02	5.648917e-02
## DNPEP-AS1	105373884	0.39763466	2.821025e-02	5.663258e-02
## ARG2	384	-0.24970845	2.826866e-02	5.674515e-02
## USP37	57695	0.10057984	2.830322e-02	5.680512e-02
## UBTD1	80019	-0.21756055	2.830201e-02	5.680512e-02
## HDDC3	374659	0.13731937	2.835480e-02	5.690395e-02
## JARID2	3720	0.09660993	2.837283e-02	5.693543e-02
## PF4V1	5197	0.35087587	2.837888e-02	5.694076e-02
## TRAM2-AS1	401264	-0.09223387	2.838017e-02	5.694076e-02
## NDUFB4	4710	-0.16081881	2.838573e-02	5.694251e-02
## P2RY8	286530	0.18207328	2.838362e-02	5.694251e-02
## SRP68	6730	-0.05172200	2.841064e-02	5.698779e-02
## COLEC11	78989	0.26089390	2.846169e-02	5.708547e-02
## RPL26	6154	0.28891105	2.858105e-02	5.732013e-02
## MPPED2-AS1	105376609	-0.23409781	2.858621e-02	5.732576e-02
## SND1-IT1	27099	0.96328555	2.861149e-02	5.737172e-02
## LBHD2	107984640	0.64532901	2.864095e-02	5.742605e-02
## ARL6	84100	-0.09800617	2.864568e-02	5.743079e-02
## KBTBD11-AS1	101928058	-0.29229253	2.867182e-02	5.747846e-02
## VPS53	55275	-0.05879695	2.868415e-02	5.749844e-02
## RPAP3	79657	0.07036678	2.869011e-02	5.750527e-02
## RNF212	285498	-0.20861470	2.869229e-02	5.750527e-02
## TGM7	116179	-0.47437361	2.870006e-02	5.751610e-02
## SARS2	54938	-0.13364449	2.871179e-02	5.753485e-02
## HK1	3098	-0.18921478	2.872014e-02	5.754640e-02
## LCAT	3931	0.25148122	2.872228e-02	5.754640e-02
## H2BC6-AS1	128266838	0.40797348	2.874049e-02	5.757812e-02
## PIPSL	266971	0.25228226	2.875468e-02	5.760181e-02
## REL-DT	400957	0.87712897	2.876511e-02	5.761795e-02
## LINC02631	114515520	0.55796045	2.877536e-02	5.763373e-02
## FAM83D	81610	0.28403009	2.879521e-02	5.766873e-02
## MIS18A-AS1	100874202	-0.29636152	2.888252e-02	5.783881e-02
## CMBL	134147	0.25416296	2.898168e-02	5.803262e-02
## H2BC12	85236	0.29997876	2.899109e-02	5.804668e-02
## PHLDA1-DT	120766142	-0.24089971	2.901983e-02	5.809943e-02
## AKAP8L	26993	-0.11942268	2.903032e-02	5.811564e-02
## ABHD1	84696	0.19069033	2.903286e-02	5.811595e-02
## TMEM54	113452	-0.23967155	2.904595e-02	5.813735e-02
## PPARG	5468	0.08093245	2.905035e-02	5.814137e-02
## HYPK	25764	0.29009855	2.908778e-02	5.821149e-02
## LINC02036	100505920	-0.95327760	2.912064e-02	5.827245e-02
## USHBP1	83878	-0.14865780	2.917167e-02	5.836976e-02
## SOX3	6658	0.96114381	2.918478e-02	5.839118e-02

## LPP-AS2	339929	-0.09817636	2.919287e-02	5.840257e-02
## TACR1	6869	0.28340633	2.923674e-02	5.848552e-02
## ATL2	64225	-0.08733775	2.924367e-02	5.849456e-02
## SYCE2	256126	0.38697266	2.928983e-02	5.858208e-02
## STOML2	30968	0.11611983	2.936779e-02	5.873317e-02
## DOCK8-AS2	112268042	-0.55085898	2.937076e-02	5.873427e-02
## RPL32P16	646104	0.48886290	2.941418e-02	5.881626e-02
## PRR5-ARHGAP8	553158	-0.40388711	2.942535e-02	5.883375e-02
## RNF133	168433	-0.46726693	2.943714e-02	5.885248e-02
## CST1	1469	1.22957845	2.944999e-02	5.887332e-02
## CCDC168	643677	-0.46130972	2.945697e-02	5.888244e-02
## FOSL2-AS1	403150	-0.32278950	2.946204e-02	5.888774e-02
## WT1-AS	51352	-0.22826927	2.949260e-02	5.894024e-02
## PPIAP3	170539	-0.63557559	2.949316e-02	5.894024e-02
## RNU4-23P	106479568	0.55155401	2.952585e-02	5.900072e-02
## TBP	6908	0.06467561	2.952869e-02	5.900153e-02
## IRAK4	51135	-0.11245505	2.954513e-02	5.902953e-02
## HSD17B6	8630	0.27798213	2.959612e-02	5.912654e-02
## TSPOAP1	9256	-0.20656535	2.961779e-02	5.916498e-02
## IFNAR2	3455	0.18720694	2.965282e-02	5.923007e-02
## PDE1C	5137	-0.20606873	2.966838e-02	5.925630e-02
## CHAMP1	283489	-0.06925042	2.967707e-02	5.926877e-02
## DAB1	1600	0.40855655	2.969907e-02	5.930690e-02
## MIR573	693158	-0.35001625	2.970104e-02	5.930690e-02
## BEX1	55859	-0.23838945	2.971560e-02	5.933110e-02
## MGA	23269	0.12015018	2.975861e-02	5.940722e-02
## NDUFA6	4700	-0.14045609	2.975815e-02	5.940722e-02
## FTH1P2	2497	0.30715358	2.976443e-02	5.941395e-02
## FOXF1	2294	-0.22030292	2.977019e-02	5.942056e-02
## CHCHD5	84269	0.17512286	2.979948e-02	5.947414e-02
## MANEAL	149175	-0.15215572	2.980201e-02	5.947431e-02
## DEFB1	1672	-0.27399512	2.984971e-02	5.956460e-02
## LINC01205	401082	-0.51430311	2.985344e-02	5.956717e-02
## RNF144B	255488	-0.22840148	2.986005e-02	5.957545e-02
## USP47	55031	0.07932213	2.986653e-02	5.958349e-02
## RNASEH2CP1	386608	1.90571641	2.987471e-02	5.959491e-02
## SMC03	440087	0.29400738	2.987966e-02	5.959990e-02
## ADAM11	4185	0.31537009	2.991267e-02	5.966084e-02
## PDS5A	23244	-0.07905577	3.005313e-02	5.993608e-02
## CLASP1	23332	-0.07725498	3.006848e-02	5.996176e-02
## LTO1	220064	0.12451600	3.010623e-02	6.003212e-02
## PIANP	196500	-0.35292859	3.011735e-02	6.004936e-02
## RANBP2	5903	-0.10217383	3.012501e-02	6.005971e-02
## NLGN1	22871	-0.16638688	3.012833e-02	6.006140e-02
## EPHA10	284656	0.32795820	3.016913e-02	6.013782e-02
## TRAV39	28642	-0.48115975	3.017357e-02	6.014172e-02
## NUB1	51667	0.05443443	3.020164e-02	6.019273e-02
## LINC00707	100507127	-0.35347785	3.021085e-02	6.020616e-02
## ATXN2-AS	102723619	-0.33507381	3.024638e-02	6.027202e-02
## EMSY	56946	0.08023221	3.025051e-02	6.027530e-02
## GPR89A	653519	0.14603726	3.027004e-02	6.030569e-02
## PCBD2	84105	-0.10691200	3.027072e-02	6.030569e-02
## HOXA13	3209	-0.37066820	3.031445e-02	6.038284e-02
## FRG1BP	284802	0.11756683	3.031572e-02	6.038284e-02

## ATAD3A	55210	-0.15117879	3.031690e-02	6.038284e-02
## CD101-AS1	101929099	0.22066342	3.032301e-02	6.039006e-02
## P2RX2	22953	-0.53616927	3.038582e-02	6.051020e-02
## SYT9-AS1	100506258	0.20111565	3.040376e-02	6.054094e-02
## LINC01754	102723442	1.41070903	3.041718e-02	6.056271e-02
## FSIP1	161835	-0.14774927	3.044500e-02	6.061314e-02
## MANEA-DT	101927288	0.29140967	3.046013e-02	6.063828e-02
## SMIM35	100526771	0.49949037	3.046525e-02	6.064351e-02
## GPIBHP1	338328	-0.32060957	3.053641e-02	6.078018e-02
## PCNX3	399909	-0.11802775	3.057571e-02	6.085342e-02
## FCHO2-DT	118597832	-0.19402738	3.061900e-02	6.093459e-02
## COA4	51287	0.13872343	3.063004e-02	6.095158e-02
## PTGES3P4	106480775	-0.37692996	3.065352e-02	6.099330e-02
## PINX1	54984	0.09090844	3.065904e-02	6.099929e-02
## DBTP1	127379690	0.72584974	3.067096e-02	6.101800e-02
## IL18	3606	0.20220580	3.069458e-02	6.106000e-02
## CPSF7	79869	-0.07118040	3.070764e-02	6.108097e-02
## LINC01277	100507489	0.23623254	3.071087e-02	6.108241e-02
## PMS2CL	441194	-0.13908324	3.076311e-02	6.118131e-02
## MAPK15	225689	-0.29504208	3.079507e-02	6.123985e-02
## THAP7-AS1	439931	-0.21282916	3.083834e-02	6.132089e-02
## ZNF224	7767	0.15273187	3.084112e-02	6.132138e-02
## XPO4	64328	0.10120368	3.090286e-02	6.143912e-02
## ACOT6	641372	0.35309620	3.098676e-02	6.160088e-02
## CREG1	8804	0.08486100	3.106868e-02	6.175868e-02
## BFAR	51283	0.07257663	3.107195e-02	6.176013e-02
## LINC01234	100506465	1.18138498	3.108972e-02	6.179040e-02
## SOX7	83595	-0.13714632	3.112082e-02	6.184717e-02
## GCDH	2639	0.18962820	3.117816e-02	6.194804e-02
## MPST	4357	-0.19462704	3.117923e-02	6.194804e-02
## MEP1B	4225	0.76946281	3.117531e-02	6.194804e-02
## MRPS31	10240	-0.10615604	3.121385e-02	6.201176e-02
## SLC35B2	347734	-0.08113202	3.126371e-02	6.210573e-02
## SPOPL-DT	105373637	0.29525013	3.126842e-02	6.211002e-02
## SPINK5	11005	-0.29719761	3.128090e-02	6.212971e-02
## RNF20	56254	0.06502645	3.129364e-02	6.214995e-02
## RBM48	84060	0.08057002	3.132109e-02	6.219939e-02
## DENND2B	6764	0.15687226	3.132621e-02	6.220447e-02
## CFAP119	90835	-0.16429032	3.133106e-02	6.220902e-02
## NRIP1	8204	-0.11587454	3.133697e-02	6.221566e-02
## LUC7L3	51747	0.15790095	3.135781e-02	6.225196e-02
## CTDNEP1P1	100420528	-0.23945374	3.136632e-02	6.226377e-02
## ZC3H6	376940	-0.14735945	3.138592e-02	6.229758e-02
## PI4K2A	55361	0.07370615	3.141604e-02	6.235228e-02
## MTCO1P12	107075141	-0.17394216	3.143062e-02	6.237611e-02
## BANCR	100885775	-0.90000137	3.145766e-02	6.242468e-02
## GIT1	28964	0.09090034	3.151115e-02	6.252573e-02
## SEPTIN7-DT	101928545	-0.16088393	3.154700e-02	6.259174e-02
## GOLGA8M	653720	-0.37874109	3.155680e-02	6.260607e-02
## KRT18P5	728300	0.56772615	3.156821e-02	6.262360e-02
## PSORS1C2	170680	-1.00530270	3.157111e-02	6.262424e-02
## STX6	10228	0.06161837	3.157618e-02	6.262919e-02
## RYBP	23429	-0.07319245	3.160705e-02	6.268530e-02
## TRIM10	10107	0.26386567	3.165688e-02	6.277899e-02

## API5P1	642812	0.44215406	3.168141e-02	6.282253e-02
## TCTN3	26123	-0.06582526	3.169107e-02	6.283654e-02
## DUOXA2	405753	0.57617161	3.170639e-02	6.286179e-02
## SCARF1	8578	0.16898220	3.174352e-02	6.293027e-02
## MEIOB	254528	-0.31830328	3.178780e-02	6.301291e-02
## RBMS3-AS2	100873978	1.53760259	3.180319e-02	6.303827e-02
## AMELY	266	-0.74886666	3.184921e-02	6.312436e-02
## IPO7P2	100128337	0.40533069	3.186132e-02	6.314320e-02
## PDK1	5163	-0.12320991	3.187310e-02	6.316139e-02
## SLC38A9	153129	0.07580654	3.189588e-02	6.320139e-02
## BAK1	578	0.11824484	3.194507e-02	6.329370e-02
## PPP1R15B-AS1	122455336	-0.42038815	3.196276e-02	6.332357e-02
## RN7SL258P	106480373	0.90490813	3.202131e-02	6.343441e-02
## PSMG4	389362	0.12604955	3.202883e-02	6.344413e-02
## CAPN5	726	0.13745283	3.203281e-02	6.344684e-02
## BTF3P16	643412	0.28609807	3.203848e-02	6.345289e-02
## TDRKH	11022	-0.09059004	3.204652e-02	6.346366e-02
## SCP2	6342	-0.09990190	3.212808e-02	6.361999e-02
## NPAP1	23742	-0.41638290	3.214190e-02	6.364217e-02
## NDUFAF4P3	100422532	-0.27196550	3.216959e-02	6.369180e-02
## ADCY4	196883	-0.22542507	3.218625e-02	6.371960e-02
## FUNDC1	139341	-0.11101576	3.221674e-02	6.377477e-02
## TRIM67	440730	0.33205057	3.225206e-02	6.383949e-02
## INSL5	10022	0.69450282	3.225626e-02	6.384260e-02
## TAF9P3	163088	-0.43217840	3.226028e-02	6.384535e-02
## HEATR9	256957	1.24591449	3.226337e-02	6.384628e-02
## WDR47	22911	-0.06269560	3.228307e-02	6.388004e-02
## SSTR3	6753	0.37434155	3.232858e-02	6.396489e-02
## F11	2160	-0.25929331	3.234139e-02	6.397461e-02
## LRRC37A	9884	0.33551271	3.233982e-02	6.397461e-02
## HEPHL1	341208	-1.03984135	3.233846e-02	6.397461e-02
## PIK3C2G	5288	-0.21554235	3.235294e-02	6.399225e-02
## TNFSF10	8743	-0.21762559	3.243098e-02	6.413618e-02
## CHCHD2P6	645317	-0.19649858	3.242989e-02	6.413618e-02
## ZFP36L2	678	-0.12690668	3.243658e-02	6.414203e-02
## MAVS	57506	-0.08478839	3.244829e-02	6.415995e-02
## CASD1	64921	-0.07590777	3.245440e-02	6.416682e-02
## RREB1	6239	-0.11259734	3.249245e-02	6.423683e-02
## BUD31	8896	0.10776887	3.251461e-02	6.427541e-02
## HLA-A	3105	0.16128947	3.252156e-02	6.428391e-02
## CCDC65	85478	0.16549679	3.254756e-02	6.433008e-02
## PTGES2	80142	-0.13404997	3.260153e-02	6.443150e-02
## CEBPB-AS1	101927559	0.17083524	3.263957e-02	6.450143e-02
## ZNF324	25799	0.06357460	3.273274e-02	6.467504e-02
## ENTPD3	956	0.26355342	3.273149e-02	6.467504e-02
## HPYR1	93668	-0.32273452	3.274151e-02	6.468711e-02
## HCG4	54435	-0.28726850	3.274553e-02	6.468978e-02
## CDK3	1018	0.49188544	3.277451e-02	6.474177e-02
## STAM-DT	102723166	0.35253151	3.278235e-02	6.475200e-02
## COX16	51241	-0.10864154	3.279078e-02	6.476338e-02
## FAIM2	23017	0.35339592	3.286192e-02	6.489862e-02
## TAL1	6886	-0.15866179	3.288610e-02	6.494110e-02
## C1QBP	708	0.11038336	3.291021e-02	6.498343e-02
## UBE2J1	51465	-0.06690323	3.293369e-02	6.502451e-02

## CASP8AP2	9994	0.17201287	3.294589e-02	6.504331e-02
## IFIH1	64135	0.11569346	3.296123e-02	6.506830e-02
## ZNF890P	645700	0.57033000	3.300472e-02	6.514887e-02
## SLC22A11	55867	0.27277505	3.303720e-02	6.520769e-02
## PEX16	9409	-0.13791112	3.304009e-02	6.520810e-02
## LINC00377	103724386	0.82153530	3.305699e-02	6.523616e-02
## ALG1L10P	106479037	0.47930780	3.306963e-02	6.525578e-02
## NEK4	6787	-0.07290866	3.309476e-02	6.530007e-02
## PCDHGB3	56102	-0.18810512	3.313093e-02	6.536614e-02
## CROCCP3	114819	0.28632079	3.313763e-02	6.537405e-02
## AJUBA	84962	-0.15968509	3.316394e-02	6.542064e-02
## SNORA66	26782	-0.43175395	3.317775e-02	6.544258e-02
## FOXO6	100132074	0.33874426	3.320260e-02	6.548627e-02
## H3C3	8352	0.57412621	3.321105e-02	6.549762e-02
## TNNI3K	51086	0.51245237	3.321535e-02	6.550079e-02
## THADA	63892	-0.05419107	3.325584e-02	6.557532e-02
## RECQL5	9400	-0.10775509	3.328980e-02	6.563694e-02
## PLPP1	8611	-0.13252602	3.331020e-02	6.566380e-02
## IRS1	3667	-0.17120172	3.331152e-02	6.566380e-02
## FAM87B	400728	0.56577716	3.330930e-02	6.566380e-02
## DERA	51071	-0.13285489	3.332682e-02	6.568863e-02
## ENPP7P12	106480230	-1.01747899	3.334668e-02	6.572243e-02
## PUSL1	126789	0.15817904	3.335950e-02	6.574238e-02
## GPR155	151556	-0.19007700	3.338244e-02	6.578224e-02
## ZNF652-AS1	102724596	0.45218698	3.338580e-02	6.578354e-02
## EMSY-DT	124902718	-0.17066436	3.342708e-02	6.585953e-02
## PTBP3	9991	-0.10879819	3.343764e-02	6.587499e-02
## STPG1	90529	-0.08649385	3.345735e-02	6.590848e-02
## C11orf52	91894	-0.31392243	3.347449e-02	6.593691e-02
## BRPF3-AS1	102723648	0.34938579	3.348683e-02	6.595586e-02
## LINC02516	101927087	0.63781273	3.350950e-02	6.599517e-02
## ERCC8	1161	0.08127084	3.355304e-02	6.607557e-02
## MIR4458HG	100505738	-0.15404941	3.355803e-02	6.608002e-02
## SNRPC	6631	0.11894260	3.357195e-02	6.610208e-02
## PCCB	5096	0.11552031	3.362254e-02	6.619633e-02
## MPHOSPH6	10200	-0.10438082	3.362724e-02	6.620022e-02
## RHBDL3	162494	-0.17240446	3.364586e-02	6.623151e-02
## WRNIP1	56897	-0.04985223	3.365221e-02	6.623865e-02
## PCDH9	56127	-0.17995044	3.366054e-02	6.624968e-02
## CCNL1	57018	-0.22176552	3.368011e-02	6.628283e-02
## WDFY1	57590	0.08723478	3.369879e-02	6.631421e-02
## LINC02416	107984528	1.50116671	3.370819e-02	6.632735e-02
## ZNF112	7771	0.10599128	3.372119e-02	6.634755e-02
## POMP	51371	0.12669513	3.372590e-02	6.635144e-02
## RAG2	5897	-0.78682134	3.374271e-02	6.637914e-02
## ZNF282	8427	0.09805821	3.379299e-02	6.647268e-02
## VWC2L	402117	-0.59083071	3.381255e-02	6.650254e-02
## HEXIM2-AS1	112268203	-0.32496976	3.381364e-02	6.650254e-02
## AZU1	566	0.63221784	3.383249e-02	6.653421e-02
## PCM1	5108	0.09780214	3.383793e-02	6.653491e-02
## GCSH	2653	0.18404323	3.383832e-02	6.653491e-02
## REELD1	345051	-0.37314811	3.384887e-02	6.655027e-02
## RANBP10	57610	-0.06676391	3.398361e-02	6.680979e-02
## RASA4	10156	0.20612281	3.403149e-02	6.689849e-02

## NKAIN3	286183	0.47530083	3.416797e-02	6.716136e-02
## FUT2	2524	-0.59460474	3.421757e-02	6.725341e-02
## KIF5B	3799	-0.09105682	3.427407e-02	6.735900e-02
## LINC00663	284440	0.14734819	3.428426e-02	6.737358e-02
## MRPS9-AS1	101927492	-0.57657823	3.429013e-02	6.737968e-02
## METTL9	51108	0.10994178	3.431863e-02	6.743022e-02
## DDX46	9879	-0.07156475	3.439100e-02	6.756697e-02
## LARS2	23395	-0.08805295	3.439962e-02	6.757842e-02
## TSSK3	81629	-0.30897925	3.441736e-02	6.760781e-02
## C10orf67-AS1	105376453	-0.28708257	3.445988e-02	6.768587e-02
## ALG13	79868	-0.07504054	3.447467e-02	6.770589e-02
## METTL21A	151194	0.08719351	3.447565e-02	6.770589e-02
## HES5	388585	0.65084066	3.451848e-02	6.778454e-02
## ADH1C	126	0.21078686	3.452249e-02	6.778692e-02
## EEF1DP1	126037	0.32250235	3.454980e-02	6.783508e-02
## RLIM	51132	-0.07223949	3.455492e-02	6.783965e-02
## ABCA15P	<NA>	0.41462907	3.457293e-02	6.786952e-02
## EEF1A1P4	100421854	0.51119030	3.458009e-02	6.787809e-02
## TIRAP	114609	0.06641429	3.460878e-02	6.792893e-02
## PDE7A-DT	118568829	-0.42262286	3.464351e-02	6.799159e-02
## TARS1-DT	107986411	-0.25136830	3.465540e-02	6.800944e-02
## MRNIP-DT	100996419	-0.15503948	3.466027e-02	6.801350e-02
## TBC1D10B	26000	0.10383137	3.466886e-02	6.802486e-02
## VAMP4	8674	-0.08234447	3.471942e-02	6.810758e-02
## KCTD19	146212	0.41163859	3.471619e-02	6.810758e-02
## UBE2L3	7332	0.07640579	3.471732e-02	6.810758e-02
## ATP5PD	10476	-0.14010024	3.476338e-02	6.818831e-02
## EEF1DP2	442429	0.22615575	3.481219e-02	6.827853e-02
## LINC02234	109729164	0.58103347	3.481912e-02	6.828661e-02
## MIR6753	102465451	0.81020369	3.482669e-02	6.829595e-02
## SLC13A2	9058	-0.29903885	3.484170e-02	6.831986e-02
## CDK8	1024	0.07434035	3.488275e-02	6.839484e-02
## LRRC37A2	474170	0.22001340	3.490701e-02	6.843688e-02
## HSCB	150274	0.12293380	3.496240e-02	6.853995e-02
## EXOSC6	118460	-0.10260178	3.497310e-02	6.855540e-02
## SLC25A4	291	-0.17381716	3.500221e-02	6.860692e-02
## DVL2	1856	0.07593151	3.500656e-02	6.860992e-02
## FXR2	9513	-0.06757010	3.506263e-02	6.871428e-02
## NHERF4	79849	0.30004689	3.508672e-02	6.875594e-02
## TACO1	51204	-0.12398057	3.509537e-02	6.876735e-02
## PPM1E	22843	-0.27951396	3.510656e-02	6.878372e-02
## PDCD6-DT	102467073	0.25862986	3.511667e-02	6.879798e-02
## C3orf85	401081	0.29764171	3.512676e-02	6.881220e-02
## UBE3B	89910	-0.05142618	3.513408e-02	6.882100e-02
## AFG2B	79029	-0.08253792	3.514005e-02	6.882159e-02
## RNA5P470	100873713	-0.32225633	3.513848e-02	6.882159e-02
## CEP78	84131	0.10817974	3.514781e-02	6.882649e-02
## LINC02011	152274	0.59443789	3.514822e-02	6.882649e-02
## MFSD12-AS1	128385373	-0.35859263	3.520470e-02	6.893154e-02
## RHCG	51458	-0.29110917	3.522950e-02	6.897455e-02
## RPSAP19	730029	0.75455775	3.534070e-02	6.918523e-02
## SRD5A3-AS1	100506462	0.24315602	3.534280e-02	6.918523e-02
## ERP29	10961	-0.09398809	3.534952e-02	6.918723e-02
## CABCOCO1	219621	-0.25270842	3.534859e-02	6.918723e-02

## WBP1L	54838	0.07596612	3.538201e-02	6.924525e-02
## MTFR1	9650	-0.13125764	3.538974e-02	6.925479e-02
## DFFBP1	100422581	-0.32580992	3.539378e-02	6.925712e-02
## NPIPA5	100288332	0.34779217	3.541009e-02	6.927954e-02
## GNL1	2794	0.08281094	3.541094e-02	6.927954e-02
## TSHZ1	10194	-0.10106887	3.541755e-02	6.928690e-02
## ZSCAN5A-AS1	112268243	-0.23919525	3.545729e-02	6.935905e-02
## GRN	2896	0.17443639	3.547179e-02	6.938184e-02
## RAB8A	4218	0.07318612	3.552009e-02	6.947072e-02
## SCYL2	55681	-0.09645115	3.553078e-02	6.948603e-02
## IRF5	3663	-0.13483976	3.553453e-02	6.948778e-02
## DAZL	1618	1.07139121	3.560944e-02	6.962307e-02
## TROAP-AS1	101927267	-0.60583131	3.560883e-02	6.962307e-02
## DCAF8-DT	100287049	0.40288818	3.561446e-02	6.962727e-02
## MMAA	166785	-0.08458742	3.565266e-02	6.969634e-02
## ERAP2	64167	0.35579609	3.566941e-02	6.972348e-02
## HSPE1P2	326300	0.51995087	3.567616e-02	6.973107e-02
## GRIA4	2893	-0.47339948	3.579007e-02	6.994809e-02
## LINC01028	101928141	1.34903167	3.579583e-02	6.995371e-02
## RPL7AP22	100271039	0.80174653	3.582810e-02	7.001115e-02
## TRBV6-4	28603	1.02268384	3.583839e-02	7.002563e-02
## RGCC	28984	0.20309408	3.584499e-02	7.003289e-02
## TIAL1	7073	-0.05650925	3.584884e-02	7.003305e-02
## PHLDB3	653583	-0.14550545	3.585084e-02	7.003305e-02
## FHP2	128385370	-0.78006289	3.589773e-02	7.011902e-02
## RASGRF2	5924	0.14201457	3.590692e-02	7.012989e-02
## LINC01220	731223	-0.18081881	3.590907e-02	7.012989e-02
## LINC01341	149134	0.28293445	3.591216e-02	7.013029e-02
## SH2D4A	63898	0.11791628	3.591975e-02	7.013949e-02
## TMA7B	112268293	0.87108367	3.592568e-02	7.014543e-02
## VIPR1	7433	-0.20328289	3.595018e-02	7.018762e-02
## GEMIN7	79760	0.11941486	3.598120e-02	7.024254e-02
## LRRC1	55227	-0.08634334	3.604769e-02	7.036668e-02
## LINC02569	111082993	0.29917844	3.607871e-02	7.042158e-02
## LINC03014	100507642	0.12283048	3.612798e-02	7.051209e-02
## RCAN3AS	100750325	0.45868463	3.616126e-02	7.056572e-02
## NCMAP-DT	100506985	0.45868463	3.616126e-02	7.056572e-02
## GNA15-DT	100996351	-0.71059200	3.621869e-02	7.067211e-02
## PLEKHN1	84069	-0.39154330	3.622666e-02	7.067630e-02
## YBX3P1	440359	0.54569906	3.622555e-02	7.067630e-02
## LHFPL3	375612	-0.76992158	3.623575e-02	7.068269e-02
## GAPDHP72	346085	0.74164136	3.623424e-02	7.068269e-02
## LINC02558	105372999	-0.55014367	3.626362e-02	7.073137e-02
## TMEM89	440955	-0.57120222	3.628770e-02	7.077267e-02
## CRKL	1399	0.08418339	3.637107e-02	7.092958e-02
## APTR	100505854	-0.11370646	3.639530e-02	7.097112e-02
## INTS14	81556	0.05009966	3.640496e-02	7.098426e-02
## CFAP161	161502	0.36559858	3.641902e-02	7.100599e-02
## DTNB	1838	-0.09914841	3.642273e-02	7.100752e-02
## GPSM1	26086	0.17927453	3.648882e-02	7.113066e-02
## KIAA0232	9778	-0.10445899	3.652209e-02	7.118981e-02
## EFR3B	22979	0.22019615	3.653374e-02	7.120681e-02
## LINC01226	284551	-0.35553099	3.665506e-02	7.143754e-02
## ASB13	79754	0.15259701	3.666621e-02	7.145353e-02

## KLK1	3816	-0.42201121	3.671376e-02	7.154046e-02
## RNASEH2C	84153	-0.15412022	3.675146e-02	7.160818e-02
## NPM1P39	440577	0.38129719	3.682215e-02	7.174016e-02
## WAC-AS1	220906	-0.09118954	3.682794e-02	7.174570e-02
## STYK1	55359	0.30032307	3.683303e-02	7.174986e-02
## ADORA2A	135	0.37725677	3.686606e-02	7.180845e-02
## NDC1	55706	-0.07063650	3.688618e-02	7.184186e-02
## ANKRD17-DT	102724832	-0.25116870	3.690452e-02	7.187183e-02
## BBX	56987	-0.11431075	3.690756e-02	7.187199e-02
## YES1	7525	-0.08694817	3.691259e-02	7.187604e-02
## MRE11	4361	0.09616108	3.699185e-02	7.202459e-02
## FAM53B-AS1	101927944	0.33190658	3.700570e-02	7.204579e-02
## COQ3	51805	-0.11595918	3.700942e-02	7.204727e-02
## CTTNBP2NL	55917	0.10373404	3.711402e-02	7.224509e-02
## CNOT3	4849	-0.07834547	3.711801e-02	7.224709e-02
## TREH	11181	-0.31128988	3.714973e-02	7.229723e-02
## SMARCA5-AS1	100128055	0.54403961	3.714725e-02	7.229723e-02
## VPS41	27072	-0.06242536	3.720719e-02	7.238007e-02
## TPRG1L	127262	0.13002264	3.720185e-02	7.238007e-02
## TMEM100	55273	0.26477634	3.719839e-02	7.238007e-02
## ANKK1	255239	-0.32796962	3.720633e-02	7.238007e-02
## RPL10P7	442086	0.59064714	3.720660e-02	7.238007e-02
## EXTL3	2137	-0.08823474	3.721276e-02	7.238512e-02
## TRIB2	28951	-0.12617967	3.723572e-02	7.242398e-02
## FDXACB1	91893	0.10323587	3.723882e-02	7.242421e-02
## EDC3	80153	0.05440527	3.727078e-02	7.248057e-02
## RAD23B	5887	0.06200126	3.729284e-02	7.251766e-02
## DENND4B	9909	0.11665764	3.731901e-02	7.256275e-02
## MCM3	4172	-0.09863495	3.736896e-02	7.265406e-02
## LMO7	4008	-0.12418657	3.739816e-02	7.270501e-02
## LNX1-AS2	100873955	-0.36775718	3.750128e-02	7.289966e-02
## MOBP	4336	0.64257924	3.752983e-02	7.294931e-02
## RNF168	165918	0.08201472	3.755757e-02	7.299740e-02
## RC3H2	54542	0.08887099	3.759458e-02	7.306162e-02
## UNC13A	23025	-0.25584401	3.759662e-02	7.306162e-02
## RGS9	8787	-0.12986410	3.763931e-02	7.313287e-02
## MBLAC2	153364	-0.09486885	3.763684e-02	7.313287e-02
## SLC12A8	84561	0.19319818	3.764902e-02	7.314589e-02
## ATG16L2	89849	0.27832363	3.771731e-02	7.327271e-02
## NUP155	9631	0.06124959	3.773179e-02	7.329497e-02
## EPN2	22905	0.07706058	3.777216e-02	7.335937e-02
## ANXA4	307	0.11003794	3.777399e-02	7.335937e-02
## ZNF10	7556	-0.14622996	3.776797e-02	7.335937e-02
## Clorf141	400757	0.67717062	3.779374e-02	7.339185e-02
## RGS9BP	388531	0.27657046	3.783932e-02	7.347450e-02
## NR1H2	7376	-0.12201626	3.784664e-02	7.348284e-02
## CGRRF1	10668	-0.08632309	3.787536e-02	7.352861e-02
## ARHGEF10	9639	0.30345210	3.787626e-02	7.352861e-02
## PHAF1	80262	-0.09438732	3.790751e-02	7.358339e-02
## TTTY14	83869	0.74113710	3.791120e-02	7.358467e-02
## GCNA	93953	0.26454526	3.794480e-02	7.363892e-02
## ZNF443	10224	0.11070650	3.794521e-02	7.363892e-02
## SCO1	6341	0.07175679	3.800360e-02	7.374635e-02
## IQCN	80726	-0.20076908	3.801959e-02	7.377148e-02

## MIR181A2HG	100379345	0.36630488	3.802637e-02	7.377875e-02
## MEA1	4201	0.12056501	3.806758e-02	7.385280e-02
## NAF1	92345	-0.06204101	3.811296e-02	7.393494e-02
## GBP7	388646	0.32066980	3.812142e-02	7.394546e-02
## TOMM20L-DT	105370522	0.51990805	3.812830e-02	7.395290e-02
## ACO2	50	0.13953555	3.814633e-02	7.398197e-02
## SAP18	10284	0.10528874	3.816721e-02	7.401655e-02
## CHCHD1	118487	0.13518299	3.818825e-02	7.405144e-02
## PIGAP1	5278	0.73463557	3.820117e-02	7.407059e-02
## SIAH3	283514	-0.31877581	3.820698e-02	7.407593e-02
## HSPA2-AS1	102723809	-0.48134462	3.827045e-02	7.419308e-02
## INO80E	283899	0.11129473	3.828020e-02	7.420606e-02
## NPY2R	4887	0.47849890	3.829707e-02	7.423284e-02
## LINC00189	193629	-0.38186094	3.830683e-02	7.424584e-02
## EEF1A1P23	100421815	0.48455674	3.831198e-02	7.424989e-02
## FTCDNL1	348751	0.17153798	3.832067e-02	7.426082e-02
## CDK13	8621	-0.06012055	3.838154e-02	7.437283e-02
## TMEM256	254863	0.21081801	3.839742e-02	7.439769e-02
## ZSWIM5	57643	-0.11599599	3.840059e-02	7.439789e-02
## MYDGF	56005	0.13008820	3.840860e-02	7.440748e-02
## MIR499B	100616134	0.66411570	3.844249e-02	7.446719e-02
## FOXO6-AS1	101929901	0.62366203	3.845839e-02	7.449206e-02
## CFAP53	220136	0.15219560	3.847063e-02	7.450982e-02
## ASB6	140459	-0.06743357	3.848122e-02	7.452440e-02
## EIF4BP6	645579	0.30231745	3.850759e-02	7.456952e-02
## SNX9	51429	0.06327063	3.852842e-02	7.460392e-02
## ZNF266	10781	0.14543987	3.853881e-02	7.461809e-02
## TPGS1	91978	-0.34365820	3.854781e-02	7.462957e-02
## NUDT19-DT	118827810	-0.19008373	3.860315e-02	7.473075e-02
## WASHC3	51019	0.11829585	3.860702e-02	7.473230e-02
## LINC02816	105371638	-0.48014054	3.862584e-02	7.476278e-02
## MYO3A	53904	0.21746449	3.863623e-02	7.477692e-02
## ARPC3	10094	0.10823167	3.868115e-02	7.485790e-02
## SMAD3	4088	0.08543176	3.868600e-02	7.486133e-02
## ZNF544	27300	0.09290588	3.871253e-02	7.490670e-02
## SMIM14-DT	105374419	0.20115869	3.875342e-02	7.497985e-02
## DHRS1	115817	0.12086917	3.876048e-02	7.498753e-02
## SNF8	11267	0.11567976	3.878341e-02	7.502592e-02
## ZNF596	169270	0.12888864	3.879080e-02	7.503425e-02
## FCAMR	83953	0.31151327	3.880493e-02	7.505560e-02
## PEMT	10400	0.16188523	3.885028e-02	7.513734e-02
## DDI2	84301	0.12252143	3.886502e-02	7.515987e-02
## LAMTOR4	389541	0.13945462	3.891617e-02	7.525279e-02
## TENT4B	64282	0.11000642	3.894205e-02	7.529685e-02
## LRPAP1	4043	-0.11971765	3.894568e-02	7.529787e-02
## LINC01828	102800447	0.45168897	3.898082e-02	7.535981e-02
## FRG1HP	100132352	0.09595140	3.899586e-02	7.538290e-02
## RRN3P2	653390	0.69324862	3.904061e-02	7.546123e-02
## ARHGEF26	26084	-0.16196289	3.904259e-02	7.546123e-02
## SNHG20	654434	0.15392667	3.905029e-02	7.546410e-02
## RPSAP36	100128888	0.60037848	3.904834e-02	7.546410e-02
## CNTNAP4	85445	1.14972631	3.910232e-02	7.555865e-02
## OGFOD1P1	387924	0.49732319	3.914986e-02	7.564449e-02
## SLC35E4	339665	0.22034274	3.915657e-02	7.565145e-02

## EPHA4	2043	-0.14961576	3.917606e-02	7.568309e-02
## TPTEP2	400927	0.21509179	3.919152e-02	7.570693e-02
## DNAJC7	7266	-0.06162424	3.920030e-02	7.571787e-02
## VSTM2B	342865	0.80974491	3.923859e-02	7.578580e-02
## IMPA1P1	650747	0.68720143	3.930859e-02	7.591496e-02
## WDR59	79726	0.08993012	3.931529e-02	7.592188e-02
## ACTG1P1	73	-0.26387531	3.932032e-02	7.592556e-02
## PARGP1	728407	0.28093771	3.935185e-02	7.598039e-02
## MUC4	4585	0.79018266	3.935787e-02	7.598598e-02
## ANKRA2	57763	-0.08942169	3.938189e-02	7.602633e-02
## RBM8A	9939	-0.04257839	3.943029e-02	7.611186e-02
## LINC02351	105371011	-0.38103447	3.943246e-02	7.611186e-02
## LINC02196	107986402	0.53909288	3.943564e-02	7.611193e-02
## SMKR1	100287482	0.20643558	3.944556e-02	7.612504e-02
## XBP1P1	7495	0.48227365	3.945015e-02	7.612785e-02
## LMF1-AS1	101929387	0.45229198	3.946902e-02	7.615218e-02
## ERVE-1	85314	-0.23532005	3.946846e-02	7.615218e-02
## RPL39P16	100271023	0.50928615	3.949833e-02	7.620268e-02
## SMG1P5	595101	0.31149887	3.956578e-02	7.632674e-02
## SCNN1G	6340	-0.20839387	3.958416e-02	7.635471e-02
## OR7E128P	81175	-0.60808495	3.958656e-02	7.635471e-02
## OTUB1	55611	-0.10313943	3.963635e-02	7.644468e-02
## NUAK2	81788	-0.18078658	3.964338e-02	7.645018e-02
## ALG3	10195	-0.12055840	3.964550e-02	7.645018e-02
## PJA2	9867	-0.07856841	3.968734e-02	7.652481e-02
## VCPIP1	80124	-0.08456890	3.969789e-02	7.653906e-02
## GINS3	64785	0.12914958	3.973093e-02	7.659669e-02
## LINC01752	101929395	-0.31626479	3.975299e-02	7.663315e-02
## DNAJC21	134218	0.08022177	3.975881e-02	7.663411e-02
## DDX41	51428	0.06827679	3.975980e-02	7.663411e-02
## CEP85	64793	0.14550207	3.976937e-02	7.664649e-02
## CTC1	80169	-0.08674510	3.980191e-02	7.670060e-02
## CPP	340451	0.76504811	3.980376e-02	7.670060e-02
## ASCC1	51008	-0.07250691	3.986905e-02	7.682031e-02
## YES1P1	7526	0.52827506	3.992084e-02	7.691401e-02
## ASCL1	429	0.89807759	3.996041e-02	7.698414e-02
## DUS3L	56931	-0.12169205	3.997608e-02	7.700823e-02
## EDN3	1908	0.59721069	4.001457e-02	7.707625e-02
## MIR10B	406903	0.47595704	4.002108e-02	7.708268e-02
## IRX6	79190	-0.41760392	4.002657e-02	7.708715e-02
## BAIAP2L2	80115	-0.22191368	4.005750e-02	7.714061e-02
## IQCE	23288	0.06370174	4.006761e-02	7.715187e-02
## HSPA8P5	399988	0.38970523	4.006970e-02	7.715187e-02
## MIR635	693220	0.16238502	4.008483e-02	7.717489e-02
## TFEC	22797	0.23225458	4.011575e-02	7.722829e-02
## FEM1B	10116	-0.07684006	4.013191e-02	7.724718e-02
## MTATP6P2	100287745	-0.62373020	4.013157e-02	7.724718e-02
## LINC03018	286178	0.78949696	4.016005e-02	7.729521e-02
## MALT1-AS1	101927322	0.20978389	4.023369e-02	7.743081e-02
## ZNF252P-AS1	286103	0.27094325	4.028527e-02	7.752394e-02
## MRPS27	23107	0.05088090	4.030062e-02	7.754734e-02
## TENM2	57451	-0.27737507	4.031347e-02	7.756593e-02
## STH	246744	0.78940539	4.032129e-02	7.757483e-02
## ADGRG7	84873	0.92299889	4.033689e-02	7.759869e-02

## NTAQ1	55093	-0.12586371	4.034661e-02	7.761124e-02
## EEF2KMT	196483	0.10248782	4.035077e-02	7.761311e-02
## PSMA8	143471	1.06165298	4.042088e-02	7.774182e-02
## LEPR	3953	0.16691296	4.044882e-02	7.778940e-02
## RPL29P19	389655	0.29741566	4.046287e-02	7.781025e-02
## TOPORS	10210	-0.07921081	4.048508e-02	7.784367e-02
## CALM2P2	806	0.32264920	4.048665e-02	7.784367e-02
## H4C5	8367	0.50757899	4.053972e-02	7.793954e-02
## IDH1-AS1	100507475	0.22948933	4.059346e-02	7.803669e-02
## UBTF	7343	0.05878963	4.064807e-02	7.811676e-02
## KAAG1	353219	0.35406305	4.065201e-02	7.811676e-02
## SH2D6	284948	-0.30106987	4.065433e-02	7.811676e-02
## YY1AP1	55249	0.04829772	4.064674e-02	7.811676e-02
## MAN1A2	10905	-0.09312373	4.064693e-02	7.811676e-02
## FAM242F	105376064	-0.54956826	4.065440e-02	7.811676e-02
## HSP90AB1	3326	0.09528546	4.068484e-02	7.816642e-02
## TMEM252-DT	105376072	0.26783891	4.068668e-02	7.816642e-02
## SPIRE1	56907	-0.09293736	4.070894e-02	7.820300e-02
## ZNF341	84905	0.11669405	4.073230e-02	7.823633e-02
## BCAR3-AS1	100129046	-0.17611464	4.073273e-02	7.823633e-02
## ANKRD61	100310846	-0.31976759	4.074194e-02	7.824451e-02
## IGHA2	3494	0.51958161	4.074343e-02	7.824451e-02
## DLG1-AS1	100507086	-0.21704458	4.075360e-02	7.825787e-02
## GPT2	84706	0.21792779	4.078937e-02	7.831418e-02
## KCNMB2-AS1	104797538	0.52498364	4.078847e-02	7.831418e-02
## UBE2O	63893	0.06899539	4.084593e-02	7.841656e-02
## SLC18A2-AS1	105378500	1.34218193	4.097824e-02	7.866438e-02
## KIAA0753	9851	0.12531804	4.100795e-02	7.871519e-02
## TIMM23B-AGAP6	113218477	0.36087434	4.106003e-02	7.880892e-02
## BRPF3	27154	-0.10047336	4.110401e-02	7.888124e-02
## STAG3L4	64940	0.15736269	4.110420e-02	7.888124e-02
## BCLAF1	9774	-0.07680674	4.111708e-02	7.889972e-02
## CYB5D2	124936	-0.10035087	4.115526e-02	7.896676e-02
## AP1G2	8906	-0.15995308	4.120265e-02	7.905145e-02
## ARHGAP39	80728	-0.14025413	4.124200e-02	7.912069e-02
## UAP1	6675	0.10676524	4.126214e-02	7.915309e-02
## LSM6	11157	0.11198728	4.126803e-02	7.915814e-02
## GPR25	2848	1.05661657	4.129533e-02	7.920424e-02
## CTXND1	100996492	-0.22233661	4.129999e-02	7.920693e-02
## LPAR2	9170	-0.20613477	4.130673e-02	7.921361e-02
## EIF4A1P2	359792	0.35814161	4.132842e-02	7.924895e-02
## CENPO	79172	0.08099742	4.134881e-02	7.928180e-02
## PDLM5	10611	0.11597200	4.145409e-02	7.947738e-02
## CDC14A	8556	-0.13552023	4.148509e-02	7.953054e-02
## DHCR24	1718	-0.14519807	4.150433e-02	7.955254e-02
## FAM193B	54540	0.22527028	4.150638e-02	7.955254e-02
## RHOQP2	730041	0.33346230	4.150314e-02	7.955254e-02
## UQCRRFS1-DT	105372352	-0.24444591	4.151238e-02	7.955776e-02
## DCAF13	25879	0.09318287	4.159115e-02	7.970243e-02
## AGPAT3	56894	0.16063556	4.161020e-02	7.973266e-02
## ABCC8	6833	-0.32619649	4.164158e-02	7.978649e-02
## ATP5MGP2	53410	0.64046408	4.164844e-02	7.979335e-02
## CLEC1A	51267	-0.14253619	4.167145e-02	7.982484e-02
## OXER1	165140	0.25346372	4.166983e-02	7.982484e-02

## RPS24P9	100132496	0.43716107	4.167747e-02	7.983007e-02
## GIN1	54826	-0.08900032	4.169800e-02	7.986310e-02
## TCAF1P1	653199	0.17485551	4.171871e-02	7.989647e-02
## HMGB1P31	100873894	0.32354816	4.172406e-02	7.990043e-02
## NFYC-AS1	100130557	-0.21892498	4.175371e-02	7.995091e-02
## MIR190A	406965	0.73906843	4.179161e-02	8.001718e-02
## YWHAZP4	246737	0.53141060	4.179566e-02	8.001862e-02
## FBXO3	26273	-0.06934163	4.185399e-02	8.012399e-02
## ENPP2	5168	-0.10922888	4.187828e-02	8.016416e-02
## ARRDC1	92714	-0.13576961	4.189452e-02	8.018894e-02
## TMED6	146456	-0.35729877	4.192815e-02	8.024699e-02
## H2AC20	8338	0.40586506	4.201033e-02	8.039793e-02
## TRBV7-7	28591	1.19872452	4.203590e-02	8.044054e-02
## ABT1	29777	0.08908744	4.208837e-02	8.053460e-02
## GJD2-DT	101928174	0.55863491	4.213808e-02	8.062338e-02
## RNU6-117P	106481213	-0.47756536	4.214417e-02	8.062869e-02
## EIF4HP2	100421545	-0.53642473	4.219852e-02	8.072630e-02
## ANO10	55129	-0.08858106	4.223909e-02	8.079756e-02
## LINC02679	105378385	0.83516377	4.227639e-02	8.086254e-02
## SPAM1	6677	0.76286315	4.228591e-02	8.087437e-02
## SUMF2	25870	-0.08528456	4.229470e-02	8.087846e-02
## NAP1L3	4675	0.13524014	4.229431e-02	8.087846e-02
## CYP2C18	1562	-0.38445059	4.233740e-02	8.095375e-02
## ARID3A	1820	0.09519980	4.234623e-02	8.096427e-02
## CCP110	9738	0.13713203	4.240033e-02	8.105751e-02
## CYP51A1P1	83528	-0.66061782	4.240167e-02	8.105751e-02
## TBC1D12	23232	0.09422427	4.241221e-02	8.107127e-02
## HSPA5P1	400750	-0.64918734	4.244160e-02	8.112107e-02
## FOLH1	2346	0.22337938	4.244728e-02	8.112555e-02
## MAF	4094	-0.18651237	4.245381e-02	8.113166e-02
## CHGA	1113	-0.55952208	4.246635e-02	8.114285e-02
## IGHV2-26	28455	0.91508726	4.246579e-02	8.114285e-02
## ZNF814	730051	0.11414740	4.251696e-02	8.123316e-02
## RPS27A	6233	0.16083677	4.254761e-02	8.128533e-02
## DUT-AS1	107984757	-0.31293493	4.259428e-02	8.136810e-02
## GGA1	26088	-0.06954436	4.264983e-02	8.146713e-02
## PADI3	51702	1.39778821	4.265282e-02	8.146713e-02
## BNIP3	664	-0.10908191	4.269471e-02	8.153432e-02
## SIX5	147912	0.19089011	4.269254e-02	8.153432e-02
## RAB40B	10966	0.11208228	4.270987e-02	8.155685e-02
## NAXE	128240	-0.14707058	4.279959e-02	8.172177e-02
## ZNF707	286075	0.09252779	4.281479e-02	8.174436e-02
## NSA2P7	100421693	0.45397621	4.285362e-02	8.181207e-02
## SPINK1	6690	-0.41205480	4.287633e-02	8.184900e-02
## LINC03052	127138865	-0.16155882	4.291372e-02	8.191393e-02
## TREX2	11219	0.25496606	4.292514e-02	8.192929e-02
## KCNQ2	3785	-0.68990933	4.297985e-02	8.202728e-02
## FSD1L	83856	0.16631319	4.303175e-02	8.211346e-02
## TXNDC17	84817	0.15001879	4.303177e-02	8.211346e-02
## GAN	8139	0.13076707	4.304003e-02	8.212278e-02
## LINC02621	105378325	0.92422519	4.310119e-02	8.223302e-02
## BRCC3P1	100421311	0.72188002	4.311567e-02	8.225418e-02
## ATF7	11016	0.08620153	4.312016e-02	8.225629e-02
## TCEA3	6920	0.15527546	4.313463e-02	8.227745e-02

## IMPDH1P5	340780	-0.51861645	4.314280e-02	8.228657e-02
## ZNF883	169834	0.21281260	4.316255e-02	8.231777e-02
## ABCB8	11194	-0.10570885	4.325204e-02	8.248197e-02
## CCDC74B	91409	0.20363218	4.326993e-02	8.250315e-02
## KLF2P1	106480253	-0.58004932	4.326988e-02	8.250315e-02
## TCAF2P1	653691	0.35531471	4.330344e-02	8.256055e-02
## LINC01315	102723775	0.22248645	4.330704e-02	8.256095e-02
## HUS1	3364	-0.06075477	4.331310e-02	8.256602e-02
## IFIT1B	439996	0.70723077	4.331740e-02	8.256775e-02
## SERPINB4	6318	0.64925340	4.335447e-02	8.263191e-02
## PRKXP1	441733	0.31997423	4.336960e-02	8.265428e-02
## TTBK2	146057	0.11982567	4.350268e-02	8.288982e-02
## ZNF444	55311	-0.11640404	4.350343e-02	8.288982e-02
## RNF182	221687	0.20078751	4.350018e-02	8.288982e-02
## IGHV30R16-9	28307	1.12841863	4.350931e-02	8.289453e-02
## MTRFR	91574	0.10104601	4.352839e-02	8.292438e-02
## DYNC1H1	1778	0.09021295	4.357540e-02	8.300744e-02
## STIM2	57620	0.10027401	4.358736e-02	8.302370e-02
## MYO1D	4642	0.14674111	4.360821e-02	8.305691e-02
## JADE3	9767	-0.09110728	4.366722e-02	8.315884e-02
## PAQR6	79957	-0.28847438	4.366857e-02	8.315884e-02
## SMIM13	221710	0.07638460	4.371222e-02	8.323543e-02
## TOX-DT	100505501	-0.18762117	4.373124e-02	8.325861e-02
## DNAH14	127602	-0.16702607	4.372815e-02	8.325861e-02
## PTPRVP	148713	0.43770221	4.373489e-02	8.325904e-02
## MRPL42P1	285415	-0.45584115	4.379795e-02	8.337256e-02
## TRBV12-5	28575	1.28662547	4.381250e-02	8.339371e-02
## MIR450A1	554214	0.95938882	4.382841e-02	8.341746e-02
## KIAA1958	158405	-0.13997141	4.383857e-02	8.343026e-02
## GNB1	2782	-0.05680415	4.384220e-02	8.343065e-02
## BCORP1	286554	0.57355446	4.387081e-02	8.347856e-02
## LINC02018	107986100	0.18537311	4.388870e-02	8.350604e-02
## RPRD2	23248	-0.07169748	4.389404e-02	8.350967e-02
## NEK1	4750	0.08398125	4.391644e-02	8.354575e-02
## FAM72C	554282	0.82459547	4.395241e-02	8.360762e-02
## TGFB1I1	7041	0.24488485	4.396002e-02	8.361456e-02
## AZI2	64343	0.06595247	4.396293e-02	8.361456e-02
## MOB2	81532	0.09985536	4.398496e-02	8.364990e-02
## DNAH6	1768	-0.23972932	4.400838e-02	8.368789e-02
## CKLF-CMTM1	100529251	0.66018633	4.405784e-02	8.377540e-02
## UBE2E3-DT	105373772	-0.42104155	4.408238e-02	8.381550e-02
## NUDT16L2P	152195	-0.11290870	4.416319e-02	8.396258e-02
## INCA1	388324	-0.14676006	4.420162e-02	8.402250e-02
## MIR4668	100616114	-0.78399948	4.419934e-02	8.402250e-02
## RNU6-945P	106479984	0.65825145	4.422440e-02	8.405921e-02
## RPP25	54913	0.14984155	4.424369e-02	8.408930e-02
## P3H4	10609	0.16913956	4.427527e-02	8.414275e-02
## ZNF182	7569	0.11911525	4.428634e-02	8.415720e-02
## RPP38-DT	221060	0.34625620	4.430353e-02	8.418329e-02
## DINOL	108783646	-0.72406877	4.442477e-02	8.440706e-02
## DLGAP1-AS2	84777	-0.24851026	4.445910e-02	8.446568e-02
## DHDH	27294	0.31826486	4.448866e-02	8.451525e-02
## PRPF3	9129	0.10718954	4.452679e-02	8.458105e-02
## ZNF627	199692	-0.06684126	4.457232e-02	8.466092e-02

## ZSCAN23	222696	0.26528391	4.458964e-02	8.468722e-02
## BCAP31	10134	-0.11148065	4.459945e-02	8.469921e-02
## RNU6-46P	100873760	0.52757187	4.461442e-02	8.472104e-02
## RPL39P36	100271526	0.35281383	4.464276e-02	8.476823e-02
## POLA1	5422	0.07295595	4.469889e-02	8.486818e-02
## SUPT3H	8464	0.07058845	4.475033e-02	8.495920e-02
## EXOC5P1	644548	-0.52884526	4.476038e-02	8.497163e-02
## ZNF711	7552	-0.19378608	4.480508e-02	8.504986e-02
## ESR2	2100	0.31963744	4.481718e-02	8.506618e-02
## PIGX	54965	-0.05475525	4.486296e-02	8.514642e-02
## ST3GAL6-AS1	100874207	-0.16864724	4.490794e-02	8.522514e-02
## TRMT1L	81627	-0.06763410	4.493141e-02	8.526006e-02
## TMEM130	222865	-0.22011412	4.493336e-02	8.526006e-02
## UBALD2	283991	-0.11730374	4.495072e-02	8.528633e-02
## ATP6V1D	51382	-0.10234146	4.495720e-02	8.529198e-02
## ZNF483	158399	-0.17002869	4.497814e-02	8.532504e-02
## FNDC11	79025	-0.39478293	4.502086e-02	8.539942e-02
## ULBP3	79465	0.10323249	4.505442e-02	8.545641e-02
## RPL10P15	100129975	-0.42858523	4.507374e-02	8.548637e-02
## THY1-AS1	117134602	0.47489939	4.510796e-02	8.554459e-02
## LRATD2	157638	-0.10241877	4.514505e-02	8.560826e-02
## GK5	256356	-0.15265793	4.515926e-02	8.562853e-02
## GUCY2D	3000	-0.30674423	4.519270e-02	8.568525e-02
## ALDH4A1	8659	0.22029690	4.519943e-02	8.569065e-02
## BANF1P2	414169	0.32406810	4.520260e-02	8.569065e-02
## SMARCD2	6603	0.07375999	4.524552e-02	8.576532e-02
## PCDHGA6	56109	-0.13753900	4.528923e-02	8.584149e-02
## SWAP70	23075	0.07633987	4.529488e-02	8.584549e-02
## SSBP3P1	100129321	-0.22750776	4.530127e-02	8.585091e-02
## RNA5SP111	100873381	-0.26671543	4.531833e-02	8.587654e-02
## RORA	6095	-0.15013843	4.534765e-02	8.592539e-02
## MSRB1	51734	0.19175282	4.540424e-02	8.602591e-02
## NBPF12	149013	0.19000799	4.541856e-02	8.604634e-02
## THBS1-IT1	118597829	-0.26063436	4.545210e-02	8.610317e-02
## TMEM253	643382	0.22274047	4.546608e-02	8.611870e-02
## ACTN1-DT	161159	0.65833054	4.546739e-02	8.611870e-02
## GPR173	54328	0.15943710	4.547518e-02	8.612674e-02
## LRRC4C	57689	0.26181988	4.549010e-02	8.614830e-02
## MTDH	92140	-0.06803094	4.551401e-02	8.618685e-02
## KIFC2	90990	-0.18567987	4.557346e-02	8.629270e-02
## LINC03020	101926892	0.59343734	4.559616e-02	8.632897e-02
## MIR106AHG	124905221	0.58494230	4.562468e-02	8.637623e-02
## LINC01451	401561	-0.48432107	4.569401e-02	8.650075e-02
## CTAGE1	64693	0.58363833	4.569772e-02	8.650104e-02
## ZNF675	171392	0.13536480	4.570462e-02	8.650735e-02
## ELOVL2	54898	0.30210418	4.571518e-02	8.652061e-02
## TJP1	7082	-0.08361368	4.577700e-02	8.663086e-02
## LRPPRC	10128	-0.08759435	4.578390e-02	8.663717e-02
## NPW	283869	0.49159953	4.579129e-02	8.664440e-02
## STOML1	9399	0.11700730	4.580325e-02	8.666028e-02
## BEND3P2	392368	0.67896378	4.581190e-02	8.666992e-02
## SMARCA1	6594	-0.07829125	4.584450e-02	8.672483e-02
## TXNRD3	114112	0.08140803	4.586236e-02	8.675186e-02
## TSPAN15	23555	0.17498654	4.589341e-02	8.680385e-02

## GLP1R	2740	-0.30407670	4.589950e-02	8.680860e-02
## TGIF1	7050	-0.10774029	4.592263e-02	8.684559e-02
## TIGD4	201798	0.16635032	4.601852e-02	8.702017e-02
## PANK1	53354	0.18270399	4.606106e-02	8.709382e-02
## DPP10-AS1	389023	-0.63306436	4.607973e-02	8.712235e-02
## LINC00622	644242	-0.17574469	4.615679e-02	8.726126e-02
## ABHD14A	25864	0.22254260	4.617188e-02	8.728299e-02
## UBAP2	55833	0.06310433	4.618920e-02	8.730894e-02
## DPH2	1802	0.07586390	4.619397e-02	8.731117e-02
## CERS3	204219	-0.61770960	4.621643e-02	8.734683e-02
## LINC02076	400579	0.60686741	4.623216e-02	8.736975e-02
## KDM4C	23081	-0.06770334	4.630969e-02	8.750891e-02
## NDUFA2	4695	0.15797883	4.631660e-02	8.750891e-02
## LINC02725	105369563	1.09843564	4.631448e-02	8.750891e-02
## FBXW11P1	54099	-0.30490941	4.632066e-02	8.750979e-02
## VPS13D	55187	-0.09393749	4.634376e-02	8.754202e-02
## ZNF366	167465	0.16146037	4.634493e-02	8.754202e-02
## ZNF169	169841	0.16433571	4.635579e-02	8.755573e-02
## LINC02664	101929352	0.58207376	4.637455e-02	8.758435e-02
## KCNN2	3781	0.30567481	4.641223e-02	8.764570e-02
## ESPN	83715	-0.25826337	4.641588e-02	8.764570e-02
## CT45A11P	100129813	0.61144689	4.641785e-02	8.764570e-02
## NOL4L	140688	-0.07497760	4.646879e-02	8.773507e-02
## SDSL	113675	0.15564508	4.650727e-02	8.780090e-02
## ACTR5	79913	0.06158134	4.654045e-02	8.785671e-02
## DDN	23109	0.36983953	4.655992e-02	8.788664e-02
## CFHR4	10877	0.54098066	4.657627e-02	8.791067e-02
## SMPD4BP	150776	0.20467515	4.659087e-02	8.793141e-02
## EIF1B	10289	0.09107218	4.661646e-02	8.797287e-02
## AKAP17A	8227	0.12390867	4.665577e-02	8.804021e-02
## UNC13C	440279	-0.34659579	4.668447e-02	8.808753e-02
## RNU7-45P	100147832	0.54706077	4.670519e-02	8.811979e-02
## COPS7A	50813	0.06725594	4.670975e-02	8.812155e-02
## NRG4	145957	0.20787093	4.672150e-02	8.813686e-02
## TSC1	7248	0.10750700	4.673867e-02	8.816241e-02
## ZNF276	92822	0.17607674	4.678808e-02	8.824448e-02
## ZFP91	80829	-0.06123276	4.678944e-02	8.824448e-02
## ZNF56P	7608	0.18633440	4.680772e-02	8.827211e-02
## ZNF704	619279	0.10811920	4.682303e-02	8.829413e-02
## PRAF2	11230	-0.18716283	4.685477e-02	8.834712e-02
## CLK1	1195	0.21206280	4.688866e-02	8.840417e-02
## LINC-PINT	378805	-0.17831296	4.689778e-02	8.841451e-02
## ASAH2	56624	-0.21455807	4.695617e-02	8.851658e-02
## UICLM	200772	-0.62320680	4.695921e-02	8.851658e-02
## AQP7P2	389756	0.41243498	4.696779e-02	8.852589e-02
## NSFL1C	55968	0.07343220	4.697927e-02	8.854066e-02
## FABP3	2170	0.16778290	4.699671e-02	8.856666e-02
## CAMTA2-AS1	101927979	-0.52558703	4.700645e-02	8.857815e-02
## RAB43	339122	-0.23152030	4.703591e-02	8.862679e-02
## ZC3H11A	9877	-0.36231617	4.703991e-02	8.862745e-02
## RWDD3	25950	0.14327251	4.704938e-02	8.863842e-02
## DLEU2L	79469	0.38220170	4.716864e-02	8.885621e-02
## SLC5A4-AS1	110806273	0.41680946	4.717696e-02	8.886500e-02
## FAM20B	9917	-0.07902766	4.718172e-02	8.886707e-02

## GSTA1	2938	0.35120130	4.727168e-02	8.902962e-02
## IVL	3713	0.92255896	4.727982e-02	8.903568e-02
## CT69	101928231	-0.52172780	4.728223e-02	8.903568e-02
## UXT	8409	0.15004150	4.730568e-02	8.907293e-02
## SRGAP3-AS2	101927416	0.62858024	4.733462e-02	8.912053e-02
## MINK1	50488	-0.07053186	4.736361e-02	8.916819e-02
## RAB5C	5878	-0.09605912	4.744495e-02	8.931441e-02
## PNPLA2	57104	-0.16579075	4.748122e-02	8.937576e-02
## FDPS	2224	-0.09472802	4.750410e-02	8.941191e-02
## GSTO1	9446	0.14228648	4.751729e-02	8.942980e-02
## CSRNP3	80034	-0.15017083	4.752372e-02	8.943498e-02
## SAMD11	148398	0.20915130	4.753981e-02	8.945833e-02
## ZDHHC22	283576	1.37365819	4.755440e-02	8.947885e-02
## TTC39C-AS1	102724246	0.40820506	4.757558e-02	8.951178e-02
## ANGEL1	23357	0.06529955	4.758537e-02	8.952287e-02
## EPX	8288	-1.22807344	4.758884e-02	8.952287e-02
## INHBA-AS1	285954	0.33821360	4.764004e-02	8.961224e-02
## RPS28P7	646195	0.29428874	4.768630e-02	8.969231e-02
## THOC1	9984	0.12268435	4.769638e-02	8.970433e-02
## PFN2-AS1	121832804	0.52788867	4.771593e-02	8.973417e-02
## IKZF2	22807	0.13804637	4.777314e-02	8.983480e-02
## PRR19	284338	-0.20821162	4.782459e-02	8.992458e-02
## KRT16P6	353194	-0.61793299	4.788013e-02	9.002205e-02
## LINC02728	101928865	-0.42294968	4.793060e-02	9.010997e-02
## SERBP1P6	100420450	0.46317389	4.793801e-02	9.011693e-02
## TBKBP1	9755	-0.12090009	4.796113e-02	9.015343e-02
## SYT4	6860	0.56852090	4.796747e-02	9.015836e-02
## SOS1-IT1	100505911	0.15114237	4.800137e-02	9.021511e-02
## POU2F3	25833	-0.25574755	4.804213e-02	9.028473e-02
## CLEC4E	26253	-0.29182357	4.813443e-02	9.045119e-02
## LRP5	4041	-0.12713202	4.822798e-02	9.061997e-02
## ZBTB39	9880	0.08646263	4.826307e-02	9.067889e-02
## SLC13A5	284111	-0.74044082	4.827679e-02	9.069493e-02
## BRD7P2	647076	0.33030114	4.827907e-02	9.069493e-02
## TRIM41	90933	-0.06493711	4.829250e-02	9.071004e-02
## C8A	731	-0.58619984	4.829457e-02	9.071004e-02
## LINC02482	105374366	0.18103528	4.831025e-02	9.073247e-02
## RTTN	25914	0.15524637	4.831904e-02	9.074196e-02
## OTOP2	92736	0.68701069	4.833065e-02	9.075676e-02
## GPATCH3	63906	0.06165657	4.833808e-02	9.076369e-02
## CRYBB3	1417	0.30960407	4.834686e-02	9.077316e-02
## MCM5	4174	0.11136187	4.835668e-02	9.078439e-02
## MAP7D2	256714	-0.21498667	4.836031e-02	9.078439e-02
## DCAF7	10238	-0.06953506	4.839491e-02	9.084232e-02
## CEP112	201134	0.12919100	4.841873e-02	9.088002e-02
## CEMIP2	23670	-0.16314893	4.857770e-02	9.117135e-02
## FUT8-AS1	645431	-0.19138968	4.859186e-02	9.119090e-02
## AURKA	6790	0.11477577	4.860889e-02	9.121580e-02
## RCN1P2	728913	0.36972716	4.862412e-02	9.123734e-02
## ZFAND3-DT	107986593	-0.31983071	4.863617e-02	9.125290e-02
## GLIS2	84662	-0.12853114	4.864500e-02	9.126242e-02
## PAEP	5047	1.49062241	4.865721e-02	9.127829e-02
## GABRR2	2570	0.26106250	4.867875e-02	9.131165e-02
## ODC1-DT	101929715	-0.15138948	4.869420e-02	9.133357e-02

## RBMXL1	494115	-0.06170810	4.874624e-02	9.142412e-02
## RPTN	126638	1.65966316	4.877835e-02	9.147728e-02
## CLCN6	1185	-0.09619237	4.880909e-02	9.152787e-02
## SBN01-AS1	112268105	0.21877390	4.884461e-02	9.158740e-02
## TESK1	7016	0.12154045	4.884912e-02	9.158880e-02
## ANXA3	306	-0.18278580	4.887543e-02	9.163107e-02
## LINC02731	100128239	0.30602595	4.888411e-02	9.164027e-02
## GPR87	53836	0.85453902	4.889362e-02	9.165103e-02
## ARB2BP	131909	1.02566094	4.890971e-02	9.166311e-02
## DIO3OS	64150	0.34429436	4.890732e-02	9.166311e-02
## IKBKG	8517	0.10706252	4.891139e-02	9.166311e-02
## PITX3	5309	0.50834299	4.892867e-02	9.168843e-02
## RPL8	6132	0.16275859	4.894173e-02	9.170584e-02
## INTS15	79034	0.07370102	4.894819e-02	9.171088e-02
## ADGRG3	222487	0.33570892	4.898683e-02	9.177620e-02
## MPP4	58538	0.47295062	4.900157e-02	9.179673e-02
## LINC02284	102723699	-0.36080542	4.902921e-02	9.184143e-02
## CDK19	23097	0.08208720	4.904173e-02	9.185779e-02
## RPS21-DT	128667224	-0.21562224	4.904600e-02	9.185871e-02
## FZD4	8322	0.11237400	4.909745e-02	9.194799e-02
## VPS28	51160	0.10974992	4.911748e-02	9.197842e-02
## CACYBP	27101	0.08794851	4.912403e-02	9.198358e-02
## GTPBP10	85865	-0.08007100	4.914029e-02	9.200694e-02
## TRIM24	8805	-0.05730071	4.914724e-02	9.201288e-02
## DENND6A	201627	-0.06975389	4.915942e-02	9.202859e-02
## QTRT1	81890	0.12207875	4.916956e-02	9.204047e-02
## IGHV3-72	28410	0.54593464	4.917861e-02	9.205032e-02
## UROC1	131669	0.50753034	4.919831e-02	9.208011e-02
## PNPLA3	80339	0.29845811	4.922787e-02	9.211416e-02
## LINC01558	26238	-0.22797065	4.922680e-02	9.211416e-02
## SIRT7	51547	0.09581907	4.922614e-02	9.211416e-02
## LINC01987	100132174	-0.36953367	4.928829e-02	9.222011e-02
## PLD1	5337	0.15063444	4.931178e-02	9.225696e-02
## LINC01118	388948	0.40637452	4.934260e-02	9.230751e-02
## NUFIP2	57532	0.08959552	4.936274e-02	9.233808e-02
## RC3H1-DT	105371620	-0.39528183	4.939658e-02	9.239426e-02
## BABAM2	9577	-0.10724210	4.940083e-02	9.239510e-02
## ECI1	1632	-0.16824406	4.942415e-02	9.243161e-02
## MTND3P24	107075199	-1.05285480	4.954942e-02	9.265875e-02
## MTCH2P1	100289118	0.59427899	4.956325e-02	9.267747e-02
## PPIAP45	100506099	1.31164858	4.956859e-02	9.268033e-02
## SHARPIN	81858	0.13319849	4.957296e-02	9.268137e-02
## RPL36P14	347292	0.62175612	4.961315e-02	9.273511e-02
## ZIK1	284307	0.09040469	4.960574e-02	9.273511e-02
## TMEM221	100130519	0.27726275	4.961120e-02	9.273511e-02
## RRM2P3	100420159	-0.37037741	4.967577e-02	9.284501e-02
## TTC38	55020	0.18116153	4.975572e-02	9.298729e-02
## IL7	3574	-0.19421236	4.976037e-02	9.298884e-02
## SENP3	26168	-0.06620592	4.979509e-02	9.304656e-02
## NBEAL2	23218	-0.15916028	4.980564e-02	9.305911e-02
## MAILR	100506753	0.11795956	4.986259e-02	9.315837e-02
## KRT18P2	54044	-0.69457447	4.990599e-02	9.323227e-02
## VSIG2	23584	-0.17099575	4.998309e-02	9.336913e-02
## ZNF731P	729806	0.22614824	4.999736e-02	9.338862e-02

## PPP1R1B	84152	0.28097760	5.002682e-02	9.343481e-02
## RNF220	55182	0.05896555	5.002978e-02	9.343481e-02
## NARF	26502	0.09517295	5.012335e-02	9.359517e-02
## ZBTB3	79842	0.07919776	5.012109e-02	9.359517e-02
## DUT	1854	0.08405050	5.020829e-02	9.373937e-02
## MRM1	79922	-0.09238655	5.020520e-02	9.373937e-02
## WDR35	57539	-0.09224373	5.023483e-02	9.376430e-02
## RSBN1L	222194	-0.07613208	5.023300e-02	9.376430e-02
## PCDHGA1	56114	-0.17712259	5.023707e-02	9.376430e-02
## RASSF10-DT	105376557	0.21790638	5.022955e-02	9.376430e-02
## CCDC144CP	348254	0.49559368	5.028572e-02	9.384788e-02
## DDX51	317781	-0.07389219	5.031637e-02	9.389788e-02
## SELENOS	55829	-0.07327972	5.037577e-02	9.400150e-02
## ATPAF1	64756	0.08869201	5.040235e-02	9.404388e-02
## MANF	7873	-0.15289507	5.041379e-02	9.405217e-02
## FAM95B1	100133036	0.53831922	5.041453e-02	9.405217e-02
## OR2A1	346528	-0.49841308	5.043452e-02	9.408223e-02
## ZNF799	90576	0.10394031	5.044147e-02	9.408797e-02
## TTI1	9675	-0.04897006	5.044987e-02	9.409642e-02
## CFAP206	154313	-0.37185950	5.050198e-02	9.418638e-02
## VPS33B-DT	101926911	-0.28450876	5.056854e-02	9.430199e-02
## STARD10	10809	-0.16255306	5.057173e-02	9.430199e-02
## TRPS1	7227	0.09726908	5.061000e-02	9.436611e-02
## RAET1E	135250	-0.24765486	5.061608e-02	9.437022e-02
## CDKN2C	1031	0.12840026	5.062734e-02	9.438396e-02
## HEATR5B	54497	-0.07721551	5.064693e-02	9.440774e-02
## NPAP1P9	392364	0.27893712	5.064786e-02	9.440774e-02
## NXPE4	54827	-0.68792700	5.066381e-02	9.443022e-02
## KCNN1	3780	0.28170478	5.069427e-02	9.447975e-02
## LRP1B	53353	-0.18234366	5.072520e-02	9.453015e-02
## CLYBL	171425	0.14548365	5.075288e-02	9.457448e-02
## ZDHHC15	158866	-0.07554294	5.078073e-02	9.461912e-02
## WDR45B	56270	-0.04636449	5.080432e-02	9.465581e-02
## PCDHGB2	56103	0.18678453	5.081618e-02	9.467065e-02
## LINC01115	339822	-0.51364562	5.095260e-02	9.491753e-02
## FKBP14-AS1	105375215	0.32650687	5.095856e-02	9.492136e-02
## ENTREP3	10712	-0.12729895	5.100283e-02	9.499653e-02
## NUTM2D	728130	0.17012054	5.104397e-02	9.506587e-02
## LRRC37B	114659	0.14749563	5.107680e-02	9.511972e-02
## BAALC-AS2	157556	-0.36120847	5.108529e-02	9.512824e-02
## COL25A1	84570	-0.27121997	5.114227e-02	9.522705e-02
## BTN2A2	10385	0.10852022	5.116115e-02	9.524890e-02
## SAP30	8819	0.11379147	5.116252e-02	9.524890e-02
## NUDT6	11162	0.13518363	5.116576e-02	9.524890e-02
## INTS6	26512	-0.06858223	5.118842e-02	9.528379e-02
## PIGB	9488	-0.08471858	5.119715e-02	9.529274e-02
## TMEM106A	113277	0.19682449	5.121558e-02	9.531973e-02
## PCDH11X	27328	-0.59286656	5.123745e-02	9.535315e-02
## ABCG5	64240	-0.52795039	5.125658e-02	9.538143e-02
## RPS28	6234	0.19822946	5.127275e-02	9.540422e-02
## CCT4	10575	0.07404173	5.128574e-02	9.541966e-02
## KIAA1586	57691	0.10995320	5.128890e-02	9.541966e-02
## RN7SL566P	106481850	0.51951547	5.130061e-02	9.543414e-02
## SORBS2	8470	-0.07903391	5.136724e-02	9.555078e-02

## RPL26L1	51121	0.11407599	5.147427e-02	9.574253e-02
## E2F3P2	100420003	-0.44183044	5.151180e-02	9.580502e-02
## NPM1P37	100422261	0.53811749	5.153585e-02	9.584240e-02
## MIR5581	100847010	0.53215422	5.161775e-02	9.598736e-02
## DYNLRB2-AS1	102724084	0.35165880	5.163267e-02	9.600776e-02
## TTLL12	23170	-0.09954851	5.166001e-02	9.605125e-02
## CCDC7	79741	-0.16766982	5.169374e-02	9.610662e-02
## ASB17	127247	0.37493348	5.170659e-02	9.612316e-02
## C2orf50	130813	-0.20073062	5.171764e-02	9.613634e-02
## DMAC1	90871	0.11684695	5.177092e-02	9.622802e-02
## TRDJ1	28522	1.19215954	5.178472e-02	9.624632e-02
## PPP1R8	5511	0.04433760	5.181309e-02	9.629167e-02
## TRAPPC2	6399	0.10244173	5.182880e-02	9.631349e-02
## C1orf87	127795	-0.50895950	5.183455e-02	9.631682e-02
## TMEM242	729515	0.05970433	5.184586e-02	9.633048e-02
## CDK20	23552	-0.08372767	5.192197e-02	9.646451e-02
## XRRA1	143570	0.14121138	5.195552e-02	9.651946e-02
## LINC01976	107546764	-0.31292231	5.196070e-02	9.652170e-02
## ZNF571-AS1	100507433	0.23723809	5.197066e-02	9.653283e-02
## IGKJ4	28947	0.95509422	5.199459e-02	9.656990e-02
## BEND3	57673	-0.08455390	5.200630e-02	9.658427e-02
## SNX1	6642	-0.05625178	5.203221e-02	9.661762e-02
## OR4D1	26689	-0.52013991	5.203187e-02	9.661762e-02
## PLAAT3	11145	-0.14788422	5.209295e-02	9.672301e-02
## LINC01564	101927171	-0.34350519	5.210854e-02	9.674456e-02
## PAX6	5080	0.69968417	5.212065e-02	9.675227e-02
## TMEM135	65084	-0.08642862	5.211835e-02	9.675227e-02
## CD55	1604	0.11063663	5.213306e-02	9.676790e-02
## CREBL2	1389	-0.06706652	5.214000e-02	9.677340e-02
## PIP4P1	90809	-0.06423981	5.217863e-02	9.683770e-02
## KIAA0087	9808	0.91903352	5.225369e-02	9.696961e-02
## LINC01349	100128787	0.41804368	5.232946e-02	9.710279e-02
## CNTNAP3P7	100420777	0.27980329	5.236797e-02	9.716684e-02
## MIR3661	100500905	-0.51250346	5.239134e-02	9.720277e-02
## NOXA1	10811	-0.19484512	5.242002e-02	9.724857e-02
## MED7	9443	-0.08374718	5.244046e-02	9.727906e-02
## UPK2	7379	0.40769063	5.246979e-02	9.732603e-02
## LMF2	91289	-0.17436285	5.254937e-02	9.746620e-02
## ULK1	8408	-0.14144376	5.255649e-02	9.747197e-02
## NCEH1	57552	-0.11527295	5.259964e-02	9.754455e-02
## RWDD4P2	647009	-0.12534011	5.265805e-02	9.764543e-02
## LDHBP2	3947	-0.25519563	5.267740e-02	9.767385e-02
## INTS1	26173	-0.13612865	5.273962e-02	9.778175e-02
## MTND4LP1	106478909	-0.30119937	5.277194e-02	9.783422e-02
## CHCHD6	84303	0.11777440	5.278395e-02	9.784901e-02
## LINGO4	339398	-0.28719148	5.279624e-02	9.786433e-02
## TMEM134	80194	0.15660751	5.281368e-02	9.788919e-02
## PTPN13	5783	-0.13757109	5.281910e-02	9.789177e-02
## MAPK8IP1	9479	-0.11561132	5.283376e-02	9.791148e-02
## TAS2R14	50840	-0.23224598	5.288641e-02	9.800157e-02
## C20orf204	284739	0.26901753	5.289075e-02	9.800215e-02
## FTH1	2495	0.17127135	5.289686e-02	9.800600e-02
## SLC6A1	6529	-0.26270555	5.292184e-02	9.804479e-02
## PRPF6	24148	-0.07022296	5.293910e-02	9.806930e-02

## GPS1	2873	0.11910306	5.296422e-02	9.810836e-02
## PDE6B	5158	0.14240759	5.305532e-02	9.826238e-02
## CATIP-AS2	103689911	-0.21464109	5.305546e-02	9.826238e-02
## DOLPP1	57171	-0.08006107	5.310675e-02	9.834989e-02
## ZNF689	115509	0.07462314	5.319514e-02	9.850606e-02
## LARP1	23367	-0.07427092	5.322224e-02	9.854875e-02
## PTAR1	375743	-0.12027500	5.323267e-02	9.856053e-02
## LINC00381	100874151	0.52289773	5.327286e-02	9.862744e-02
## VIRMA	25962	0.05926793	5.329956e-02	9.866935e-02
## BTBD19	149478	0.19672069	5.330408e-02	9.867021e-02
## EVC2	132884	0.10098122	5.332750e-02	9.870603e-02
## NDUFAF6	137682	0.09521368	5.333794e-02	9.871784e-02
## CCDC137	339230	0.07388430	5.335056e-02	9.873369e-02
## CAPN9	10753	-0.41480128	5.336313e-02	9.874942e-02
## ZNF32-AS2	414208	0.37567593	5.337731e-02	9.876814e-02
## RNU6-703P	106479876	0.65007592	5.339345e-02	9.879049e-02
## RLN3	117579	-0.65522136	5.343072e-02	9.885193e-02
## LINC02847	105375823	0.76530597	5.346949e-02	9.891612e-02
## NME7	29922	0.09038773	5.348823e-02	9.894325e-02
## ELAVL1	1994	-0.05302972	5.351248e-02	9.897303e-02
## EBNA1BP2	10969	0.08096248	5.351217e-02	9.897303e-02
## IGKJ3	28948	0.99790913	5.352125e-02	9.898173e-02
## DNAJC22	79962	0.16557261	5.357949e-02	9.908190e-02
## VPS35L	57020	0.05292254	5.359195e-02	9.909739e-02
## POLR1HASP	80862	0.18892253	5.362394e-02	9.914901e-02
## MIR331	442903	0.45926069	5.364551e-02	9.918134e-02
## SNRPA1-DT	120766138	-0.28694037	5.368217e-02	9.924156e-02
## ATP9B	374868	-0.07153799	5.368724e-02	9.924339e-02
## NOTCH2NLA	388677	-0.38932781	5.371384e-02	9.928501e-02
## MIA3	375056	-0.06576901	5.375218e-02	9.934457e-02
## DEFA4	1669	0.84894565	5.375424e-02	9.934457e-02
## HOXB3	3213	-0.18175403	5.376395e-02	9.935125e-02
## SERPINB8	5271	0.19413595	5.376603e-02	9.935125e-02
## LRRK2	120892	-0.15753496	5.379554e-02	9.939822e-02
## PKD2	5311	-0.09698432	5.383610e-02	9.946560e-02
## MSTO2P	100129405	0.32208218	5.384092e-02	9.946694e-02
## FAM86HP	729375	0.17726884	5.386444e-02	9.950284e-02
## DAGLA	747	-0.13590291	5.391957e-02	9.959711e-02
## MIR5195	100847062	0.99355685	5.397739e-02	9.969633e-02
## SHC2	25759	0.20028546	5.399977e-02	9.972249e-02
## POLE	5426	0.10027466	5.399788e-02	9.972249e-02
## IRF7	3665	0.21173743	5.402082e-02	9.975380e-02
## FNDC3B	64778	0.10574489	5.404482e-02	9.978120e-02
## PPP1R35	221908	-0.12999379	5.404798e-02	9.978120e-02
## ANKRD55	79722	0.31497980	5.404161e-02	9.978120e-02
## RPS6P25	729389	0.26703263	5.405318e-02	9.978323e-02
## UFD1	7353	0.08186331	5.406943e-02	9.980563e-02
## SCN11A	11280	0.19718116	5.407643e-02	9.981097e-02
## ZSCAN12	9753	0.12971842	5.409119e-02	9.983064e-02
## COQ10A	93058	0.13601663	5.417473e-02	9.996963e-02
## UPF3AP3	100422343	-0.30690589	5.417144e-02	9.996963e-02
## WDR13	64743	-0.11148663	5.418275e-02	9.997684e-02
## SLC7A6	9057	0.16785058	5.419083e-02	9.998416e-02
## IGHV3-20	28445	0.63977613	5.420804e-02	1.000083e-01

## SYT6	148281	-0.28908421	5.422492e-02	1.000319e-01
## DLK2	65989	0.51476992	5.426052e-02	1.000899e-01
## PSTK	118672	0.10279637	5.427952e-02	1.001174e-01
## SAYSD1	55776	0.07318452	5.429483e-02	1.001380e-01
## ZNF559-ZNF177	100529215	0.46145882	5.430151e-02	1.001427e-01
## MGLL	11343	0.10559069	5.436641e-02	1.002548e-01
## GLCCI1	113263	0.11581824	5.439043e-02	1.002915e-01
## CHURC1	91612	0.08906774	5.440428e-02	1.003094e-01
## TFB2M	64216	0.09076356	5.442925e-02	1.003438e-01
## PROSER2-AS1	219731	-0.22644435	5.443116e-02	1.003438e-01
## MOGAT3	346606	-0.35585183	5.445064e-02	1.003721e-01
## PKN2	5586	-0.10167337	5.453114e-02	1.005128e-01
## LYPLAL1-DT	643723	-0.18925408	5.454737e-02	1.005351e-01
## RPRML	388394	0.86481328	5.458875e-02	1.005961e-01
## LHX1-DT	102723471	-0.18041981	5.458721e-02	1.005961e-01
## PEX3	8504	-0.09615615	5.459561e-02	1.006012e-01
## TANC1	85461	-0.09770924	5.463679e-02	1.006660e-01
## SYT11	23208	0.14875686	5.463910e-02	1.006660e-01
## CNDP1	84735	0.25414377	5.472064e-02	1.008086e-01
## RAB33B	83452	0.08985297	5.476114e-02	1.008756e-01
## ADAM20P1	317760	0.30990487	5.479824e-02	1.009362e-01
## IL6ST-DT	441072	-0.23620088	5.482479e-02	1.009775e-01
## SNHG19	100507303	0.23343840	5.487081e-02	1.010546e-01
## FAHD2B	151313	-0.12748839	5.488446e-02	1.010626e-01
## LINC01707	105378785	0.57640706	5.488761e-02	1.010626e-01
## RN7SKP70	107057644	0.37189506	5.487936e-02	1.010626e-01
## MYSM1	114803	-0.19930549	5.500869e-02	1.012626e-01
## HTR2A-AS1	100874082	0.59609523	5.500304e-02	1.012626e-01
## UGDH-AS1	100885776	0.11156284	5.500874e-02	1.012626e-01
## TSR2	90121	-0.06507920	5.503052e-02	1.012950e-01
## DHRS12	79758	0.13159569	5.504990e-02	1.013153e-01
## AMN	81693	-0.26794155	5.504970e-02	1.013153e-01
## DGKZP1	400126	0.22049250	5.510948e-02	1.014173e-01
## GABRB2	2561	-0.24786253	5.511434e-02	1.014186e-01
## OSBPL8	114882	-0.12754624	5.514388e-02	1.014499e-01
## SERPINB6	5269	0.07948487	5.514098e-02	1.014499e-01
## SEPTIN10	151011	-0.06117952	5.513667e-02	1.014499e-01
## SLC26A7	115111	-0.23108762	5.515125e-02	1.014558e-01
## SPG11	80208	-0.06651948	5.519004e-02	1.015118e-01
## LINC00574	80069	0.22311875	5.518794e-02	1.015118e-01
## ZNF736	728927	0.12231861	5.519662e-02	1.015162e-01
## CNTNAP3P2	643827	-0.25828029	5.529163e-02	1.016832e-01
## SHROOM3-AS1	105377289	0.45862939	5.532387e-02	1.017348e-01
## ZNF571	51276	0.07268371	5.534958e-02	1.017744e-01
## PCDH12	51294	0.14576588	5.537060e-02	1.017985e-01
## FAM245A	728218	0.19717440	5.537106e-02	1.017985e-01
## HNRNPH1	3187	-0.13254583	5.539374e-02	1.018325e-01
## RMI2	116028	0.15293355	5.544535e-02	1.019196e-01
## DHX57	90957	0.07050411	5.545678e-02	1.019329e-01
## UBE2FP1	100421436	-0.25702449	5.547240e-02	1.019539e-01
## MDN1	23195	0.14726174	5.551218e-02	1.020193e-01
## LINC02885	101926957	-0.35785719	5.552088e-02	1.020276e-01
## ZFP30	22835	0.12365952	5.556380e-02	1.020987e-01
## PPP1CA	5499	0.10002164	5.559009e-02	1.021393e-01

## PSKH2	85481	0.29358597	5.562509e-02	1.021959e-01
## PSG5	5673	-0.46380244	5.570261e-02	1.023306e-01
## TINAG	27283	0.23836889	5.571572e-02	1.023469e-01
## CYP2T1P	171523	-0.13643374	5.572179e-02	1.023504e-01
## C6orf62	81688	0.05927703	5.575761e-02	1.024084e-01
## CLIP3	25999	0.16849054	5.581601e-02	1.025079e-01
## NEK5	341676	0.17487383	5.584273e-02	1.025492e-01
## SFT2D1	113402	-0.08158391	5.588038e-02	1.026106e-01
## LINC02916	124902415	0.13397710	5.590441e-02	1.026470e-01
## FOXD3-AS1	100996301	0.74085784	5.592403e-02	1.026753e-01
## SPNS3	201305	0.21543740	5.594016e-02	1.026971e-01
## NCOR1	9611	-0.06941130	5.596872e-02	1.027365e-01
## JAKMIP3	282973	0.27234521	5.597432e-02	1.027365e-01
## PYDC2-AS1	103344926	0.64482755	5.597124e-02	1.027365e-01
## PRR35	146325	-0.27087001	5.600873e-02	1.027919e-01
## MINCR	100507316	0.14618212	5.603193e-02	1.028268e-01
## MBD1	4152	0.04339970	5.611038e-02	1.029630e-01
## MPP2	4355	0.13659472	5.612437e-02	1.029808e-01
## PUF60	22827	-0.07643352	5.614425e-02	1.030095e-01
## SOCS1	8651	-0.20682992	5.614972e-02	1.030118e-01
## PTGER2	5732	0.19273234	5.616958e-02	1.030405e-01
## RBM42	79171	-0.13440576	5.620006e-02	1.030808e-01
## ZBTB8OSP2	729898	-0.97984826	5.619729e-02	1.030808e-01
## CENPBD1P	92806	0.05100284	5.620940e-02	1.030902e-01
## ULBP2	80328	-0.24169892	5.622790e-02	1.031163e-01
## GMDS-DT	100508120	0.08742382	5.627776e-02	1.032000e-01
## AQP1	358	0.13751324	5.629179e-02	1.032179e-01
## HMGN1	3150	0.07651454	5.631405e-02	1.032509e-01
## PUDP	8226	-0.11770704	5.632145e-02	1.032567e-01
## APPAT	100506123	0.45297665	5.634988e-02	1.033010e-01
## TASOR2	54906	0.11907802	5.638375e-02	1.033553e-01
## POC5	134359	0.08193908	5.643074e-02	1.034337e-01
## GULOP	2989	-0.35943370	5.644517e-02	1.034523e-01
## ZG16	653808	0.65535881	5.646716e-02	1.034848e-01
## GPR37L1	9283	-0.35527377	5.650630e-02	1.035487e-01
## CERS5	91012	-0.08080001	5.651787e-02	1.035603e-01
## FLVCR2-AS1	102724153	-0.33711581	5.652115e-02	1.035603e-01
## CNBP	7555	0.08273778	5.655423e-02	1.036067e-01
## CYP4F2	8529	0.39127741	5.655870e-02	1.036067e-01
## FAM177B	400823	-0.37427889	5.656351e-02	1.036067e-01
## CBR1-AS1	100133286	-0.26439946	5.656156e-02	1.036067e-01
## BCRP8	100133044	-0.58300205	5.657246e-02	1.036153e-01
## SLC35E2A	9906	0.20326069	5.661160e-02	1.036791e-01
## DENND6B	414918	-0.11054031	5.667217e-02	1.037822e-01
## HERC2P4	100289574	0.52215566	5.669286e-02	1.038123e-01
## DUX4L50	106480350	0.31326239	5.671315e-02	1.038416e-01
## OR10AB1P	390091	0.36915165	5.673815e-02	1.038796e-01
## LINC02768	105373212	0.61740559	5.680143e-02	1.039876e-01
## FAM209A	200232	0.45097495	5.681145e-02	1.039981e-01
## NOVA1	4857	0.11341120	5.681686e-02	1.040002e-01
## TMEM185A	84548	0.07701302	5.691168e-02	1.041659e-01
## UBE2J2	118424	-0.09110127	5.705777e-02	1.044254e-01
## DDN-AS1	105369758	0.28599078	5.706513e-02	1.044310e-01
## SLC25A1	6576	0.17125290	5.708558e-02	1.044606e-01

## H4C4	8360	0.58266874	5.715139e-02	1.045731e-01
## XYLB	9942	0.20178239	5.717304e-02	1.045970e-01
## IREB2	3658	-0.08047196	5.717290e-02	1.045970e-01
## CELP	1057	-0.37881849	5.718727e-02	1.046152e-01
## TMPRSS11BNL	401136	1.31253757	5.719763e-02	1.046262e-01
## LINC02237	105375706	1.14067265	5.722539e-02	1.046691e-01
## RPS10	6204	0.19811197	5.723427e-02	1.046775e-01
## RPS7	6201	0.13458624	5.724624e-02	1.046915e-01
## IGKV1-6	28943	0.60617449	5.726577e-02	1.047193e-01
## SMNDC1	10285	-0.05528633	5.732297e-02	1.048161e-01
## HAGHL	84264	-0.21844133	5.733503e-02	1.048302e-01
## ERVK9-11	111188141	-0.18732425	5.735494e-02	1.048587e-01
## MSMP	692094	-0.40376972	5.738991e-02	1.049148e-01
## POLDIP3	84271	0.05322799	5.748696e-02	1.050843e-01
## HARS2	23438	-0.04184091	5.750468e-02	1.051088e-01
## VWA8-AS1	100507240	-0.29820404	5.755227e-02	1.051879e-01
## ZNF554	115196	0.07677613	5.757260e-02	1.052092e-01
## CORT	1325	0.30047356	5.756880e-02	1.052092e-01
## LINC01713	105372516	0.89618759	5.758105e-02	1.052167e-01
## ANKRD33	341405	-0.47130715	5.758679e-02	1.052193e-01
## LINC01491	101928442	-0.84812813	5.759979e-02	1.052351e-01
## RAB12	201475	-0.07110040	5.761342e-02	1.052521e-01
## ZNF727	442319	0.18066382	5.762436e-02	1.052642e-01
## PDZK1	5174	-0.19256808	5.767096e-02	1.053414e-01
## RRM2B	50484	-0.07421927	5.768800e-02	1.053646e-01
## PPAN	56342	-0.10063642	5.775926e-02	1.054789e-01
## TMEM120A	83862	0.14603629	5.775826e-02	1.054789e-01
## BOK-AS1	100379249	0.41218260	5.778702e-02	1.055217e-01
## DDHD2	23259	-0.07531140	5.780137e-02	1.055399e-01
## RER1	11079	-0.06569223	5.781947e-02	1.055651e-01
## ASS1P12	392302	0.45130627	5.782730e-02	1.055714e-01
## NES	10763	0.16635947	5.784900e-02	1.056031e-01
## BICRAL	23506	0.08469107	5.786609e-02	1.056264e-01
## GOLGA8B	440270	0.32054043	5.789104e-02	1.056640e-01
## SH3RF1	57630	-0.08936032	5.799597e-02	1.058475e-01
## CBY2	220082	-0.43689416	5.815276e-02	1.061257e-01
## EGFL7	51162	-0.16497645	5.818262e-02	1.061723e-01
## NDUFS3	4722	-0.11482361	5.821385e-02	1.062213e-01
## LINC01619	256021	-0.26046864	5.825319e-02	1.062851e-01
## GALNT11	63917	0.13806364	5.827099e-02	1.063096e-01
## PPP4R2	151987	-0.07002059	5.828794e-02	1.063325e-01
## PRKAR1B	5575	-0.11942257	5.832203e-02	1.063867e-01
## NGDN	25983	-0.07542364	5.834913e-02	1.064281e-01
## CTSB	1508	0.16073865	5.847919e-02	1.066574e-01
## TATDN3	128387	-0.08141874	5.851052e-02	1.067065e-01
## RAB40A	142684	-0.29938898	5.853921e-02	1.067508e-01
## ZNF778	197320	-0.08876825	5.858476e-02	1.068233e-01
## FOXD1	2297	-0.16452117	5.858778e-02	1.068233e-01
## STMP1	647087	0.09008195	5.859220e-02	1.068234e-01
## HIC2	23119	-0.10038049	5.859727e-02	1.068246e-01
## POLM	27434	-0.10334144	5.861847e-02	1.068552e-01
## SLC22A23	63027	0.15575083	5.866802e-02	1.069376e-01
## NUDT22	84304	-0.15545876	5.871643e-02	1.070178e-01
## LINC02148	100505811	0.38161542	5.873066e-02	1.070357e-01

## POLR3A	11128	-0.05379041	5.875615e-02	1.070741e-01
## SLC7A14	57709	-0.31028119	5.877250e-02	1.070878e-01
## PLAC9P1	389033	0.42345019	5.876980e-02	1.070878e-01
## DCXR-DT	113523640	-0.28040765	5.881978e-02	1.071659e-01
## AVL9	23080	-0.07789229	5.888807e-02	1.072823e-01
## TRUB2	26995	0.08316999	5.896536e-02	1.074151e-01
## ASIC2	40	-0.20948800	5.905999e-02	1.075794e-01
## H1-10-AS1	339942	-0.20303056	5.913933e-02	1.077158e-01
## MECP2	4204	-0.06259706	5.916590e-02	1.077525e-01
## SDC2	6383	-0.09551625	5.916832e-02	1.077525e-01
## SEC14L2	23541	-0.12327075	5.923977e-02	1.078745e-01
## C21orf62-AS1	<NA>	0.14749588	5.925026e-02	1.078856e-01
## SUZ12	23512	-0.08627812	5.940495e-02	1.081591e-01
## ZBTB17	7709	0.08335847	5.943191e-02	1.082001e-01
## SIGLEC10-AS1	100129083	0.82401804	5.943933e-02	1.082055e-01
## APOB	338	-0.34974699	5.944450e-02	1.082068e-01
## CASP12	100506742	-0.31710149	5.955552e-02	1.083942e-01
## C8orf82	414919	-0.16422811	5.955637e-02	1.083942e-01
## NADK2	133686	0.06652055	5.957323e-02	1.084168e-01
## ANKRD24	170961	0.16297806	5.958157e-02	1.084238e-01
## NUDC	10726	-0.08232038	5.963721e-02	1.085170e-01
## SPATA6L	55064	-0.20380638	5.965967e-02	1.085497e-01
## RHEB	6009	-0.07509823	5.970593e-02	1.086257e-01
## SFN	2810	-0.36443560	5.971290e-02	1.086303e-01
## SPCS3-AS1	116435303	-0.28585183	5.974973e-02	1.086891e-01
## FOXN4	121643	0.26025495	5.978599e-02	1.087470e-01
## USP27X-DT	158572	0.09379854	5.979712e-02	1.087591e-01
## DSG4	147409	0.81798267	5.985192e-02	1.088506e-01
## MAB21L3	126868	0.21042872	5.988663e-02	1.089056e-01
## INTS6L-AS1	100874118	-0.37777188	5.992404e-02	1.089654e-01
## LINC02975	101929331	-0.12439263	5.995084e-02	1.089979e-01
## TEX41	401014	-0.16653759	5.994658e-02	1.089979e-01
## PROX2	283571	0.88442913	6.002628e-02	1.091269e-01
## OR7A8P	26661	-0.95632234	6.004156e-02	1.091465e-01
## CCDC154	645811	0.41640998	6.006116e-02	1.091739e-01
## C2orf74	339804	0.17572152	6.010610e-02	1.092416e-01
## MRGPRX7P	441592	1.71716651	6.010737e-02	1.092416e-01
## ANKRD33BP1	100419920	-0.21691098	6.013476e-02	1.092832e-01
## VIRMA-DT	101926977	-0.18374861	6.014424e-02	1.092922e-01
## CDC42-AS1	112268223	0.54502583	6.022486e-02	1.094306e-01
## TLR4	7099	0.12774643	6.033090e-02	1.096150e-01
## RHOT2	89941	-0.10956563	6.034160e-02	1.096181e-01
## GOLGA2P10	80154	0.19016141	6.033856e-02	1.096181e-01
## UQCC5	440957	-0.15415166	6.037014e-02	1.096617e-01
## LIG3	3980	0.05536037	6.038709e-02	1.096843e-01
## LRFN1	57622	0.24804637	6.040376e-02	1.097003e-01
## RUSF1-DT	123706528	-0.22219075	6.040493e-02	1.097003e-01
## ESYT1	23344	0.13569911	6.046776e-02	1.098062e-01
## PIGN	23556	-0.06628694	6.048388e-02	1.098273e-01
## DPRXP4	503645	0.41021390	6.051248e-02	1.098710e-01
## CRLS1	54675	-0.19208086	6.055070e-02	1.099322e-01
## DTD2	112487	-0.06886959	6.056471e-02	1.099494e-01
## PACERR	103752588	0.59924921	6.060094e-02	1.100070e-01
## PSPN	5623	-0.11528793	6.068232e-02	1.101465e-01

## CCAR2	57805	-0.04981625	6.069470e-02	1.101607e-01
## LINC01134	100133612	0.16862906	6.071393e-02	1.101874e-01
## SUSD2	56241	0.26483001	6.071993e-02	1.101900e-01
## C19orf84	147646	0.63774663	6.073736e-02	1.102135e-01
## TIMELESS	8914	-0.07305289	6.074637e-02	1.102216e-01
## LINC00970	101978719	-0.59537921	6.075823e-02	1.102349e-01
## KMT2E	55904	0.09795844	6.078617e-02	1.102773e-01
## H2BC18	440689	-0.33067272	6.080422e-02	1.103018e-01
## MXD3	83463	0.18280520	6.093791e-02	1.105196e-01
## SIRPB3P	105369219	1.17765909	6.093733e-02	1.105196e-01
## LINC01165	100128830	-0.51528522	6.093492e-02	1.105196e-01
## SLC7A4	6545	-0.30827074	6.095075e-02	1.105346e-01
## ARHGAP11B-DT	102725021	-0.18962076	6.097993e-02	1.105793e-01
## LINC02137	105371295	1.05836846	6.104327e-02	1.106859e-01
## NAB2	4665	0.10311096	6.115762e-02	1.108850e-01
## FSTL5	56884	0.36661190	6.117983e-02	1.109170e-01
## RNASE2	6036	-0.42573003	6.123375e-02	1.110064e-01
## MALRD1	340895	-0.22006774	6.131630e-02	1.111478e-01
## RPS7P1	388363	0.16602343	6.136657e-02	1.112306e-01
## GPAA1	8733	-0.14803511	6.138061e-02	1.112478e-01
## RUSC2	9853	0.08916882	6.139328e-02	1.112624e-01
## INPP5A	3632	-0.06608565	6.139869e-02	1.112640e-01
## ZNF117	51351	0.18867972	6.143226e-02	1.113082e-01
## RCC2P7	442221	-0.45384702	6.143041e-02	1.113082e-01
## ZNG1A	55871	0.12881590	6.145335e-02	1.113215e-01
## RPL13AP7	284821	0.34332915	6.144908e-02	1.113215e-01
## GAS2L2	246176	0.34638303	6.144779e-02	1.113215e-01
## LINC01801	400685	0.18561877	6.145942e-02	1.113242e-01
## CIMAP3	128344	-0.13037521	6.151950e-02	1.114247e-01
## LINC01482	101928104	-0.48478801	6.154360e-02	1.114600e-01
## PELP1	27043	-0.10312328	6.156767e-02	1.114953e-01
## TUBG1	7283	0.11293184	6.165112e-02	1.116381e-01
## NSMCE3	56160	-0.05450365	6.165869e-02	1.116435e-01
## MFSD4B	91749	-0.12135136	6.168775e-02	1.116821e-01
## FAM237B	107986818	-1.37983713	6.168919e-02	1.116821e-01
## GALNT16-AS1	105370550	-0.28809896	6.170695e-02	1.117060e-01
## FAM184B	27146	0.24632845	6.171701e-02	1.117158e-01
## HIPK3	10114	-0.09306768	6.186221e-02	1.119703e-01
## SH3YL1	26751	-0.18017910	6.186835e-02	1.119731e-01
## PYCR3	65263	-0.11947094	6.187661e-02	1.119797e-01
## PTGR1	22949	-0.14667003	6.191127e-02	1.120341e-01
## LINC02021	105374104	0.18855125	6.191938e-02	1.120404e-01
## LINC02906	389676	-0.45178562	6.193326e-02	1.120572e-01
## ANKRD65-AS1	105378585	-0.32609241	6.199885e-02	1.121675e-01
## RIMKLB	57494	0.11171813	6.202186e-02	1.122008e-01
## ZDHHC12	84885	-0.14906650	6.204398e-02	1.122241e-01
## HNRNPA3P6	653115	-0.18793622	6.204118e-02	1.122241e-01
## DMAC2	55101	-0.09760202	6.205595e-02	1.122290e-01
## CHST7	56548	-0.20877817	6.205202e-02	1.122290e-01
## KCTD10	83892	-0.07704546	6.209364e-02	1.122889e-01
## NXPH2	11249	-0.27508443	6.211114e-02	1.123121e-01
## TFRC	7037	-0.17793926	6.212285e-02	1.123250e-01
## TP53BP2	7159	-0.06022560	6.215990e-02	1.123836e-01
## SMPD5	392275	-0.36542251	6.219335e-02	1.124357e-01

## TMA7	51372	0.12201088	6.219820e-02	1.124361e-01
## ZBTB46	140685	-0.08830019	6.233370e-02	1.126643e-01
## UQCRO	27089	0.15978962	6.233236e-02	1.126643e-01
## CCNYL2	414194	-0.34051117	6.236993e-02	1.127214e-01
## ABCG1	9619	-0.15102864	6.248363e-02	1.129185e-01
## RHOBTB1	9886	0.18186715	6.254854e-02	1.130274e-01
## STAMBP	10617	0.05592570	6.255612e-02	1.130327e-01
## GOPC	57120	0.07204970	6.257397e-02	1.130565e-01
## ARAP3	64411	-0.11245264	6.260169e-02	1.130898e-01
## KLHDC1	122773	-0.13553549	6.259768e-02	1.130898e-01
## MRPS28	28957	-0.11197846	6.262352e-02	1.131208e-01
## SP2-DT	102724532	0.16360354	6.263046e-02	1.131249e-01
## GSTT2B	653689	-0.32049856	6.264185e-02	1.131371e-01
## MICALL2	79778	0.21668132	6.270366e-02	1.132403e-01
## POLR2MP1	339970	0.54028712	6.277628e-02	1.133630e-01
## RBMS3-AS3	100873979	0.19853868	6.280924e-02	1.134141e-01
## BGLAP	632	0.40243470	6.282713e-02	1.134380e-01
## SKAP1-AS1	110806289	0.85763370	6.283446e-02	1.134428e-01
## CYB561A3	220002	0.10046001	6.286061e-02	1.134816e-01
## PDIA3P1	171423	-0.08707437	6.294221e-02	1.136205e-01
## LINC00603	102467077	0.64267461	6.295208e-02	1.136298e-01
## RBM18	92400	0.05533126	6.296746e-02	1.136491e-01
## TTLL7	79739	0.20163769	6.298854e-02	1.136742e-01
## HSPA12A	259217	-0.09778650	6.299071e-02	1.136742e-01
## SEMA6A	57556	0.11386112	6.300439e-02	1.136905e-01
## FAM86B2	653333	-0.30076139	6.309712e-02	1.138494e-01
## GNA14	9630	0.13991479	6.312982e-02	1.138914e-01
## LINC01182	101929071	-0.17792654	6.312789e-02	1.138914e-01
## ATP7A	538	-0.09857760	6.316256e-02	1.139421e-01
## CUZD1	50624	0.59905325	6.319601e-02	1.139939e-01
## FOXO1	2308	-0.09412999	6.321640e-02	1.140222e-01
## HDAC2	3066	-0.04185025	6.330241e-02	1.141689e-01
## HCFC1	3054	-0.11087908	6.333709e-02	1.142166e-01
## KDM2A	22992	0.06249854	6.333825e-02	1.142166e-01
## DVL1	1855	0.16162147	6.345147e-02	1.144123e-01
## LINC02955	107984516	-0.53949450	6.346698e-02	1.144317e-01
## NQO1	1728	0.19764845	6.353917e-02	1.145534e-01
## H2BP1	337875	0.30632044	6.355232e-02	1.145686e-01
## SCAMP1-AS1	728769	0.10602455	6.358053e-02	1.146110e-01
## STIP1	10963	0.08634288	6.362296e-02	1.146790e-01
## GSK3A	2931	-0.07613277	6.364675e-02	1.147133e-01
## LINC01611	105377880	1.69723808	6.369728e-02	1.147959e-01
## CLK4	57396	0.18738368	6.373967e-02	1.148598e-01
## CDK2	1017	-0.07363920	6.374829e-02	1.148598e-01
## ACOXL-AS1	400997	0.22664251	6.374750e-02	1.148598e-01
## PMS2P13	441259	0.21507970	6.375167e-02	1.148598e-01
## CHMP7	91782	0.03910724	6.377273e-02	1.148892e-01
## LINC02680	105376463	0.51426648	6.380966e-02	1.149473e-01
## UBB	7314	0.10420850	6.383288e-02	1.149806e-01
## LINC01783	100132147	-0.57919969	6.387649e-02	1.150506e-01
## RUFY1	80230	-0.05283668	6.393181e-02	1.151417e-01
## SNRPGP14	100874434	-0.38031815	6.394780e-02	1.151620e-01
## IGHV3-64D	102723170	0.80710755	6.398690e-02	1.152238e-01
## PHF6	84295	-0.08715004	6.400687e-02	1.152513e-01

## LINC02944	101927760	0.27022769	6.401199e-02	1.152519e-01
## ECPAS	23392	0.05281602	6.402560e-02	1.152594e-01
## UBE2H-DT	121832803	-0.61597752	6.402539e-02	1.152594e-01
## ERRFI1	54206	-0.27713277	6.407395e-02	1.153379e-01
## GATM	2628	0.27372320	6.408469e-02	1.153440e-01
## ZNF248-AS1	128266837	-0.23729809	6.408686e-02	1.153440e-01
## TNRC18P1	644962	-0.37530414	6.412723e-02	1.154081e-01
## ACO1	48	0.16250811	6.414113e-02	1.154246e-01
## H2AC1	221613	0.48985138	6.414626e-02	1.154253e-01
## MPP7-DT	105376466	-0.58000869	6.417329e-02	1.154654e-01
## TPTE2P1	646405	0.18374908	6.420562e-02	1.155150e-01
## ILRUN-AS1	101929243	0.15784558	6.422178e-02	1.155355e-01
## FAM183BP	<NA>	-0.47291529	6.424200e-02	1.155633e-01
## LRRC71	149499	0.38470940	6.425913e-02	1.155856e-01
## PI4KAP2	375133	0.16973611	6.427945e-02	1.156136e-01
## WSB2	55884	0.07487540	6.428654e-02	1.156178e-01
## TBILA	112806053	-0.23380828	6.430552e-02	1.156433e-01
## PLXNA2	5362	0.11612270	6.431816e-02	1.156575e-01
## SIDT1	54847	0.16880295	6.436450e-02	1.157323e-01
## KPTN	11133	-0.09054587	6.441947e-02	1.158225e-01
## CCBE1	147372	0.13417453	6.456032e-02	1.160672e-01
## TRBV11-3	28580	1.37837809	6.458817e-02	1.161087e-01
## SCYL2P1	100420110	-0.36889517	6.465583e-02	1.162217e-01
## GP6	51206	-0.30880721	6.468435e-02	1.162644e-01
## PUS7L	83448	-0.12154618	6.468982e-02	1.162656e-01
## MYO1B	4430	0.09815461	6.473823e-02	1.163440e-01
## RNU6-35P	100873750	-0.52013564	6.477412e-02	1.163999e-01
## ST3GAL1-DT	119545630	0.21843880	6.480130e-02	1.164401e-01
## TLDC2	140711	-0.19563749	6.488136e-02	1.165754e-01
## AKAP4	8852	-0.54228319	6.498175e-02	1.167471e-01
## NDUFV2	4729	-0.26820742	6.499267e-02	1.167581e-01
## CNTN4	152330	-0.10215163	6.502990e-02	1.168163e-01
## PDAP1	11333	0.08145957	6.507149e-02	1.168824e-01
## HOXC-AS3	100874365	-0.19860596	6.512931e-02	1.169776e-01
## HECTD1	25831	-0.07211025	6.514851e-02	1.169976e-01
## DNAJC12	56521	0.21927303	6.516268e-02	1.169976e-01
## MARS1	4141	-0.05677936	6.515729e-02	1.169976e-01
## NPM1	4869	0.07305159	6.516449e-02	1.169976e-01
## EIPR1-IT1	100874301	-0.40049860	6.515077e-02	1.169976e-01
## PRAMENP	649179	-0.46442870	6.521062e-02	1.170718e-01
## FAM162A	26355	-0.10537726	6.526884e-02	1.171676e-01
## ZSCAN25	221785	-0.05432142	6.529298e-02	1.172023e-01
## ZFHX3	463	0.12883227	6.544300e-02	1.174629e-01
## OR52V1P	81242	0.67538248	6.547327e-02	1.175086e-01
## ULK3	25989	0.11498705	6.549226e-02	1.175340e-01
## NXF5	55998	-0.43584897	6.551908e-02	1.175734e-01
## NME9	347736	0.21899472	6.553932e-02	1.176011e-01
## FTH1P19	389844	0.49794624	6.555878e-02	1.176273e-01
## TCHP	84260	0.05745970	6.558231e-02	1.176608e-01
## MIR589	693174	0.73925057	6.558974e-02	1.176655e-01
## DHX36	170506	-0.06136812	6.559989e-02	1.176750e-01
## FOXN3-AS1	400236	0.15588533	6.568894e-02	1.178260e-01
## USP40	55230	0.07328101	6.571338e-02	1.178612e-01
## TFF2	7032	-0.79110466	6.572825e-02	1.178704e-01

## COX5AP1	9385	-0.59645615	6.572802e-02	1.178704e-01
## SLC14A2	8170	0.33586280	6.577921e-02	1.179531e-01
## HAGLROS	102800310	-0.20836549	6.579464e-02	1.179721e-01
## FOXQ1	94234	-0.17330455	6.580592e-02	1.179749e-01
## MIS12	79003	0.06050043	6.580374e-02	1.179749e-01
## CYBA	1535	0.20510207	6.583063e-02	1.180105e-01
## RFC3	5983	-0.09002053	6.583795e-02	1.180132e-01
## PPP1CB-DT	112267877	-0.19123077	6.584187e-02	1.180132e-01
## CENPJ	55835	0.13276791	6.588809e-02	1.180873e-01
## ZNF767P	79970	0.22441931	6.596158e-02	1.182104e-01
## ZNF782	158431	0.11438751	6.604468e-02	1.183506e-01
## RPS20P22	100271087	0.32334188	6.614445e-02	1.185206e-01
## PCDHB19P	84054	0.36032229	6.618196e-02	1.185791e-01
## TIPRL	261726	0.06176368	6.619611e-02	1.185957e-01
## SNX15	29907	0.27752473	6.621925e-02	1.186212e-01
## SYT2-AS1	129810494	0.40556425	6.622013e-02	1.186212e-01
## PGK1P2	5233	-0.30759329	6.630231e-02	1.187597e-01
## LINC02515	102723920	1.39013204	6.630858e-02	1.187621e-01
## IQCH-AS1	100506686	-0.10700821	6.631469e-02	1.187643e-01
## HOXD10	3236	-0.15329855	6.632139e-02	1.187676e-01
## RIOK2	55781	0.05858066	6.635829e-02	1.188249e-01
## XYL2	64132	-0.08684243	6.637081e-02	1.188298e-01
## MAD2L2	10459	0.11652293	6.636595e-02	1.188298e-01
## DSCR9	257203	0.63740829	6.637985e-02	1.188344e-01
## LINC01841	105372288	0.56081473	6.638313e-02	1.188344e-01
## INO80B	83444	0.31490831	6.639155e-02	1.188407e-01
## IBSP	3381	1.40023211	6.642283e-02	1.188879e-01
## LINC02043	102724699	0.56545637	6.647348e-02	1.189698e-01
## RPL37AP1	140717	0.31932539	6.653007e-02	1.190623e-01
## EIF6	3692	0.10430791	6.653625e-02	1.190646e-01
## ABCB6	10058	0.23213368	6.656208e-02	1.191021e-01
## FAM227A	646851	0.24753268	6.657923e-02	1.191240e-01
## LINC02033	105377031	0.48097724	6.659396e-02	1.191416e-01
## ZNF439	90594	-0.14746154	6.662436e-02	1.191784e-01
## NEAT1	283131	-0.27775136	6.662085e-02	1.191784e-01
## FADS3	3995	-0.14224817	6.663779e-02	1.191936e-01
## ZNF419	79744	0.09016600	6.666513e-02	1.192338e-01
## SLC25A5	292	-0.12979912	6.670447e-02	1.192954e-01
## LINC02413	105369906	0.86383424	6.678442e-02	1.194295e-01
## BZW1	9689	0.05110174	6.680254e-02	1.194532e-01
## ARL14EPL	644100	-0.46680525	6.681194e-02	1.194612e-01
## ZDHHC17	23390	-0.10740213	6.685425e-02	1.195280e-01
## ACSM2B	348158	-0.24347718	6.686449e-02	1.195288e-01
## AOC2	314	0.18041041	6.686140e-02	1.195288e-01
## S100P	6286	0.45659482	6.690615e-02	1.195856e-01
## SGMS1-AS1	104355295	-0.12275398	6.690157e-02	1.195856e-01
## ABCD3	5825	-0.09538585	6.691597e-02	1.195944e-01
## ZBTB16	7704	-0.31717866	6.692390e-02	1.195998e-01
## COG1	9382	-0.04947523	6.694481e-02	1.196283e-01
## LINC01811	101928114	0.57704946	6.694985e-02	1.196286e-01
## SNX19P3	646442	0.47349364	6.699233e-02	1.196957e-01
## ZSCAN9	7746	0.08296117	6.699735e-02	1.196958e-01
## FZR1	51343	0.07968604	6.705878e-02	1.197968e-01
## ABL2	27	0.10890471	6.706986e-02	1.198078e-01

## SNORA63C	109616970	-0.48861588	6.712040e-02	1.198892e-01
## FAM66E	100132103	-0.62437398	6.712802e-02	1.198910e-01
## HNF4A-AS1	101927219	0.31914157	6.713125e-02	1.198910e-01
## FBXL18	80028	0.08220577	6.721274e-02	1.200203e-01
## ZNF818P	390963	0.15781252	6.721355e-02	1.200203e-01
## GDF9	2661	-0.18003754	6.724078e-02	1.200601e-01
## RFXANK	8625	0.09771539	6.725840e-02	1.200828e-01
## NLGN2	57555	0.17215034	6.726362e-02	1.200833e-01
## ZNF287	57336	0.07063095	6.738211e-02	1.202860e-01
## ZNF343	79175	0.07070696	6.740051e-02	1.203100e-01
## APOC3	345	0.42069721	6.747170e-02	1.204250e-01
## PEPBP1P2	647307	0.19074326	6.747486e-02	1.204250e-01
## MYH13	8735	1.04740843	6.751173e-02	1.204819e-01
## KARS1	3735	0.07159630	6.758670e-02	1.206069e-01
## SMUG1	23583	0.08742018	6.760968e-02	1.206390e-01
## XRCC4	7518	0.09090534	6.762258e-02	1.206478e-01
## ZNF22-AS1	220979	0.10411518	6.762753e-02	1.206478e-01
## BCLAF3	256643	-0.10457614	6.762951e-02	1.206478e-01
## ZBTB40	9923	0.07615367	6.770369e-02	1.207713e-01
## C11orf16	56673	-0.35833196	6.777761e-02	1.208943e-01
## MIER3	166968	-0.08071646	6.781528e-02	1.209526e-01
## C10orf62	414157	0.28098671	6.782038e-02	1.209528e-01
## NAGA	4668	-0.09547131	6.785425e-02	1.210043e-01
## RPS26	6231	0.15143654	6.789377e-02	1.210622e-01
## ELF2P2	260335	0.82231140	6.789666e-02	1.210622e-01
## ARVCF	421	-0.12994684	6.791080e-02	1.210785e-01
## MAPK11	5600	0.11397237	6.792544e-02	1.210957e-01
## SPTBN1	6711	-0.07712722	6.793609e-02	1.211058e-01
## NDUFB1	4707	-0.15120663	6.795320e-02	1.211275e-01
## PSMG2	56984	0.08283811	6.796330e-02	1.211314e-01
## COL4A2-AS1	100874203	-0.58626731	6.796539e-02	1.211314e-01
## DLX3	1747	-0.30108101	6.800669e-02	1.211886e-01
## PLPBP	11212	-0.06554114	6.800742e-02	1.211886e-01
## PCNA	5111	0.06263002	6.804489e-02	1.212464e-01
## ZNRF2P2	100271874	0.19463207	6.809888e-02	1.213337e-01
## ISOC2	79763	0.16240985	6.812667e-02	1.213744e-01
## LOH12CR2	503693	0.13620479	6.814619e-02	1.214002e-01
## ACER2	340485	0.14077525	6.815135e-02	1.214005e-01
## TTC17	55761	-0.07518381	6.815667e-02	1.214011e-01
## CENPS	378708	0.19171961	6.817306e-02	1.214214e-01
## MRPL40	64976	0.11350248	6.829656e-02	1.216324e-01
## HRH3	11255	1.11502468	6.831318e-02	1.216531e-01
## EXOSC3	51010	0.06974848	6.836830e-02	1.217424e-01
## SMIM17	147670	0.22650566	6.838295e-02	1.217595e-01
## MATN1-AS1	100129196	-0.18812359	6.842718e-02	1.218294e-01
## RAB4B	53916	-0.25483970	6.843224e-02	1.218294e-01
## MLH3	27030	0.09029856	6.847762e-02	1.219013e-01
## PCDH11Y	83259	-0.64899510	6.854806e-02	1.220178e-01
## ABCA7	10347	-0.14742463	6.859091e-02	1.220851e-01
## RBM26-AS1	100505538	-0.15190864	6.864087e-02	1.221651e-01
## ZRANB2	9406	0.11564489	6.865427e-02	1.221800e-01
## NOP14-AS1	317648	0.07293271	6.865994e-02	1.221811e-01
## RN7SL526P	106479415	0.35729546	6.867800e-02	1.222043e-01
## COG6	57511	0.06304321	6.871785e-02	1.222663e-01

## KLHL7	55975	0.04873565	6.873686e-02	1.222911e-01
## PDZK1IP1	10158	-0.22306103	6.876262e-02	1.223280e-01
## LINC02625	107984237	-0.30926614	6.879775e-02	1.223726e-01
## SNRPF-DT	105369921	-0.36216427	6.879554e-02	1.223726e-01
## TMEM179B	374395	-0.11115454	6.884998e-02	1.224565e-01
## ZNF345	25850	0.11528683	6.887549e-02	1.224929e-01
## SPIN1	10927	-0.06276723	6.905328e-02	1.228001e-01
## DENND2A	27147	0.18177107	6.909400e-02	1.228636e-01
## KPNA1	3836	0.06272791	6.912821e-02	1.229154e-01
## RALGAPA1P1	26134	-0.16990656	6.921340e-02	1.230579e-01
## TPRXL	348825	0.38111340	6.928930e-02	1.231838e-01
## PTMAP5	150928	-0.12945390	6.931596e-02	1.232222e-01
## HERC3	8916	-0.17233362	6.949888e-02	1.235293e-01
## RPUSD2	27079	-0.06248568	6.949814e-02	1.235293e-01
## CBLN1	869	0.41957672	6.951139e-02	1.235425e-01
## CCDC196	440184	-0.32209814	6.959230e-02	1.236772e-01
## ATIC	471	0.07043657	6.977638e-02	1.239953e-01
## A2M-AS1	144571	0.12532814	6.979006e-02	1.240015e-01
## LINC02156	111082992	1.17962588	6.978642e-02	1.240015e-01
## ATP6V1B1	525	-0.20718767	6.981172e-02	1.240309e-01
## NSMCE2	286053	0.08998565	6.983403e-02	1.240615e-01
## IDH3G	3421	-0.10636661	6.989593e-02	1.241624e-01
## LINC03011	100289098	0.16386233	6.992212e-02	1.241998e-01
## GRIK3	2899	0.26991150	6.994847e-02	1.242375e-01
## RNMT	8731	0.06144229	6.996577e-02	1.242592e-01
## NCK2	8440	0.07870486	7.009676e-02	1.244827e-01
## LINC02640	107984241	0.31486977	7.013677e-02	1.245447e-01
## CXXC5	51523	-0.09057961	7.015026e-02	1.245595e-01
## ANXA10	11199	0.79544571	7.021337e-02	1.246625e-01
## GLRX2	51022	-0.07702107	7.024084e-02	1.247021e-01
## PSMC6	5706	-0.06068017	7.026524e-02	1.247363e-01
## MYCBP2-AS2	100874213	0.65784553	7.029764e-02	1.247847e-01
## PCMTD2	55251	-0.08415689	7.033128e-02	1.248353e-01
## DDX11L10	100287029	1.02390838	7.036198e-02	1.248807e-01
## PSPC1-AS2	109729130	-0.28672152	7.037686e-02	1.248889e-01
## LINC01719	101928979	0.19115501	7.037508e-02	1.248889e-01
## KMT2D	8085	0.12866371	7.040068e-02	1.249220e-01
## LINC02666	107984280	0.32061472	7.043558e-02	1.249748e-01
## RPAIN	84268	0.10334063	7.045138e-02	1.249846e-01
## ZNF280A	129025	1.40271123	7.044989e-02	1.249846e-01
## SPATA33	124045	0.07932791	7.045930e-02	1.249895e-01
## RPUSD3	285367	0.09583698	7.051681e-02	1.250824e-01
## SUMF1	285362	-0.06742018	7.054031e-02	1.251150e-01
## WASH3P	374666	-0.17622869	7.056735e-02	1.251538e-01
## DYNLL1P1	246720	-0.46722014	7.060392e-02	1.252095e-01
## PNO1	56902	0.06547563	7.065029e-02	1.252826e-01
## POU6F1	5463	-0.11139503	7.067052e-02	1.253093e-01
## TAP2	6891	0.11927797	7.069275e-02	1.253345e-01
## KBTBD6-DT	101929140	-0.15696525	7.069504e-02	1.253345e-01
## SLC2A3	6515	0.20649284	7.071571e-02	1.253620e-01
## LINC01058	103724387	-0.32192052	7.077747e-02	1.254623e-01
## MPLKIP	136647	0.09250402	7.078925e-02	1.254741e-01
## PALM	5064	0.15041170	7.082323e-02	1.255251e-01
## ZNF844	284391	-0.11558821	7.083006e-02	1.255281e-01

## TUBAP11	100132824	-0.48562824	7.085727e-02	1.255672e-01
## NTHL1	4913	0.12585630	7.096009e-02	1.257402e-01
## SKIC2	6499	-0.05736044	7.100163e-02	1.258046e-01
## LINC02172	105377443	-0.85724337	7.106189e-02	1.259022e-01
## NAT8	9027	0.23641222	7.108471e-02	1.259335e-01
## COA7	65260	-0.07311958	7.116079e-02	1.260591e-01
## SLF1	84250	0.11429162	7.119438e-02	1.261094e-01
## HOGA1	112817	0.16413989	7.124611e-02	1.261918e-01
## THOC6	79228	0.10360260	7.132003e-02	1.263135e-01
## MBL1P	8512	0.28003170	7.137278e-02	1.263977e-01
## ATP6V0E2-AS1	401431	-0.11916085	7.143778e-02	1.264944e-01
## SUPT4H1	6827	-0.15065708	7.143544e-02	1.264944e-01
## SLC46A2-AS1	127379751	0.45724707	7.147155e-02	1.265450e-01
## DHRS4	10901	0.21283665	7.149199e-02	1.265627e-01
## SMAD9-IT1	100874072	-0.39870561	7.148804e-02	1.265627e-01
## EPS15L1	58513	-0.07398921	7.151860e-02	1.265914e-01
## LINC03017	101927378	-0.22616178	7.151482e-02	1.265914e-01
## USB1	79650	0.09540538	7.155940e-02	1.266544e-01
## COX6B1	1340	-0.13618542	7.159705e-02	1.267118e-01
## RPL7L1	285855	0.05157512	7.170260e-02	1.268801e-01
## TTTY10	246119	0.52316384	7.170101e-02	1.268801e-01
## PRIMPOL	201973	0.06938509	7.172906e-02	1.269177e-01
## LINC02646	107984002	0.45481964	7.174069e-02	1.269290e-01
## LMO7-AS1	101927155	-0.24544485	7.180540e-02	1.270343e-01
## FRG1-DT	728339	-0.19594873	7.182797e-02	1.270650e-01
## ATG4B	23192	-0.07725968	7.187213e-02	1.271338e-01
## SMIM30	401397	-0.08064635	7.189789e-02	1.271701e-01
## SCN9A	6335	-0.19359133	7.197198e-02	1.272919e-01
## ZNF835	90485	0.11250558	7.197907e-02	1.272952e-01
## TBC1D8-AS1	100506286	-0.15342692	7.200462e-02	1.273311e-01
## NOP58	51602	0.07304749	7.202091e-02	1.273414e-01
## ZSCAN21	7589	-0.07382297	7.201989e-02	1.273414e-01
## NSUN7	79730	-0.12621008	7.209609e-02	1.274651e-01
## CLIC4P1	646609	0.32711713	7.215806e-02	1.275653e-01
## CTTN-DT	121233926	0.18600638	7.216327e-02	1.275653e-01
## RPL31P30	729203	-0.38428464	7.219288e-02	1.276083e-01
## AQP7P4	100132938	0.90041207	7.223056e-02	1.276564e-01
## PCDHB11	56125	-0.17225162	7.222792e-02	1.276564e-01
## RELB	5971	0.17831270	7.224714e-02	1.276764e-01
## MVD	4597	-0.12874693	7.226756e-02	1.277032e-01
## ZNF512	84450	0.06861565	7.228469e-02	1.277242e-01
## RSPH14	27156	0.16246002	7.231016e-02	1.277557e-01
## ZNNT1	115830329	0.14642635	7.231307e-02	1.277557e-01
## DNAJC30	84277	-0.11299616	7.234533e-02	1.278034e-01
## NDUFB2-AS1	100134713	-0.14037224	7.241821e-02	1.279229e-01
## RPL41P2	22970	0.25578347	7.245465e-02	1.279779e-01
## ZNF516-AS1	101927989	0.16434258	7.250665e-02	1.280605e-01
## SCN1A	6323	-0.72458796	7.260635e-02	1.282272e-01
## YIF1A	10897	0.12849325	7.263251e-02	1.282641e-01
## PANX2	56666	-0.22983078	7.265364e-02	1.282690e-01
## KIF25	3834	0.40416024	7.264328e-02	1.282690e-01
## FRMD8	83786	0.08853312	7.266035e-02	1.282690e-01
## CHID1	66005	0.09141516	7.264709e-02	1.282690e-01
## THEM7P	106480297	0.85879169	7.266435e-02	1.282690e-01

## PAFAH1B2P2	643711	1.47794431	7.266694e-02	1.282690e-01
## ZBTB20-AS1	100131117	1.07458101	7.272917e-02	1.283695e-01
## METTL27	155368	-0.17943441	7.276432e-02	1.284222e-01
## TNNT2	7139	0.31706827	7.277194e-02	1.284264e-01
## RGS16	6004	0.17780668	7.281569e-02	1.284942e-01
## GFOD1	54438	0.15230292	7.289155e-02	1.286188e-01
## AGO2	27161	0.10374254	7.310677e-02	1.289892e-01
## LARP7	51574	-0.09798309	7.312841e-02	1.289992e-01
## ZNF408	79797	0.10426285	7.311949e-02	1.289992e-01
## ZNF771	51333	-0.16916988	7.312760e-02	1.289992e-01
## PNRC2	55629	0.04404975	7.323028e-02	1.291696e-01
## MRPS15	64960	0.11669352	7.327360e-02	1.292366e-01
## PTH1R	5745	0.20747585	7.329532e-02	1.292655e-01
## DPP8	54878	-0.07526420	7.330497e-02	1.292732e-01
## KDM2B	84678	0.08933402	7.332500e-02	1.292803e-01
## TCP11L2	255394	0.10597381	7.332022e-02	1.292803e-01
## IGKV3D-11	28876	0.65922096	7.331830e-02	1.292803e-01
## KCNJ2-AS1	400617	0.24217469	7.351231e-02	1.296012e-01
## MIR199A1	406976	1.31815144	7.353682e-02	1.296350e-01
## ZC3H14	79882	-0.05200658	7.362123e-02	1.297744e-01
## PKP4P1	402116	-0.52441563	7.364913e-02	1.298141e-01
## YBX1P1	50631	0.25064259	7.369608e-02	1.298875e-01
## SLC7A9	11136	0.25627778	7.382462e-02	1.301026e-01
## ALDH7A1	501	0.14503270	7.382886e-02	1.301026e-01
## TRIM68	55128	-0.05392265	7.383657e-02	1.301068e-01
## MIR600HG	81571	-0.14149251	7.395537e-02	1.303067e-01
## TEKT2	27285	0.17027825	7.397867e-02	1.303383e-01
## LINC01428	101929265	0.38372010	7.400216e-02	1.303702e-01
## ENPP7P7	100421859	-0.31913220	7.406604e-02	1.304733e-01
## EIF2S2	8894	0.07007483	7.407295e-02	1.304760e-01
## HDAC4-AS1	101928111	0.25441508	7.409738e-02	1.305096e-01
## CETP	1071	0.21151029	7.413952e-02	1.305743e-01
## RUNDC3A	10900	0.18236241	7.416212e-02	1.306047e-01
## DDX11-AS1	100506660	0.24437448	7.421058e-02	1.306805e-01
## FUT3	2525	-0.25170199	7.426374e-02	1.307647e-01
## SLC12A3	6559	-0.29074142	7.432999e-02	1.308718e-01
## MTND1P30	100507157	-0.32929734	7.435937e-02	1.309141e-01
## LINC00051	619434	-0.84884478	7.439479e-02	1.309669e-01
## RNFT1	51136	0.09474066	7.440602e-02	1.309772e-01
## LTC4S	4056	0.25612987	7.441685e-02	1.309868e-01
## LRRK2-DT	107984474	-0.13684640	7.443946e-02	1.310171e-01
## ZNF347	84671	0.09427765	7.447560e-02	1.310712e-01
## VPS13B	157680	0.09959449	7.449168e-02	1.310900e-01
## ADAT1	23536	-0.06670382	7.463059e-02	1.313079e-01
## OR3A1	4994	0.64319376	7.462136e-02	1.313079e-01
## C1DP1	554049	0.59563957	7.463168e-02	1.313079e-01
## IBTK	25998	-0.07478916	7.466931e-02	1.313646e-01
## ZDHHC9	51114	-0.10835674	7.471748e-02	1.314398e-01
## SNORA65	26783	0.37611842	7.477030e-02	1.315232e-01
## RBCK1	10616	0.09988721	7.480344e-02	1.315720e-01
## KLHDC4	54758	0.06502483	7.482216e-02	1.315954e-01
## KLHL10	317719	-0.31507639	7.483537e-02	1.315996e-01
## LDHAL6A	160287	-0.41737176	7.483224e-02	1.315996e-01
## CEP97	79598	0.09365798	7.489792e-02	1.317000e-01

## NDUFA4L2	56901	0.27035700	7.496829e-02	1.318142e-01
## NMRAL1	57407	-0.10307242	7.498380e-02	1.318316e-01
## ZNF131	7690	0.06262775	7.498902e-02	1.318316e-01
## LINC01827	105373818	1.33766199	7.501386e-02	1.318657e-01
## AGBL2	79841	0.24237371	7.503012e-02	1.318848e-01
## WDR49	151790	0.30035672	7.508038e-02	1.319636e-01
## CLEC5A	23601	0.29773338	7.519527e-02	1.321560e-01
## SNHG16	100507246	0.11721541	7.521152e-02	1.321749e-01
## CCT5	22948	-0.06359630	7.523132e-02	1.322002e-01
## RAB3GAP2	25782	-0.07126669	7.524673e-02	1.322177e-01
## ZNF362	149076	0.07026980	7.526573e-02	1.322415e-01
## CORO1B	57175	-0.11073281	7.539183e-02	1.324439e-01
## PPIEL	728448	0.24348078	7.538697e-02	1.324439e-01
## GRSF1	2926	-0.04643779	7.539958e-02	1.324480e-01
## NAMPTP1	646309	-0.31174657	7.543826e-02	1.325063e-01
## C17orf107	100130311	0.13853630	7.544701e-02	1.325121e-01
## DCAF12L2	340578	0.22057097	7.546464e-02	1.325332e-01
## ATP13A3-DT	401106	-0.10654375	7.546991e-02	1.325332e-01
## ICAM4-AS1	123706506	-0.42677446	7.550228e-02	1.325804e-01
## ZNF560	147741	0.50156538	7.553368e-02	1.326260e-01
## PFN2	5217	0.06993713	7.564315e-02	1.328086e-01
## FIG4	9896	0.04452704	7.568722e-02	1.328723e-01
## MED27	9442	-0.08293201	7.569033e-02	1.328723e-01
## MAPKAPK5-AS1	51275	0.08694907	7.571000e-02	1.328972e-01
## ADGRF2P	<NA>	-0.60316180	7.573237e-02	1.329269e-01
## PGAM5	192111	-0.05536408	7.580661e-02	1.330476e-01
## DUSP12	11266	0.07968572	7.582073e-02	1.330531e-01
## CLCN5	1184	-0.14617125	7.581700e-02	1.330531e-01
## BRWD1-AS1	100874093	-0.52724543	7.583325e-02	1.330655e-01
## PREP	5550	0.06707196	7.587031e-02	1.331209e-01
## CDR2L	30850	-0.14827531	7.588844e-02	1.331431e-01
## RSPO4	343637	0.37618022	7.590585e-02	1.331640e-01
## RAC1	5879	-0.05932744	7.594696e-02	1.332265e-01
## PLEKHH1	57475	-0.15671226	7.596825e-02	1.332543e-01
## RFX1	5989	-0.13431855	7.598515e-02	1.332743e-01
## CNTNAP3B	728577	-0.20933804	7.603624e-02	1.333543e-01
## GDI2P2	100420259	0.30596186	7.604403e-02	1.333583e-01
## SCFD2	152579	0.07216135	7.610998e-02	1.334559e-01
## MORN5	254956	0.19805065	7.611069e-02	1.334559e-01
## TPSP2	650474	-0.53382323	7.626437e-02	1.337158e-01
## ROCK1	6093	0.08160133	7.630091e-02	1.337605e-01
## WDR64	128025	-0.37238013	7.630024e-02	1.337605e-01
## FAM149B1	317662	0.06049488	7.635367e-02	1.338397e-01
## MIR1249	100302149	0.78274393	7.635710e-02	1.338397e-01
## PRAME	23532	-0.22557118	7.639465e-02	1.338866e-01
## ZNF107	51427	0.15865255	7.639488e-02	1.338866e-01
## RNF26	79102	-0.08598607	7.642407e-02	1.339281e-01
## RNF32-DT	100506380	-0.08926180	7.647245e-02	1.340033e-01
## DAZAP2P1	645805	-0.28110661	7.650788e-02	1.340557e-01
## RHOQP3	284988	0.45048452	7.653881e-02	1.341002e-01
## HES7	84667	-0.61554173	7.663254e-02	1.342451e-01
## IGKV1OR2-108	28862	1.16188245	7.663033e-02	1.342451e-01
## RPL10AP2	253986	0.50242416	7.665930e-02	1.342823e-01
## MTREX	23517	-0.04324067	7.674278e-02	1.344188e-01

## B4GALT4	8702	0.09879942	7.675556e-02	1.344315e-01
## BOLA3-DT	100507171	0.11070199	7.676670e-02	1.344413e-01
## PES1	23481	-0.06317450	7.678112e-02	1.344569e-01
## RIMS3	9783	0.10318238	7.680911e-02	1.344962e-01
## ITGA2	3673	0.12997244	7.684418e-02	1.345479e-01
## CHP1P2	729603	-0.16725455	7.688430e-02	1.346085e-01
## ZNF585A	199704	0.09802720	7.693306e-02	1.346816e-01
## PABPC4L	132430	-0.17598873	7.693715e-02	1.346816e-01
## TSACC	128229	0.20795614	7.696259e-02	1.347164e-01
## RO60	6738	-0.08477942	7.697746e-02	1.347273e-01
## LINC03022	101929191	0.30526197	7.697992e-02	1.347273e-01
## RNF126	55658	-0.15483376	7.704316e-02	1.348283e-01
## OLFM1	10439	0.27898537	7.705025e-02	1.348310e-01
## DRD4	1815	-0.30986302	7.708627e-02	1.348843e-01
## ABCG8	64241	-0.40338124	7.712964e-02	1.349505e-01
## PDZRN3-AS1	101927249	0.65479134	7.714847e-02	1.349737e-01
## A4GNT	51146	-0.52814440	7.719194e-02	1.350400e-01
## ATP2A3	489	-0.19928933	7.720002e-02	1.350445e-01
## NRSN1	140767	0.58312227	7.725646e-02	1.351335e-01
## LINC01350	101929093	0.51529631	7.728073e-02	1.351662e-01
## OR13C6P	392311	2.02208035	7.729239e-02	1.351769e-01
## CCDC14	64770	0.17486630	7.731176e-02	1.352010e-01
## LRRC18	474354	0.84637997	7.735036e-02	1.352588e-01
## LINC00571	100874188	-0.14219100	7.755018e-02	1.355984e-01
## NT5DC2	64943	0.18167942	7.756343e-02	1.356118e-01
## TMEM14B-DT	118597831	-0.22827232	7.760188e-02	1.356693e-01
## PKD1L3	342372	0.33374569	7.762531e-02	1.357005e-01
## NUDT13	25961	0.16198699	7.766230e-02	1.357554e-01
## OR7C1	26664	-0.46484127	7.768772e-02	1.357901e-01
## SDHAP4	220729	-0.15826872	7.770034e-02	1.358024e-01
## PDCD6P1	728613	-0.10215888	7.770715e-02	1.358045e-01
## GRASLND	386597	0.23076091	7.773533e-02	1.358440e-01
## RAN	5901	0.07857337	7.774428e-02	1.358498e-01
## PFN1P1	730138	0.26757841	7.776868e-02	1.358791e-01
## LIX1-AS1	101926893	0.47212309	7.777223e-02	1.358791e-01
## FAM228B	375190	0.12544912	7.788572e-02	1.360676e-01
## LINC00472	79940	-0.21302915	7.799073e-02	1.362413e-01
## QPRT	23475	0.18424624	7.805325e-02	1.363309e-01
## SMIM2-IT1	100874377	0.946344683	7.805291e-02	1.363309e-01
## EFCAB10	100130771	0.27258391	7.808687e-02	1.363798e-01
## KILH	101927136	-0.35837207	7.810233e-02	1.363970e-01
## ITGB1P1	100422691	0.25230434	7.812150e-02	1.364207e-01
## SNRNP25	79622	0.13088784	7.816567e-02	1.364880e-01
## TSR3	115939	0.14103347	7.822673e-02	1.365848e-01
## CD151	977	-0.12752266	7.824810e-02	1.366123e-01
## SRBD1	55133	0.05360810	7.827277e-02	1.366456e-01
## SLC23A1	9963	-0.23668159	7.845744e-02	1.369581e-01
## NANOGNBP3	100652831	-0.51076234	7.846381e-02	1.369594e-01
## TRAPPCL	58485	0.09960761	7.852782e-02	1.370613e-01
## PCSK1N	27344	-0.30640454	7.855875e-02	1.370997e-01
## C6orf47-AS1	106480731	0.35373971	7.856110e-02	1.370997e-01
## HSBP1	3281	-0.08096706	7.860300e-02	1.371630e-01
## RPL23P8	222901	0.32626484	7.870434e-02	1.373299e-01
## AAAS	8086	-0.06429243	7.878125e-02	1.374444e-01

## LINC02561	110806285	0.50733491	7.877962e-02	1.374444e-01
## CAPN8	388743	-0.34311657	7.886351e-02	1.375781e-01
## FRMPD2B	728798	0.37937078	7.892130e-02	1.376690e-01
## USP16	10600	-0.08361373	7.896308e-02	1.377320e-01
## IGHV4-39	28394	0.48603004	7.899515e-02	1.377780e-01
## LINC01356	100996702	0.48791762	7.901681e-02	1.378059e-01
## IGFBP5	3488	-0.15194552	7.903166e-02	1.378120e-01
## TARBP2	6895	-0.08392684	7.903143e-02	1.378120e-01
## MRPL11	65003	0.11749572	7.908392e-02	1.378933e-01
## TERLR1	101928857	0.39935672	7.916140e-02	1.380184e-01
## DNAJC27	51277	-0.11184309	7.917006e-02	1.380237e-01
## C7	730	0.20048586	7.920857e-02	1.380531e-01
## ZNF430	80264	0.11542460	7.920118e-02	1.380531e-01
## RHBDF2	79651	0.14121178	7.919928e-02	1.380531e-01
## VSIG8	391123	-0.33134978	7.920970e-02	1.380531e-01
## SMC1B	27127	0.63864128	7.927784e-02	1.381620e-01
## ZNF45-AS1	118827818	-0.24794140	7.929867e-02	1.381884e-01
## BCCIP	56647	-0.07956122	7.932598e-02	1.382232e-01
## RFKP4	100313968	0.54962967	7.933002e-02	1.382232e-01
## IGHG4	3503	-0.40485099	7.935088e-02	1.382496e-01
## MYT1	4661	-0.37301586	7.944796e-02	1.384088e-01
## NT5DC4	284958	-0.33591986	7.946957e-02	1.384366e-01
## ZNF701	55762	0.09660650	7.951843e-02	1.385117e-01
## GALK1	2584	-0.17295215	7.954223e-02	1.385433e-01
## TPT1P5	100421420	0.56120983	7.959910e-02	1.386324e-01
## SLC6A4	6532	-0.18433204	7.961115e-02	1.386434e-01
## SLC22A5	6584	-0.15343636	7.962003e-02	1.386490e-01
## SPICE1	152185	-0.16831188	7.963584e-02	1.386666e-01
## RPS3AP54	101927101	0.43061328	7.965374e-02	1.386878e-01
## TMEM151B	441151	-0.47015065	7.966970e-02	1.387044e-01
## MTCO1P31	107075171	0.69191005	7.967472e-02	1.387044e-01
## IDUA	3425	0.19281723	7.976710e-02	1.388454e-01
## RNU6-807P	106479923	0.57584038	7.976405e-02	1.388454e-01
## LINC01435	103695365	-0.44488971	7.977683e-02	1.388524e-01
## HMGB1P5	10354	0.14781609	7.985212e-02	1.389735e-01
## KIZ	55857	0.08164121	7.987837e-02	1.390092e-01
## DOCK9	23348	-0.09996265	7.993222e-02	1.390805e-01
## QARS1	5859	0.06072327	7.993939e-02	1.390805e-01
## HMGB3P22	729595	0.19302783	7.994223e-02	1.390805e-01
## YEATS2-AS1	100874113	0.40858764	7.993228e-02	1.390805e-01
## TOP3B	8940	0.09146511	8.009893e-02	1.393431e-01
## AGAP4	119016	0.24301324	8.011284e-02	1.393574e-01
## MASTL	84930	-0.08312090	8.013561e-02	1.393859e-01
## TTC28-AS1	284900	-0.10405495	8.014073e-02	1.393859e-01
## GLE1	2733	0.04591236	8.016959e-02	1.394161e-01
## EML3	256364	-0.11258125	8.016540e-02	1.394161e-01
## HSPA6	3310	0.23621504	8.018607e-02	1.394348e-01
## XDH	7498	0.30789579	8.020575e-02	1.394591e-01
## HTR1B	3351	-0.25839332	8.022615e-02	1.394846e-01
## TBCE	6905	-0.22197786	8.026096e-02	1.395351e-01
## RMB8AP1	112846	-0.28257596	8.029464e-02	1.395837e-01
## TEX26-AS1	100507064	0.62399350	8.031603e-02	1.396109e-01
## ATF4P4	100127952	0.50258853	8.032839e-02	1.396224e-01
## SAPCD2	89958	0.15372475	8.036320e-02	1.396629e-01

## PCAT7	101928099	0.17307612	8.036207e-02	1.396629e-01
## PPP1R12A-AS1	105369865	-0.13375542	8.039635e-02	1.397105e-01
## CAPN10-DT	101752400	0.19970580	8.042598e-02	1.397520e-01
## EIF2S1	1965	-0.05198215	8.044243e-02	1.397706e-01
## ABLIM3	22885	-0.18201498	8.047681e-02	1.398203e-01
## PEAR1	375033	0.15198228	8.050923e-02	1.398667e-01
## INHCAP	100129696	0.29341819	8.072915e-02	1.402387e-01
## SLC39A4	55630	-0.19140645	8.077601e-02	1.403000e-01
## AQP7P1	375719	0.24464782	8.077273e-02	1.403000e-01
## AP4S1	11154	0.07503679	8.078652e-02	1.403083e-01
## MAT2A	4144	-0.11026483	8.083683e-02	1.403856e-01
## MIB1	57534	-0.10029550	8.084570e-02	1.403882e-01
## LINC02950	123466212	0.41726999	8.084989e-02	1.403882e-01
## ATP5F1EP2	432369	0.40164242	8.087182e-02	1.404081e-01
## PRMT3	10196	-0.08006718	8.087291e-02	1.404081e-01
## TRIT1	54802	-0.06225748	8.088275e-02	1.404152e-01
## MTMR4	9110	-0.09701670	8.097435e-02	1.405642e-01
## MANCR	100216001	0.53887908	8.108902e-02	1.407532e-01
## C19orf33	64073	-0.46238299	8.111009e-02	1.407797e-01
## SLC10A7	84068	-0.06700303	8.113819e-02	1.408083e-01
## RNF170	81790	0.06490011	8.113643e-02	1.408083e-01
## MTND5P27	100873264	-0.62126788	8.136187e-02	1.411864e-01
## ACTA2	59	0.24537007	8.136955e-02	1.411897e-01
## IFITM3	10410	-0.19374987	8.139120e-02	1.412084e-01
## RBM46	166863	0.49700434	8.139194e-02	1.412084e-01
## NUGGC	389643	-0.25204748	8.143611e-02	1.412749e-01
## TBX19	9095	0.11565305	8.145841e-02	1.413035e-01
## OR2T11	127077	0.41361016	8.147028e-02	1.413140e-01
## ATXN7L2	127002	0.16177942	8.153815e-02	1.414216e-01
## RPL17P28	100270940	0.46274160	8.155440e-02	1.414339e-01
## LINC02477	105377512	0.76331481	8.155688e-02	1.414339e-01
## FAM182A	284800	0.44240004	8.157483e-02	1.414550e-01
## SEPTIN2	4735	0.04946736	8.164891e-02	1.415733e-01
## LENG1	79165	-0.08286649	8.168410e-02	1.416242e-01
## KMT5AP2	100421788	0.54564695	8.174243e-02	1.417153e-01
## SULT1A3	6818	0.48051515	8.178731e-02	1.417830e-01
## TAF4B	6875	0.11030666	8.179320e-02	1.417830e-01
## USP39	10713	0.05415215	8.192438e-02	1.419902e-01
## F2	2147	0.39959166	8.192149e-02	1.419902e-01
## LINC01560	203414	-0.08513056	8.193216e-02	1.419924e-01
## ARHGAP27P1-BPTFP1-KPNA2P3	109286553	0.26004607	8.193733e-02	1.419924e-01
## ZNF99	7652	-0.24692877	8.197033e-02	1.420394e-01
## ZNF708	7562	0.14376816	8.198620e-02	1.420568e-01
## TOM1L1	10040	-0.11349361	8.210466e-02	1.422519e-01
## MGAM	8972	0.23548807	8.215099e-02	1.423220e-01
## PSMB10	5699	0.16784434	8.225524e-02	1.424925e-01
## SELENBP1	8991	-0.12731687	8.232131e-02	1.425968e-01
## ACMSD	130013	-0.21268744	8.232852e-02	1.425991e-01
## SRXN1	140809	-0.40004475	8.246108e-02	1.428185e-01
## ZNF772	400720	-0.08000044	8.248022e-02	1.428415e-01
## NUBP1	4682	-0.07441419	8.254159e-02	1.429376e-01
## PDF	64146	-0.35589578	8.255855e-02	1.429497e-01
## CTBP2P7	401914	-0.64558259	8.256036e-02	1.429497e-01
## KCNAB2	8514	-0.18773961	8.257873e-02	1.429713e-01

## RCAN3	11123	0.10966876	8.258680e-02	1.429751e-01
## LINC00589	619351	1.35384416	8.260028e-02	1.429883e-01
## KL	9365	-0.21876942	8.263189e-02	1.430226e-01
## PLAC1	10761	0.68825737	8.263131e-02	1.430226e-01
## HSPA8P11	392209	0.40463760	8.269717e-02	1.431254e-01
## GJB4	127534	0.73043176	8.271180e-02	1.431405e-01
## PRPF40A	55660	-0.06243109	8.273314e-02	1.431673e-01
## CORO2B	10391	-0.11560953	8.298031e-02	1.435848e-01
## RAPGEF6	51735	-0.09849358	8.300714e-02	1.436210e-01
## FAM234A	83986	-0.09393978	8.303644e-02	1.436512e-01
## PRDX6-AS1	101928673	-0.14098869	8.303333e-02	1.436512e-01
## EFL1	79631	0.04705852	8.315538e-02	1.438467e-01
## XIAP	331	-0.09931622	8.317401e-02	1.438687e-01
## MIR6774	102466732	0.85082005	8.325061e-02	1.439910e-01
## PIH1D1	55011	0.07568067	8.329530e-02	1.440580e-01
## SULT1C5P	151234	-0.27972694	8.331043e-02	1.440739e-01
## GIPR	2696	0.29665711	8.349186e-02	1.443774e-01
## MICALL1	85377	-0.07518208	8.350991e-02	1.443983e-01
## ARMH3	79591	-0.04163901	8.352395e-02	1.444123e-01
## CAPNS1	826	-0.11456474	8.362394e-02	1.445749e-01
## PSMB4	5692	0.10019559	8.365117e-02	1.446117e-01
## WDR81	124997	0.10351185	8.365759e-02	1.446125e-01
## SLC9A2	6549	-0.15237157	8.387172e-02	1.449623e-01
## COX6CP1	9384	-0.39564826	8.387187e-02	1.449623e-01
## TRIM40	135644	-0.31210027	8.396252e-02	1.451087e-01
## LUARIS	100506895	1.08502419	8.403761e-02	1.452281e-01
## LDHC	3948	0.35872104	8.405798e-02	1.452530e-01
## RHOXF1	158800	0.28630861	8.407072e-02	1.452647e-01
## UBBP4	23666	0.18909173	8.408086e-02	1.452719e-01
## ZNF225-AS1	100379224	0.12568915	8.411571e-02	1.453218e-01
## NOX4P1	729960	0.58962325	8.415550e-02	1.453802e-01
## RNU6-125P	106479621	0.56244604	8.416335e-02	1.453834e-01
## RAP2C	57826	-0.10713378	8.417690e-02	1.453870e-01
## EPHA5	2044	0.41636590	8.417743e-02	1.453870e-01
## MRPL57	78988	0.12841506	8.419183e-02	1.454016e-01
## LIPT1	51601	0.08404887	8.426261e-02	1.455135e-01
## C22orf23	84645	0.15139818	8.428605e-02	1.455436e-01
## YWHAG	7532	0.08247138	8.436281e-02	1.456658e-01
## AGXT2	64902	0.23715525	8.441210e-02	1.457406e-01
## HGF	3082	0.19775567	8.444092e-02	1.457696e-01
## LDOC1	23641	-0.14508162	8.443768e-02	1.457696e-01
## RRAGA	10670	-0.07286332	8.448069e-02	1.458279e-01
## IVD	3712	0.11350688	8.452162e-02	1.458882e-01
## FAM229B	619208	0.09169589	8.453061e-02	1.458933e-01
## TET2	54790	0.14443277	8.456618e-02	1.459444e-01
## FAM106C	100129396	0.55401426	8.459363e-02	1.459814e-01
## PXT1	222659	-0.46426273	8.461108e-02	1.460011e-01
## MEIS2	4212	-0.09702503	8.462594e-02	1.460164e-01
## TNS1	7145	-0.10355884	8.464677e-02	1.460330e-01
## CRYBG2	55057	-0.30988796	8.464757e-02	1.460330e-01
## ACSM5P1	100421779	0.50750224	8.471104e-02	1.461321e-01
## BMP8A	353500	0.21720166	8.474311e-02	1.461771e-01
## TRAPPC14	55262	-0.11935027	8.475573e-02	1.461884e-01
## XKR7	343702	0.50776115	8.478906e-02	1.462356e-01

## IL1R1	3554	0.14091774	8.483575e-02	1.463057e-01
## MIR450B	100126302	0.87997641	8.486381e-02	1.463437e-01
## LUC7L	55692	0.13380936	8.489964e-02	1.463951e-01
## LINC02365	105377586	-0.49569845	8.492521e-02	1.464288e-01
## LRRC34	151827	0.10056845	8.495186e-02	1.464644e-01
## PRPF18	8559	-0.08290364	8.511143e-02	1.467291e-01
## RNU2-17P	106480204	-0.56972589	8.514479e-02	1.467762e-01
## RPL41	6171	0.17060630	8.516908e-02	1.468076e-01
## VIL1	7429	-0.20030586	8.519471e-02	1.468414e-01
## SEPTIN7P9	285961	-0.27410872	8.524438e-02	1.469166e-01
## MCM9	254394	-0.08098659	8.525647e-02	1.469270e-01
## SF3B5	83443	0.12199523	8.531892e-02	1.470242e-01
## KLF13	51621	-0.08491778	8.532560e-02	1.470253e-01
## SATB2	23314	0.12698843	8.543490e-02	1.472032e-01
## CAPN1-AS1	728975	-0.15533516	8.553732e-02	1.473587e-01
## PIGY-DT	101929134	-0.33965398	8.553312e-02	1.473587e-01
## ZNF232-AS1	101928000	0.14419797	8.571826e-02	1.476600e-01
## HGSNAT	138050	0.08549424	8.573307e-02	1.476750e-01
## HSP90AB4P	664618	0.54388518	8.576070e-02	1.477122e-01
## MASP2	10747	-0.65125683	8.586020e-02	1.478730e-01
## MCM8	84515	-0.11407612	8.589619e-02	1.479245e-01
## RBM7	10179	0.06930485	8.598540e-02	1.480677e-01
## SLC10A3	8273	0.09821255	8.599425e-02	1.480724e-01
## AQP4-AS1	147429	0.27939993	8.606755e-02	1.481881e-01
## CRIPTOP6	22813	-0.57149031	8.607774e-02	1.481952e-01
## CST11	140880	-0.62088137	8.613761e-02	1.482878e-01
## FAM242C	112488744	-0.31412911	8.616737e-02	1.483285e-01
## MTCL2	140710	0.14556089	8.621128e-02	1.483936e-01
## OSGEPL1	64172	0.06976830	8.625086e-02	1.484413e-01
## TESMIN	9633	0.12528820	8.625123e-02	1.484413e-01
## HOXB13	10481	0.47150077	8.627794e-02	1.484767e-01
## PECR	55825	0.12711019	8.636254e-02	1.486118e-01
## SELE	6401	0.34391794	8.640586e-02	1.486758e-01
## LINC01208	100505547	-0.63169432	8.647328e-02	1.487813e-01
## EYA4	2070	0.19564654	8.648127e-02	1.487845e-01
## CA12	771	-0.13944238	8.660749e-02	1.489911e-01
## STK32C	282974	0.10938469	8.662147e-02	1.490046e-01
## TCTA	6988	-0.08136084	8.667869e-02	1.490862e-01
## FBXO38-DT	102546294	-0.12320405	8.668118e-02	1.490862e-01
## TSGA10	80705	-0.12074689	8.670846e-02	1.491226e-01
## ACY3	91703	0.23972647	8.674374e-02	1.491727e-01
## ANKRD44-IT1	101927547	0.92812308	8.676477e-02	1.491983e-01
## TRAF6	7189	-0.04873140	8.679248e-02	1.492354e-01
## ARF5	381	0.10200969	8.681657e-02	1.492663e-01
## GLUD1P3	2749	-0.16269040	8.687104e-02	1.493494e-01
## PPIAP41	111082977	0.48935974	8.701678e-02	1.495893e-01
## MED19	219541	0.09321211	8.707185e-02	1.496734e-01
## ATG4C	84938	0.06158602	8.710919e-02	1.497270e-01
## MIR2117HG	106660605	-0.58914236	8.714096e-02	1.497710e-01
## PECAM1	5175	0.14327843	8.724247e-02	1.499349e-01
## LIMD1-AS1	644714	0.16399543	8.728638e-02	1.499997e-01
## LINC01965	107985928	-0.59194767	8.729318e-02	1.500008e-01
## ACTBP2	62	0.27674395	8.731369e-02	1.500254e-01
## TRPC1	7220	0.12209652	8.734755e-02	1.500730e-01

## VHL	7428	0.08918107	8.742212e-02	1.501799e-01
## C2orf76	130355	0.10345765	8.742094e-02	1.501799e-01
## SLC16A3	9123	-0.21195017	8.743819e-02	1.501969e-01
## RNU6-762P	106479903	0.44506598	8.744902e-02	1.502049e-01
## AHSA2P	130872	0.22775011	8.746682e-02	1.502142e-01
## LINC02977	105376220	-0.10480511	8.746423e-02	1.502142e-01
## MED1	5469	0.06934440	8.749852e-02	1.502474e-01
## CERNA2	642934	-0.31400297	8.749328e-02	1.502474e-01
## LINC01798	100507073	0.26183327	8.756494e-02	1.503509e-01
## GCLM	2730	-0.09569552	8.764573e-02	1.504789e-01
## RPL36AP13	100271323	0.69070464	8.773537e-02	1.506222e-01
## ATP8B3	148229	0.18533513	8.780003e-02	1.507226e-01
## GALNT13-AS1	100144595	-0.36167627	8.785277e-02	1.508024e-01
## LINC00334	114042	-0.41110397	8.788877e-02	1.508536e-01
## SYTL5	94122	0.20647396	8.789857e-02	1.508597e-01
## ABCF1	23	-0.05805246	8.790666e-02	1.508630e-01
## SYN2	6854	-0.21462764	8.799096e-02	1.509863e-01
## LINC03053	124905179	0.55526597	8.798673e-02	1.509863e-01
## PHF12	57649	0.05682522	8.801846e-02	1.510228e-01
## ZNF318	24149	0.06485765	8.808281e-02	1.511226e-01
## ERAS	3266	0.36157148	8.809461e-02	1.511322e-01
## IQCG	84223	0.07187607	8.816702e-02	1.512440e-01
## TUBAL3	79861	0.23738121	8.817499e-02	1.512440e-01
## LINC01550	388011	0.15935907	8.817846e-02	1.512440e-01
## REX1BD	55049	0.19927671	8.823118e-02	1.513237e-01
## ATP5F1E	514	0.12695173	8.823787e-02	1.513245e-01
## DYNLT3	6990	0.08814647	8.825712e-02	1.513468e-01
## DDX10P1	100421371	0.38518289	8.827071e-02	1.513595e-01
## IFITM2	10581	-0.18029659	8.830370e-02	1.514054e-01
## ELK1	2002	0.07669782	8.841882e-02	1.515921e-01
## LAMTOR1	55004	0.10746001	8.842589e-02	1.515935e-01
## ZP2	7783	-0.39391798	8.847288e-02	1.516633e-01
## USP12	219333	-0.06250586	8.849211e-02	1.516856e-01
## TRIP11	9321	-0.09008081	8.853812e-02	1.517538e-01
## RAMP2	10266	0.16083234	8.856724e-02	1.517930e-01
## SNORA33	594839	0.26230512	8.860722e-02	1.518409e-01
## H2BW3P	100101478	0.60385450	8.860773e-02	1.518409e-01
## LINC02285	101929422	0.43381051	8.869261e-02	1.519757e-01
## LINC01572	101927957	0.23094535	8.871881e-02	1.520099e-01
## YTHDF3	253943	-0.06173228	8.882708e-02	1.521739e-01
## CYP51A1P2	83530	-0.35588558	8.882428e-02	1.521739e-01
## CCDC180	100499483	0.23044818	8.896258e-02	1.523953e-01
## CDC42-IT1	100874292	0.66521495	8.897945e-02	1.524135e-01
## ANKRD10	55608	0.09957184	8.904178e-02	1.525095e-01
## SWSAP1	126074	-0.08309671	8.908501e-02	1.525728e-01
## LINC01629	105370578	1.16201037	8.911613e-02	1.526153e-01
## GPRASP3	80823	-0.44874906	8.914440e-02	1.526530e-01
## MIR3125	100422986	-0.44707005	8.915439e-02	1.526593e-01
## PINK1-AS	100861548	-0.07375447	8.919225e-02	1.527134e-01
## USP25	29761	-0.06723861	8.921606e-02	1.527434e-01
## LBX2	85474	0.17293378	8.923752e-02	1.527694e-01
## BCS1L	617	0.06879172	8.924643e-02	1.527738e-01
## GID8	54994	0.04979401	8.930587e-02	1.528648e-01
## LINC02691	145195	-0.26487489	8.935374e-02	1.529360e-01

## FAM151A	338094	0.31588571	8.936404e-02	1.529428e-01
## NDUFS6	4726	-0.13589141	8.939879e-02	1.529915e-01
## UGT2B28	54490	0.73048881	8.948164e-02	1.531152e-01
## SLC10A4	201780	0.39095076	8.948366e-02	1.531152e-01
## DXO	1797	-0.08833642	8.953180e-02	1.531868e-01
## PAN3	255967	-0.10438805	8.954437e-02	1.531975e-01
## BBOX1	8424	-0.20963693	8.970672e-02	1.534645e-01
## NAPRT	93100	-0.16433604	8.977654e-02	1.535731e-01
## TIMM21	29090	-0.06615100	8.985038e-02	1.536794e-01
## MFAP1	4236	0.04057015	8.985134e-02	1.536794e-01
## LINC00562	100861549	-0.18186306	8.986483e-02	1.536917e-01
## GSTA4	2941	0.07555618	8.990176e-02	1.537440e-01
## MMP24OS	101410538	-0.12030386	9.001959e-02	1.539347e-01
## VTCN1	79679	0.20125481	9.002718e-02	1.539368e-01
## FOXH1	8928	-0.40064162	9.008899e-02	1.540317e-01
## HERPUD2	64224	-0.04739343	9.021598e-02	1.542380e-01
## MEIS1-AS3	730198	0.71835886	9.027558e-02	1.543290e-01
## CERKL	375298	-0.14101518	9.033947e-02	1.544274e-01
## PGLS	25796	0.14537095	9.038359e-02	1.544919e-01
## TRPC5	7224	-0.25278672	9.041482e-02	1.545344e-01
## SMCR8	140775	0.05990624	9.042657e-02	1.545437e-01
## TMED9	54732	-0.07931840	9.052604e-02	1.547028e-01
## DNAJC18	202052	-0.07280222	9.055345e-02	1.547387e-01
## TFAM	7019	-0.07093312	9.056512e-02	1.547478e-01
## LINC00339	29092	0.11031460	9.061579e-02	1.548235e-01
## LINC03086	388780	0.50166009	9.068405e-02	1.549292e-01
## JMJD4	65094	0.08510693	9.069060e-02	1.549295e-01
## H3C1	8350	0.36990201	9.070789e-02	1.549481e-01
## LINC01775	101928602	0.81985747	9.075420e-02	1.550164e-01
## ARRDC2	27106	0.15862438	9.077325e-02	1.550380e-01
## RPS24P10	100271097	0.61312977	9.090372e-02	1.552465e-01
## SLC2A9-AS1	105374476	-0.37404836	9.090810e-02	1.552465e-01
## GAPDHP38	729493	0.34003524	9.097500e-02	1.553498e-01
## A2MP1	3	-0.39020207	9.098317e-02	1.553529e-01
## ZNF292	23036	-0.11937121	9.101486e-02	1.553948e-01
## RNU6-137P	106481220	-0.28912608	9.102053e-02	1.553948e-01
## DDX11	1663	0.17951626	9.105541e-02	1.554434e-01
## ZDHHC7	55625	0.04570600	9.106308e-02	1.554456e-01
## PPP2R1B	5519	0.11111617	9.109358e-02	1.554868e-01
## CYP2G1P	22952	0.56607743	9.114855e-02	1.555697e-01
## GLDC	2731	0.17685133	9.132233e-02	1.558553e-01
## AK4	205	-0.19053096	9.135158e-02	1.558943e-01
## HACD3	51495	-0.06907176	9.136347e-02	1.559036e-01
## ZNF518B	85460	0.07832680	9.144247e-02	1.560275e-01
## FSD1	79187	-0.34978383	9.156039e-02	1.562068e-01
## GALNT14	79623	-0.12693685	9.155595e-02	1.562068e-01
## YTHDF2	51441	-0.03854157	9.157510e-02	1.562209e-01
## MAST4	375449	-0.08220087	9.175981e-02	1.565250e-01
## PTCHD3	374308	-0.52634280	9.180464e-02	1.565905e-01
## MAGOH	4116	-0.07452581	9.183211e-02	1.566263e-01
## POLR1F	221830	-0.05402290	9.184890e-02	1.566440e-01
## FPGT	8790	-0.07479823	9.185683e-02	1.566465e-01
## ZNF8-DT	105372482	-0.07814761	9.189128e-02	1.566943e-01
## TTI2	80185	-0.05045942	9.191037e-02	1.567158e-01

## OR2C3	81472	0.32073367	9.196929e-02	1.568053e-01
## OTOG	340990	0.25593283	9.204695e-02	1.569267e-01
## TECTB	6975	-0.52417292	9.212728e-02	1.570526e-01
## MTG2	26164	0.06044891	9.221289e-02	1.571765e-01
## CDNDF	441549	0.16045579	9.220984e-02	1.571765e-01
## CCT7P2	100288772	0.61620042	9.224382e-02	1.572182e-01
## THOC7	80145	0.09273549	9.231173e-02	1.573137e-01
## FAM72B	653820	0.27174507	9.231279e-02	1.573137e-01
## NRF1	4899	0.04092826	9.234167e-02	1.573519e-01
## LINC00479	150135	0.33578074	9.248012e-02	1.575767e-01
## TUBGCP4	27229	-0.06083760	9.251854e-02	1.576264e-01
## SLC46A3	283537	-0.09608287	9.252800e-02	1.576264e-01
## SAPCD1	401251	-0.37661726	9.252875e-02	1.576264e-01
## SMG5	23381	-0.05237657	9.267314e-02	1.578613e-01
## STIMATE-MUSTN1	100526772	0.32316833	9.268901e-02	1.578773e-01
## ATP6V1E1P1	343515	-0.36579049	9.275326e-02	1.579757e-01
## RAD9A	5883	0.09210908	9.277184e-02	1.579962e-01
## LINC01585	101929765	1.35164898	9.290365e-02	1.582096e-01
## PCDHGA8	9708	-0.21311306	9.291772e-02	1.582225e-01
## RRP7A	27341	0.07887865	9.295096e-02	1.582631e-01
## RPS4XP16	220433	0.21454438	9.295459e-02	1.582631e-01
## MBD3	53615	0.14205545	9.296944e-02	1.582773e-01
## PCBD1	5092	0.13951304	9.299157e-02	1.582928e-01
## RAET1G	353091	-0.23720973	9.299003e-02	1.582928e-01
## TBC1D15	64786	-0.05670313	9.305478e-02	1.583893e-01
## NPIP86	728741	0.42272683	9.306599e-02	1.583973e-01
## TMEM8B	51754	-0.08590587	9.307708e-02	1.584051e-01
## PPAT	5471	0.05859007	9.308804e-02	1.584126e-01
## VN1R108P	100312850	0.35567432	9.313029e-02	1.584623e-01
## ACAD9-DT	123706524	0.29251019	9.312698e-02	1.584623e-01
## MEF2A	4205	-0.06669142	9.317767e-02	1.585211e-01
## C1RL-AS1	283314	0.24682982	9.317788e-02	1.585211e-01
## ABCC4	10257	-0.11644941	9.319873e-02	1.585455e-01
## MBD6	114785	-0.10476481	9.323747e-02	1.586003e-01
## TPM3P6	653758	-0.22821310	9.326259e-02	1.586319e-01
## C4orf46P3	101241902	-0.32662080	9.333908e-02	1.587509e-01
## FRMD5	84978	0.25460375	9.337458e-02	1.587989e-01
## ATP5PO	539	-0.13403705	9.338035e-02	1.587989e-01
## GABPB1-AS1	100129387	0.22287183	9.348931e-02	1.589730e-01
## VPS9D1-AS1	100128881	0.18924115	9.350411e-02	1.589871e-01
## AKIP1	56672	0.07712435	9.355457e-02	1.590618e-01
## TRAPPC6B	122553	-0.06271558	9.360225e-02	1.591317e-01
## MYRF-AS1	26070	0.39182902	9.363266e-02	1.591722e-01
## TTLL6	284076	-0.19584390	9.368234e-02	1.592456e-01
## LINC01219	104355220	-0.49040684	9.372028e-02	1.592898e-01
## LINC02651	105378346	0.38974760	9.372147e-02	1.592898e-01
## IGHV1-69D	102723169	0.58003235	9.376145e-02	1.593466e-01
## C1GALT1	56913	-0.09463621	9.380821e-02	1.593991e-01
## ALDH2	217	0.13853069	9.381856e-02	1.593991e-01
## RAB26	25837	0.17033773	9.381351e-02	1.593991e-01
## OR52N4	390072	0.38318168	9.381009e-02	1.593991e-01
## CRAMP1	57585	0.08945708	9.382684e-02	1.594020e-01
## PLEKHH3	79990	0.13982466	9.383854e-02	1.594107e-01
## PHF14	9678	0.05574801	9.389496e-02	1.594901e-01

## ARHGEF33	100271715	0.16984790	9.389840e-02	1.594901e-01
## TAFA1	407738	0.16517908	9.401310e-02	1.596738e-01
## PITRM1	10531	-0.05669998	9.412717e-02	1.598563e-01
## DNASE1L2	1775	0.32178913	9.414437e-02	1.598744e-01
## CDKN1A	1026	-0.19527926	9.424287e-02	1.600305e-01
## P4HB	5034	-0.10158605	9.430398e-02	1.601219e-01
## LIPN	643418	0.64396715	9.430989e-02	1.601219e-01
## RPL29P17	645224	0.57536579	9.431813e-02	1.601247e-01
## SLC6A14	11254	0.60132117	9.436328e-02	1.601901e-01
## NGEF	25791	0.15950881	9.441321e-02	1.602637e-01
## MC1R	4157	0.20765585	9.452128e-02	1.604360e-01
## CCNI	10983	-0.07419155	9.457635e-02	1.605182e-01
## NME2	4831	-0.26742592	9.465357e-02	1.606381e-01
## NBPF20	100288142	0.17848643	9.468899e-02	1.606869e-01
## RGS7BP	401190	-0.21365786	9.482703e-02	1.608875e-01
## PBX2P1	5088	0.44183091	9.481670e-02	1.608875e-01
## SPICP2	100130114	1.11603153	9.482613e-02	1.608875e-01
## LINC03069	642484	0.33808310	9.483547e-02	1.608906e-01
## LINC00200	399706	-0.78853610	9.485516e-02	1.609128e-01
## LEO1	123169	-0.06578051	9.486759e-02	1.609226e-01
## ECT2L	345930	0.41043157	9.504371e-02	1.612101e-01
## VN1R83P	100312828	0.26240810	9.511957e-02	1.613275e-01
## TBX10	347853	-0.37341452	9.512941e-02	1.613330e-01
## VDAC2P5	729317	-0.13294900	9.516682e-02	1.613760e-01
## TRAV34	28648	1.04866612	9.516805e-02	1.613760e-01
## MUCL3	135656	-0.35148080	9.536855e-02	1.616934e-01
## TRIM31	11074	0.35242591	9.536782e-02	1.616934e-01
## Clorf220	400798	0.28510929	9.539692e-02	1.617302e-01
## DNAJB2	3300	0.06409796	9.542772e-02	1.617598e-01
## ZNF114	163071	-0.17247340	9.542618e-02	1.617598e-01
## SLC5A4	6527	-0.21405162	9.543884e-02	1.617674e-01
## SUGT1	10910	-0.05508392	9.546196e-02	1.617953e-01
## CAMSAP2	23271	-0.09186766	9.549652e-02	1.618309e-01
## GCC1	79571	0.04657429	9.550295e-02	1.618309e-01
## RHOXF1P3	107075307	0.29642305	9.549252e-02	1.618309e-01
## CYB5A	1528	0.14880831	9.560206e-02	1.619876e-01
## CWH43	80157	-0.16338379	9.563306e-02	1.620288e-01
## FNDC10	643988	-0.18717420	9.564487e-02	1.620375e-01
## CEP44	80817	-0.09124505	9.567611e-02	1.620791e-01
## SDHAF3	57001	-0.09194439	9.571181e-02	1.621283e-01
## KCNAB1-AS2	100874083	0.56162450	9.574315e-02	1.621701e-01
## ELK4	2005	0.08259084	9.577544e-02	1.622022e-01
## LINC00642	400238	-0.52488566	9.577372e-02	1.622022e-01
## LINC00511	400619	-0.24924939	9.583860e-02	1.622978e-01
## ALOX5AP	241	0.20784854	9.592775e-02	1.624262e-01
## IGHV4-59	28392	0.46300527	9.592376e-02	1.624262e-01
## OTUD5	55593	-0.05896250	9.594057e-02	1.624366e-01
## CHRM5	1133	-0.25537250	9.598872e-02	1.625068e-01
## AXDND1	126859	-0.25307513	9.603881e-02	1.625802e-01
## WFDC12	128488	-0.74297480	9.607227e-02	1.626255e-01
## MESTP1	338470	0.66503098	9.612720e-02	1.627072e-01
## PTCHD1-AS	100873065	-0.56508203	9.622230e-02	1.628568e-01
## CPLANE2	79363	-0.08679875	9.623013e-02	1.628587e-01
## BTN2A1	11120	-0.06811411	9.631531e-02	1.629915e-01

## IPMK	253430	0.09512584	9.632362e-02	1.629942e-01
## PNPT1P1	100288506	0.72354882	9.640125e-02	1.631142e-01
## KCNK12	56660	-0.43683243	9.640799e-02	1.631143e-01
## PPP1R2B	153743	-0.32955047	9.643031e-02	1.631407e-01
## JTB	10899	0.11384638	9.645268e-02	1.631593e-01
## UGT3A1	133688	0.18514687	9.645473e-02	1.631593e-01
## CMTM8	152189	-0.09824813	9.659316e-02	1.633821e-01
## IFT74	80173	-0.08718190	9.660457e-02	1.633900e-01
## EHD3	30845	-0.15828016	9.669200e-02	1.635265e-01
## PPIA	5478	-0.08273151	9.671039e-02	1.635462e-01
## HMGB2	3148	-0.08154545	9.673018e-02	1.635683e-01
## ZNF558	148156	0.08709236	9.677855e-02	1.636387e-01
## SNX30	401548	-0.13332433	9.685316e-02	1.637535e-01
## PDPK2P	653650	-0.61486225	9.686022e-02	1.637540e-01
## SMIM15-AS1	101928630	0.31305069	9.706120e-02	1.640824e-01
## MBD5	55777	0.05989974	9.709161e-02	1.641224e-01
## APOBEC4	403314	1.22034260	9.712765e-02	1.641719e-01
## TAS2R13	50838	0.74259473	9.715461e-02	1.642060e-01
## MRPL10	124995	0.07405408	9.718795e-02	1.642509e-01
## DKC1	1736	0.03911138	9.721056e-02	1.642777e-01
## SLC23A2	9962	-0.10259064	9.722479e-02	1.642806e-01
## JMJD8	339123	-0.09600334	9.722575e-02	1.642806e-01
## CES1P1	51716	-0.60767081	9.731468e-02	1.644194e-01
## C5orf64	<NA>	-0.29711589	9.738196e-02	1.645216e-01
## GPR157	80045	-0.11817386	9.739837e-02	1.645379e-01
## RAB6D	150786	0.27408044	9.741715e-02	1.645468e-01
## RNU6ATAC24P	106479554	0.48992400	9.741569e-02	1.645468e-01
## PNOC	5368	0.42489052	9.748015e-02	1.646417e-01
## SMIM10	644538	0.14723897	9.754078e-02	1.647312e-01
## LINC03015	102723672	-0.09708605	9.754669e-02	1.647312e-01
## ZNF528	84436	0.11563862	9.761827e-02	1.648406e-01
## PLPPR5	163404	-0.29816414	9.785082e-02	1.652218e-01
## RBMX	27316	-0.04546414	9.787128e-02	1.652449e-01
## LINC02452	105369924	-0.45072604	9.788400e-02	1.652549e-01
## PUS1	80324	-0.06168203	9.791990e-02	1.653040e-01
##AADACL4	343066	0.23762905	9.795095e-02	1.653450e-01
## LINC02167	400533	1.23882525	9.797075e-02	1.653669e-01
## HMX2	3167	0.26262676	9.803974e-02	1.654719e-01
## RBMS1P1	5938	0.35246192	9.805491e-02	1.654860e-01
## SPACDR	402573	0.34781789	9.809067e-02	1.655348e-01
## ATP6V1G3	127124	0.23317937	9.816667e-02	1.656516e-01
## C7orf50	84310	0.13189422	9.817784e-02	1.656589e-01
## ALOX12	239	0.40329987	9.818740e-02	1.656635e-01
## MED8	112950	0.07346405	9.826064e-02	1.657756e-01
## CFAP47	286464	0.21873355	9.827978e-02	1.657964e-01
## MEMO1	51072	0.10922947	9.833051e-02	1.658705e-01
## TATDN2	9797	0.04346041	9.835994e-02	1.659056e-01
## FAM238A	645528	0.71475766	9.836500e-02	1.659056e-01
## PRR29-AS1	400612	0.53234017	9.838175e-02	1.659223e-01
## ADAMTSL2	9719	-0.18895159	9.846331e-02	1.660484e-01
## LINC02475	100506827	-0.90701156	9.852430e-02	1.661397e-01
## ASB7	140460	-0.05001044	9.859771e-02	1.662519e-01
## SRRM1	10250	-0.06499374	9.864414e-02	1.663187e-01
## LINC00534	100874052	0.38144664	9.870438e-02	1.664087e-01

## DLX1	1745	0.47696519	9.874091e-02	1.664561e-01
## DND1	373863	0.25715381	9.874616e-02	1.664561e-01
## IRX4	50805	0.82859734	9.885804e-02	1.666331e-01
## BMP8B	656	-0.18918009	9.886832e-02	1.666389e-01
## CFAP418-AS1	100616530	0.17798138	9.890375e-02	1.666870e-01
## PDXK	8566	-0.10489102	9.892343e-02	1.667086e-01
## LRSAM1	90678	-0.07470716	9.897996e-02	1.667923e-01
## BRMS1L	84312	-0.05663778	9.902163e-02	1.668510e-01
## LINC02893	440173	-0.14609875	9.903446e-02	1.668610e-01
## HAO2-IT1	100874270	0.38976422	9.905141e-02	1.668780e-01
## PPP1R21-DT	118568827	0.19038383	9.911134e-02	1.669674e-01
## RRP1	8568	0.06795250	9.919894e-02	1.671021e-01
## HSP90AB2P	391634	0.44464905	9.920504e-02	1.671021e-01
## MRPS22	56945	-0.07506488	9.924182e-02	1.671525e-01
## STIM1	6786	0.10417492	9.933296e-02	1.672944e-01
## C20orf144	128864	-0.31077416	9.936393e-02	1.673299e-01
## RPL5P18	389428	0.61785825	9.936781e-02	1.673299e-01
## ARHGAP27P2	440461	-0.56599788	9.946575e-02	1.674832e-01
## OVOL2	58495	-0.14225647	9.960424e-02	1.677047e-01
## IGKV1-16	28938	0.51510891	9.965517e-02	1.677789e-01
## RAB17	64284	-0.13232448	9.967056e-02	1.677932e-01
## UNC93B1	81622	0.14176363	9.970749e-02	1.678321e-01
## RN7SL172P	106480967	0.56206840	9.970150e-02	1.678321e-01
## ACP1	52	-0.07376882	9.973348e-02	1.678642e-01
## PPP1R37	284352	0.09196533	9.974516e-02	1.678722e-01
## ASS1P5	450	0.58647997	9.976723e-02	1.678897e-01
## NCAL1	128193293	0.40847391	9.976936e-02	1.678897e-01
## ABCA17P	650655	-0.21439148	9.978873e-02	1.679107e-01
## TAF13	6884	-0.07775974	9.981190e-02	1.679380e-01
## TMEM252	169693	-0.22574054	9.983375e-02	1.679632e-01
## RPS6KL1	83694	0.14054316	9.985682e-02	1.679903e-01
## WDR5B-DT	102723582	0.12994656	1.000114e-01	1.682387e-01
## KRT36	8689	1.09551348	1.002035e-01	1.685503e-01
## UOX	391051	0.68328116	1.002186e-01	1.685640e-01
## MROH3P	647215	-0.37794781	1.003680e-01	1.688036e-01
## TRABD	80305	-0.11941853	1.004047e-01	1.688419e-01
## LINC02228	105374694	0.75366767	1.003997e-01	1.688419e-01
## FOXK2	3607	0.04857481	1.004849e-01	1.689651e-01
## SREK1	140890	-0.11726754	1.005197e-01	1.690120e-01
## FSTL3	10272	0.16201421	1.005381e-01	1.690312e-01
## SRGAP2D	100996712	0.33490063	1.006571e-01	1.692196e-01
## ALG9	79796	-0.05650593	1.007600e-01	1.693809e-01
## ATG16L1	55054	-0.05206843	1.008373e-01	1.694990e-01
## CDH2	1000	-0.12841464	1.009513e-01	1.696788e-01
## FBLIM1	54751	0.17549233	1.010508e-01	1.698330e-01
## EVA1CP5	122149298	-0.34579046	1.010570e-01	1.698330e-01
## DBIL5P2	100169989	0.58296754	1.010913e-01	1.698789e-01
## MAL2-AS1	105375726	-0.61240267	1.011027e-01	1.698863e-01
## LINC01882	100996324	0.34664002	1.011131e-01	1.698921e-01
## PAICSP4	780813	-0.41283336	1.013011e-01	1.701961e-01
## NDUFA7	4701	0.19161996	1.013777e-01	1.703131e-01
## NR5A2	2494	0.25979187	1.013965e-01	1.703329e-01
## NAP1L1P3	100130335	0.54453332	1.014043e-01	1.703342e-01
## SRGAP2	23380	0.09487013	1.014511e-01	1.704011e-01

## ZFYVE21	79038	0.05951646	1.014671e-01	1.704162e-01
## R3HCC1	203069	0.07892310	1.014797e-01	1.704256e-01
## DNAJB13	374407	0.25431932	1.015008e-01	1.704492e-01
## ANKRD30A	91074	-0.52763477	1.015663e-01	1.705474e-01
## CHMP1B-AS1	109729129	-0.64695967	1.016240e-01	1.706326e-01
## ALG14	199857	0.10219361	1.017652e-01	1.708578e-01
## RIPOR1	79567	-0.07622386	1.017919e-01	1.708909e-01
## ANKH1-DT	121232368	-0.14129344	1.018001e-01	1.708929e-01
## TBC1D22A-DT	119863861	-0.15054910	1.018734e-01	1.710040e-01
## ARPC1B	10095	0.20447517	1.018967e-01	1.710195e-01
## ANKRD20A17P	100421363	0.65551543	1.018963e-01	1.710195e-01
## CDK10	8558	0.09217698	1.019053e-01	1.710222e-01
## LOXL4	84171	0.17501618	1.019948e-01	1.711605e-01
## SULT1C2P2	106480333	-0.44448680	1.020541e-01	1.712481e-01
## PDE6G	5148	-0.19673919	1.021049e-01	1.713216e-01
## LINC02888	102659288	-1.03820548	1.021246e-01	1.713429e-01
## PLA2G4D	283748	0.80737293	1.021361e-01	1.713503e-01
## RHBDD3	25807	0.11337165	1.021441e-01	1.713519e-01
## HULC	728655	0.11088710	1.021525e-01	1.713541e-01
## NDUFA5P11	102724866	-0.35628001	1.021896e-01	1.714045e-01
## MZF1-AS1	100131691	-0.10088396	1.021987e-01	1.714080e-01
## ZNF223	7766	0.11433960	1.022259e-01	1.714418e-01
## PPM1G	5496	-0.05908304	1.023130e-01	1.715760e-01
## ARSH	347527	-0.77667384	1.023222e-01	1.715795e-01
## BACE1-AS	100379571	0.08551336	1.023530e-01	1.716195e-01
## MIR659	724029	-0.29336530	1.024075e-01	1.716990e-01
## LACTB2-AS1	286190	-0.33627168	1.024162e-01	1.717017e-01
## RPL41P5	6172	0.31820300	1.024353e-01	1.717219e-01
## PDCD2	5134	0.06376856	1.024717e-01	1.717592e-01
## DNAJC17	55192	0.05564966	1.024697e-01	1.717592e-01
## DGUOK	1716	0.08821354	1.025178e-01	1.718246e-01
## AGAP6	414189	0.29351485	1.025802e-01	1.719174e-01
## RAB2B	84932	-0.06848780	1.026603e-01	1.720397e-01
## KCNK9	51305	-0.31069935	1.026854e-01	1.720698e-01
## BTD	686	0.10383489	1.027293e-01	1.721316e-01
## LINC00886	730091	0.13563483	1.028302e-01	1.722888e-01
## ZFP92	139735	0.15133391	1.028411e-01	1.722952e-01
## LINC02447	730971	0.16739523	1.028661e-01	1.723252e-01
## SCMH1-DT	102723924	0.35540681	1.028921e-01	1.723568e-01
## SSUH2	51066	-0.17309884	1.029104e-01	1.723748e-01
## CCDC102A	92922	0.13361639	1.029170e-01	1.723748e-01
## PLEKHM1P1	440456	0.17376600	1.030657e-01	1.726119e-01
## PPP1R14BP2	729406	-0.53776863	1.031619e-01	1.727565e-01
## ITGA6-AS1	101929947	-0.29415017	1.031662e-01	1.727565e-01
## DNAAF6	139212	0.56660542	1.033339e-01	1.730253e-01
## GAS5-AS1	100506046	-0.10841028	1.035215e-01	1.733275e-01
## NDOR1	27158	-0.10091566	1.035290e-01	1.733281e-01
## ACSF2	80221	0.19257109	1.036433e-01	1.735075e-01
## RNF207	388591	-0.22392096	1.037208e-01	1.736014e-01
## C12orf56	115749	-0.14963022	1.037126e-01	1.736014e-01
## INSYN1	388135	-0.13112680	1.037148e-01	1.736014e-01
## KIRREL1	55243	0.11939202	1.038132e-01	1.737441e-01
## IFT43	112752	0.09410101	1.038521e-01	1.737972e-01
## OVAAL	148756	1.40261341	1.039141e-01	1.738890e-01

## ELMOD2	255520	-0.06877633	1.039522e-01	1.739409e-01
## LINC01517	101929218	0.22789707	1.040076e-01	1.740215e-01
## TRAPPC10	7109	-0.06930668	1.040828e-01	1.741354e-01
## HMGN5	79366	-0.12509453	1.041165e-01	1.741798e-01
## ASIP	434	-0.29457535	1.041691e-01	1.742557e-01
## UBXN7	26043	0.08562581	1.042021e-01	1.742990e-01
## IFITM10	402778	-0.21596575	1.042183e-01	1.743140e-01
## MRPS12	6183	-0.13481684	1.042517e-01	1.743486e-01
## KTI12	112970	0.08720424	1.042533e-01	1.743486e-01
## GNAZ	2781	-0.11805791	1.042926e-01	1.744023e-01
## ABCA13	154664	-0.40173735	1.043782e-01	1.745334e-01
## CCT6B	10693	-0.13424407	1.044122e-01	1.745663e-01
## KCTD13-DT	107984836	0.17591989	1.044080e-01	1.745663e-01
## SPAG7	9552	-0.07803004	1.044277e-01	1.745801e-01
## PSME4	23198	0.06563323	1.044507e-01	1.746067e-01
## ACSL4	2182	-0.12078418	1.044885e-01	1.746579e-01
## CBR1	873	-0.08275235	1.045039e-01	1.746715e-01
## KIF3A	11127	-0.10711184	1.046334e-01	1.748759e-01
## VWDE	221806	-0.29381821	1.048120e-01	1.751503e-01
## BAG6	7917	-0.06987564	1.048109e-01	1.751503e-01
## UCN2	90226	0.45741251	1.050191e-01	1.754844e-01
## AGBL5	60509	0.08102434	1.050407e-01	1.755084e-01
## ZFP57	346171	0.37672964	1.051070e-01	1.756071e-01
## FBXO7	25793	0.07907509	1.052220e-01	1.757871e-01
## CEACAM6	4680	0.75196461	1.052340e-01	1.757951e-01
## LINC01283	107985711	1.30077960	1.053848e-01	1.760348e-01
## CCK	885	0.67321627	1.054075e-01	1.760607e-01
## PSAT1	29968	0.20388075	1.054986e-01	1.762008e-01
## POLR3E	55718	0.04696012	1.055995e-01	1.763450e-01
## SNX14	57231	-0.06480975	1.055949e-01	1.763450e-01
## MIR6863	102466752	-0.53347545	1.056265e-01	1.763781e-01
## H3C6	8353	0.18954498	1.056920e-01	1.764753e-01
## LIMASI	105372272	-0.38040168	1.057071e-01	1.764883e-01
## BAALC	79870	0.13737917	1.057469e-01	1.765426e-01
## THAP7	80764	0.10159279	1.058760e-01	1.767461e-01
## CGA	1081	-0.36630553	1.059586e-01	1.768718e-01
## KCTD15	79047	0.13203435	1.060020e-01	1.769321e-01
## SNORD93	692210	0.74890704	1.060660e-01	1.770146e-01
## FAM151AP1	285303	-0.47748366	1.060617e-01	1.770146e-01
## NPTXR	23467	-0.17752369	1.061208e-01	1.770940e-01
## CHMP6	79643	0.09906614	1.061537e-01	1.771249e-01
## KCNH7	90134	0.36335190	1.061539e-01	1.771249e-01
## CTRB2	440387	1.04778628	1.061912e-01	1.771748e-01
## H3C10	8357	0.28209677	1.063251e-01	1.773862e-01
## MYL9	10398	0.18463359	1.063396e-01	1.773981e-01
## NSUN2	54888	-0.03872941	1.066988e-01	1.779797e-01
## ABHD17A	81926	0.18990262	1.067028e-01	1.779797e-01
## ABHD6	57406	0.13343055	1.067768e-01	1.780908e-01
## CHP2	63928	0.31530762	1.067920e-01	1.781039e-01
## GFM2	84340	-0.06948000	1.068114e-01	1.781241e-01
## ZFPM1-AS1	100128882	0.42629920	1.068189e-01	1.781243e-01
## GAS8	2622	-0.07638598	1.068514e-01	1.781663e-01
## LINC01168	399829	-0.58905013	1.068706e-01	1.781861e-01
## LCNL1	401562	0.36464455	1.068938e-01	1.782126e-01

## RNU4-1	26835	0.71709617	1.069198e-01	1.782315e-01
## HERC2P2	400322	0.26997059	1.069160e-01	1.782315e-01
## SLIT3-AS2	101927969	0.66350901	1.069897e-01	1.783357e-01
## YARS1	8565	0.06607752	1.070217e-01	1.783769e-01
## SCRN2	90507	0.15623330	1.071043e-01	1.785023e-01
## LINC03079	128193294	0.61120446	1.071192e-01	1.785149e-01
## RPL7P32	100130892	-0.61624333	1.071292e-01	1.785193e-01
## C16orf95-DT	101928659	0.24881936	1.072368e-01	1.786864e-01
## PLEC	5339	0.16872643	1.073297e-01	1.788204e-01
## SRGAP3	9901	-0.11943833	1.073320e-01	1.788204e-01
## FGF14-IT1	283480	-0.44158439	1.073426e-01	1.788259e-01
## RRM1	6240	0.05336543	1.073788e-01	1.788740e-01
## BOP1	23246	0.13167499	1.074315e-01	1.789494e-01
## ALLC	55821	0.31909822	1.074734e-01	1.790069e-01
## KIAA0319	9856	0.25246888	1.075137e-01	1.790618e-01
## CDC40	51362	-0.05460593	1.075894e-01	1.791755e-01
## TTC3P1	286495	0.12472178	1.076476e-01	1.792603e-01
## NRG1	3084	0.13564779	1.076882e-01	1.793156e-01
## C8orf33	65265	0.04106904	1.077100e-01	1.793395e-01
## USP38-DT	105377623	0.13695730	1.077338e-01	1.793669e-01
## KLHDC2	23588	0.07977487	1.077571e-01	1.793736e-01
## ADO	84890	0.03708961	1.077600e-01	1.793736e-01
## MRGPRX2	117194	1.13582082	1.077492e-01	1.793736e-01
## ACADVL	37	-0.07830731	1.077706e-01	1.793789e-01
## ADAM21P1	145241	-0.45076295	1.081203e-01	1.799487e-01
## RPS2P7	86781	0.51242441	1.081547e-01	1.799937e-01
## PRELID2	153768	0.11569086	1.081741e-01	1.800136e-01
## PKP2	5318	-0.11866554	1.082691e-01	1.801594e-01
## SRP72	6731	0.04429851	1.083429e-01	1.802699e-01
## OPA1	4976	-0.06871692	1.084043e-01	1.803596e-01
## SNED1-AS1	105373970	-0.44513192	1.084182e-01	1.803705e-01
## ANKRD36BP2	645784	0.39739740	1.085215e-01	1.805299e-01
## CROCC2	728763	0.48691420	1.085398e-01	1.805481e-01
## PGM5P2	595135	0.26018434	1.085698e-01	1.805855e-01
## CCDC110	256309	-0.13917167	1.086951e-01	1.807816e-01
## DUSP5P1	574029	0.68254422	1.087240e-01	1.808173e-01
## SLC2A14	144195	0.41703528	1.087328e-01	1.808185e-01
## RPL34P10	100271004	0.47385406	1.087471e-01	1.808185e-01
## IGKV1-12	28940	0.59699125	1.087405e-01	1.808185e-01
## TAS2R4	50832	0.24422669	1.087568e-01	1.808223e-01
## FAM224B	401629	0.74182085	1.087880e-01	1.808494e-01
## CDR2-DT	440346	-0.51086029	1.087876e-01	1.808494e-01
## OR2T6	254879	-0.64635954	1.088549e-01	1.809482e-01
## SNHG11	128439	0.08443394	1.089581e-01	1.811075e-01
## SPANXB1	728695	0.62450454	1.089734e-01	1.811205e-01
## YWHAZP10	158781	0.59245516	1.089833e-01	1.811246e-01
## EIF5AP2	1986	0.30870276	1.090266e-01	1.811841e-01
## PSME2	5721	0.10672660	1.091904e-01	1.814440e-01
## TMEM74	157753	0.20445981	1.093272e-01	1.816589e-01
## KDM6A	7403	-0.08857511	1.093520e-01	1.816877e-01
## PSMD1	5707	0.06116446	1.093774e-01	1.817173e-01
## WDR45	11152	-0.08495558	1.094142e-01	1.817661e-01
## KRT73	319101	-0.58249257	1.094906e-01	1.818806e-01
## GPRC5D	55507	-0.46081781	1.095171e-01	1.819122e-01

## ANKRD36B	57730	0.21104297	1.095295e-01	1.819204e-01
## ZNF746	155061	0.05754719	1.095633e-01	1.819640e-01
## SMARCE1	6605	-0.06743258	1.096024e-01	1.820166e-01
## ZNF608	57507	0.11386674	1.096434e-01	1.820689e-01
## PTMAP10	442727	0.51307815	1.096489e-01	1.820689e-01
## ZNF473CR	400710	-0.22536320	1.097046e-01	1.821489e-01
## TBC1D31	93594	0.06531627	1.097628e-01	1.822206e-01
## PTCHD3P2	100533664	0.42668641	1.097583e-01	1.822206e-01
## NEDD8	4738	0.10858959	1.097820e-01	1.822401e-01
## ENDOU	8909	-0.22752025	1.098398e-01	1.822987e-01
## CCNYL1	151195	0.05650576	1.098281e-01	1.822987e-01
## LINC00671	388387	0.23387868	1.098357e-01	1.822987e-01
## NHLRC4	283948	0.14739281	1.098618e-01	1.823228e-01
## PRORP	9692	0.08378880	1.099366e-01	1.824344e-01
## CASC3	22794	-0.05224983	1.099900e-01	1.825106e-01
## FIGNL2-DT	105369971	-0.25475455	1.101002e-01	1.826810e-01
## CRAT	1384	0.11027480	1.101702e-01	1.827847e-01
## MICOS10	440574	-0.10413931	1.102321e-01	1.828748e-01
## CDC37	11140	0.06556616	1.102941e-01	1.829652e-01
## TUBB4A	10382	-0.17726025	1.103321e-01	1.830158e-01
## MRPL43	84545	0.09862233	1.104762e-01	1.832423e-01
## SLC26A8	116369	-0.31019977	1.105456e-01	1.833449e-01
## LINC02038	105374285	0.15044702	1.106232e-01	1.834611e-01
## CPLANE1	65250	0.12402256	1.106656e-01	1.835188e-01
## PCDHA2	56146	-0.30849226	1.106783e-01	1.835274e-01
## LINC01587	10141	0.38393440	1.107819e-01	1.836865e-01
## ZNF692	55657	0.17313531	1.107947e-01	1.836952e-01
## RPS6KB2-AS1	111216279	0.57271464	1.109789e-01	1.839881e-01
## LINC01547	84536	-0.08134519	1.109999e-01	1.840105e-01
## SNTA1	6640	0.14648648	1.110483e-01	1.840781e-01
## CCDC140	151278	1.55340419	1.110595e-01	1.840842e-01
## SLC22A14	9389	-0.26871120	1.110883e-01	1.841193e-01
## RASAL2	9462	0.10117060	1.111407e-01	1.841864e-01
## BTBD8	284697	0.10278036	1.111439e-01	1.841864e-01
## MRPS34	65993	0.12423554	1.111625e-01	1.841920e-01
## PET100P1	100287402	0.25520529	1.111568e-01	1.841920e-01
## TPD52L1	7164	0.09426151	1.111996e-01	1.842409e-01
## NXT2	55916	-0.06557990	1.112282e-01	1.842757e-01
## TMEM218	219854	0.07237883	1.112492e-01	1.842980e-01
## SRF	6722	0.08393907	1.114056e-01	1.845445e-01
## PHF13	148479	0.06863273	1.116130e-01	1.848755e-01
## PTRHD1	391356	0.13739730	1.116284e-01	1.848757e-01
## MCCD1P2	100048924	0.59690995	1.116208e-01	1.848757e-01
## SEPTIN5	5413	0.39972784	1.116491e-01	1.848893e-01
## TRBV10-1	28585	1.38634435	1.116518e-01	1.848893e-01
## GALNT15	117248	0.23437475	1.116844e-01	1.849307e-01
## PHKG2	5261	0.07983413	1.116933e-01	1.849329e-01
## HPS1-AS1	101927278	0.17950562	1.117482e-01	1.850111e-01
## ZNF397	84307	0.10495620	1.118568e-01	1.851783e-01
## FNIP2	57600	-0.11600285	1.119375e-01	1.852993e-01
## HSD17B11	51170	0.10899889	1.119786e-01	1.853547e-01
## NPIPBA4	440345	0.15595232	1.119905e-01	1.853617e-01
## C3	718	0.34666623	1.120205e-01	1.853988e-01
## RPL13P8	100270928	0.33121615	1.121739e-01	1.856400e-01

## RTL8C	8933	0.12512691	1.121856e-01	1.856467e-01
## SULT4A1	25830	0.28448990	1.122125e-01	1.856787e-01
## FBXO11	80204	-0.04912120	1.123318e-01	1.858633e-01
## JCHAIN	3512	0.34936069	1.124487e-01	1.860378e-01
## NT5DC1	221294	-0.07658048	1.124526e-01	1.860378e-01
## NIPAL4-DT	102724404	0.90484140	1.125521e-01	1.861899e-01
## CPSF3	51692	-0.04469485	1.125656e-01	1.861995e-01
## TMEM50A	23585	-0.05950224	1.126093e-01	1.862540e-01
## FTH1P15	2507	0.72974366	1.126215e-01	1.862540e-01
## RPS20P33	100271564	0.33612523	1.126157e-01	1.862540e-01
## UBE2H	7328	0.04693279	1.126448e-01	1.862672e-01
## MIR3681HG	100506457	-0.25331306	1.126405e-01	1.862672e-01
## PSD2	84249	0.22783628	1.126529e-01	1.862677e-01
## ZNF845	91664	0.07082287	1.126628e-01	1.862715e-01
## LINC01470	101927134	-0.35080076	1.127144e-01	1.863442e-01
## NECTIN1	5818	-0.10100109	1.127449e-01	1.863819e-01
## DDA1	79016	-0.06036555	1.127798e-01	1.864269e-01
## SDHC	6391	-0.07969090	1.128173e-01	1.864762e-01
## TCAIM	285343	-0.06577528	1.128279e-01	1.864811e-01
## CARD10	29775	-0.10331852	1.128589e-01	1.865196e-01
## MED13	9969	-0.08153291	1.128820e-01	1.865451e-01
## RNPC3-DT	101928436	-0.32589756	1.131496e-01	1.869677e-01
## DLG5-AS1	100128292	-0.14335468	1.131531e-01	1.869677e-01
## RPS18P12	388339	0.25285203	1.132447e-01	1.870937e-01
## LINC02703	102724165	0.62857352	1.132399e-01	1.870937e-01
## PELI3	246330	0.09695497	1.133005e-01	1.871730e-01
## PCDHGA11	56105	0.15779241	1.133322e-01	1.872127e-01
## NAIF1	203245	-0.05555799	1.134135e-01	1.873215e-01
## MTND4P14	100653489	0.61635655	1.134117e-01	1.873215e-01
## FTH1P23	100420300	0.37173965	1.134585e-01	1.873831e-01
## PPIAP4	122552	-0.24759761	1.134815e-01	1.874084e-01
## A3GALT2	127550	-0.48570591	1.135070e-01	1.874377e-01
## TRAF3IP2	10758	0.07326751	1.135446e-01	1.874782e-01
## OR2I1P	442197	0.26970475	1.135469e-01	1.874782e-01
## EAF1-AS1	100873956	0.34109790	1.136069e-01	1.875645e-01
## LINC02422	105369723	0.23752137	1.136260e-01	1.875832e-01
## IGFL1	374918	-0.66167759	1.136930e-01	1.876812e-01
## RPL7P18	100270852	0.80687817	1.137268e-01	1.877241e-01
## FAM3D-AS1	105377108	0.22968867	1.138029e-01	1.878370e-01
## IFT22	64792	0.08790311	1.139447e-01	1.880583e-01
## SLC8A2	6543	0.41988600	1.139638e-01	1.880643e-01
## LINC00882	100302640	-0.19091637	1.139583e-01	1.880643e-01
## ADRA1D	146	0.30485926	1.140153e-01	1.881365e-01
## LINC02471	105369734	-0.24714674	1.140546e-01	1.881886e-01
## MYO1C	4641	-0.10618635	1.140685e-01	1.881988e-01
## TMEM234	56063	-0.08151403	1.140890e-01	1.882198e-01
## ACOT4	122970	-0.15080239	1.141868e-01	1.883682e-01
## LINC01539	100505474	0.35188535	1.142109e-01	1.883953e-01
## G6PD	2539	-0.11630895	1.142877e-01	1.885091e-01
## EMC3	55831	-0.06286513	1.143026e-01	1.885104e-01
## RUSC1	23623	0.07792473	1.143039e-01	1.885104e-01
## PSMC3	5702	0.07491087	1.143367e-01	1.885517e-01
## TRDMT1	1787	-0.06945774	1.143511e-01	1.885625e-01
## FER	2241	0.09598322	1.143589e-01	1.885626e-01

## EPHA2-AS1	101927479	-0.24586394	1.143978e-01	1.886139e-01
## SNORD15B	114599	0.57795665	1.144926e-01	1.887574e-01
## GAS8-AS1	750	-0.64050069	1.145929e-01	1.889100e-01
## ADGB	79747	0.49517864	1.146742e-01	1.890311e-01
## ABHD12B	145447	-0.23869957	1.147497e-01	1.891429e-01
## TRIM8	81603	-0.07596846	1.147679e-01	1.891601e-01
## AK4P3	645619	0.84020727	1.149049e-01	1.893730e-01
## ZNF789	285989	0.11266697	1.150276e-01	1.895623e-01
## BAD	572	0.13978354	1.150637e-01	1.896089e-01
## ROGDI	79641	0.11022373	1.151324e-01	1.896964e-01
## NORAD	647979	0.06280111	1.151280e-01	1.896964e-01
## ZNF682	91120	0.12646669	1.151487e-01	1.897104e-01
## MCM4	4173	-0.06781230	1.152405e-01	1.898489e-01
## PCDH8	5100	1.06054025	1.152621e-01	1.898714e-01
## PA2G4	5036	-0.05017698	1.153066e-01	1.899320e-01
## ANKRD6	22881	-0.07825341	1.154287e-01	1.900945e-01
## PADI1	29943	0.47906536	1.154230e-01	1.900945e-01
## CPB2-AS1	100509894	-0.18331924	1.154146e-01	1.900945e-01
## PPP2R2C	5522	0.28288171	1.155128e-01	1.902071e-01
## FBXO24	26261	0.15618947	1.155070e-01	1.902071e-01
## LINC02814	112267873	0.30498995	1.155679e-01	1.902849e-01
## RAD18	56852	0.05492508	1.156743e-01	1.904440e-01
## LINC01346	728716	0.52512498	1.156802e-01	1.904440e-01
## BRWD3	254065	0.11974221	1.157069e-01	1.904751e-01
## EFHD2-AS1	101927441	0.36858786	1.157980e-01	1.906121e-01
## UBXN8	7993	0.07479317	1.158155e-01	1.906280e-01
## KRTCAP2	200185	0.19352445	1.159576e-01	1.908490e-01
## PPP1R9A-AS1	105375405	0.50007135	1.159848e-01	1.908809e-01
## CCNY-AS1	118732302	-0.14244671	1.160258e-01	1.909354e-01
## HSD11B1L	374875	0.11347333	1.160568e-01	1.909735e-01
## UFL1-AS1	100861530	-0.28012739	1.160677e-01	1.909784e-01
## FUT8	2530	0.09109079	1.161289e-01	1.910662e-01
## METTL3	56339	0.06709487	1.162205e-01	1.912040e-01
## PHF20L1	51105	0.08287475	1.162363e-01	1.912170e-01
## RPL12P47	107075115	0.44724142	1.162795e-01	1.912752e-01
## SRPK1	6732	-0.07138571	1.162939e-01	1.912860e-01
## PSME2P6	338098	0.59362766	1.163664e-01	1.913792e-01
## HSFX2	100130086	0.59253179	1.163657e-01	1.913792e-01
## LINC00460	728192	1.05003811	1.164776e-01	1.915493e-01
## FDX1	2230	-0.09362803	1.165030e-01	1.915650e-01
## PPIAP46	729739	0.90554963	1.165025e-01	1.915650e-01
## GALNT7	51809	0.09793560	1.166054e-01	1.917205e-01
## ST8SIA6-AS1	100128098	-0.43742424	1.166370e-01	1.917466e-01
## ERLNC1	101929441	-0.61943159	1.166396e-01	1.917466e-01
## RAD1P2	100129690	0.76672992	1.166450e-01	1.917466e-01
## DOT1L	84444	-0.12566208	1.167443e-01	1.918242e-01
## QDPR	5860	0.15381324	1.167130e-01	1.918242e-01
## ZNF75A	7627	-0.08399711	1.167376e-01	1.918242e-01
## UGT3A2	167127	-0.23091753	1.167067e-01	1.918242e-01
## SYCE3	644186	-0.26068181	1.167475e-01	1.918242e-01
## ANAPC1P1	100286979	0.39285710	1.167355e-01	1.918242e-01
## IGSF3P1	122965330	-0.34788058	1.167330e-01	1.918242e-01
## LINC02235	109729147	0.28110293	1.167739e-01	1.918547e-01
## LONRF2	164832	-0.12890576	1.168132e-01	1.919063e-01

## ZNF529	57711	0.07133350	1.168720e-01	1.919899e-01
## MIR3936HG	553103	-0.17022982	1.169045e-01	1.920303e-01
## MX1-AS1	130890644	0.45877128	1.169381e-01	1.920726e-01
## MPP1	4354	0.07442443	1.169737e-01	1.921180e-01
## PNP	4860	0.12092067	1.170156e-01	1.921738e-01
## TKFC	26007	0.17129356	1.170688e-01	1.922482e-01
## RPAP1	26015	-0.06520908	1.171023e-01	1.922831e-01
## GSK3B-DT	107986119	0.16119700	1.171059e-01	1.922831e-01
## SNORA23	677808	0.52059077	1.171151e-01	1.922853e-01
## WFDC2	10406	-0.25270709	1.171696e-01	1.923618e-01
## RPL17P39	645296	0.15780820	1.171846e-01	1.923734e-01
## CASTOR1	652968	-0.17583358	1.172123e-01	1.924058e-01
## PCDHGA3	56112	-0.15855353	1.173090e-01	1.925516e-01
## VPS13A-AS1	100286938	0.37330636	1.173219e-01	1.925597e-01
## RPL32P9	100270992	0.63472775	1.173506e-01	1.925938e-01
## RXRB	6257	0.03778733	1.173714e-01	1.926150e-01
## TMED2	10959	-0.05650020	1.174762e-01	1.927609e-01
## PCDHAC2	56134	0.16567395	1.174695e-01	1.927609e-01
## LINC02724	100996455	0.34144484	1.175060e-01	1.927967e-01
## ATP5F1D	513	-0.18610760	1.176789e-01	1.930675e-01
## GNAQP1	2777	0.78393210	1.177322e-01	1.931418e-01
## POLR2B	5431	-0.03720650	1.178680e-01	1.933516e-01
## C11orf65	160140	0.11660345	1.180668e-01	1.936646e-01
## LINC02765	105373110	0.34572204	1.181035e-01	1.937118e-01
## LINC02259	102723640	0.34795827	1.181152e-01	1.937178e-01
## GOLGA8N	643699	-0.18589289	1.181266e-01	1.937234e-01
## LINC02700	105369436	0.48014655	1.181547e-01	1.937565e-01
## IRAG2	4033	0.14783506	1.181710e-01	1.937701e-01
## NLRP2	55655	-0.24025723	1.181917e-01	1.937910e-01
## RHOQP1	319093	0.25014282	1.182272e-01	1.938362e-01
## ST7-AS2	93654	0.27365604	1.182535e-01	1.938661e-01
## ZNF267	10308	0.09694734	1.183014e-01	1.939317e-01
## TYSND1	219743	0.07607182	1.183334e-01	1.939710e-01
## RPS10P7	376693	-0.13981794	1.183682e-01	1.940149e-01
## ENPP7P15	121832813	-0.46579304	1.184261e-01	1.940968e-01
## SUMO2P17	100128010	0.24356151	1.184652e-01	1.941477e-01
## FAM72D	728833	0.37569318	1.184989e-01	1.941898e-01
## GCH1	2643	-0.14989321	1.185558e-01	1.942700e-01
## PIGBOS1	101928527	-0.07903731	1.185690e-01	1.942786e-01
## SPATA22	84690	0.42273923	1.186375e-01	1.943777e-01
## SLC25A6	293	-0.11515219	1.186855e-01	1.944301e-01
## GTF2IP20	441124	0.20679603	1.186837e-01	1.944301e-01
## ACVR2B-AS1	100128640	-0.11526450	1.188001e-01	1.946047e-01
## MTATP8P2	106479042	0.20792697	1.188737e-01	1.947122e-01
## ATP5MGP1	53411	0.48673263	1.189202e-01	1.947753e-01
## IKBKB-DT	101929897	0.51221658	1.189720e-01	1.948469e-01
## RPSAP9	653162	0.14962053	1.190679e-01	1.949908e-01
## RHOT1	55288	-0.03654985	1.190968e-01	1.950119e-01
## SURF6	6838	0.05207911	1.190918e-01	1.950119e-01
## ZNF732	654254	0.40478708	1.191578e-01	1.950986e-01
## USH1G	124590	-0.28468587	1.191725e-01	1.951096e-01
## MYO1H	283446	-0.28566130	1.192382e-01	1.952039e-01
## LAMC3	10319	-0.22400361	1.192878e-01	1.952698e-01
## GPAA1P2	106481722	-0.32406580	1.192945e-01	1.952698e-01

## UBE2R2	54926	0.05476208	1.193274e-01	1.953105e-01
## SNHG15	285958	0.09499798	1.193785e-01	1.953810e-01
## ANKRD26	22852	0.13710588	1.194477e-01	1.954810e-01
## CCT6A	908	-0.05022924	1.195027e-01	1.955579e-01
## SAP30BP	29115	0.04243835	1.195290e-01	1.955808e-01
## IL10RB	3588	-0.12395701	1.195328e-01	1.955808e-01
## LINC01193	348120	-0.57059084	1.195594e-01	1.956111e-01
## RN7SL558P	106481074	0.76620304	1.195810e-01	1.956333e-01
## TAF1D	79101	0.10205788	1.196180e-01	1.956807e-01
## SUN1	23353	-0.07652571	1.197143e-01	1.957987e-01
## SSBP3-AS1	619518	-0.29866436	1.197134e-01	1.957987e-01
## PIRAT1	101929559	0.48434219	1.197131e-01	1.957987e-01
## IK	3550	-0.03544688	1.197350e-01	1.958195e-01
## SPATC1L	84221	0.20462095	1.197528e-01	1.958354e-01
## SDF2	6388	-0.06229553	1.197616e-01	1.958365e-01
## LIPC-AS1	101928694	-0.56724924	1.198408e-01	1.959529e-01
## RAB11FIP5	26056	0.08586009	1.199450e-01	1.961101e-01
## AAMP	14	-0.05595092	1.199903e-01	1.961709e-01
## WARS2-AS1	101929147	-0.09918819	1.200101e-01	1.961900e-01
## NCOR2	9612	-0.13583896	1.200910e-01	1.963091e-01
## ECH1	1891	0.10649222	1.201615e-01	1.964111e-01
## CATSPERE	257044	0.13030668	1.202613e-01	1.965610e-01
## SPOUT1	51490	0.32070017	1.203147e-01	1.966351e-01
## TTC1	7265	0.06394296	1.203412e-01	1.966652e-01
## SERP1	27230	-0.05580533	1.204504e-01	1.968039e-01
## SERPINE2	5270	0.11938585	1.204397e-01	1.968039e-01
## BTF3L4P2	653189	-0.34125287	1.204494e-01	1.968039e-01
## USE1	55850	0.10130422	1.205109e-01	1.968832e-01
## GTF2IP12	101926918	0.14747559	1.205151e-01	1.968832e-01
## SERINC4	619189	0.18584996	1.205501e-01	1.969271e-01
## GUCY1B1	2983	0.08384808	1.205616e-01	1.969326e-01
## IATPR	101929447	0.90630588	1.205803e-01	1.969500e-01
## TMEM185B	79134	-0.05967961	1.206546e-01	1.970580e-01
## KCNH2	3757	0.16962573	1.206961e-01	1.971119e-01
## NKILA	105416157	0.13042312	1.207038e-01	1.971119e-01
## KPRP	448834	1.09259364	1.207366e-01	1.971523e-01
## RPL17P38	100271417	0.44895629	1.207460e-01	1.971543e-01
## GPR143	4935	-0.13909349	1.208595e-01	1.973264e-01
## ELL3	80237	0.33891351	1.208708e-01	1.973316e-01
## TIPIN	54962	-0.08387663	1.208855e-01	1.973425e-01
## INAFM1	255783	0.18030738	1.208954e-01	1.973453e-01
## TXNL4A	10907	0.09632554	1.209613e-01	1.974262e-01
## MSH5	4439	-0.25255565	1.209584e-01	1.974262e-01
## CCDC59	29080	0.08404291	1.209792e-01	1.974423e-01
## LSP1P4	654342	0.17347620	1.210434e-01	1.975205e-01
## ELOBP2	253665	0.57566009	1.210397e-01	1.975205e-01
## RNF213	57674	-0.13489502	1.210963e-01	1.975936e-01
## ZBTB26	57684	0.09226941	1.211716e-01	1.977031e-01
## SPTLC2	9517	-0.07900052	1.214061e-01	1.980725e-01
## MIR503HG	84848	0.16758110	1.214577e-01	1.981434e-01
## MRGPRF-AS1	101928200	0.26693193	1.214770e-01	1.981616e-01
## AMH	268	0.33080513	1.215106e-01	1.981898e-01
## S100A8	6279	0.29234574	1.215106e-01	1.981898e-01
## SF3B3	23450	-0.05705988	1.215217e-01	1.981945e-01

## PIAS4	51588	-0.07490043	1.215681e-01	1.982570e-01
## UBTFL6	643615	-0.41686657	1.216240e-01	1.983348e-01
## GPKOW	27238	-0.05478265	1.217457e-01	1.985199e-01
## ATP6V1B2	526	0.10414329	1.218705e-01	1.987101e-01
## NOLC1	9221	0.04342530	1.219161e-01	1.987711e-01
## ARSJ	79642	-0.09276536	1.219562e-01	1.988231e-01
## MYO5A	4644	0.09509959	1.221254e-01	1.990856e-01
## IP6K3	117283	0.24709426	1.221484e-01	1.991097e-01
## MACROH2A2	55506	0.07629788	1.221691e-01	1.991301e-01
## NAA30	122830	-0.05132226	1.222239e-01	1.992061e-01
## RPS4XP6	391777	0.38426120	1.222474e-01	1.992176e-01
## ZNF8-ERVK3-1	108903150	0.20249898	1.222443e-01	1.992176e-01
## LPAR6	10161	0.09839181	1.222974e-01	1.992698e-01
## ARL17B	100506084	0.17995151	1.222962e-01	1.992698e-01
## NKAPP1	158801	0.09128446	1.223040e-01	1.992698e-01
## PAFAH1B1	5048	-0.04286277	1.223194e-01	1.992811e-01
## EIF4BP3	100128771	0.09457992	1.223273e-01	1.992811e-01
## ZNF778-DT	123706547	-0.09697322	1.223589e-01	1.993191e-01
## HHAT	55733	-0.08283415	1.223908e-01	1.993577e-01
## LINC01593	107178918	-0.36224804	1.223992e-01	1.993580e-01
## DECR1	1666	0.08608409	1.224319e-01	1.993980e-01
## ZNF304	57343	0.04409304	1.225334e-01	1.995499e-01
## LINC02933	122965334	0.33840299	1.225605e-01	1.995806e-01
## MNS1	55329	0.15146946	1.225808e-01	1.996005e-01
## LGALS2	3957	0.20195528	1.226079e-01	1.996312e-01
## UBR3	130507	-0.08316173	1.226397e-01	1.996696e-01
## B3GAT2	135152	0.40660026	1.227785e-01	1.998822e-01
## SPRTN	83932	-0.04273557	1.228016e-01	1.999041e-01
## CAP1P2	399748	-0.34998081	1.228084e-01	1.999041e-01
## SCAI	286205	0.11615046	1.228606e-01	1.999756e-01
## SLC4A1	6521	-0.20214706	1.228822e-01	1.999973e-01
## LZTS2	84445	0.08942322	1.229001e-01	2.000036e-01
## CBARP-DT	118827813	0.33215883	1.229025e-01	2.000036e-01
## PSG4	5672	-0.42553735	1.230273e-01	2.001934e-01
## KLF7-IT1	100874272	0.27243965	1.230728e-01	2.002539e-01
## FJX1	24147	0.15528223	1.231062e-01	2.002948e-01
## PPP1R9B	84687	0.11126404	1.231331e-01	2.003252e-01
## OR51B5	282763	0.41579237	1.231665e-01	2.003661e-01
## MYH9	4627	-0.11406609	1.233099e-01	2.005860e-01
## CTNNB1	1499	-0.04851824	1.233653e-01	2.006627e-01
## DIDO1	11083	-0.04992839	1.235348e-01	2.009249e-01
## FMR1-IT1	106478973	-0.31194437	1.236160e-01	2.010436e-01
## PLA2G12AP2	100420281	0.68307254	1.236329e-01	2.010441e-01
## ZFY-AS1	107987337	0.56849218	1.236307e-01	2.010441e-01
## TMEM120B	144404	-0.08274601	1.236795e-01	2.011065e-01
## CCDC152	100129792	0.20583872	1.237731e-01	2.012452e-01
## SMG6	23293	0.05919202	1.238184e-01	2.012919e-01
## MFSD10	10227	-0.15228524	1.238106e-01	2.012919e-01
## KLHL25	64410	0.07727909	1.238555e-01	2.013253e-01
## GIHCG	100506844	0.10117126	1.238553e-01	2.013253e-01
## LINC01772	107984921	0.19205249	1.238696e-01	2.013347e-01
## SNORA71B	26776	0.24388649	1.239647e-01	2.014758e-01
## TAF10	6881	-0.10906788	1.240370e-01	2.015799e-01
## FMO4	2329	0.19039534	1.243088e-01	2.020080e-01

## PCDHB13	56123	-0.11431229	1.243787e-01	2.021082e-01
## CDC23	8697	0.04116370	1.244129e-01	2.021231e-01
## RHOD	29984	-0.14623460	1.244061e-01	2.021231e-01
## LINC02298	102723354	-0.18649158	1.244086e-01	2.021231e-01
## GADD45G	10912	-0.19283419	1.244306e-01	2.021384e-01
## AMBRA1	55626	-0.04387535	1.244880e-01	2.022028e-01
## PLBD2	196463	0.12364984	1.244802e-01	2.022028e-01
## PDE11A-AS1	105373764	-0.25771528	1.244952e-01	2.022028e-01
## MYLK3	91807	-0.23440458	1.245427e-01	2.022664e-01
## JMJD6	23210	0.06503820	1.245678e-01	2.022936e-01
## LINC00470	56651	0.49216214	1.245801e-01	2.023001e-01
## ANKRD27	84079	0.03800498	1.246504e-01	2.024008e-01
## CNTROB	116840	0.05063236	1.246965e-01	2.024621e-01
## CLASP2	23122	0.05514189	1.247231e-01	2.024888e-01
## MIR3605	100500853	-0.37299634	1.247296e-01	2.024888e-01
## GPR35	2859	0.21356922	1.249982e-01	2.029112e-01
## LINC02080	101928514	0.39048716	1.250089e-01	2.029150e-01
## MIDEAS	91748	-0.08490805	1.250440e-01	2.029584e-01
## CNTN3	5067	-0.12132226	1.250691e-01	2.029857e-01
## PCYT1A	5130	0.04636560	1.251017e-01	2.030251e-01
## IGLV3-1	28809	0.44038406	1.251374e-01	2.030581e-01
## IGHEP2	3499	0.55106319	1.251388e-01	2.030581e-01
## PLA2G4E-AS1	101928388	-0.36209359	1.252709e-01	2.032589e-01
## MIF	4282	-0.18295259	1.253493e-01	2.033725e-01
## SNHG12	85028	0.18788795	1.254121e-01	2.034608e-01
## TRPC3	7222	-0.19078717	1.254710e-01	2.035428e-01
## RWDD2A	112611	0.05794811	1.255543e-01	2.036644e-01
## USP4	7375	0.03178571	1.256354e-01	2.037822e-01
## TBC1D22B	55633	-0.04656932	1.256562e-01	2.037887e-01
## PMS2P3	5387	0.13861783	1.256509e-01	2.037887e-01
## RASL11A	387496	0.09816389	1.257049e-01	2.038542e-01
## FAM3C2P	286460	0.12773153	1.257803e-01	2.039628e-01
## TMIGD1	388364	0.24428618	1.257889e-01	2.039632e-01
## MRPL58	3396	0.08936042	1.259599e-01	2.042269e-01
## HSPB1	3315	0.18127264	1.259776e-01	2.042419e-01
## SERPINI1	5274	0.14255066	1.260001e-01	2.042648e-01
## CNTLN	54875	0.07084306	1.260429e-01	2.043205e-01
## FRG1CP	100289097	0.10398598	1.260533e-01	2.043237e-01
## PKD1P5	348156	0.43007853	1.260685e-01	2.043347e-01
## HLA-G	3135	-0.25687939	1.261250e-01	2.044126e-01
## CHRM1	1128	-0.23941185	1.261873e-01	2.044727e-01
## PSME2P2	338099	0.20339326	1.261749e-01	2.044727e-01
## NHIP	105373085	0.28131067	1.261818e-01	2.044727e-01
## DMXL1	1657	-0.11511079	1.262014e-01	2.044820e-01
## DOC2GP	390213	-0.27259595	1.263382e-01	2.046899e-01
## MMADHC-DT	101929231	0.15643028	1.263817e-01	2.047468e-01
## RPL19P4	646710	0.43746922	1.264039e-01	2.047691e-01
## GIPC3	126326	-0.12773807	1.264335e-01	2.048034e-01
## SEMA4D	10507	0.10961166	1.264424e-01	2.048041e-01
## WASH7P	653635	0.39898976	1.265162e-01	2.049100e-01
## SGMS1	259230	-0.05871961	1.265644e-01	2.049744e-01
## RPS19P3	728953	0.28009601	1.268651e-01	2.054477e-01
## ALDH9A1	223	0.08726031	1.269053e-01	2.054991e-01
## OXA1L-DT	105370404	-0.17748643	1.269726e-01	2.055945e-01

## MT1E	4493	-0.20415762	1.270807e-01	2.057557e-01
## SOAT2	8435	0.23256813	1.271264e-01	2.058161e-01
## VCP	7415	0.05803815	1.271844e-01	2.058962e-01
## LINC00345	105370208	-0.29748335	1.272702e-01	2.060214e-01
## MTCYBP37	109729151	-0.41489713	1.272886e-01	2.060374e-01
## ARL6IP6	151188	0.07296697	1.273563e-01	2.061196e-01
## FTH1P3	2498	-0.37493108	1.273492e-01	2.061196e-01
## STEAP2	261729	-0.07470308	1.274523e-01	2.062613e-01
## TM2D2	83877	-0.06811773	1.274713e-01	2.062768e-01
## MIR6809	102465485	0.75328991	1.274789e-01	2.062768e-01
## PPP1R3F	89801	0.13668615	1.275057e-01	2.063064e-01
## KTN1	3895	-0.09177431	1.275578e-01	2.063770e-01
## DEPDC7	91614	-0.17269820	1.275908e-01	2.064166e-01
## MRPL44	65080	0.06236846	1.276005e-01	2.064186e-01
## EIF3C	8663	-0.08163141	1.276187e-01	2.064264e-01
## WDR27	253769	0.19644769	1.276223e-01	2.064264e-01
## DIAPH2-AS1	10824	0.76181480	1.276793e-01	2.065048e-01
## THBS1	7057	0.14298054	1.278228e-01	2.067231e-01
## NRXN3	9369	-0.13013872	1.279728e-01	2.069519e-01
## ZNF808	388558	-0.11933134	1.280594e-01	2.070782e-01
## CTDP1-DT	284241	-0.47277824	1.280808e-01	2.070990e-01
## GTF2E2	2961	0.08181517	1.282794e-01	2.074064e-01
## CGB7	94027	0.72654265	1.283333e-01	2.074797e-01
## ZNF639	51193	-0.04596430	1.284090e-01	2.075882e-01
## SLC25A28-DT	123466211	-0.23108702	1.285140e-01	2.077442e-01
## MIR548A1HG	105374956	0.54036264	1.285352e-01	2.077646e-01
## TMEM183BP	653659	0.28000730	1.285607e-01	2.077783e-01
## STX18-AS1	100507266	0.08240946	1.285604e-01	2.077783e-01
## THAP6	152815	0.07047119	1.286069e-01	2.078391e-01
## NUDT7	283927	-0.09331941	1.286856e-01	2.079525e-01
## POM121B	100288540	-0.27307168	1.287071e-01	2.079733e-01
## KARS1P2	100419560	-0.37521649	1.287445e-01	2.080199e-01
## FABP5P7	728641	0.75469855	1.287572e-01	2.080267e-01
## ABAT	18	0.18719915	1.288102e-01	2.080984e-01
## ATP6AP1-DT	158960	0.12158885	1.289749e-01	2.083507e-01
## JPH3	57338	0.52011133	1.290393e-01	2.084409e-01
## TMEM14A	28978	-0.08018646	1.290522e-01	2.084478e-01
## TMEM60	85025	0.08025664	1.290659e-01	2.084560e-01
## DDX21	9188	-0.06045965	1.291209e-01	2.085310e-01
## CCL28	56477	-0.17256112	1.291918e-01	2.086318e-01
## CD83	9308	0.12173756	1.292889e-01	2.087330e-01
## ZNF274	10782	-0.05834439	1.292870e-01	2.087330e-01
## EXOSC4	54512	-0.12867260	1.292884e-01	2.087330e-01
## IGHV5-51	28388	0.41812211	1.292811e-01	2.087330e-01
## CMPK1	51727	-0.05015975	1.294343e-01	2.089539e-01
## ITPRID2	6744	-0.07181914	1.294968e-01	2.090409e-01
## NDRG2	57447	-0.12904766	1.295160e-01	2.090579e-01
## SOX12	6666	0.09140267	1.295340e-01	2.090592e-01
## PAGR1	79447	0.05561609	1.295310e-01	2.090592e-01
## ASPHD2	57168	-0.19394691	1.296268e-01	2.091952e-01
## LMO3	55885	0.19539883	1.296654e-01	2.092364e-01
## EFCAB5	374786	0.17584346	1.296696e-01	2.092364e-01
## OR5M6P	79512	0.72219836	1.297404e-01	2.093368e-01
## EXOSC7	23016	-0.06601632	1.297652e-01	2.093629e-01

## AKT3	10000	0.07571016	1.298121e-01	2.094247e-01
## RAET1K	646024	0.41539311	1.298317e-01	2.094423e-01
## SSNA1	8636	0.10011738	1.298434e-01	2.094474e-01
## PIGL	9487	0.11274185	1.299193e-01	2.095559e-01
## POLR3C	10623	0.04012536	1.299600e-01	2.096076e-01
## SBNO2	22904	-0.13347511	1.299990e-01	2.096463e-01
## IL22RA2	116379	1.32913279	1.300090e-01	2.096463e-01
## LCOR	84458	-0.08351698	1.300099e-01	2.096463e-01
## RAE1	8480	0.03397175	1.300715e-01	2.097178e-01
## SLC5A9	200010	0.22562940	1.300679e-01	2.097178e-01
## TINF2	26277	-0.04875077	1.300986e-01	2.097477e-01
## PLEKHM3	389072	-0.07662484	1.301176e-01	2.097644e-01
## ZSCAN22	342945	0.07315727	1.301270e-01	2.097656e-01
## REXO5	81691	0.11052228	1.302090e-01	2.098783e-01
## HMX1	3166	1.13142004	1.302142e-01	2.098783e-01
## HSD3BP2	440606	-0.38542592	1.302247e-01	2.098813e-01
## HEBP1	50865	-0.06991745	1.303162e-01	2.100009e-01
## CLP1	10978	0.05478215	1.303154e-01	2.100009e-01
## LINC01068	103724388	0.40277617	1.303366e-01	2.100199e-01
## LANCL3	347404	-0.15314038	1.303463e-01	2.100216e-01
## YIPF4	84272	-0.04313418	1.303673e-01	2.100414e-01
## ACD	65057	0.08872967	1.304774e-01	2.102050e-01
## RBM15-AS1	440600	-0.19653964	1.304965e-01	2.102217e-01
## ATP8A1	10396	0.10975665	1.305303e-01	2.102623e-01
## BMPR1AP2	100533800	0.54457818	1.306680e-01	2.104702e-01
## TFF3	7033	0.22320231	1.308008e-01	2.106701e-01
## RPS15AP10	728963	0.30240241	1.309336e-01	2.108700e-01
## ANAPC1	64682	0.05976401	1.309647e-01	2.109061e-01
## TRAPP C11	60684	0.04756652	1.309757e-01	2.109099e-01
## FXYD6	53826	0.11323871	1.309997e-01	2.109345e-01
## ZNF335	63925	0.07593036	1.310406e-01	2.109864e-01
## NUBPL	80224	0.06695237	1.310917e-01	2.110547e-01
## TWSG1-DT	102724397	-0.15259273	1.311043e-01	2.110609e-01
## RNASE7	84659	0.41632917	1.311898e-01	2.111706e-01
## SNX18	112574	-0.06761383	1.311831e-01	2.111706e-01
## MRPS10	55173	0.05239121	1.312669e-01	2.112704e-01
## H1-12P	387325	-0.39167666	1.312692e-01	2.112704e-01
## NFATC2IP	84901	0.05679826	1.313117e-01	2.113248e-01
## SLC2A3P2	391045	0.33946896	1.313515e-01	2.113749e-01
## ZNF385B	151126	0.10556353	1.315444e-01	2.116714e-01
## LINC01600	154386	0.20934454	1.317109e-01	2.119252e-01
## NUP160	23279	-0.05217126	1.317257e-01	2.119351e-01
## PLCG1-AS1	101927117	0.18184748	1.317532e-01	2.119653e-01
## SLC25A42	284439	-0.16182626	1.317727e-01	2.119826e-01
## LINC01511	100506791	-1.11021460	1.319614e-01	2.122720e-01
## BNIP3P15	106481692	0.53921345	1.321535e-01	2.125669e-01
## GUSBP19	100133050	0.38989243	1.322077e-01	2.126402e-01
## DYNC2H1	79659	-0.10537587	1.324298e-01	2.129832e-01
## RNASE2CP	643332	-0.58599604	1.325847e-01	2.132041e-01
## IGLL5	100423062	0.52616023	1.325776e-01	2.132041e-01
## MANBA	4126	-0.05903983	1.326490e-01	2.132934e-01
## EIF4E3	317649	0.06277014	1.326740e-01	2.133194e-01
## LBX2-AS1	151534	-0.10908080	1.326969e-01	2.133422e-01
## PLRG1	5356	-0.03676594	1.327290e-01	2.133796e-01

## POU5F1P6	100009668	0.48092717	1.327454e-01	2.133920e-01
## ADAMTS9-AS2	100507098	-0.14140059	1.327658e-01	2.134107e-01
## DPY19L3	147991	0.06979171	1.328145e-01	2.134748e-01
## FASTK	10922	0.10090647	1.328243e-01	2.134764e-01
## FAM209B	388799	-0.23825853	1.328509e-01	2.135050e-01
## RPS21	6227	0.15491354	1.328821e-01	2.135128e-01
## GDAP2	54834	-0.04137468	1.328779e-01	2.135128e-01
## CDRT15P12	100420789	0.35947675	1.328703e-01	2.135128e-01
## ZNF214	7761	-0.09254247	1.329408e-01	2.135930e-01
## DNAH10	196385	0.16366027	1.329557e-01	2.136029e-01
## SOX15	6665	0.19816415	1.330199e-01	2.136918e-01
## TP53TG5	27296	-0.40540382	1.330941e-01	2.137969e-01
## RBX1	9978	0.10676940	1.331175e-01	2.138204e-01
## DNAH10OS	642797	-0.11908344	1.331763e-01	2.139007e-01
## GOLPH3L	55204	-0.04414444	1.333342e-01	2.141401e-01
## IL12A	3592	0.25495258	1.333549e-01	2.141592e-01
## PPP4R2P1	100421419	0.52049013	1.334891e-01	2.143606e-01
## PCIF1	63935	-0.06109039	1.335650e-01	2.144683e-01
## TRIOBP	11078	0.07763898	1.337743e-01	2.147902e-01
## ZC3H7B	23264	0.06157841	1.338113e-01	2.148354e-01
## RPL7AP70	728139	0.39647200	1.338808e-01	2.149328e-01
## MFN1	55669	-0.05569908	1.339435e-01	2.150192e-01
## SP5	389058	-0.22390627	1.339654e-01	2.150402e-01
## CPA2	1358	0.41150759	1.340644e-01	2.151849e-01
## MRPL20	55052	0.10270610	1.341299e-01	2.152758e-01
## RBIS	401466	0.10434853	1.341525e-01	2.152978e-01
## OVCH1-AS1	101055625	0.16156275	1.341861e-01	2.153376e-01
## LINC01905	102724698	0.43201569	1.342474e-01	2.154217e-01
## SPATA42	642864	1.06067800	1.343434e-01	2.155615e-01
## TAMM41	132001	-0.05569302	1.344595e-01	2.157336e-01
## LINC02827	105369606	0.44801697	1.345102e-01	2.158006e-01
## ADGRL1	22859	-0.12200441	1.345801e-01	2.158985e-01
## GPLD1	2822	0.10296545	1.345988e-01	2.159143e-01
## MRPL12	6182	-0.19109494	1.346247e-01	2.159416e-01
## SNHG4	724102	0.16194047	1.346558e-01	2.159772e-01
## EHD1	10938	-0.10700323	1.347805e-01	2.161475e-01
## ANKRD13C	81573	-0.04563884	1.347953e-01	2.161475e-01
## VPS45	11311	0.03300396	1.347975e-01	2.161475e-01
## LINC01685	105378656	-0.64299834	1.347902e-01	2.161475e-01
## LINC02334	101929077	0.28064949	1.348983e-01	2.162948e-01
## APOL2	23780	0.07691674	1.349876e-01	2.164236e-01
## GCLC	2729	0.08330146	1.350259e-01	2.164450e-01
## EME2	197342	-0.17425021	1.350276e-01	2.164450e-01
## HMGN2P5	727795	0.19799031	1.350273e-01	2.164450e-01
## GALNT17	64409	-0.17238187	1.350525e-01	2.164707e-01
## FTX	100302692	0.15818196	1.350809e-01	2.165018e-01
## HNRNPA0	10949	-0.06040960	1.351010e-01	2.165198e-01
## CHCHD4	131474	-0.07627878	1.351333e-01	2.165430e-01
## DSEL-AS1	643542	0.41941536	1.351263e-01	2.165430e-01
## TMEM59L	25789	0.26209137	1.352040e-01	2.166419e-01
## METTL2B	55798	0.05864837	1.352699e-01	2.167333e-01
## DNAJC2	27000	0.06772045	1.352912e-01	2.167532e-01
## RPSAP11	645326	0.41890955	1.353021e-01	2.167562e-01
## MORC1	27136	0.39888761	1.353145e-01	2.167619e-01

## NXF1	10482	0.10543777	1.353276e-01	2.167686e-01
## RD3	343035	-0.50428808	1.353634e-01	2.168117e-01
## PSMB2	5690	0.06053573	1.353852e-01	2.168322e-01
## SLC28A2	9153	0.28067094	1.355384e-01	2.170347e-01
## SLC2A5	6518	0.18421937	1.355321e-01	2.170347e-01
## TOMM40P4	100422473	0.40999125	1.355242e-01	2.170347e-01
## HAP1	9001	-0.24189409	1.355890e-01	2.171014e-01
## SH3GL2	6456	-0.14223891	1.357015e-01	2.172672e-01
## NBPF2P	343381	0.16338396	1.357673e-01	2.173583e-01
## NSUN5	55695	-0.09542417	1.357810e-01	2.173658e-01
## C1orf53	388722	-0.15732138	1.358659e-01	2.174875e-01
## PPP1R21	129285	-0.08876007	1.359041e-01	2.175342e-01
## KHDRBS2	202559	-0.17164189	1.360700e-01	2.177711e-01
## ANXA9	8416	-0.13848092	1.360626e-01	2.177711e-01
## LINC01616	106456574	-0.45695614	1.361840e-01	2.179393e-01
## ACR	49	-0.18864774	1.362732e-01	2.180676e-01
## PRKCZ-DT	105378591	-0.32251007	1.363834e-01	2.182296e-01
## DDX19A-DT	100506083	-0.14765503	1.364245e-01	2.182810e-01
## EIF5AL1	143244	0.21286646	1.364353e-01	2.182839e-01
## TM4SF1-AS1	100874091	-0.36306614	1.364502e-01	2.182934e-01
## PWWP2A	114825	-0.04997978	1.364934e-01	2.183480e-01
## ASB3	51130	-0.03903016	1.365280e-01	2.183891e-01
## TMEM143	55260	0.09560481	1.365460e-01	2.184036e-01
## POLR2J3	548644	0.15321931	1.365821e-01	2.184468e-01
## ACCS	84680	0.13741280	1.366775e-01	2.185850e-01
## FLYWCH2	114984	0.09833164	1.367131e-01	2.186276e-01
## MPPE2	744	-0.09928459	1.368371e-01	2.188115e-01
## H2AZ1	3015	-0.07776326	1.370261e-01	2.190903e-01
## ZNF329	79673	0.06592808	1.370295e-01	2.190903e-01
## RFPL2	10739	0.32466142	1.370580e-01	2.190951e-01
## CELA2B	51032	1.08995732	1.370596e-01	2.190951e-01
## DNAAF3-AS1	101930593	0.97858469	1.370422e-01	2.190951e-01
## DBNDD1	79007	-0.12611920	1.370696e-01	2.190967e-01
## TSNAXIP1	55815	0.11745022	1.371671e-01	2.192314e-01
## PPP2R2D	55844	0.05062113	1.371719e-01	2.192314e-01
## HLA-H	3136	0.20208448	1.372204e-01	2.192946e-01
## KIAA0825	285600	-0.07827203	1.373134e-01	2.194245e-01
## RNA5SP108	100873378	0.49033987	1.373197e-01	2.194245e-01
## PRDX2	7001	-0.09517897	1.373783e-01	2.195036e-01
## VARS1	7407	-0.08730890	1.373986e-01	2.195216e-01
## POLDIP2	26073	0.07670212	1.374393e-01	2.195721e-01
## FYB2	199920	-0.16997864	1.376454e-01	2.198725e-01
## OR7D2	162998	0.45045510	1.376410e-01	2.198725e-01
## IGLV2-14	28815	0.36534092	1.376747e-01	2.199048e-01
## ZWILCH	55055	0.06898710	1.376889e-01	2.199132e-01
## MIR6814	102465488	-0.61089388	1.377227e-01	2.199526e-01
## ZCRB1P1	100131556	0.60481393	1.378234e-01	2.200990e-01
## CASP8	841	0.05911338	1.378773e-01	2.201707e-01
## LINC02390	105369652	0.80730199	1.378879e-01	2.201731e-01
## RAD51C	5889	0.06832521	1.380115e-01	2.203560e-01
## SGMS2	166929	-0.08039897	1.380478e-01	2.203993e-01
## PCDHB8	56128	-0.19917051	1.381520e-01	2.205513e-01
## AGBL5-AS1	100874031	0.43376506	1.381656e-01	2.205585e-01
## SPPL3	121665	-0.04634946	1.382090e-01	2.206133e-01

## SBDS	51119	-0.05427718	1.382362e-01	2.206423e-01
## MIR3176	100423037	0.33379466	1.384904e-01	2.210335e-01
## ZNF101	94039	0.08851273	1.385881e-01	2.211749e-01
## TMPRSS7	344805	-0.47110878	1.386158e-01	2.212045e-01
## ZKSCAN8	7745	0.08444121	1.386894e-01	2.212981e-01
## RN7SL333P	106481014	0.42869375	1.386926e-01	2.212981e-01
## UBXN7-AS1	100874034	0.51221854	1.387351e-01	2.213513e-01
## ZFP3	124961	-0.05793098	1.389515e-01	2.216821e-01
## TLN1	7094	-0.08403221	1.390239e-01	2.217829e-01
## SDF4	51150	-0.06774561	1.391304e-01	2.219383e-01
## MBTD1	54799	0.08655561	1.391930e-01	2.220090e-01
## SPACA3	124912	0.99693732	1.391841e-01	2.220090e-01
## MARK1	4139	-0.09320464	1.392896e-01	2.221485e-01
## LINC01089	338799	0.16223091	1.393248e-01	2.221900e-01
## UQCRRFS1P1	100128525	-0.40845218	1.393384e-01	2.221972e-01
## SLC25A19	60386	-0.08245349	1.393476e-01	2.221973e-01
## LINC03016	101927354	-0.19476670	1.395116e-01	2.224441e-01
## MRPS33	51650	0.09033801	1.396817e-01	2.226862e-01
## LINC00052	145978	-0.42766620	1.396767e-01	2.226862e-01
## PSMB5	5693	0.08350993	1.397189e-01	2.227309e-01
## ZNF414	84330	-0.15057995	1.397612e-01	2.227836e-01
## ZNF862	643641	0.10173333	1.397753e-01	2.227914e-01
## TBC1D3L	101060376	0.26033101	1.397844e-01	2.227914e-01
## FIGNL2	401720	-0.10921939	1.398295e-01	2.228487e-01
## TCP1	6950	-0.05341044	1.399507e-01	2.230125e-01
## B4GAT1-DT	102724064	-0.10831606	1.399498e-01	2.230125e-01
## HLA-V	352962	-0.22350982	1.400307e-01	2.231254e-01
## LINC01770	102724312	-0.20850975	1.400774e-01	2.231851e-01
## MAP3K12	7786	-0.13097692	1.400987e-01	2.232045e-01
## LRRC47	57470	-0.06143158	1.401104e-01	2.232085e-01
## FBXW4	6468	0.06553743	1.401315e-01	2.232222e-01
## CHPT1	56994	-0.10131785	1.401373e-01	2.232222e-01
## ANKRD54	129138	0.05245214	1.402027e-01	2.233116e-01
## MNAT1	4331	0.07757038	1.403709e-01	2.235649e-01
## PPP1R12A	4659	0.07772329	1.404085e-01	2.236102e-01
## CRB1	23418	0.15707982	1.405597e-01	2.238362e-01
## NAA20	51126	-0.06866037	1.405744e-01	2.238450e-01
## DLEU1	10301	-0.08575939	1.406120e-01	2.238903e-01
## ERF	2077	-0.08718935	1.406231e-01	2.238932e-01
## IL1RAP	3556	0.10932394	1.406434e-01	2.239109e-01
## LSM12	124801	-0.05338149	1.406895e-01	2.239696e-01
## RELN	5649	0.17156016	1.407006e-01	2.239726e-01
## CFAP36	112942	-0.08748985	1.407109e-01	2.239744e-01
## ANKZF1	55139	0.09561056	1.407351e-01	2.239982e-01
## RNA5SP107	100873377	-0.33482367	1.408619e-01	2.241852e-01
## INTS10	55174	0.05283589	1.408896e-01	2.242147e-01
## ANKRD20A8P	729171	0.45327800	1.409431e-01	2.242851e-01
## STMN4	81551	-0.38418981	1.410083e-01	2.243595e-01
## ERCC6L2	375748	-0.07490807	1.410006e-01	2.243595e-01
## ITFG1-AS1	101927102	-0.48921973	1.410259e-01	2.243728e-01
## CIMAP2	163747	0.22570186	1.410436e-01	2.243863e-01
## LINC00482	284185	-0.16833047	1.410791e-01	2.244281e-01
## CTBP1-AS	285463	0.40268845	1.412043e-01	2.246126e-01
## SNRNP27	11017	-0.05891678	1.412201e-01	2.246230e-01

## SLC16A2	6567	0.09205586	1.412841e-01	2.247101e-01
## FANCM	57697	0.09118659	1.413160e-01	2.247460e-01
## ATF7-NPFF	114108587	0.27797470	1.413956e-01	2.248579e-01
## PTS	5805	-0.08500497	1.414245e-01	2.248892e-01
## XAGE3	170626	0.35188553	1.415369e-01	2.250532e-01
## SNORD83A	116937	0.37011883	1.415559e-01	2.250687e-01
## SEPTIN3	55964	-0.14260644	1.417099e-01	2.252988e-01
## PSMD10	5716	0.05281027	1.417806e-01	2.253964e-01
## HOXA3	3200	-0.11759143	1.418228e-01	2.254488e-01
## ALKAL1	389658	-0.44406966	1.419217e-01	2.255912e-01
## NTNG1	22854	-0.19283802	1.419341e-01	2.255962e-01
## NUDT17	200035	0.09472491	1.419443e-01	2.255976e-01
## ATPSCKMT	134145	-0.05432585	1.419596e-01	2.256072e-01
## NIFK-AS1	254128	-0.06482584	1.420456e-01	2.257291e-01
## RPS6KA2-IT1	100874353	0.46214764	1.420818e-01	2.257720e-01
## CSPG4	1464	0.20546181	1.421092e-01	2.258007e-01
## FBXW5	54461	0.12237292	1.421560e-01	2.258603e-01
## COX6A1	1337	-0.12243910	1.423269e-01	2.261171e-01
## TFPT	29844	0.07814044	1.423626e-01	2.261589e-01
## PRPF38B	55119	0.08505449	1.424385e-01	2.262647e-01
## RNU6-45P	100873759	0.56617410	1.425082e-01	2.263606e-01
## MRPL4	51073	-0.09561489	1.425893e-01	2.264598e-01
## THAP9	79725	-0.09899022	1.425833e-01	2.264598e-01
## RMEL3	102724122	-0.31317547	1.425992e-01	2.264607e-01
## MIR4422HG	109729135	0.67361128	1.426412e-01	2.265127e-01
## TMEM51	55092	-0.07552201	1.426615e-01	2.265301e-01
## LINC02362	102723766	0.29311852	1.427004e-01	2.265771e-01
## IGSF21	84966	-0.19001680	1.428017e-01	2.267232e-01
## ITPR2-AS1	101928554	0.33272853	1.428300e-01	2.267532e-01
## AURKC	6795	-0.13564714	1.428914e-01	2.268299e-01
## ADAMTS19-AS1	103689846	-0.27606686	1.428970e-01	2.268299e-01
## SAMMSON	101927152	0.47383835	1.429540e-01	2.269057e-01
## LINC02872	401535	0.28659043	1.432620e-01	2.273648e-01
## LINC01002	399844	0.19269078	1.432620e-01	2.273648e-01
## KCNJ5-AS1	219833	0.14166370	1.434672e-01	2.276757e-01
## PLS3	5358	-0.06034161	1.435272e-01	2.277560e-01
## PAXIP1	22976	0.04455085	1.436352e-01	2.279124e-01
## RPL30-AS1	123706519	0.40621528	1.436544e-01	2.279281e-01
## HSPA14	51182	0.06744920	1.436836e-01	2.279594e-01
## SRR	63826	0.07354950	1.437285e-01	2.280157e-01
## MCCC2	64087	-0.08178324	1.437673e-01	2.280328e-01
## LRRC9	341883	0.30403508	1.437602e-01	2.280328e-01
## LRCOL1	100507055	0.29453951	1.437645e-01	2.280328e-01
## MTA1-DT	100507437	0.08032618	1.438469e-01	2.281440e-01
## DNASE2	1777	-0.08042054	1.438896e-01	2.281969e-01
## TMEM11-DT	107984969	0.24235398	1.439052e-01	2.282067e-01
## LINC01063	101929769	-0.27756800	1.439322e-01	2.282347e-01
## UGT1A1	54658	-0.20545725	1.439471e-01	2.282433e-01
## ST7-OT4	338069	0.44615530	1.442840e-01	2.287627e-01
## TAX1BP3	30851	-0.13753090	1.443231e-01	2.288098e-01
## OR2W3	343171	0.34164455	1.443527e-01	2.288418e-01
## ACLY	47	0.08321668	1.443885e-01	2.288836e-01
## PRKAR2A	5576	-0.05587931	1.444181e-01	2.289155e-01
## LDHD	197257	0.15875761	1.444562e-01	2.289611e-01

## EDIL3-DT	105379057	0.20216424	1.445030e-01	2.290202e-01
## NUP133	55746	0.03089164	1.445435e-01	2.290441e-01
## GRAMD1A	57655	-0.08809749	1.445456e-01	2.290441e-01
## RPSAP52	204010	0.37415772	1.445463e-01	2.290441e-01
## TTLL5	23093	0.03984585	1.446572e-01	2.292049e-01
## STON1-GTF2A1L	286749	-0.41055941	1.446710e-01	2.292117e-01
## NOP2	4839	-0.21881281	1.446953e-01	2.292354e-01
## SNAP29	9342	0.03294083	1.447425e-01	2.292952e-01
## SPA17	53340	-0.07215869	1.447887e-01	2.293533e-01
## CNIH4	29097	0.05544818	1.448058e-01	2.293655e-01
## DPH1	1801	-0.05578193	1.448763e-01	2.294622e-01
## CNTNAP3P1	100420787	0.28748164	1.450197e-01	2.296744e-01
## MRPS24	64951	0.21010578	1.450360e-01	2.296853e-01
## SUV39H1	6839	-0.06267499	1.450759e-01	2.297035e-01
## TMEM160	54958	-0.22736296	1.450700e-01	2.297035e-01
## LGMNP1	122199	-0.19386477	1.450759e-01	2.297035e-01
## KRT18P10	360019	-0.41121546	1.451553e-01	2.298143e-01
## H4C11	8363	0.48153134	1.451910e-01	2.298558e-01
## SNORA13	654322	0.37994624	1.452159e-01	2.298802e-01
## FTH1P10	2502	0.38229286	1.453217e-01	2.300178e-01
## LINC01865	105373350	-0.43784108	1.453172e-01	2.300178e-01
## PLAAT2	54979	-0.27653281	1.453662e-01	2.300732e-01
## NIPSNAP2	2631	0.08026728	1.454538e-01	2.301969e-01
## SRA1	10011	0.09116857	1.454746e-01	2.302148e-01
## DHDDS	79947	-0.05509846	1.455063e-01	2.302499e-01
## NECTIN4	81607	-0.11732270	1.455314e-01	2.302747e-01
## CYP2C8	1558	0.27589264	1.455671e-01	2.302909e-01
## AK5	26289	0.17669456	1.455701e-01	2.302909e-01
## RBM10	8241	-0.04669187	1.455662e-01	2.302909e-01
## LINC01474	101927258	0.29116625	1.456602e-01	2.304184e-01
## ZNF442	79973	-0.08465396	1.457542e-01	2.305521e-01
## KLRC3	3823	0.83481221	1.457643e-01	2.305531e-01
## ZNF525	170958	0.10144304	1.457862e-01	2.305727e-01
## BMPR2	659	-0.08122171	1.458319e-01	2.306301e-01
## DDIT3	1649	0.10992744	1.458944e-01	2.307139e-01
## YOD1	55432	-0.08294808	1.460724e-01	2.309803e-01
## ERICH6-AS1	101928085	-0.11378964	1.462268e-01	2.312094e-01
## HDAC6	10013	0.10481286	1.462417e-01	2.312179e-01
## SLC35E1P1	727991	-0.27384056	1.463161e-01	2.313205e-01
## BTNL3	10917	-0.46482069	1.464101e-01	2.314541e-01
## BNIP2	663	0.06830314	1.466018e-01	2.317420e-01
## HCN3	57657	-0.11353215	1.466344e-01	2.317784e-01
## CREBRF	153222	-0.08558068	1.466526e-01	2.317922e-01
## ZNF316	100131017	-0.07401331	1.467610e-01	2.319333e-01
## ZDHHC20P4	730239	0.45433661	1.467567e-01	2.319333e-01
## SLC15A4	121260	-0.05924914	1.468508e-01	2.320601e-01
## MRPS18C	51023	-0.09094774	1.468796e-01	2.320907e-01
## IARS2	55699	0.04366501	1.469174e-01	2.321353e-01
## VWC2	375567	0.21262896	1.469715e-01	2.322057e-01
## LINC02280	101929634	0.57602672	1.469908e-01	2.322210e-01
## SLC30A4	7782	0.09177714	1.470789e-01	2.323352e-01
## UBE2SP1	246719	0.17977694	1.470822e-01	2.323352e-01
## IFNE	338376	0.42468269	1.473716e-01	2.327772e-01
## CLTB	1212	0.10226479	1.474221e-01	2.328418e-01

## METTL15P1	100130758	-0.22887714	1.474520e-01	2.328739e-01
## SKIL	6498	0.08823382	1.475319e-01	2.329850e-01
## CCZ1	51622	0.08416502	1.476605e-01	2.331658e-01
## PI15	51050	-0.30394236	1.476656e-01	2.331658e-01
## MINPP1	9562	-0.07574399	1.476935e-01	2.331947e-01
## LEKR1	389170	-0.12158375	1.479526e-01	2.335886e-01
## DIO1	1733	0.21239800	1.480140e-01	2.336704e-01
## CBR4	84869	-0.07127624	1.481845e-01	2.338939e-01
## PDCL3P5	644850	-0.33408931	1.481786e-01	2.338939e-01
## UBE2Q2P13	100128108	0.17584108	1.481683e-01	2.338939e-01
## MMRN2	79812	-0.13975668	1.483951e-01	2.342112e-01
## FNTB	2342	0.05106904	1.484430e-01	2.342578e-01
## TLCD4-RWDD3	100527978	0.23593678	1.484439e-01	2.342578e-01
## RLF	6018	0.07017545	1.484921e-01	2.343186e-01
## HLA-L	3139	0.20695814	1.485821e-01	2.344453e-01
## TCFL5	10732	0.05564400	1.486368e-01	2.345164e-01
## LCN10	414332	-0.44368005	1.486947e-01	2.345926e-01
## TIGAR	57103	0.09096283	1.487236e-01	2.346229e-01
## NDUFB5	4711	-0.08109254	1.490758e-01	2.351611e-01
## MTSS1	9788	-0.05787940	1.490841e-01	2.351611e-01
## ZC2HC1C	79696	-0.08523328	1.491289e-01	2.352165e-01
## NELFE	7936	0.06532921	1.492168e-01	2.353399e-01
## H2AX	3014	0.13528281	1.493249e-01	2.354952e-01
## RPS27AP11	728590	0.51415759	1.493514e-01	2.355216e-01
## WDR26	80232	0.04255088	1.494996e-01	2.357400e-01
## UBQLN2	29978	0.04899171	1.495366e-01	2.357831e-01
## ZBTB8A	653121	0.09437923	1.495691e-01	2.358190e-01
## HSP90AA3P	3322	0.53608131	1.496278e-01	2.358810e-01
## LLPH-DT	103625681	-0.33420266	1.496204e-01	2.358810e-01
## PI3	5266	-0.43746869	1.496618e-01	2.359192e-01
## LINC02138	400558	-0.83479872	1.497086e-01	2.359777e-01
## TMEM232	642987	-0.11157256	1.497260e-01	2.359898e-01
## CD63-AS1	105369779	0.07233949	1.499617e-01	2.363460e-01
## ATP7B	540	-0.07253738	1.499873e-01	2.363557e-01
## ACTG1P20	644961	0.23647016	1.499794e-01	2.363557e-01
## HAVCR2	84868	-0.19639772	1.501020e-01	2.365211e-01
## DUSP22	56940	0.07039144	1.501325e-01	2.365539e-01
## SLC26A5	375611	-0.33540210	1.501553e-01	2.365744e-01
## FLNA	2316	0.17619202	1.502263e-01	2.366710e-01
## IFT25	51668	0.08554313	1.502600e-01	2.367029e-01
## USP8	9101	-0.05486664	1.502660e-01	2.367029e-01
## TAS2R46	259292	0.72724760	1.502907e-01	2.367264e-01
## OLFM4	10562	-0.30097249	1.504249e-01	2.369225e-01
## DNMBP	23268	0.05931592	1.504442e-01	2.369375e-01
## FAM27C	100132948	-0.12715932	1.505613e-01	2.371066e-01
## NFS1	9054	0.08387414	1.505752e-01	2.371130e-01
## NCAPD2P1	100421175	-0.25894710	1.507868e-01	2.374308e-01
## ARID3C	138715	0.41056991	1.508186e-01	2.374655e-01
## PINX1-DT	101929229	-0.40097238	1.508539e-01	2.375057e-01
## PNMA8A	55228	-0.10530166	1.509131e-01	2.375834e-01
## INTS4	92105	0.04006054	1.509305e-01	2.375955e-01
## EDF1	8721	0.08536551	1.509547e-01	2.376182e-01
## ZYG11B	79699	-0.07471633	1.510972e-01	2.378271e-01
## BIK	638	-0.12736196	1.511773e-01	2.379069e-01

## HSP90B2P	7190	0.15237895	1.511735e-01	2.379069e-01
## LINC01569	100507501	-0.09781155	1.511709e-01	2.379069e-01
## YWHAH-AS1	25775	0.23683323	1.512115e-01	2.379453e-01
## IL20	50604	-0.56684933	1.513280e-01	2.381133e-01
## TPT1P4	285741	0.16642920	1.514139e-01	2.382331e-01
## PRR7-AS1	340037	0.43681022	1.514488e-01	2.382725e-01
## RNU4-22P	107057646	-0.69855112	1.514791e-01	2.383048e-01
## ZNF460-AS1	105372476	0.15228951	1.515155e-01	2.383465e-01
## IGHJ3	28479	0.93768500	1.516066e-01	2.384745e-01
## RBM26	64062	0.07676069	1.516304e-01	2.384965e-01
## TAF5L	27097	0.03828266	1.516563e-01	2.385217e-01
## NGB	58157	0.67002793	1.516813e-01	2.385457e-01
## EPRS1	2058	-0.04995344	1.518486e-01	2.387932e-01
## PPIC-AS1	107986447	-0.18138059	1.519097e-01	2.388739e-01
## PLEK2	26499	-0.11164384	1.519387e-01	2.388944e-01
## RPS3AP6	145767	0.24145228	1.519424e-01	2.388944e-01
## RBP7	116362	0.20604351	1.519741e-01	2.389289e-01
## ANKRD40CL	55018	0.58779642	1.519976e-01	2.389503e-01
## COL4A2	1284	0.15219486	1.520171e-01	2.389655e-01
## NIP7	51388	0.04930546	1.520764e-01	2.390432e-01
## IFRD1	3475	0.12355494	1.521382e-01	2.391095e-01
## CAMK1	8536	-0.08632745	1.521303e-01	2.391095e-01
## TTBK2-AS1	121676926	0.18617641	1.522044e-01	2.391981e-01
## DNAJC28	54943	-0.09034556	1.523299e-01	2.393798e-01
## EPOR	2057	-0.13843962	1.524401e-01	2.395374e-01
## IGKV4-1	28908	0.35642770	1.524790e-01	2.395831e-01
## HSP90B3P	343477	-0.34558722	1.525349e-01	2.396554e-01
## LRRC59	55379	-0.08053142	1.525501e-01	2.396638e-01
## PAPLN	89932	0.10836404	1.526215e-01	2.397140e-01
## HGD	3081	-0.14298565	1.526072e-01	2.397140e-01
## INO80D	54891	-0.10127918	1.526057e-01	2.397140e-01
## RPL26P30	653147	-0.31279164	1.526188e-01	2.397140e-01
## BMS1P20	96610	0.19795064	1.527033e-01	2.398270e-01
## METTL18	92342	-0.07028495	1.527525e-01	2.398888e-01
## ATP5PBP2	645973	0.45277538	1.528045e-01	2.399549e-01
## PHB1P13	100418843	0.48953665	1.528200e-01	2.399638e-01
## BEAN1-AS1	101927726	0.49061558	1.528478e-01	2.399919e-01
## GNAO1-DT	283856	0.19318637	1.528589e-01	2.399939e-01
## DDIT4L-AS1	101929353	0.52472274	1.529101e-01	2.400586e-01
## PRC1-AS1	100507118	0.30382063	1.529248e-01	2.400662e-01
## RABAC1	10567	-0.15420227	1.529607e-01	2.401071e-01
## IGHG1	3500	-0.34439701	1.529721e-01	2.401095e-01
## SNORA47	677828	-0.31643581	1.530052e-01	2.401460e-01
## COG3	83548	-0.05460045	1.530665e-01	2.402266e-01
## SBF1P2	390997	-0.66872841	1.531259e-01	2.403043e-01
## SAT1-DT	105373148	0.20321768	1.531551e-01	2.403347e-01
## FGF7P6	387628	-0.21875567	1.532300e-01	2.404366e-01
## RPL7AP75	100132644	-0.18177758	1.532677e-01	2.404802e-01
## MIR6859-4	103504738	0.47236960	1.532982e-01	2.405125e-01
## MITA1	105375914	-0.17625703	1.533551e-01	2.405863e-01
## TFB1M	51106	0.07143419	1.533844e-01	2.406167e-01
## SLC39A10	57181	0.07539354	1.534197e-01	2.406566e-01
## RPS4Y1	6192	0.48487172	1.534432e-01	2.406779e-01
## PURG	29942	0.17706132	1.535143e-01	2.407739e-01

## LINC02055	107986980	0.39254448	1.535971e-01	2.408882e-01
## SRC	6714	0.05622909	1.536105e-01	2.408938e-01
## SNHG10	283596	0.10500763	1.537810e-01	2.411456e-01
## TIMM50	92609	-0.05623246	1.540151e-01	2.414815e-01
## CCDC171	203238	0.08665515	1.540090e-01	2.414815e-01
## LINC02623	101929445	0.43232906	1.540639e-01	2.415424e-01
## ALCAM	214	-0.09139742	1.541479e-01	2.416585e-01
## GTF3C4	9329	0.04981352	1.542130e-01	2.417450e-01
## PGLYRP4	57115	0.81502950	1.542861e-01	2.418440e-01
## ASGR2	433	-0.19291661	1.543649e-01	2.419518e-01
## SPMIP2	152940	0.57202665	1.543755e-01	2.419528e-01
## MICA	100507436	-0.09040482	1.545255e-01	2.421724e-01
## ARMC8	25852	-0.03514317	1.545579e-01	2.422075e-01
## LINC02826	105370057	0.29349184	1.546624e-01	2.423556e-01
## UQCR10	29796	0.10783757	1.547159e-01	2.424237e-01
## PCBP1	5093	-0.06220736	1.547921e-01	2.425276e-01
## FAM3A	60343	-0.07912010	1.548130e-01	2.425448e-01
## CREB3	10488	0.06767719	1.548761e-01	2.426279e-01
## CSPG4BP	727930	-0.18632458	1.548945e-01	2.426411e-01
## MYLK4	340156	0.15572845	1.549315e-01	2.426835e-01
## TRBV26OR9-2	246285	0.56991895	1.550658e-01	2.428781e-01
## CAVIN2-AS1	105373813	-0.27262649	1.550956e-01	2.429092e-01
## ALG1L13P	106479038	-0.26612483	1.551206e-01	2.429230e-01
## LINC02763	101928823	0.49524730	1.551244e-01	2.429230e-01
## IL5RA	3568	0.26001215	1.552235e-01	2.430625e-01
## PEX11G	92960	0.12641465	1.552863e-01	2.431451e-01
## ANKRD46	157567	-0.07731507	1.553155e-01	2.431596e-01
## NUDT19	390916	-0.04883005	1.553072e-01	2.431596e-01
## CTIF	9811	-0.07120895	1.553510e-01	2.431946e-01
## SOD1-DT	102724449	-0.24853415	1.553579e-01	2.431946e-01
## PLCH2	9651	0.25504529	1.554216e-01	2.432786e-01
## MED14	9282	0.04717174	1.555024e-01	2.433893e-01
## ACSS2	55902	-0.09870669	1.555187e-01	2.433993e-01
## SEC31B	25956	0.21632507	1.555706e-01	2.434649e-01
## MMP20	9313	0.28614039	1.556012e-01	2.434970e-01
## LINC02688	101927503	-0.27632316	1.556179e-01	2.435074e-01
## NUDT14	256281	0.11942152	1.556476e-01	2.435226e-01
## SLC48A1	55652	-0.08520680	1.556435e-01	2.435226e-01
## NPIPP1	100874381	0.17205468	1.557070e-01	2.435999e-01
## SPNS2-AS1	107985053	0.15907541	1.557718e-01	2.436699e-01
## RPL5P24	100270841	-0.69218579	1.557680e-01	2.436699e-01
## ASS1P7	339845	0.29564482	1.560270e-01	2.440534e-01
## SLTM	79811	-0.06154352	1.562712e-01	2.444195e-01
## PCDHB4	56131	-0.15077767	1.563629e-01	2.445472e-01
## IGKV1D-12	28903	0.87292175	1.564011e-01	2.445912e-01
## MAP3K14	9020	-0.10721963	1.564348e-01	2.446151e-01
## FERMT2	10979	-0.06013970	1.564365e-01	2.446151e-01
## SAXO1	158297	0.18740724	1.564825e-01	2.446714e-01
## LINC01982	105371830	1.01269601	1.565657e-01	2.447857e-01
## SDCCAG8	10806	0.04590682	1.566798e-01	2.449167e-01
## FMC1	154791	-0.16172058	1.566679e-01	2.449167e-01
## PBX1	5087	0.06639367	1.566790e-01	2.449167e-01
## GABBR1	2550	0.17977595	1.570323e-01	2.454519e-01
## TEX56P	404220	-0.27869185	1.571056e-01	2.455507e-01

## SNORD9A	692212	0.29415976	1.572314e-01	2.457316e-01
## CCDC121	79635	-0.06413132	1.572498e-01	2.457445e-01
## RPS3P4	100270862	0.20892570	1.572643e-01	2.457514e-01
## PDCD6IPPI	100861430	-0.31805510	1.573451e-01	2.458619e-01
## CYYR1	116159	-0.07029278	1.573961e-01	2.459256e-01
## TMPRSS4	56649	0.15776471	1.574187e-01	2.459452e-01
## ZC3H11C	441155	0.52691916	1.574682e-01	2.460067e-01
## IMPG1	3617	0.29715994	1.575292e-01	2.460842e-01
## DSN1	79980	0.05528199	1.575535e-01	2.460842e-01
## TRIM56	81844	0.06623174	1.575684e-01	2.460842e-01
## DMAP1	55929	-0.05269221	1.575485e-01	2.460842e-01
## ALDH7A1P1	541	0.18983829	1.575586e-01	2.460842e-01
## SLC4A1AP	22950	-0.03142987	1.576219e-01	2.461520e-01
## RRP9	9136	0.06744836	1.576774e-01	2.462228e-01
## FAM99A	387742	-0.81726008	1.578280e-01	2.464420e-01
## DPP7	29952	-0.11444463	1.578725e-01	2.464957e-01
## IGLV4-3	28786	1.29866582	1.578947e-01	2.465146e-01
## VLDLR-AS1	401491	-0.16840330	1.579373e-01	2.465652e-01
## RPL21P19	641293	0.49007786	1.581323e-01	2.468538e-01
## EIF2B5-DT	105374249	0.16811391	1.582339e-01	2.469965e-01
## DPY19L1P2	102724668	-0.23721266	1.582453e-01	2.469985e-01
## C4orf33	132321	-0.08466105	1.582805e-01	2.470376e-01
## ARMC6	93436	-0.06411818	1.582996e-01	2.470515e-01
## MRPL34	64981	-0.12503285	1.583434e-01	2.471040e-01
## MICD	4279	0.57465778	1.586283e-01	2.475327e-01
## RND1	27289	-0.15905174	1.586474e-01	2.475397e-01
## ALG1L1P	200810	-0.21007258	1.586532e-01	2.475397e-01
## OGDHL	55753	0.14176775	1.586840e-01	2.475719e-01
## RLIMP2	100533731	0.41196854	1.587050e-01	2.475888e-01
## KRT25	147183	0.97571100	1.587461e-01	2.476369e-01
## FDPSP1	343332	-0.43810245	1.588725e-01	2.478182e-01
## UQCRB	7381	-0.08985221	1.589371e-01	2.479031e-01
## LRAT	9227	0.18302997	1.589607e-01	2.479239e-01
## PLEKHH2	130271	0.16278865	1.589951e-01	2.479617e-01
## OR7E90P	79537	-0.72537638	1.590775e-01	2.480744e-01
## SLC25A34	284723	-0.20839209	1.590897e-01	2.480775e-01
## ZNF354B	117608	0.13255137	1.591215e-01	2.481111e-01
## AUTS2	26053	0.07907388	1.591546e-01	2.481468e-01
## ZNF688	146542	0.10766694	1.592082e-01	2.482145e-01
## UPK1A-AS1	100862728	-0.43962399	1.592437e-01	2.482539e-01
## PSMC3IP	29893	0.07879619	1.592777e-01	2.482750e-01
## RILP	83547	-0.09591681	1.592746e-01	2.482750e-01
## ACBD3	64746	-0.05487356	1.593061e-01	2.483034e-01
## LINC01284	101926971	0.34227685	1.594356e-01	2.484892e-01
## RNU6-638P	106481383	0.37714884	1.594603e-01	2.485119e-01
## MGAT4B	11282	-0.06932717	1.595018e-01	2.485605e-01
## CCDC186	55088	-0.09588744	1.596902e-01	2.488381e-01
## APPBP2-DT	120017341	0.13081212	1.597322e-01	2.488876e-01
## GLTC1	131840634	-0.27292484	1.597434e-01	2.488891e-01
## ALKBH5	54890	0.07728673	1.598844e-01	2.490930e-01
## CLEC19A	728276	0.77831003	1.599198e-01	2.491321e-01
## HAVCR1	26762	-0.25315894	1.599727e-01	2.491825e-01
## RN7SKP22	106481805	0.39915678	1.599671e-01	2.491825e-01
## HIPK4	147746	0.21443743	1.601138e-01	2.493863e-01

## LINC00836	101929052	0.71067299	1.602578e-01	2.495946e-01
## SFRP1	6422	0.10066281	1.602720e-01	2.496007e-01
## C16orf89	146556	-0.16887611	1.603064e-01	2.496383e-01
## B4GALT1	2683	0.07527823	1.603460e-01	2.496680e-01
## SMIM1	388588	0.18410122	1.603381e-01	2.496680e-01
## SLX1B	79008	0.75236120	1.603616e-01	2.496763e-01
## SNORD101	594837	0.29591099	1.604364e-01	2.497448e-01
## SLC28A2-AS1	101928414	0.18594558	1.604185e-01	2.497448e-01
## DDX11L17	102725121	-0.41670167	1.604281e-01	2.497448e-01
## FAM246C	117134596	0.36622810	1.605034e-01	2.498331e-01
## C3orf33	285315	-0.09442225	1.605323e-01	2.498620e-01
## JMJD7	100137047	0.29938871	1.605449e-01	2.498657e-01
## IGLVI-70	28763	0.84593115	1.606352e-01	2.499901e-01
## APCDD1	147495	0.20688779	1.606887e-01	2.500575e-01
## C16orf87	388272	0.08835515	1.607349e-01	2.501133e-01
## TFDP1P2	441488	-0.11832993	1.607469e-01	2.501160e-01
## PKD1P6	353511	0.20619639	1.610443e-01	2.505626e-01
## SRP14-DT	100131089	0.09056340	1.611974e-01	2.507848e-01
## TREML3P	340206	0.65055274	1.612392e-01	2.508338e-01
## KEL	3792	-0.23981450	1.612903e-01	2.508972e-01
## BRMS1	25855	-0.07278650	1.613881e-01	2.510333e-01
## NONOP2	100271700	0.24759176	1.614988e-01	2.511894e-01
## PTPRD-AS1	101929407	0.13843825	1.615440e-01	2.512436e-01
## PGAM1	5223	-0.07330946	1.615869e-01	2.512858e-01
## LINC02226	729506	-0.64346753	1.615919e-01	2.512858e-01
## IFT81	28981	-0.06764945	1.617309e-01	2.514859e-01
## RTN4R	65078	-0.21915375	1.617714e-01	2.515328e-01
## LINC02391	101930023	0.20425479	1.618137e-01	2.515825e-01
## ELN-AS1	107986809	0.14567592	1.618614e-01	2.516406e-01
## ANKFY1	51479	0.04442875	1.619360e-01	2.517404e-01
## ATP13A5	344905	-0.29639598	1.619904e-01	2.518089e-01
## SNTG2	54221	0.26163236	1.620352e-01	2.518625e-01
## SCAND1	51282	-0.18940172	1.620907e-01	2.519326e-01
## GLTPD2	388323	0.24273966	1.621777e-01	2.520516e-01
## BEX3	27018	-0.08123949	1.622313e-01	2.520965e-01
## DCAKD	79877	0.06069839	1.622317e-01	2.520965e-01
## MTCO1P11	107075264	0.42344142	1.622377e-01	2.520965e-01
## LGALS3BP	3959	0.11871987	1.622667e-01	2.521256e-01
## PLGLB2	5342	0.39417630	1.622996e-01	2.521604e-01
## WAPL-DT	122152326	0.16115653	1.623224e-01	2.521798e-01
## CNNM4	26504	0.06504994	1.623872e-01	2.522643e-01
## LINC01635	101928043	-0.24124955	1.624043e-01	2.522747e-01
## LINC01697	284825	-0.13303742	1.624371e-01	2.523097e-01
## E2F6	1876	0.05493045	1.625620e-01	2.524875e-01
## RAD51B	5890	0.06990266	1.625879e-01	2.525116e-01
## H3P4	106479023	0.31449658	1.626752e-01	2.526309e-01
## AGTPBP1	23287	0.04466634	1.627409e-01	2.527169e-01
## COMMD2	51122	0.04754781	1.627834e-01	2.527668e-01
## GNS	2799	-0.08122925	1.627995e-01	2.527681e-01
## TNRC18	84629	-0.10226010	1.628051e-01	2.527681e-01
## ODAM	54959	-0.17516067	1.629156e-01	2.529235e-01
## DAAM2	23500	0.11808669	1.629801e-01	2.530045e-01
## TMEM262	100130348	0.42025914	1.629886e-01	2.530045e-01
## ARHGEF19	128272	-0.12400217	1.630147e-01	2.530289e-01

## EEA1	8411	0.10095947	1.631427e-01	2.532114e-01
## FAM201A	158228	-0.10310638	1.631642e-01	2.532286e-01
## CHEK2P2	646096	-0.38503677	1.632766e-01	2.533869e-01
## TCAF1	9747	0.07288342	1.633020e-01	2.534100e-01
## NAA40	79829	-0.07116657	1.633215e-01	2.534241e-01
## FREY1	143678	-0.19841625	1.634317e-01	2.535789e-01
## ISG20L2P2	100421976	0.32552937	1.634421e-01	2.535789e-01
## GPCPD1	56261	0.09151096	1.634569e-01	2.535857e-01
## SLC39A12	221074	0.52860512	1.635080e-01	2.536487e-01
## ZNF383	163087	0.06632723	1.635460e-01	2.536764e-01
## LINC02354	107984503	-0.50097503	1.635467e-01	2.536764e-01
## LARP1P1	100379623	-0.51816778	1.635712e-01	2.536863e-01
## RANP4	100130621	0.23727440	1.635740e-01	2.536863e-01
## FREM1	158326	-0.11151860	1.636265e-01	2.537516e-01
## CACNG4	27092	0.26482945	1.637044e-01	2.538563e-01
## PI4KAP1	728233	0.19477410	1.638000e-01	2.539883e-01
## TMEM184A	202915	0.13263116	1.638527e-01	2.540537e-01
## SPAG8	26206	0.12132721	1.639027e-01	2.541151e-01
## MIR553	693138	-0.43356372	1.639519e-01	2.541751e-01
## PYURF	100996939	0.06957965	1.640581e-01	2.543235e-01
## LINC02442	105369815	-0.54161561	1.641390e-01	2.544327e-01
## HNRNPCP2	653447	-0.13284757	1.642734e-01	2.546248e-01
## KRR1	11103	-0.05781053	1.643338e-01	2.547021e-01
## SETD6P1	106481727	-0.70135616	1.643454e-01	2.547040e-01
## RUNX3-AS1	105376878	0.73246642	1.644202e-01	2.548036e-01
## KRTAP5-7	440050	0.35345046	1.644778e-01	2.548766e-01
## OPRK1	4986	0.94295583	1.645023e-01	2.548983e-01
## BEND3P1	644459	0.38850194	1.646196e-01	2.550637e-01
## TFG	10342	-0.03849247	1.647210e-01	2.552047e-01
## TEX30	93081	-0.08651157	1.647593e-01	2.552478e-01
## BLCAP	10904	0.07543763	1.648092e-01	2.553087e-01
## PTPRJ	5795	-0.06402310	1.648393e-01	2.553390e-01
## TMBIM6	7009	-0.08491350	1.648815e-01	2.553882e-01
## PHGR1	644844	1.01840279	1.649227e-01	2.554358e-01
## U2SURP	23350	-0.08118960	1.649873e-01	2.555032e-01
## SHISA8	440829	-0.28742862	1.649861e-01	2.555032e-01
## ZNF37A	7587	0.09521004	1.650939e-01	2.556521e-01
## TEKTIP1	100128569	-0.24334044	1.651460e-01	2.557164e-01
## DYNLT1	6993	0.09256237	1.652229e-01	2.558192e-01
## XRCC6P2	389901	0.17515159	1.652535e-01	2.558502e-01
## IGKV2-30	28919	0.38467796	1.653760e-01	2.560235e-01
## CD300LG	146894	0.17461387	1.654398e-01	2.560991e-01
## PPM1N	147699	0.20067938	1.654459e-01	2.560991e-01
## ZBTB4	57659	-0.06267738	1.654862e-01	2.561452e-01
## VPS72	6944	0.05741637	1.655652e-01	2.562511e-01
## APC2	10297	0.37290975	1.655969e-01	2.562840e-01
## SLAMF6P1	100862852	-0.26268404	1.656092e-01	2.562867e-01
## WDR93	56964	-0.11366182	1.657042e-01	2.564174e-01
## CCDC185	164127	-0.37081263	1.657309e-01	2.564423e-01
## BLTP3B	23074	0.06379791	1.657621e-01	2.564742e-01
## NOVA2	4858	-0.09422155	1.658390e-01	2.565764e-01
## C2CD3	26005	-0.05238201	1.658492e-01	2.565764e-01
## TMEM88B	643965	-0.37613445	1.659993e-01	2.567923e-01
## FHIP1A-DT	105377486	-0.19508456	1.660237e-01	2.568136e-01

## RPH3AL-AS2	123706508	-0.12924856	1.660854e-01	2.568927e-01
## SIRT6	51548	-0.08506781	1.662712e-01	2.571473e-01
## GP5	2814	0.23006078	1.662659e-01	2.571473e-01
## SNX12	29934	-0.05120215	1.663827e-01	2.573034e-01
## TXNDC12	51060	-0.09578348	1.664580e-01	2.574035e-01
## NDUFA3	4696	0.12089328	1.665106e-01	2.574685e-01
## LINC02261	101929199	0.74059561	1.665557e-01	2.575217e-01
## CCDC178	374864	0.11169585	1.666782e-01	2.576948e-01
## RNFT2	84900	-0.09638915	1.667249e-01	2.577342e-01
## TMEM192	201931	-0.09270821	1.667223e-01	2.577342e-01
## SLC10A2	6555	0.21704672	1.668416e-01	2.578982e-01
## HADHA	3030	-0.05631115	1.668942e-01	2.579631e-01
## ACKR2	1238	-0.13448887	1.672368e-01	2.584762e-01
## C12orf54	121273	0.24613815	1.672610e-01	2.584972e-01
## TEX21P	441687	-0.17816620	1.672747e-01	2.585019e-01
## CCDC144BP	284047	0.25358828	1.672884e-01	2.585066e-01
## RPL21P51	100271169	0.52468382	1.672995e-01	2.585073e-01
## PHACTR3	116154	0.13983158	1.673380e-01	2.585504e-01
## CFAP299	255119	0.21652101	1.675685e-01	2.588737e-01
## ZNF736P4Y	100419735	0.51143592	1.675627e-01	2.588737e-01
## PLPPR2	64748	0.14702057	1.675879e-01	2.588871e-01
## SDHDP3	29771	0.46038574	1.676635e-01	2.589874e-01
## PBLD	64081	0.15006964	1.677185e-01	2.590395e-01
## NEGR1-IT1	100852409	0.79488235	1.677081e-01	2.590395e-01
## FOXD2-AS1	84793	0.11744901	1.677642e-01	2.590936e-01
## STX5	6811	0.05958510	1.677792e-01	2.591003e-01
## SPIDR	23514	0.05320083	1.678473e-01	2.591820e-01
## EEF1A1P11	440595	-0.23682003	1.678534e-01	2.591820e-01
## ZC3H4	23211	-0.06127647	1.679188e-01	2.592664e-01
## SPTBN1-AS2	123706536	-0.34670957	1.679881e-01	2.593570e-01
## MIR99AHG	388815	0.10765514	1.680748e-01	2.594743e-01
## ALG11	440138	-0.06916619	1.681435e-01	2.595639e-01
## DKKL1	27120	0.24521939	1.681771e-01	2.595783e-01
## VWA3B	200403	-0.27145722	1.681712e-01	2.595783e-01
## MIR7111	102465668	-0.38478998	1.681849e-01	2.595783e-01
## CIBAR2	339145	0.47786265	1.682058e-01	2.595942e-01
## PPIAP84	111082984	-0.71709676	1.683245e-01	2.597608e-01
## CSAD	51380	0.15593368	1.683634e-01	2.598043e-01
## SLC25A51	92014	0.06401105	1.684253e-01	2.598742e-01
## HECTD4	283450	-0.08431139	1.684300e-01	2.598742e-01
## TAP1T1-AS1	202020	0.10121007	1.685281e-01	2.600090e-01
## CROCC	9696	0.12244833	1.685405e-01	2.600116e-01
## SEC22A	26984	0.05076126	1.686603e-01	2.601800e-01
## HMGB2P1	729119	0.64644497	1.688243e-01	2.604164e-01
## HMGN1P1	319131	0.30110144	1.689222e-01	2.605508e-01
## ZNF141	7700	-0.11544087	1.689702e-01	2.606084e-01
## NKX1-2	390010	0.86403540	1.689899e-01	2.606222e-01
## LIN52	91750	0.10737692	1.692432e-01	2.609963e-01
## CMTM5	116173	0.22277071	1.695395e-01	2.614366e-01
## RDX	5962	-0.06143577	1.696271e-01	2.615509e-01
## PCDH10-DT	101927359	0.28435125	1.696351e-01	2.615509e-01
## SOD1	6647	-0.08511732	1.696693e-01	2.615870e-01
## VSIG10	54621	-0.05850392	1.696902e-01	2.616026e-01
## YME1L1	10730	0.03381015	1.697075e-01	2.616127e-01

## IRS3P	442338	-0.38533468	1.699898e-01	2.620312e-01
## FGD5-AS1	100505641	0.05236035	1.700672e-01	2.621339e-01
## TRIM29	23650	-0.23772365	1.701470e-01	2.622237e-01
## OXCT1-AS1	100874002	-0.19192131	1.701405e-01	2.622237e-01
## EPS15	2060	-0.03609255	1.701705e-01	2.622433e-01
## FAM43A	131583	-0.19007701	1.702018e-01	2.622748e-01
## DLGAP4-AS1	101926987	0.14276858	1.702984e-01	2.624070e-01
## NLGN4Y	22829	0.43641097	1.703222e-01	2.624271e-01
## BUB3	9184	-0.02941870	1.703829e-01	2.625040e-01
## MIR429	554210	-0.29341093	1.704805e-01	2.626377e-01
## ZFTRAF1	50626	0.06305057	1.705446e-01	2.627197e-01
## ZNF324B	388569	0.04788646	1.706242e-01	2.628257e-01
## ZNF768	79724	-0.07244786	1.706985e-01	2.629236e-01
## ZNF618	114991	-0.07045875	1.707771e-01	2.630112e-01
## HMGB3P9	100873879	0.58048726	1.707686e-01	2.630112e-01
## TAF1B	9014	0.07197376	1.708093e-01	2.630275e-01
## TCEAL8	90843	0.06026586	1.708064e-01	2.630275e-01
## C15orf62	643338	0.12199087	1.709469e-01	2.632157e-01
## PNMA6F	105373377	0.69404929	1.709532e-01	2.632157e-01
## LDB2	9079	-0.07564671	1.709980e-01	2.632680e-01
## KRCC1	51315	-0.05503327	1.710921e-01	2.633962e-01
## OR52N2	390077	0.62891164	1.712221e-01	2.635796e-01
## REM2	161253	-0.16334880	1.712532e-01	2.635940e-01
## TMEM69	51249	-0.04944901	1.712490e-01	2.635940e-01
## C9orf72	203228	-0.09260316	1.713081e-01	2.636619e-01
## SDK2	54549	0.14161973	1.715275e-01	2.639828e-01
## LINC01449	101928773	0.30445489	1.715743e-01	2.640382e-01
## DDX50P1	192146	-0.23654983	1.716450e-01	2.641303e-01
## FNDC3CP	100421340	0.55822544	1.717650e-01	2.642981e-01
## RPL7AP60	100271538	0.46819150	1.718109e-01	2.643520e-01
## TNS1-AS1	105373878	-0.13816366	1.719304e-01	2.645112e-01
## TRGV5P	6979	0.40262837	1.719361e-01	2.645112e-01
## KRT41P	8686	-0.31983643	1.719676e-01	2.645429e-01
## LINC03078	128193286	0.90317273	1.719898e-01	2.645604e-01
## HCG9	10255	-0.30550679	1.720861e-01	2.646916e-01
## ANKRD34B	340120	-0.23841758	1.721459e-01	2.647626e-01
## TMX2P1	100233198	-0.29517848	1.721540e-01	2.647626e-01
## ZNF341-AS1	101929746	-0.28626997	1.722291e-01	2.648613e-01
## NCBP2	22916	0.03395567	1.724776e-01	2.652210e-01
## SLC8A1-AS1	100128590	-0.22337905	1.724848e-01	2.652210e-01
## C2orf92	728537	0.17513440	1.725491e-01	2.653031e-01
## CNKSR1	10256	-0.12292192	1.726933e-01	2.655080e-01
## PAXBP1-AS1	100506215	-0.09958599	1.727128e-01	2.655143e-01
## LINC02321	105370623	-0.30391803	1.727193e-01	2.655143e-01
## TOR1B	27348	-0.04857062	1.727351e-01	2.655218e-01
## ZNF394	84124	0.04328643	1.728275e-01	2.656472e-01
## DCTN3	11258	0.08012489	1.728601e-01	2.656805e-01
## EIF5A	1984	0.07171289	1.728720e-01	2.656820e-01
## PYCARD-AS1	100652740	0.26324992	1.729622e-01	2.658037e-01
## ERV3-1	2086	-0.09636502	1.731189e-01	2.660277e-01
## MAGED2	10916	-0.04263399	1.731859e-01	2.660970e-01
## C2orf66	401027	0.25195194	1.731754e-01	2.660970e-01
## CCNY	219771	0.03852332	1.732010e-01	2.661034e-01
## DGKE	8526	-0.09684239	1.732841e-01	2.661974e-01

## H4C9	8294	0.34108749	1.732806e-01	2.661974e-01
## MAP2K7	5609	-0.06136759	1.734623e-01	2.664544e-01
## CCDC38	120935	-0.17106636	1.736001e-01	2.666488e-01
## C19orf18	147685	-0.16639135	1.736109e-01	2.666488e-01
## PHAX	51808	0.04176194	1.736314e-01	2.666636e-01
## F2RL2	2151	0.23597269	1.737014e-01	2.667542e-01
## SLC25A12	8604	-0.07957458	1.737142e-01	2.667569e-01
## OPHN1	4983	0.06755372	1.738520e-01	2.669382e-01
## EEF1A1P22	645693	0.30814737	1.738542e-01	2.669382e-01
## PCCA	5095	-0.08899368	1.739298e-01	2.670374e-01
## NDUFB3	4709	-0.09855753	1.739689e-01	2.670700e-01
## NTMT2	149281	1.19211265	1.739730e-01	2.670700e-01
## INPP5E	56623	0.07698306	1.740387e-01	2.671539e-01
## ZNF431	170959	0.13046652	1.741218e-01	2.672646e-01
## RPL37A-DT	100507554	-0.11135426	1.742723e-01	2.674787e-01
## ZNF37CP	79232	0.50572373	1.743534e-01	2.675728e-01
## HAPSTR1	29035	-0.03061700	1.743556e-01	2.675728e-01
## ZNF77	58492	0.08621825	1.743696e-01	2.675775e-01
## CPLX4	339302	-0.53919471	1.744035e-01	2.676126e-01
## LINC03107	124903648	-0.37832647	1.745047e-01	2.677509e-01
## EGFEM1P	93556	0.33512503	1.745314e-01	2.677750e-01
## CHMP4A	29082	0.17899316	1.745852e-01	2.678238e-01
## SEC23A-AS1	105370458	-0.18544308	1.745748e-01	2.678238e-01
## PHTF1	10745	0.05409022	1.745976e-01	2.678258e-01
## ZNF121	7675	0.09869564	1.746890e-01	2.679491e-01
## CNTNAP3C	100289279	-0.54445397	1.747408e-01	2.680117e-01
## DHX37	57647	-0.06617491	1.747698e-01	2.680393e-01
## IGHV2-5	28457	0.40529906	1.748231e-01	2.681040e-01
## RAB1C	441400	-0.30770178	1.748738e-01	2.681649e-01
## MSL3-DT	124905247	0.45041679	1.749466e-01	2.682596e-01
## DNAJC19P5	100861453	-0.19933297	1.749827e-01	2.682979e-01
## SF1	7536	-0.05006811	1.750077e-01	2.683194e-01
## STARD4-AS1	100505678	0.23036240	1.750349e-01	2.683442e-01
## PRDX6	9588	0.06995975	1.751938e-01	2.685709e-01
## TUSC3	7991	-0.07858015	1.752132e-01	2.685836e-01
## UFM1	51569	-0.05201839	1.752642e-01	2.686279e-01
## BTBD3-AS1	121832811	-0.44660125	1.752548e-01	2.686279e-01
## AKT3-IT1	100874263	0.50190244	1.753014e-01	2.686508e-01
## PAIP1P1	100421582	-0.19803592	1.752995e-01	2.686508e-01
## LINC00507	100862680	-0.40042054	1.753123e-01	2.686508e-01
## SEPTIN7P14	645513	-0.09417270	1.754527e-01	2.688490e-01
## PCDH15	65217	0.25422712	1.754847e-01	2.688640e-01
## KRTAP5-9	3846	0.21174030	1.754773e-01	2.688640e-01
## CLIP1	6249	0.07666431	1.755429e-01	2.689208e-01
## TIGD3	220359	-0.18252394	1.755438e-01	2.689208e-01
## ZNF91	7644	0.09580585	1.755984e-01	2.689875e-01
## ZPLD2P	101928303	-0.12573855	1.757271e-01	2.691676e-01
## CXXC1	30827	0.056667066	1.758390e-01	2.693221e-01
## LRRC37A15P	106481796	0.63462210	1.759207e-01	2.694301e-01
## SMARCE1P6	646196	0.39207064	1.759964e-01	2.695291e-01
## SUPT20H	55578	0.07330597	1.760755e-01	2.696163e-01
## GLB1L2	89944	0.14340511	1.760677e-01	2.696163e-01
## ETV7-AS1	105375037	0.43042469	1.761313e-01	2.696847e-01
## BCO1	53630	0.12721161	1.763244e-01	2.699634e-01

## LSM1	27257	0.07549795	1.763788e-01	2.700126e-01
## RPL7AP62	644029	-0.37102540	1.763717e-01	2.700126e-01
## ZBTB9	221504	0.05325053	1.764914e-01	2.701681e-01
## SEC14L5	9717	0.17562699	1.765420e-01	2.702285e-01
## MTND4P11	100873255	0.35320215	1.766041e-01	2.703064e-01
## A1CF	29974	-0.17848646	1.766974e-01	2.704152e-01
## FADS1	3992	-0.09827770	1.766902e-01	2.704152e-01
## IGHV3-7	28452	0.33998644	1.767339e-01	2.704541e-01
## LINC02882	100507377	0.54889699	1.768201e-01	2.705689e-01
## PLA2G2C	391013	0.36335070	1.769871e-01	2.708075e-01
## H2BC5	3017	0.13540326	1.771090e-01	2.709549e-01
## TRIM60P14	653794	0.64905991	1.770956e-01	2.709549e-01
## ETV3L	440695	1.01637511	1.771169e-01	2.709549e-01
## KCNC4	3749	0.07852777	1.771617e-01	2.710063e-01
## S1PR1-DT	101928370	-0.22236612	1.772799e-01	2.711701e-01
## RNU6-760P	106481420	0.80243949	1.773546e-01	2.712672e-01
## KLHL36	79786	-0.05095522	1.773791e-01	2.712876e-01
## STK40	83931	0.06302368	1.775123e-01	2.714743e-01
## PRPF8	10594	-0.03962111	1.776265e-01	2.716288e-01
## ZNF891	101060200	0.13809610	1.776357e-01	2.716288e-01
## CCL15	6359	-0.18983212	1.777002e-01	2.717103e-01
## UBR1	197131	-0.05058720	1.777485e-01	2.717671e-01
## TSPAN14-AS1	101929574	0.34199366	1.779256e-01	2.720207e-01
## CYP4F12	66002	0.17450802	1.781650e-01	2.723354e-01
## BCDIN3D	144233	0.04699375	1.781510e-01	2.723354e-01
## ENTPD5	957	-0.15306823	1.781644e-01	2.723354e-01
## TCP11	6954	0.17081087	1.782333e-01	2.724226e-01
## CLIC4	25932	0.08264555	1.785010e-01	2.728146e-01
## C15orf40	123207	0.07040015	1.786783e-01	2.730357e-01
## R3HDM1-AS1	105372629	0.28783607	1.786794e-01	2.730357e-01
## RPL5P30	645160	0.18855946	1.786580e-01	2.730357e-01
## C5orf60	285679	-0.28733267	1.788273e-01	2.732446e-01
## KBTBD2	25948	0.05610499	1.789195e-01	2.733684e-01
## SLC47A1P1	107075108	-0.26928542	1.789334e-01	2.733723e-01
## AZGP1	563	0.16843271	1.789579e-01	2.733926e-01
## TUB	7275	0.10926750	1.789926e-01	2.734284e-01
## LINC00314	246705	-0.58525847	1.790171e-01	2.734487e-01
## TM6SF2	53345	-0.16935818	1.790681e-01	2.734921e-01
## CASC22	283854	-0.31615737	1.790588e-01	2.734921e-01
## POLD2	5425	0.07914626	1.791192e-01	2.735204e-01
## EIF5A2	56648	0.08520709	1.791203e-01	2.735204e-01
## SCGB1C2	653486	0.53748409	1.791197e-01	2.735204e-01
## EEF1A1P18	100887747	0.44775811	1.791734e-01	2.735842e-01
## WDR25	79446	-0.07179765	1.794616e-01	2.740070e-01
## RNASEH2A	10535	0.33381734	1.794912e-01	2.740351e-01
## CALCA	796	-0.23978835	1.795271e-01	2.740726e-01
## RTCA-AS1	100506007	0.11301108	1.796544e-01	2.742497e-01
## ZBTB2P1	100421184	-0.32607950	1.796864e-01	2.742814e-01
## FRG1FP	102723780	0.34475860	1.797152e-01	2.743081e-01
## ELAVL2	1993	0.19143289	1.797752e-01	2.743653e-01
## CALML4	91860	0.16778328	1.797693e-01	2.743653e-01
## KCNJ13	3769	-0.15033969	1.798008e-01	2.743790e-01
## NPIP85	100132247	0.14107196	1.798068e-01	2.743790e-01
## CCDC122	160857	-0.08062341	1.800849e-01	2.747691e-01

## SNHG29	125144	0.10506744	1.800880e-01	2.747691e-01
## SUCLG2-DT	101927111	-0.09657535	1.800964e-01	2.747691e-01
## EPHX2	2053	0.11723330	1.802001e-01	2.749102e-01
## TRMT2A	27037	0.06000906	1.802643e-01	2.749908e-01
## GRIP1	23426	-0.08997057	1.807825e-01	2.757640e-01
## MAN2A1-DT	124901041	-0.14494588	1.809601e-01	2.760175e-01
## CEBPZ	10153	-0.04993596	1.809765e-01	2.760253e-01
## HNRNPA1P10	664709	-0.22077874	1.810510e-01	2.761215e-01
## PASK	23178	0.09201471	1.811660e-01	2.762795e-01
## PRSS33	260429	0.77625335	1.812028e-01	2.763096e-01
## PRDX3	10935	-0.05785276	1.812084e-01	2.763096e-01
## ELP1	8518	-0.03377025	1.814323e-01	2.766336e-01
## ERGIC3	51614	0.06357147	1.814449e-01	2.766355e-01
## NRIP2	83714	-0.10413654	1.815354e-01	2.767561e-01
## ZMAT4	79698	-0.31493888	1.816050e-01	2.768447e-01
## IRF9	10379	0.18603575	1.816875e-01	2.769533e-01
## SLC13A1	6561	0.17247466	1.817262e-01	2.769948e-01
## XKR8	55113	0.04606593	1.819147e-01	2.772647e-01
## MIR4500HG	642345	-0.33538580	1.820806e-01	2.775003e-01
## SPR	6697	-0.08139828	1.821119e-01	2.775306e-01
## MED11	400569	0.07861817	1.821503e-01	2.775716e-01
## BCL7C	9274	0.10867306	1.821866e-01	2.776095e-01
## EIF4BP7	643873	0.20358402	1.822239e-01	2.776489e-01
## TRMT10B	158234	0.08282434	1.822386e-01	2.776539e-01
## SINHCAF2	728115	0.48670168	1.822900e-01	2.777149e-01
## POLR2J2	246721	0.20290848	1.823023e-01	2.777162e-01
## CCKAR	886	-0.34679438	1.823610e-01	2.777881e-01
## ZNF480	147657	-0.07432786	1.825468e-01	2.780538e-01
## LINC01347	731275	0.25290326	1.825611e-01	2.780581e-01
## SPRY4	81848	-0.07414544	1.827134e-01	2.782726e-01
## PKLR	5313	0.19714797	1.827912e-01	2.783737e-01
## TPTE2P6	374491	0.50283808	1.828779e-01	2.784883e-01
## RAMACL	353267	0.40265868	1.829041e-01	2.785106e-01
## TMPRSS11E	28983	-0.54991159	1.829583e-01	2.785691e-01
## BRD8	10902	0.05799995	1.829658e-01	2.785691e-01
## SIGLEC12	89858	0.34500426	1.829768e-01	2.785691e-01
## CCZ1B	221960	0.08313372	1.830572e-01	2.786740e-01
## ZNF462	58499	0.07440687	1.830774e-01	2.786872e-01
## KRT34	3885	1.16011240	1.830899e-01	2.786889e-01
## LINC01397	104355139	0.85195592	1.831113e-01	2.787039e-01
## RHBDF1	64285	0.11562817	1.831588e-01	2.787413e-01
## PLEKHB2	55041	-0.07137848	1.831507e-01	2.787413e-01
## COMMD4	54939	0.08174666	1.833981e-01	2.790881e-01
## SNX2	6643	-0.04145717	1.834268e-01	2.791040e-01
## RN7SL23P	106480482	0.35694646	1.834315e-01	2.791040e-01
## ARPC3P3	729494	0.16328998	1.834441e-01	2.791057e-01
## CHRNE	1145	0.11199954	1.835079e-01	2.791853e-01
## TAS2R50	259296	0.54105242	1.836102e-01	2.793234e-01
## INSIG1-DT	105375591	-0.15115999	1.837272e-01	2.794839e-01
## FCER1A	2205	0.25133999	1.837728e-01	2.795357e-01
## CYP17A1	1586	0.23146617	1.837889e-01	2.795427e-01
## SETP8	100128536	-0.31654609	1.838431e-01	2.796077e-01
## NHERF1	9368	-0.13296891	1.838764e-01	2.796409e-01
## ZNF181	339318	0.06016636	1.839219e-01	2.796924e-01

## PLBD1-AS1	101928290	-0.07253785	1.840651e-01	2.798928e-01
## FHIP2A	57700	0.05873145	1.842073e-01	2.800914e-01
## AMD1P1	100133024	0.35035449	1.842287e-01	2.801065e-01
## LINC01023	100652853	-0.17292026	1.843070e-01	2.802079e-01
## IGLV8-61	28774	0.45548509	1.844114e-01	2.803491e-01
## AKAP9	10142	-0.10917498	1.844439e-01	2.803810e-01
## ADAM17	6868	0.07028847	1.845161e-01	2.804733e-01
## TAF7L	54457	-0.18211568	1.846244e-01	2.806028e-01
## RPA3	6119	-0.09569040	1.846168e-01	2.806028e-01
## NKIRAS1	28512	-0.05054429	1.846474e-01	2.806201e-01
## FASTKD3	79072	-0.07517891	1.847303e-01	2.807286e-01
## COX7A2L	9167	-0.07833239	1.849458e-01	2.810041e-01
## CHRNA10	57053	0.16911833	1.849463e-01	2.810041e-01
## PGLS-DT	100507551	0.12085001	1.849258e-01	2.810041e-01
## TSKU-AS1	101928837	-0.17558351	1.850953e-01	2.812129e-01
## MAPK9	5601	0.03346725	1.851874e-01	2.813353e-01
## HAUS3	79441	0.06484477	1.852564e-01	2.814224e-01
## PPRC1	23082	0.06790912	1.853397e-01	2.815139e-01
## PKHD1	5314	-0.13409645	1.853347e-01	2.815139e-01
## ABLIM2	84448	0.15299375	1.853892e-01	2.815715e-01
## TXNRD2	10587	-0.06643081	1.854009e-01	2.815716e-01
## CHST1	8534	0.17513172	1.854238e-01	2.815888e-01
## MUCL1	118430	-0.50008310	1.854508e-01	2.816122e-01
## C1QL4	338761	-0.27472187	1.854724e-01	2.816273e-01
## HPX	3263	0.22240214	1.855155e-01	2.816752e-01
## SPANXA2-OT1	619455	0.22144467	1.855387e-01	2.816928e-01
## HOXC4	3221	-0.07721920	1.855705e-01	2.817235e-01
## SNX29P1	100652781	0.48260850	1.856640e-01	2.818479e-01
## LRRC56	115399	0.13074145	1.857162e-01	2.819095e-01
## RHBG	57127	0.15072700	1.857510e-01	2.819447e-01
## ZNF775	285971	0.11524269	1.857713e-01	2.819580e-01
## UBXN11	91544	0.08521571	1.859795e-01	2.822563e-01
## THRAP3	9967	-0.03762209	1.860115e-01	2.822872e-01
## UNC5B	219699	0.09476892	1.861883e-01	2.825380e-01
## RAPGEFL1	51195	0.12851520	1.862463e-01	2.826082e-01
## TLE5	166	-0.08168076	1.862975e-01	2.826684e-01
## C4orf51	646603	-0.30984803	1.863205e-01	2.826855e-01
## ANKS1B	56899	0.14639370	1.863520e-01	2.827156e-01
## GIGYF2	26058	-0.04327575	1.865013e-01	2.829245e-01
## CLEC18A	348174	0.25396877	1.865775e-01	2.829893e-01
## OR2C1	4993	0.20862172	1.865789e-01	2.829893e-01
## ZNF721	170960	0.08814435	1.865636e-01	2.829893e-01
## TMEM254	80195	0.05044789	1.866262e-01	2.830434e-01
## TBCA	6902	-0.07956683	1.866882e-01	2.831197e-01
## UBE2Q1	55585	0.03439800	1.867872e-01	2.832168e-01
## CEACAM19	56971	-0.15854456	1.867751e-01	2.832168e-01
## POFUT2	23275	0.07081766	1.867832e-01	2.832168e-01
## KCNH4	23415	0.25754105	1.868529e-01	2.832882e-01
## LINC01668	101928311	-0.32470873	1.868576e-01	2.832882e-01
## LINC02656	399716	-0.27716544	1.869455e-01	2.834038e-01
## HSPA8P18	402125	0.53938969	1.870558e-01	2.835533e-01
## NHEJ1	79840	-0.16593299	1.872140e-01	2.837754e-01
## STN1	79991	0.04880018	1.872462e-01	2.837889e-01
## CLEC14A	161198	0.12593841	1.872416e-01	2.837889e-01

## FMO6P	388714	-0.26246584	1.872812e-01	2.838122e-01
## ZNF594	84622	0.11648526	1.872967e-01	2.838122e-01
## IGHV2-70	28454	0.50818349	1.872891e-01	2.838122e-01
## NFRKB	4798	0.04733017	1.873606e-01	2.838914e-01
## NLRP4	147945	0.84764969	1.874368e-01	2.839768e-01
## MAPT	4137	0.16898064	1.874403e-01	2.839768e-01
## PPP1R17	10842	0.92269944	1.875313e-01	2.840730e-01
## SF3B4	10262	-0.06239289	1.875389e-01	2.840730e-01
## FTH1P7	2500	0.29738810	1.875286e-01	2.840730e-01
## LINC02502	100996694	1.36917509	1.876086e-01	2.841608e-01
## ST3GAL5-AS1	101928113	0.30108980	1.876262e-01	2.841699e-01
## KIAA1328	57536	0.05778351	1.877240e-01	2.843002e-01
## KCNJ6	3763	-0.22882947	1.877500e-01	2.843219e-01
## CH25H	9023	-0.30814196	1.878500e-01	2.844556e-01
## GLRA2	2742	-0.36303470	1.880687e-01	2.847690e-01
## PP1P	151842	-0.40985571	1.882031e-01	2.849547e-01
## STX19	415117	-0.30826223	1.882214e-01	2.849648e-01
## ZNF638	27332	0.05866127	1.882519e-01	2.849932e-01
## FBLL1	345630	0.32816734	1.882803e-01	2.850183e-01
## SLC6A9	6536	-0.13078493	1.884083e-01	2.851944e-01
## CLASRP	11129	-0.10107960	1.885949e-01	2.854590e-01
## PKP4-AS1	100129029	-0.37934308	1.886441e-01	2.855157e-01
## CYP2A6	1548	1.15100239	1.887764e-01	2.856981e-01
## MICAL1	64780	0.09747468	1.888819e-01	2.858333e-01
## LINC01460	100129995	-0.29746330	1.888892e-01	2.858333e-01
## MTCO3P22	100289371	-0.14521722	1.889379e-01	2.858892e-01
## BCL2	596	0.06711464	1.892747e-01	2.863785e-01
## MACC1	346389	-0.13584061	1.892849e-01	2.863785e-01
## ERMARD	55780	0.05041329	1.893571e-01	2.864699e-01
## LINC02398	100506393	0.50160400	1.894030e-01	2.865215e-01
## POMGNT2	84892	0.05986234	1.894800e-01	2.866203e-01
## PSAPL1	768239	0.92459595	1.895099e-01	2.866476e-01
## IGHV1-69	28461	0.48457257	1.895390e-01	2.866617e-01
## IGHV2-70D	102723168	0.74382141	1.895428e-01	2.866617e-01
## NCAPH2	29781	0.06216007	1.896285e-01	2.867735e-01
## TNS3	64759	0.06118587	1.896599e-01	2.868031e-01
## RPS4XP2	92507	0.30238187	1.897125e-01	2.868647e-01
## LPP	4026	-0.09082325	1.897491e-01	2.869022e-01
## RP2	6102	0.06211798	1.901038e-01	2.874028e-01
## ZNF209P	441843	-0.21619291	1.900960e-01	2.874028e-01
## ATG3	64422	-0.04663484	1.902108e-01	2.875467e-01
## EPS15-AS1	105378720	-0.18969673	1.903539e-01	2.877451e-01
## FTSJ1	24140	0.05838504	1.903881e-01	2.877789e-01
## BAG1	573	-0.07815899	1.904401e-01	2.878247e-01
## PPIAP29	134997	0.24735625	1.904421e-01	2.878247e-01
## PPP4R3A	55671	-0.04771311	1.904549e-01	2.878262e-01
## KCMF1	56888	0.04226012	1.906223e-01	2.880612e-01
## SYNCRI	10492	-0.04215922	1.906939e-01	2.881466e-01
## KRTAP2-3	730755	0.68335025	1.907025e-01	2.881466e-01
## SRSF6P2	644422	-0.31017466	1.907238e-01	2.881608e-01
## NCOA3	8202	0.06193636	1.907620e-01	2.882007e-01
## RPS4XP7	442162	0.24845805	1.908868e-01	2.883713e-01
## PDHX	8050	0.05654014	1.909408e-01	2.884349e-01
## SNORA5C	677796	0.22209141	1.910346e-01	2.885586e-01

## CDCP1	64866	-0.12428590	1.910831e-01	2.886139e-01
## PA2G4P6	646083	-0.47184808	1.911246e-01	2.886588e-01
## EPHA8	2046	-0.45703145	1.912414e-01	2.888172e-01
## RNA5SP217	100873477	0.36225704	1.913131e-01	2.889075e-01
## AKT1S1	84335	0.08586753	1.913852e-01	2.889805e-01
## RN7SL608P	106480521	-0.27624499	1.913796e-01	2.889805e-01
## PSMD4	5710	0.05868515	1.914187e-01	2.889952e-01
## UBLCP1	134510	0.04559041	1.914075e-01	2.889952e-01
## RPS12P26	100130495	-0.32146946	1.914674e-01	2.890508e-01
## SCAMP5	192683	0.07692749	1.915026e-01	2.890859e-01
## FKBP1C	642489	0.16118954	1.915586e-01	2.891524e-01
## CNOT7	29883	0.03113733	1.915738e-01	2.891575e-01
## SRSF6	6431	-0.05877429	1.916090e-01	2.891926e-01
## LINC01099	101928656	-0.29897687	1.916568e-01	2.892467e-01
## ADAM2	2515	-1.00460704	1.916958e-01	2.892876e-01
## SLC27A1	376497	0.08977985	1.917491e-01	2.893329e-01
## RLIG1	91298	-0.05145273	1.917496e-01	2.893329e-01
## BLVRA	644	0.06312111	1.918969e-01	2.895155e-01
## PAPOLG	64895	0.05552117	1.919070e-01	2.895155e-01
## CLDND2	125875	0.14231210	1.919182e-01	2.895155e-01
## IDO2	169355	0.35148331	1.918890e-01	2.895155e-01
## PAGE5	90737	0.28866013	1.919340e-01	2.895214e-01
## AOC1	26	-0.19657185	1.919700e-01	2.895576e-01
## VPS11-DT	118597841	0.19060446	1.920267e-01	2.896251e-01
## AGGF1P2	644435	0.26379447	1.920447e-01	2.896343e-01
## FAUP1	140623	0.22290473	1.921422e-01	2.897634e-01
## SGK3	23678	-0.07647496	1.921891e-01	2.898162e-01
## MAD2L1BP	9587	0.05730006	1.922227e-01	2.898488e-01
## IGHV3-53	28420	0.38078003	1.922705e-01	2.899029e-01
## CPO	130749	0.16714656	1.923265e-01	2.899694e-01
## SEPHS2	22928	-0.08437076	1.923483e-01	2.899842e-01
## PCBP2	5094	-0.06974363	1.924250e-01	2.900818e-01
## RNU5B-1	26832	-0.71460236	1.925815e-01	2.902999e-01
## IGLV3-21	28796	0.37458831	1.926628e-01	2.904044e-01
## AGBL3	340351	-0.09909498	1.927422e-01	2.905060e-01
## GTF2E1	2960	0.04479972	1.927778e-01	2.905417e-01
## PTGES2-AS1	389791	0.24247615	1.928007e-01	2.905541e-01
## RPL21P115	100271443	-0.57132023	1.928100e-01	2.905541e-01
## TXN	7295	0.10589576	1.928270e-01	2.905617e-01
## VPS25	84313	-0.06492477	1.928463e-01	2.905728e-01
## RPUSD1	113000	0.10489270	1.931177e-01	2.909636e-01
## HLA-DRB6	3128	0.22284917	1.932704e-01	2.911757e-01
## FBXO5	26271	0.06974255	1.933905e-01	2.913386e-01
## VPS13A	23230	-0.09545296	1.934214e-01	2.913671e-01
## EZHIP	340602	-0.47489847	1.934544e-01	2.913988e-01
## EI24	9538	0.04814499	1.935235e-01	2.914667e-01
## LINC00504	201853	0.18899105	1.935204e-01	2.914667e-01
## LINC00491	285708	0.51344513	1.935634e-01	2.915087e-01
## MRTFA	57591	0.08566124	1.935812e-01	2.915174e-01
## KCNK5	8645	-0.17272559	1.936481e-01	2.915662e-01
## PROB1	389333	0.19735635	1.936616e-01	2.915662e-01
## LINC00636	285205	0.56235036	1.936483e-01	2.915662e-01
## SNHG9	735301	0.11398311	1.936521e-01	2.915662e-01
## MARK2P16	100533795	-0.29168714	1.937203e-01	2.916366e-01

## RIDA	10247	0.14813948	1.937705e-01	2.916940e-01
## CRYZL2P	730102	-0.07646652	1.938089e-01	2.917337e-01
## Clorf94	84970	0.90979140	1.938378e-01	2.917591e-01
## TRIM52	84851	0.08441683	1.939000e-01	2.918348e-01
## NANOS1	340719	0.16052524	1.939408e-01	2.918600e-01
## KXD1-AS1	128193285	0.45818436	1.939370e-01	2.918600e-01
## CHMP5P1	100420317	-0.35545702	1.939549e-01	2.918631e-01
## VDAC1P6	359800	-0.33371541	1.940580e-01	2.920003e-01
## RHAG	6005	-0.80686053	1.941051e-01	2.920530e-01
## KDM7A	80853	0.08690098	1.941257e-01	2.920659e-01
## MPDZ	8777	0.07059416	1.941890e-01	2.921152e-01
## GPR68	8111	0.20959904	1.941945e-01	2.921152e-01
## CANT1	124583	0.05354857	1.941850e-01	2.921152e-01
## ANKRD26P1	124149	0.79213707	1.942905e-01	2.922415e-01
## ETAA1	54465	-0.07817925	1.943423e-01	2.923013e-01
## ZEB1-AS1	220930	-0.07096429	1.943729e-01	2.923293e-01
## MTND4P15	100873240	-0.64046804	1.944068e-01	2.923622e-01
## UBXN6	80700	0.09658368	1.944656e-01	2.924324e-01
## PBXIP1	57326	-0.07451682	1.945746e-01	2.925783e-01
## EID3	493861	0.09909035	1.945980e-01	2.925953e-01
## LINC03026	102724156	-0.12253568	1.947122e-01	2.927489e-01
## UIMC1	51720	-0.05323606	1.947558e-01	2.927503e-01
## EPHA2	1969	-0.12013713	1.947338e-01	2.927503e-01
## AGTRAP	57085	0.09266336	1.947613e-01	2.927503e-01
## NPM1P9	392428	0.50569883	1.947432e-01	2.927503e-01
## TP53RK	112858	-0.04801900	1.948023e-01	2.927757e-01
## RPL13AP20	387841	0.28441378	1.947908e-01	2.927757e-01
## FAM157B	100132403	0.62358491	1.948233e-01	2.927891e-01
## CYP2E1	1571	0.30110705	1.950011e-01	2.930383e-01
## LINC01695	101927973	0.33960833	1.950850e-01	2.931463e-01
## CDK5RAP1	51654	-0.04247188	1.951089e-01	2.931640e-01
## GBX1	2636	0.93165649	1.951347e-01	2.931665e-01
## SUMO1P3	474338	0.21647436	1.951307e-01	2.931665e-01
## GTF3C6	112495	0.07652267	1.951734e-01	2.932065e-01
## CASP7	840	0.05107660	1.952415e-01	2.932907e-01
## AHSG	197	0.24357765	1.952770e-01	2.933259e-01
## TRGC1	6966	-0.20095836	1.954113e-01	2.935095e-01
## FAM83F	113828	-0.10436168	1.954438e-01	2.935264e-01
## RNU6-181P	106480559	0.42020050	1.954467e-01	2.935264e-01
## SNORA5A	654319	0.26352568	1.956923e-01	2.938771e-01
## AFF4-DT	124901065	-0.38843399	1.959223e-01	2.942042e-01
## B4GALNT4	338707	0.23584581	1.959650e-01	2.942502e-01
## RASSF10	644943	-0.11932738	1.960140e-01	2.943056e-01
## TMEM47	83604	-0.06359518	1.961435e-01	2.944819e-01
## HSD3B2	3284	0.16971912	1.962122e-01	2.945486e-01
## ZNF888	388559	-0.12099912	1.962114e-01	2.945486e-01
## MTERF2	80298	-0.06682844	1.963192e-01	2.946911e-01
## COPS2	9318	0.04593030	1.963751e-01	2.947385e-01
## MGMT	4255	0.09694268	1.963675e-01	2.947385e-01
## FKBPL	63943	0.06751745	1.964164e-01	2.947823e-01
## PWP2	5822	-0.33820764	1.965109e-01	2.949059e-01
## LGMN	5641	-0.13267427	1.965975e-01	2.950177e-01
## CHFR-DT	101928530	-0.18267692	1.966998e-01	2.951522e-01
## PCDHGB6	56100	-0.11176847	1.967114e-01	2.951522e-01

## GGTL C4P	729838	0.19891588	1.968054e-01	2.952749e-01
## SUPT20HL1	100130302	0.86577042	1.968286e-01	2.952915e-01
## IGLC6	3542	0.69175282	1.968495e-01	2.953047e-01
## SLC30A4-AS1	105376714	0.76993919	1.968806e-01	2.953330e-01
## TIMM23B	100652748	-0.08947746	1.970577e-01	2.955804e-01
## ZNF543	125919	0.06712239	1.972587e-01	2.958637e-01
## TMBIM4	51643	-0.10397688	1.973050e-01	2.959149e-01
## DLX6-AS1	285987	-0.40400008	1.973525e-01	2.959679e-01
## RPL13P12	388344	0.24682985	1.973940e-01	2.960118e-01
## HTT-AS	100750326	0.38367026	1.974522e-01	2.960809e-01
## LINC01301	100505532	0.09403408	1.975541e-01	2.962153e-01
## GPX1	2876	0.12685810	1.975691e-01	2.962195e-01
## ERFE	151176	0.25639825	1.976327e-01	2.962967e-01
## SIGLEC11	114132	-0.19256080	1.976646e-01	2.963262e-01
## CLK3	1198	0.04620650	1.978092e-01	2.965246e-01
## FAM90A25P	389633	-0.36480706	1.978259e-01	2.965314e-01
## MEAK7	57707	0.04714103	1.979064e-01	2.966338e-01
## TUT4	23318	0.06736411	1.979557e-01	2.966893e-01
## VPS26C	10311	-0.04071706	1.979762e-01	2.967018e-01
## ZNF595	152687	-0.05708580	1.980695e-01	2.968233e-01
## MIR3117	100422871	-0.60806718	1.980984e-01	2.968483e-01
## PSMC4	5704	-0.05836279	1.982295e-01	2.970264e-01
## AHRR	57491	0.43556017	1.982832e-01	2.970886e-01
## MEIG1	644890	0.20449086	1.983287e-01	2.971385e-01
## FRAT2	23401	0.06986665	1.984143e-01	2.972483e-01
## PKD1P2	283955	0.40769370	1.985861e-01	2.974874e-01
## SCAND2P	54581	0.09798850	1.986038e-01	2.974926e-01
## NUTM2B	729262	-0.22615460	1.986141e-01	2.974926e-01
## RAD23BP1	131185	0.35185426	1.986962e-01	2.975973e-01
## STC2	8614	0.14227201	1.987627e-01	2.976356e-01
## C1orf116	79098	-0.11764136	1.987345e-01	2.976356e-01
## SOX18	54345	-0.20089946	1.987557e-01	2.976356e-01
## SEPTIN10P1	389662	0.28587486	1.987830e-01	2.976356e-01
## DHCR7-DT	129810502	0.12943228	1.987723e-01	2.976356e-01
## LINC02674	102724627	-0.20529484	1.989630e-01	2.978868e-01
## MRPL39	54148	-0.06139866	1.990119e-01	2.979233e-01
## LINC02864	400655	-0.94302137	1.990038e-01	2.979233e-01
## SNORD113-3	767563	0.75073011	1.990952e-01	2.980296e-01
## RSKR	124923	-0.22443552	1.994154e-01	2.984905e-01
## SYNPR	132204	0.57930610	1.995763e-01	2.987130e-01
## TBATA	219793	-0.31560738	1.996679e-01	2.988316e-01
## MYH9-DT	105377199	0.32091480	1.997012e-01	2.988452e-01
## FTH1P20	729009	0.24724536	1.997015e-01	2.988452e-01
## HRG-AS1	105374258	-0.20864307	1.997804e-01	2.989080e-01
## SULT1A2	6799	-0.16776837	1.997617e-01	2.989080e-01
## RPS25P3	100271101	0.22514323	1.997778e-01	2.989080e-01
## DYNLT5	200132	0.22516114	1.998981e-01	2.990657e-01
## UXT-AS1	100133957	-0.08814676	1.999562e-01	2.991341e-01
## SUGP1	57794	-0.03946184	1.999844e-01	2.991525e-01
## EFCAB6-DT	105373058	0.15297062	1.999930e-01	2.991525e-01
## GAPVD1	26130	-0.05062307	2.000681e-01	2.992463e-01
## LINC02783	400743	-0.62542814	2.001257e-01	2.992772e-01
## SELENOH	280636	0.11314047	2.001123e-01	2.992772e-01
## BTF3P3	652964	0.45113244	2.001229e-01	2.992772e-01

## ZNF300	91975	0.10853438	2.001564e-01	2.993047e-01
## IGLL1	3543	-0.39624732	2.002309e-01	2.993877e-01
## MFF-DT	654841	0.07695313	2.002365e-01	2.993877e-01
## MRPL52	122704	0.08999981	2.003880e-01	2.995957e-01
## HSF1	3297	0.08617199	2.004014e-01	2.995973e-01
## FBH1	84893	0.02213287	2.004494e-01	2.996507e-01
## ATOH7	220202	0.20768860	2.004975e-01	2.997041e-01
## ZFP41	286128	0.06155070	2.005099e-01	2.997043e-01
## RFC2	5982	0.05751333	2.005464e-01	2.997404e-01
## PROX1-AS1	100505832	-0.28101255	2.007322e-01	2.999995e-01
## PM20D1	148811	-0.27566607	2.007544e-01	3.000143e-01
## CAPZA2	830	-0.04285534	2.007702e-01	3.000195e-01
## GPRC5D-AS1	100506314	-0.10539944	2.009368e-01	3.002499e-01
## PALB2	79728	0.05574434	2.009550e-01	3.002587e-01
## HSBP1P2	100288483	0.30932857	2.010240e-01	3.003433e-01
## ZBED5-AS1	729013	0.09600937	2.010939e-01	3.004293e-01
## PTPN9	5780	0.03483200	2.011868e-01	3.005496e-01
## INPP4B	8821	0.08690036	2.012633e-01	3.006453e-01
## C1orf115	79762	-0.07372967	2.013481e-01	3.007536e-01
## ZMYND12	84217	0.10733120	2.013699e-01	3.007622e-01
## CACNA1G-AS1	253962	1.02497135	2.013786e-01	3.007622e-01
## ARGLU1	55082	0.12060502	2.014550e-01	3.008556e-01
## SIRPAP1	23755	0.20665341	2.014659e-01	3.008556e-01
## MFAP3	4238	0.06694199	2.015377e-01	3.009444e-01
## ZNF611	81856	-0.08136067	2.016203e-01	3.010492e-01
## GRM5-AS1	100873989	-0.26378823	2.020070e-01	3.016080e-01
## ZNF620	253639	-0.06872324	2.020911e-01	3.017150e-01
## CNOT7P1	100421338	0.38614366	2.021169e-01	3.017351e-01
## ZNF215	7762	0.08464749	2.023842e-01	3.021056e-01
## RPL35AP36	100128393	0.39522514	2.023900e-01	3.021056e-01
## ORMDL1	94101	0.05680480	2.024109e-01	3.021183e-01
## KPNA5	3841	-0.08390830	2.024312e-01	3.021300e-01
## LINC02066	105374158	1.26684400	2.026367e-01	3.024181e-01
## SZRD1	26099	0.03968994	2.027703e-01	3.025617e-01
## AMOTL2	51421	-0.07588069	2.027692e-01	3.025617e-01
## FAM221B	392307	0.54482686	2.027531e-01	3.025617e-01
## MRM3	55178	-0.04769720	2.028527e-01	3.026575e-01
## SELENOKP3	100287632	1.04920378	2.028593e-01	3.026575e-01
## GAB1	2549	0.05395519	2.030454e-01	3.029019e-01
## HSPA12B	116835	0.13732188	2.030519e-01	3.029019e-01
## SCARNA7	677767	0.25414035	2.030606e-01	3.029019e-01
## PSG9	5678	0.45317190	2.030849e-01	3.029196e-01
## RASSF6	166824	-0.13142310	2.031002e-01	3.029238e-01
## ZNF663P	100130934	-0.34242509	2.031644e-01	3.030010e-01
## GFRA3	2676	-0.18868179	2.032116e-01	3.030528e-01
## HNRNPLL	92906	0.02647041	2.033024e-01	3.031696e-01
## GATC	283459	-0.05489977	2.033748e-01	3.032589e-01
## PRDX1P1	7002	-0.29481439	2.036785e-01	3.036932e-01
## BMP2K-DT	119863864	0.47885748	2.037321e-01	3.037544e-01
## COL9A3	1299	-0.19115200	2.037665e-01	3.037871e-01
## SRCAP	10847	-0.07247198	2.037792e-01	3.037875e-01
## MIR378D2HG	114515521	0.44497603	2.038425e-01	3.038444e-01
## BCAN-AS1	105371453	0.27381227	2.038350e-01	3.038444e-01
## RPL39P3	285785	0.21694191	2.040740e-01	3.041709e-01

## ATXN1L	342371	0.06851670	2.041197e-01	3.042204e-01
## TSSK4	283629	0.39516692	2.041353e-01	3.042250e-01
## SGCZ	137868	-0.33105859	2.042996e-01	3.044512e-01
## ENOX1-AS2	100874130	-0.37348234	2.043954e-01	3.045752e-01
## POLR2F	5435	0.07573277	2.045493e-01	3.047859e-01
## SDHB	6390	-0.08272596	2.046352e-01	3.048952e-01
## CHD9	80205	-0.09157544	2.047556e-01	3.050559e-01
## A1BG	1	0.26783746	2.048402e-01	3.051632e-01
## LRRC8B	23507	0.06241337	2.048587e-01	3.051721e-01
## ZNF137P	7696	0.14066894	2.049592e-01	3.052851e-01
## COX6A1P2	285849	-0.14755749	2.049597e-01	3.052851e-01
## LINC01524	101927700	0.53788548	2.050158e-01	3.053500e-01
## SDHAP1	255812	0.15327432	2.051914e-01	3.055927e-01
## RAPGEF3	10411	-0.07982510	2.052100e-01	3.056017e-01
## ECHDC3	79746	0.10332739	2.053018e-01	3.056925e-01
## RTL6	84247	0.04837999	2.053010e-01	3.056925e-01
## LINC02593	100130417	0.13163408	2.053087e-01	3.056925e-01
## CEBPZOS	100505876	-0.05463308	2.053562e-01	3.057445e-01
## GOT2P2	391139	-0.36964225	2.054004e-01	3.057916e-01
## FAM228A	653140	0.20290813	2.056213e-01	3.060829e-01
## MSL3P1	<NA>	0.38502648	2.056099e-01	3.060829e-01
## FBXO27	126433	0.07158885	2.056661e-01	3.061308e-01
## UBE2CP5	100874260	0.11813567	2.056980e-01	3.061595e-01
## KDM3B	51780	-0.03759516	2.058027e-01	3.062966e-01
## XPO5	57510	0.03697584	2.058704e-01	3.063650e-01
## FLG	2312	-0.39321330	2.058738e-01	3.063650e-01
## KLC2-AS1	105369352	-0.29143117	2.059158e-01	3.064087e-01
## RMND5B	64777	-0.03856573	2.061311e-01	3.066825e-01
## SRFBP1	153443	-0.04978486	2.061503e-01	3.066825e-01
## DALRD3	55152	0.06837077	2.061282e-01	3.066825e-01
## ARSD-AS1	100506356	-0.32798115	2.061488e-01	3.066825e-01
## CDHR2	54825	-0.16575151	2.061911e-01	3.067243e-01
## TCP10L	140290	-0.10332495	2.062353e-01	3.067713e-01
## ZNF681	148213	0.09430562	2.063171e-01	3.068743e-01
## LINC02966	101927400	0.50381782	2.066899e-01	3.074099e-01
## FAM83G	644815	0.08757412	2.067863e-01	3.075201e-01
## RPL11P3	100271271	0.25495307	2.067893e-01	3.075201e-01
## CNNM3-DT	100506036	-0.12941975	2.069031e-01	3.076705e-01
## ZCWPW1	55063	0.07452503	2.069446e-01	3.077134e-01
## FNDC3A	22862	-0.06446186	2.070204e-01	3.078029e-01
## HMGN1P8	100874431	-0.33786575	2.070301e-01	3.078029e-01
## GARIN1B	84691	-0.28799065	2.070486e-01	3.078116e-01
## SNORD123	100113384	0.39619121	2.070845e-01	3.078253e-01
## LINC00919	100505619	-0.30551420	2.070959e-01	3.078253e-01
## MEI4	101928601	-0.12212623	2.070728e-01	3.078253e-01
## RHOXF1-AS1	101928969	0.25912866	2.071152e-01	3.078353e-01
## STK25P1	100533662	-0.25425167	2.071361e-01	3.078474e-01
## RTE11-TNFRSF6B	100533107	-0.22393070	2.072886e-01	3.079988e-01
## ZNF738	148203	0.09792258	2.072808e-01	3.079988e-01
## MAP10	54627	0.08316127	2.072756e-01	3.079988e-01
## TLE1P1	645381	0.28438938	2.072861e-01	3.079988e-01
## RPSAP12	387867	0.44122423	2.074308e-01	3.081912e-01
## MAST4-AS1	101928794	0.26973492	2.074584e-01	3.082134e-01
## HNRNPA1P16	440396	-0.15508879	2.074777e-01	3.082232e-01

## CYSRT1	375791	-0.12978820	2.075052e-01	3.082452e-01
## PSG1	5669	0.86229175	2.077160e-01	3.085395e-01
## LINC02939	642648	-0.11617447	2.077450e-01	3.085637e-01
## RPL7AP30	441034	0.29306612	2.078079e-01	3.086383e-01
## SHBG	6462	0.17538361	2.078469e-01	3.086702e-01
## NCOA7-AS1	104355145	-0.28420578	2.078548e-01	3.086702e-01
## PPFIBP1	8496	0.07748369	2.078917e-01	3.087062e-01
## PDGFC	56034	0.06405270	2.079609e-01	3.087901e-01
## RPL7L1P3	100131964	-0.34013733	2.079965e-01	3.088240e-01
## LINC01562	105378716	-0.20308479	2.081129e-01	3.089780e-01
## POC1B-AS1	109729146	0.09870648	2.081922e-01	3.090769e-01
## PUM1	9698	-0.04219666	2.082453e-01	3.091368e-01
## RNU1-70P	107105264	-0.17895407	2.083608e-01	3.092893e-01
## PROCA1	147011	-0.12584917	2.084119e-01	3.093463e-01
## DCAF15	90379	-0.06362747	2.084587e-01	3.093969e-01
## GGH	8836	0.13655775	2.086491e-01	3.096605e-01
## KDM8	79831	0.04948840	2.087227e-01	3.097409e-01
## MSH2-OT1	644093	0.24911442	2.087287e-01	3.097409e-01
## OSTN-AS1	106480738	0.22280264	2.087490e-01	3.097520e-01
## KLHDC7B-DT	105373098	0.31382249	2.088182e-01	3.098358e-01
## PDSS1	23590	-0.10288978	2.088488e-01	3.098623e-01
## SLC38A3	10991	0.21272109	2.088919e-01	3.099073e-01
## SFTPA2	729238	-0.28585939	2.090394e-01	3.101072e-01
## SPATA1	100505741	-0.16302095	2.090849e-01	3.101558e-01
## TP53I3	9540	-0.06538960	2.091697e-01	3.102626e-01
## FREM3	166752	0.24406059	2.091843e-01	3.102653e-01
## IBA57-DT	574432	0.28879204	2.092212e-01	3.103011e-01
## DPY19L2P4	442523	-0.14284710	2.093230e-01	3.104332e-01
## TUBA3D	113457	-0.58875894	2.093608e-01	3.104702e-01
## SPIRE2	84501	-0.09613966	2.094690e-01	3.106118e-01
## RPL21P32	100271161	0.37840614	2.097099e-01	3.109501e-01
## TRAF6P1	644871	-0.46327353	2.098594e-01	3.111527e-01
## CNTN5	53942	-0.19371973	2.098795e-01	3.111635e-01
## SIPA1	6494	0.10864080	2.099798e-01	3.112932e-01
## EGR2	1959	-0.28278472	2.100185e-01	3.113317e-01
## LINC02987	101927151	0.06026930	2.102175e-01	3.116076e-01
## RTL5	340526	0.07851899	2.103110e-01	3.117273e-01
## CCNH	902	-0.06365015	2.103855e-01	3.118186e-01
## EGR3	1960	-0.24727250	2.105172e-01	3.119948e-01
## RNU4-29P	106481181	-0.28409324	2.106855e-01	3.122251e-01
## DDX39B	7919	0.14566151	2.107850e-01	3.123345e-01
## LCMT1-AS2	100506655	0.23414448	2.107786e-01	3.123345e-01
## TDG	6996	0.05797828	2.108522e-01	3.124150e-01
## GK4P	2716	0.16723117	2.108848e-01	3.124444e-01
## IRAK1BP1	134728	-0.06214581	2.109471e-01	3.124986e-01
## RBM43	375287	0.07295317	2.109423e-01	3.124986e-01
## CECR3	27442	-0.34038980	2.109843e-01	3.125346e-01
## GSTM2	2946	0.11787440	2.110370e-01	3.125936e-01
## SUCLG1	8802	-0.11778837	2.111618e-01	3.127594e-01
## FBXL6	26233	0.08174662	2.112659e-01	3.128909e-01
## TEX46	729059	0.39975516	2.112764e-01	3.128909e-01
## RPS27P25	100271584	0.53176022	2.113533e-01	3.129858e-01
## FBXW10	10517	0.27628498	2.113687e-01	3.129896e-01
## LINC01116	375295	0.07841120	2.114329e-01	3.130655e-01

## TPMT	7172	-0.09193906	2.116107e-01	3.133096e-01
## POLR2H	5437	-0.06056860	2.117029e-01	3.134269e-01
## CLN8	2055	-0.06252471	2.117157e-01	3.134269e-01
## SYF2	25949	-0.04433839	2.118063e-01	3.135419e-01
## ZBTB18	10472	0.05604390	2.118299e-01	3.135578e-01
## GTF2I	2969	-0.06147650	2.119175e-01	3.136684e-01
## RSF1	51773	-0.06252919	2.119572e-01	3.136777e-01
## KCNJ14	3770	0.11616194	2.119559e-01	3.136777e-01
## MIR3609	100500819	-0.37323398	2.119625e-01	3.136777e-01
## CNN2P1	646467	-0.28074336	2.119786e-01	3.136823e-01
## DIO2	1734	-0.19177749	2.120174e-01	3.137207e-01
## KRT72	140807	0.67465272	2.120475e-01	3.137461e-01
## FAM245B	102724643	0.16103647	2.121729e-01	3.139126e-01
## RBM28	55131	-0.04443040	2.122395e-01	3.139920e-01
## PRELID1P5	388734	-0.55072036	2.122713e-01	3.140199e-01
## RPS3AP21	402287	0.11966136	2.123101e-01	3.140582e-01
## PTPRR	5801	0.15773767	2.124685e-01	3.142733e-01
## WWC2-AS1	101928734	0.56054218	2.125082e-01	3.143130e-01
## RPS3P3	440991	0.20285225	2.125487e-01	3.143537e-01
## CDC37L1-DT	101929351	0.13540455	2.125872e-01	3.143916e-01
## MYADM-AS2	129810493	0.52387440	2.127239e-01	3.145746e-01
## FAM204A	63877	-0.04511435	2.128408e-01	3.147283e-01
## MIR4292	100422860	0.24262524	2.129717e-01	3.149027e-01
## HELQ	113510	0.04659846	2.130320e-01	3.149632e-01
## MYL6P5	124685	-0.27202824	2.130386e-01	3.149632e-01
## PAPOLA	10914	-0.03759792	2.131153e-01	3.150000e-01
## ACTR1B	10120	0.04589543	2.131043e-01	3.150000e-01
## ATXN7L1	222255	0.08344160	2.130888e-01	3.150000e-01
## DYNLRB2	83657	0.11916463	2.131021e-01	3.150000e-01
## TMEM212	389177	1.08141307	2.132379e-01	3.151620e-01
## TMEM200A	114801	0.08954481	2.132872e-01	3.151691e-01
## CUTALP	253039	0.12147122	2.132807e-01	3.151691e-01
## SNHG6	641638	0.09802258	2.132907e-01	3.151691e-01
## GOLGA8H	728498	0.26919776	2.132946e-01	3.151691e-01
## PCDHB10	56126	0.11287414	2.134436e-01	3.153350e-01
## HOXC12	3228	0.60625567	2.134458e-01	3.153350e-01
## RAVER2	55225	-0.05871645	2.134317e-01	3.153350e-01
## LINC02918	105378688	-0.12976084	2.134603e-01	3.153374e-01
## LDHAL6FP	100420477	0.45664973	2.135505e-01	3.154514e-01
## RASSF1-AS1	102060282	0.14756421	2.136567e-01	3.155890e-01
## BRD1	23774	0.05457652	2.139056e-01	3.159184e-01
## WRAP53	55135	0.06057114	2.138979e-01	3.159184e-01
## AP2B1P1	401602	-0.33025105	2.142196e-01	3.163628e-01
## IGHV3-74	28408	0.27050369	2.143149e-01	3.164844e-01
## KCNS2	3788	0.40851046	2.143480e-01	3.165140e-01
## LINC01675	105371590	0.63545481	2.143733e-01	3.165321e-01
## ZNF593	51042	0.11297075	2.143942e-01	3.165438e-01
## SLC8A1	6546	-0.14297148	2.144207e-01	3.165637e-01
## IGKV1-13	28939	0.76420786	2.144623e-01	3.166058e-01
## METAP1	23173	-0.03084273	2.145752e-01	3.167533e-01
## ST13P20	729828	-0.32513872	2.150405e-01	3.174208e-01
## HPN	3249	-0.11453800	2.151039e-01	3.174951e-01
## BRPF1	7862	0.04357711	2.151573e-01	3.175547e-01
## LCN1	3933	1.29031250	2.153296e-01	3.177897e-01

## STIM1-AS1	105376527	-0.17353552	2.154051e-01	3.178819e-01
## CCDC18-AS1	100131564	0.13951963	2.155647e-01	3.180980e-01
## ALKBH8	91801	0.04942355	2.156443e-01	3.181961e-01
## ATP1B1P1	485	-0.23357098	2.158078e-01	3.184180e-01
## FUT6	2528	-0.15107779	2.158658e-01	3.184809e-01
## RPL7L1P9	100128899	0.38084796	2.158897e-01	3.184809e-01
## LINC01694	105372840	0.26767489	2.158879e-01	3.184809e-01
## MAP2K2	5605	0.09676347	2.159307e-01	3.185149e-01
## CSPG4P11	100631254	0.41788166	2.159389e-01	3.185149e-01
## COL7A1	1294	0.22640542	2.159604e-01	3.185272e-01
## GUSBP9	118126072	-0.26600201	2.161001e-01	3.187139e-01
## ANKRD62P1	107080639	-0.45363660	2.161535e-01	3.187733e-01
## SMPD4	55627	-0.05169777	2.162620e-01	3.189125e-01
## LINC02177	101927009	0.27664752	2.162741e-01	3.189125e-01
## LINC01876	101929378	0.24133756	2.163948e-01	3.190517e-01
## RPS16P4	100271068	0.36846102	2.163840e-01	3.190517e-01
## GAPDHP35	647001	0.42448196	2.165639e-01	3.192817e-01
## ST6GALNAC4P1	100874524	-0.33168068	2.166349e-01	3.193670e-01
## METTL16	79066	-0.03724665	2.168220e-01	3.196040e-01
## BZW1P2	151579	0.12345713	2.168183e-01	3.196040e-01
## PKD1P3	339039	0.24536508	2.170285e-01	3.198889e-01
## PPP1R12C	54776	-0.06350964	2.171048e-01	3.199751e-01
## UBA3	9039	-0.03871721	2.171133e-01	3.199751e-01
## KANK4	163782	0.14408046	2.171295e-01	3.199796e-01
## EFNA3	1944	0.11551747	2.171553e-01	3.199897e-01
## GDPD4	220032	0.53470981	2.171627e-01	3.199897e-01
## TSEN54	283989	-0.05782484	2.172163e-01	3.200493e-01
## MGST3	4259	-0.07965457	2.172476e-01	3.200760e-01
## INPP5B	3633	0.07233115	2.172627e-01	3.200788e-01
## HSFX1	100506164	0.34286880	2.172794e-01	3.200841e-01
## CSTF3-DT	338739	0.50256912	2.174985e-01	3.203874e-01
## GSR	2936	-0.05912922	2.175621e-01	3.204519e-01
## CBX3P4	100873792	0.34918568	2.175686e-01	3.204519e-01
## KRT6A	3853	1.12374493	2.176255e-01	3.205161e-01
## TOR4A	54863	-0.12260405	2.177234e-01	3.206410e-01
## MACF1	23499	0.08785434	2.177561e-01	3.206697e-01
## CTDSP12-DT	120017340	-0.44727614	2.178400e-01	3.207738e-01
## PITPNB	23760	0.03886873	2.179794e-01	3.209596e-01
## TMLHE-AS1	100507404	-0.33844178	2.180419e-01	3.210322e-01
## BTNL2	56244	0.65609355	2.183341e-01	3.214430e-01
## STX5-DT	105369332	0.20533266	2.183830e-01	3.214954e-01
## EFCC1	79825	-0.12272246	2.184496e-01	3.215740e-01
## SNRPCP3	100128469	-0.37338609	2.185466e-01	3.216973e-01
## TMEM144	55314	-0.06718934	2.185705e-01	3.217130e-01
## YWHAH	7533	0.07483592	2.187145e-01	3.219054e-01
## IQSEC2	23096	0.06950578	2.187658e-01	3.219419e-01
## FEM1C	56929	0.04204466	2.187644e-01	3.219419e-01
## ARL5A	26225	-0.05642797	2.188528e-01	3.220506e-01
## ZNF19	7567	0.06214083	2.190678e-01	3.223474e-01
## AKAP12	9590	-0.11307131	2.191108e-01	3.223911e-01
## CAST	831	0.04357693	2.191596e-01	3.224433e-01
## LINC01506	101927015	0.15540326	2.192519e-01	3.225596e-01
## ATF1	466	0.03909016	2.193764e-01	3.227233e-01
## IGHV4-31	28396	0.40984959	2.195649e-01	3.229811e-01

## VSTM2L	128434	0.17613486	2.196448e-01	3.230790e-01
## GTF2B	2959	-0.04503454	2.198498e-01	3.233610e-01
## NPAP1P3	100420830	-0.40536736	2.199410e-01	3.234559e-01
## RNU6-94P	106481206	0.45595350	2.199295e-01	3.234559e-01
## SUPT7L	9913	0.02824814	2.200135e-01	3.235038e-01
## IGLON5	402665	-0.44708005	2.200077e-01	3.235038e-01
## ZNF84-DT	101928597	0.43276184	2.200047e-01	3.235038e-01
## HCG25	414765	0.15101262	2.201845e-01	3.237304e-01
## ZNF503-AS2	100131213	0.07794957	2.202075e-01	3.237304e-01
## ATP2C2-AS1	105371374	-0.19552644	2.201964e-01	3.237304e-01
## AOX2P	344454	0.38824622	2.202315e-01	3.237461e-01
## PWP1	11137	-0.03174708	2.202490e-01	3.237497e-01
## FBXO22	26263	0.04378016	2.202774e-01	3.237497e-01
## LINC02599	113523635	0.55253347	2.202614e-01	3.237497e-01
## SPRR2A	6700	-0.50342697	2.202873e-01	3.237497e-01
## ABCB7	22	-0.03436797	2.203151e-01	3.237515e-01
## CHCT1	124773	-0.28201176	2.203055e-01	3.237515e-01
## TIMM22	29928	0.05047414	2.204445e-01	3.239024e-01
## MRAP-AS1	105372779	0.55237353	2.204368e-01	3.239024e-01
## MLLT1	4298	-0.06598414	2.206188e-01	3.241247e-01
## RN7SL574P	106481079	0.19475099	2.206225e-01	3.241247e-01
## DNAAF1	123872	0.14132746	2.208252e-01	3.244029e-01
## SLC17A2	10246	0.17878624	2.208433e-01	3.244098e-01
## HSPA8P15	100420051	0.23455312	2.209046e-01	3.244660e-01
## RXYLT1-AS1	104169670	-0.31675331	2.209082e-01	3.244660e-01
## NEDD1	121441	-0.05055270	2.211098e-01	3.247424e-01
## YAP1	10413	0.05073873	2.212335e-01	3.248767e-01
## IL24	11009	-0.83725338	2.212364e-01	3.248767e-01
## MTND1P27	100288227	-0.77816558	2.212413e-01	3.248767e-01
## LINC03008	100128325	0.28518020	2.213067e-01	3.249343e-01
## TMEM242-DT	118732303	-0.20147917	2.213072e-01	3.249343e-01
## MTFR2	113115	-0.14442432	2.213226e-01	3.249372e-01
## MRPS14	63931	-0.04276196	2.213649e-01	3.249797e-01
## LEPROT1	23484	-0.04631937	2.214906e-01	3.251231e-01
## CYCSP34	360182	0.22275215	2.215161e-01	3.251231e-01
## ACTR3-AS1	101060091	0.25306517	2.214909e-01	3.251231e-01
## EEF1A1P34	100132358	0.57917831	2.215080e-01	3.251231e-01
## WDR4	10785	-0.04901993	2.215564e-01	3.251626e-01
## NOSIP	51070	0.08959866	2.217661e-01	3.254506e-01
## FH	2271	-0.05543666	2.219008e-01	3.256286e-01
## MAP1LC3B2	643246	0.15170437	2.219869e-01	3.257353e-01
## ZBTB7A	51341	-0.06291457	2.220223e-01	3.257677e-01
## RUNX1-AS1	124905014	1.04945948	2.220560e-01	3.257974e-01
## SPDEF	25803	0.41964012	2.220785e-01	3.258108e-01
## TRIP10	9322	0.07566383	2.221251e-01	3.258314e-01
## MIR3153	100422936	0.51740197	2.221177e-01	3.258314e-01
## TIMMDC1-DT	118568812	0.25662065	2.221328e-01	3.258314e-01
## EXD1	161829	-0.39986413	2.221587e-01	3.258498e-01
## CAPG	822	0.09171018	2.222635e-01	3.259838e-01
## RNPEP	6051	0.05715120	2.223156e-01	3.260406e-01
## EGOT	100126791	0.13142679	2.225348e-01	3.263423e-01
## SND1-DT	121832805	-0.43819115	2.226064e-01	3.264276e-01
## PELO-AS1	125775243	0.13819494	2.226349e-01	3.264496e-01
## RPS26P21	100271105	0.55686438	2.226803e-01	3.264965e-01

## FAM78B-AS1	105371586	0.27364549	2.227541e-01	3.265683e-01
## NDUFB9P2	100128596	-0.26890490	2.227561e-01	3.265683e-01
## UBL7	84993	0.08130851	2.227874e-01	3.265945e-01
## GOLGA6FP	645752	0.31694840	2.229616e-01	3.268301e-01
## C6orf132	647024	-0.12360270	2.230663e-01	3.269639e-01
## ANGEL2	90806	0.03824198	2.234233e-01	3.274674e-01
## ZNF268	10795	0.06171032	2.238314e-01	3.280458e-01
## BEGAIN	57596	0.12804665	2.238565e-01	3.280480e-01
## DMRTC1B	728656	-0.35619491	2.238599e-01	3.280480e-01
## BSN-DT	100132677	0.17387262	2.240246e-01	3.282695e-01
## THNSL2	55258	-0.13958094	2.240541e-01	3.282930e-01
## MSANTD1	345222	-0.16166156	2.240923e-01	3.283291e-01
## RPL23AP81	100271627	-0.38909437	2.241830e-01	3.284422e-01
## IPO9	55705	0.03116581	2.242126e-01	3.284657e-01
## ELFN2	114794	0.17157186	2.242984e-01	3.285717e-01
## NAXD	55739	0.04193020	2.243457e-01	3.286212e-01
## TM4SF18	116441	-0.06593032	2.244825e-01	3.288018e-01
## VCX3B	425054	-0.32768432	2.245038e-01	3.288131e-01
## TEX19	400629	0.59159778	2.246347e-01	3.289850e-01
## L3MBTL3	84456	0.05469787	2.247323e-01	3.291081e-01
## MYRF	745	-0.09834778	2.248008e-01	3.291886e-01
## CHD1	1105	-0.07939848	2.248179e-01	3.291927e-01
## UBL5	59286	0.08588123	2.248307e-01	3.291927e-01
## NR1I3	9970	0.21949866	2.248785e-01	3.292302e-01
## KANSL1L-AS1	101928020	-0.20607675	2.248834e-01	3.292302e-01
## TUBAP2	399942	0.23091046	2.249936e-01	3.293717e-01
## RNF2	6045	0.04458072	2.251008e-01	3.295087e-01
## RBM22P2	100271871	0.19861684	2.252033e-01	3.296390e-01
## OSBPL5	114879	-0.09671085	2.252198e-01	3.296432e-01
## SNORA70F	100337591	-0.24094430	2.253075e-01	3.297518e-01
## SLC30A10	55532	0.68957634	2.254263e-01	3.299057e-01
## ABHD14A-ACY1	100526760	-0.22044275	2.255078e-01	3.299597e-01
## RPL23AP34	100271294	0.29151081	2.255175e-01	3.299597e-01
## RPL7AP76	643630	0.23050123	2.254916e-01	3.299597e-01
## RPL37P6	346950	0.35156442	2.255074e-01	3.299597e-01
## MAP2K5	5607	0.04348884	2.255453e-01	3.299806e-01
## RRN3P3	100131998	0.09705777	2.256560e-01	3.301227e-01
## COX15	1355	-0.04506163	2.257448e-01	3.302327e-01
## LINC01897	124904311	0.48274441	2.259046e-01	3.304465e-01
## RPS2P32	256355	0.11945855	2.259273e-01	3.304598e-01
## NFYB	4801	-0.04404066	2.260133e-01	3.305657e-01
## REPS2	9185	-0.13414806	2.262123e-01	3.308206e-01
## WASH8P	100288778	-0.11891558	2.262148e-01	3.308206e-01
## PSMF1	9491	0.05209257	2.262854e-01	3.309040e-01
## MIR26B	407017	0.51289707	2.263108e-01	3.309211e-01
## C17orf50	146853	-0.32617680	2.264131e-01	3.310509e-01
## LINC00322	100126693	-0.73744447	2.265262e-01	3.311963e-01
## MITD1	129531	0.06958888	2.265772e-01	3.312310e-01
## PRB3	5544	0.63439381	2.265689e-01	3.312310e-01
## SSR3	6747	-0.04872243	2.267374e-01	3.314452e-01
## FASN	2194	0.12863651	2.268527e-01	3.315939e-01
## SNX5P2	728467	0.25771731	2.269575e-01	3.317271e-01
## TLK2	11011	-0.03275362	2.270005e-01	3.317650e-01
## MTDHP3	100418832	-0.24115295	2.270108e-01	3.317650e-01

## LINC02716	374387	0.21347380	2.270891e-01	3.318595e-01
## MOGAT1	116255	-0.19592140	2.271064e-01	3.318649e-01
## HEXD-IT1	100505970	-0.27879144	2.271926e-01	3.319709e-01
## IGLV1-44	28823	0.34591873	2.272324e-01	3.319890e-01
## PRDX2P3	100418943	0.37362848	2.272279e-01	3.319890e-01
## DNAH9	1770	0.10541751	2.272488e-01	3.319931e-01
## ABCD1	215	-0.11005083	2.273655e-01	3.321303e-01
## STK11IP	114790	-0.05831970	2.273701e-01	3.321303e-01
## DCTN2	10540	0.04929786	2.274894e-01	3.322847e-01
## ALDH5A1	7915	0.09634679	2.275635e-01	3.323730e-01
## PGC	5225	-0.21909163	2.276032e-01	3.324109e-01
## PATJ-DT	118732297	0.27600207	2.276415e-01	3.324469e-01
## CARS1	833	0.04571398	2.277148e-01	3.325339e-01
## MIR6757	102466193	0.37959746	2.277951e-01	3.326313e-01
## CTBP1	1487	0.05405207	2.278820e-01	3.327381e-01
## MS4A10	341116	0.33954808	2.279865e-01	3.328708e-01
## SHTN1	57698	-0.06137069	2.281966e-01	3.331574e-01
## JMJD1C	221037	0.08212898	2.282614e-01	3.332320e-01
## SLC24A1	9187	0.06389675	2.283895e-01	3.333990e-01
## EFHC1	114327	0.07637194	2.284288e-01	3.334363e-01
## IL6R	3570	0.12243221	2.286132e-01	3.336855e-01
## PRXL2AP2	100131252	0.51148727	2.287449e-01	3.338576e-01
## TAAR8	83551	0.54148890	2.287750e-01	3.338815e-01
## BAZ2A	11176	-0.05078554	2.288023e-01	3.339013e-01
## TULP2	7288	0.15752303	2.289638e-01	3.341170e-01
## SAMM50	25813	0.06564347	2.289863e-01	3.341297e-01
## KMT2C	58508	0.09213618	2.291568e-01	3.343584e-01
## APBB2	323	-0.05447515	2.291988e-01	3.343996e-01
## CSGALNACT2-DT	118568825	-0.15300000	2.292205e-01	3.344112e-01
## TRIM38	10475	-0.07891053	2.293450e-01	3.345728e-01
## MOK	5891	0.06766188	2.293973e-01	3.346139e-01
## HINT1P1	730647	-0.34425610	2.294008e-01	3.346139e-01
## CBX8	57332	0.06452762	2.294297e-01	3.346361e-01
## CSNK1A1	1452	0.03710349	2.294736e-01	3.346800e-01
## EHMT2-AS1	107986588	-0.19849797	2.296059e-01	3.348529e-01
## UPF3B	65109	0.07934918	2.296578e-01	3.349084e-01
## IFNGR2	3460	0.06758592	2.296805e-01	3.349214e-01
## TAGAP-AS1	105378083	-0.09834099	2.296953e-01	3.349229e-01
## ASCL4	121549	-0.19629090	2.297706e-01	3.350126e-01
## CYP4X1	260293	-0.07059633	2.297883e-01	3.350183e-01
## IGLV5-52	28779	0.45394907	2.299038e-01	3.351667e-01
## KCTD2	23510	0.03512682	2.300549e-01	3.353668e-01
## KDM5D	8284	0.39353775	2.301461e-01	3.354795e-01
## TPP1	1200	-0.08682077	2.301721e-01	3.354974e-01
## IMP4	92856	0.04900909	2.302997e-01	3.356632e-01
## FKTN-AS1	105376199	-0.34206280	2.303306e-01	3.356881e-01
## HDAC10	83933	0.15449494	2.304306e-01	3.358138e-01
## CHCHD3P3	646572	-0.35467699	2.305675e-01	3.359931e-01
## PCDHGA10	56106	0.11190409	2.307002e-01	3.361663e-01
## ZSCAN30	100101467	-0.06333873	2.307303e-01	3.361699e-01
## BRD3OS	266655	0.04161595	2.307190e-01	3.361699e-01
## TBC1D23	55773	0.04154126	2.307907e-01	3.362377e-01
## SIPA1L1-AS1	102724015	-0.11718269	2.308224e-01	3.362637e-01
## NUP107-DT	<NA>	0.17000584	2.309771e-01	3.364689e-01

## MIR663AHG	284801	-1.32338666	2.310324e-01	3.365292e-01
## GSTT2	2953	-0.42567719	2.311189e-01	3.366352e-01
## SGTA	6449	-0.06380223	2.311496e-01	3.366597e-01
## ZNF26	7574	0.07176228	2.311648e-01	3.366617e-01
## MRGBP	55257	0.05097886	2.312110e-01	3.366704e-01
## DNAI1	27019	0.14662570	2.312124e-01	3.366704e-01
## ZFP28	140612	0.04625031	2.312121e-01	3.366704e-01
## SYT15	83849	-0.16919237	2.312594e-01	3.367187e-01
## RFPL1	5988	0.73210712	2.312980e-01	3.367547e-01
## ANKHD1	54882	-0.12193300	2.313761e-01	3.368483e-01
## AGK-DT	105375538	-0.34649544	2.314170e-01	3.368876e-01
## SEC11A	23478	0.06781479	2.314959e-01	3.369823e-01
## LINC01422	101929539	0.16814890	2.315318e-01	3.370143e-01
## BAALC-AS1	100499183	-0.06011033	2.316104e-01	3.371086e-01
## WDFY3	23001	0.07582179	2.317509e-01	3.372866e-01
## KRT8P11	347265	-0.50610712	2.317605e-01	3.372866e-01
## LPAL2	80350	-0.19665171	2.318827e-01	3.374443e-01
## PIP5KL1	138429	-0.10658906	2.319221e-01	3.374611e-01
## ARIH2OS	646450	-0.09423246	2.319113e-01	3.374611e-01
## RN7SL130P	106479269	0.20892377	2.319979e-01	3.375512e-01
## HIGD1C	613227	0.34504189	2.320834e-01	3.376555e-01
## SOS1	6654	0.05433757	2.322007e-01	3.378058e-01
## ZNF207	7756	-0.03563644	2.322208e-01	3.378068e-01
## GABARAP	11337	-0.10822617	2.322292e-01	3.378068e-01
## TIPARP-AS1	100287227	0.12259263	2.322434e-01	3.378073e-01
## ARHGAP44	9912	-0.06259389	2.323894e-01	3.379994e-01
## ATP6V0D2	245972	-0.13038034	2.324240e-01	3.380204e-01
## ANKRD44-AS1	101927596	0.37105218	2.324316e-01	3.380204e-01
## PCDHB14	56122	0.08859325	2.325022e-01	3.380447e-01
## RUFY2	55680	-0.05695577	2.325040e-01	3.380447e-01
## SRRM5	100170229	0.13572774	2.324947e-01	3.380447e-01
## PRELID1P6	388955	0.21412331	2.325017e-01	3.380447e-01
## CALHM4	221301	-0.22911456	2.325645e-01	3.381124e-01
## PSMA6P1	64596	0.23239816	2.325878e-01	3.381261e-01
## ZNF395	55893	-0.03532033	2.326099e-01	3.381379e-01
## LINC01337	103689917	0.35891076	2.328156e-01	3.384168e-01
## TSEN2	80746	0.04480150	2.328809e-01	3.384713e-01
## LRRC58	116064	-0.06707709	2.328752e-01	3.384713e-01
## CMIP	80790	0.06227587	2.329055e-01	3.384867e-01
## FAM227B	196951	-0.07055027	2.329580e-01	3.385368e-01
## SPDYC	387778	-0.30334386	2.329678e-01	3.385368e-01
## L3MBTL4	91133	0.09042589	2.330471e-01	3.386115e-01
## MIR3682	100500850	-0.24795508	2.330336e-01	3.386115e-01
## LINC00602	441177	0.32626224	2.330706e-01	3.386254e-01
## TRIM39	56658	0.03202279	2.331910e-01	3.387801e-01
## EI24P2	100129866	0.39487388	2.332209e-01	3.388033e-01
## ZNF570	148268	0.06383325	2.332778e-01	3.388657e-01
## ANKRD10-IT1	100505494	0.16604886	2.333670e-01	3.389750e-01
## MIR4768	100616249	0.28021495	2.333959e-01	3.389967e-01
## PLEKHA6	22874	-0.07225402	2.334898e-01	3.391128e-01
## IDH3B	3420	-0.04884891	2.337178e-01	3.394237e-01
## DUOX2	50506	0.14439115	2.337684e-01	3.394769e-01
## RN7SL145P	106481753	0.28967101	2.337942e-01	3.394941e-01
## RBKS	64080	-0.09544549	2.338553e-01	3.395624e-01

## THUMPD2	80745	-0.06695419	2.339130e-01	3.396260e-01
## FBXO30	84085	-0.04672109	2.339888e-01	3.397157e-01
## MOV10	4343	-0.04534626	2.340729e-01	3.398176e-01
## TUBA4B	80086	0.16581559	2.341846e-01	3.399594e-01
## IMMP1L	196294	-0.07889234	2.342218e-01	3.399764e-01
## MYO16-AS1	100885782	0.82325779	2.342243e-01	3.399764e-01
## VN1R80P	100312825	0.49488342	2.342410e-01	3.399803e-01
## LINC02803	107985228	0.25352618	2.343186e-01	3.400727e-01
## ZC3H11B	643136	-0.36017543	2.344437e-01	3.402339e-01
## GYPA	2993	0.19767570	2.344647e-01	3.402352e-01
## OR9A3P	392106	0.38158279	2.344726e-01	3.402352e-01
## XRN2	22803	0.03169778	2.345821e-01	3.403738e-01
## G2E3	55632	0.05227104	2.346398e-01	3.404372e-01
## CCDC106	29903	-0.08151064	2.346687e-01	3.404587e-01
## ABCC1	4363	0.08039988	2.346869e-01	3.404649e-01
## FGF13	2258	0.06659649	2.347172e-01	3.404885e-01
## PELO	53918	-0.03832962	2.347764e-01	3.405541e-01
## CFTR	1080	-0.22206554	2.348636e-01	3.406115e-01
## TSPAN10	83882	0.10760585	2.348721e-01	3.406115e-01
## ZDHHC11	79844	0.16520377	2.348674e-01	3.406115e-01
## RNY3P16	106480686	0.38930684	2.348402e-01	3.406115e-01
## ZNF836	162962	0.06101267	2.349817e-01	3.407501e-01
## HAX1	10456	0.07860133	2.351120e-01	3.409187e-01
## FAM86C1P	55199	0.06328282	2.351639e-01	3.409737e-01
## MED26	9441	0.04193123	2.353022e-01	3.411539e-01
## GLB1L	79411	-0.08793652	2.356865e-01	3.416906e-01
## ATF2	1386	-0.04083447	2.357421e-01	3.417347e-01
## KCNT2	343450	0.12836158	2.357451e-01	3.417347e-01
## USP36	57602	0.04893371	2.359416e-01	3.419993e-01
## SMTN	6525	0.09161776	2.359891e-01	3.420477e-01
## LINC01911	105373669	0.51510285	2.360374e-01	3.420973e-01
## EIF2S2P2	347673	-0.36711108	2.361606e-01	3.422555e-01
## MPHOSPH8	54737	-0.04374498	2.361831e-01	3.422676e-01
## PNMA8C	110806277	0.19571937	2.362897e-01	3.424017e-01
## DNAJB6P1	387820	-0.14543391	2.363054e-01	3.424040e-01
## EIF4A1	1973	-0.19231565	2.364225e-01	3.425533e-01
## ADAM22	53616	0.09365842	2.365033e-01	3.426499e-01
## PDLIM1P4	100419185	-0.17038241	2.365199e-01	3.426536e-01
## CISD2	493856	-0.05957567	2.365397e-01	3.426618e-01
## NKX3-1	4824	0.09826137	2.367010e-01	3.428750e-01
## NCAM1-AS1	100288346	-0.30745279	2.367853e-01	3.429767e-01
## GK	2710	0.14103647	2.368286e-01	3.429985e-01
## PSMB3	5691	-0.06823722	2.368161e-01	3.429985e-01
## PURPL	643401	0.27255857	2.368923e-01	3.430703e-01
## LINC02119	101929745	0.35071771	2.370222e-01	3.432379e-01
## PLCXD3	345557	-0.12461710	2.370890e-01	3.433142e-01
## EBAG9	9166	-0.04945114	2.373193e-01	3.436273e-01
## PSMC1P1	151645	0.09327774	2.374434e-01	3.437865e-01
## IGHV3-13	28449	-0.43304057	2.374681e-01	3.438018e-01
## WASF3	10810	0.06544997	2.375725e-01	3.439324e-01
## LINC02739	105369317	-0.23440897	2.376519e-01	3.440268e-01
## ZNHIT2	741	-0.13258486	2.377235e-01	3.441100e-01
## RBM17	84991	0.03979913	2.377680e-01	3.441540e-01
## MYL12-AS1	104968399	-0.16451288	2.377929e-01	3.441695e-01

## ANKS1A	23294	-0.03932766	2.378763e-01	3.442492e-01
## PLPP4	196051	0.10051296	2.378696e-01	3.442492e-01
## ANKRD7	56311	0.11003710	2.380692e-01	3.445078e-01
## AMD1P3	728931	0.27745679	2.382191e-01	3.447042e-01
## LINC01385	106144542	-0.60561681	2.383685e-01	3.448999e-01
## PJVK	494513	0.11072849	2.384327e-01	3.449721e-01
## LINC02652	105376468	-0.61462211	2.385072e-01	3.450594e-01
## TAF7	6879	-0.03113266	2.386562e-01	3.452545e-01
## MTUS1-DT	101930275	-0.37287022	2.386758e-01	3.452622e-01
## KLRA1P	10748	0.16322009	2.387924e-01	3.454103e-01
## RAB7A	7879	-0.03133527	2.388894e-01	3.455301e-01
## XKR9	389668	-0.16736920	2.390413e-01	3.457293e-01
## SMYD3	64754	0.05241177	2.390578e-01	3.457325e-01
## KLHL21	9903	0.06933189	2.391292e-01	3.458152e-01
## CTRC	11330	0.57302125	2.391437e-01	3.458156e-01
## NCL	4691	-0.03389601	2.391960e-01	3.458707e-01
## TMEM183AP2	646616	0.63621492	2.393689e-01	3.461000e-01
## GPALPP1	55425	-0.05448484	2.394298e-01	3.461675e-01
## TNRC6B	23112	0.05831449	2.394895e-01	3.462332e-01
## HSPE1	3336	0.10782646	2.396019e-01	3.463752e-01
## ATP5MC2	517	0.08731152	2.396220e-01	3.463836e-01
## FOXP2	93986	-0.12455353	2.399601e-01	3.468517e-01
## TMEM132A	54972	-0.14790001	2.400131e-01	3.469076e-01
## CD2AP-DT	118732299	-0.12016111	2.400527e-01	3.469442e-01
## RAI14-DT	105374723	0.19089492	2.400693e-01	3.469476e-01
## PDCD6	10016	0.13223771	2.401000e-01	3.469714e-01
## RNF24	11237	-0.10336585	2.402210e-01	3.470637e-01
## GLRX5	51218	0.07416618	2.402003e-01	3.470637e-01
## HNRNPA1P53	728732	-0.39832384	2.401837e-01	3.470637e-01
## WHSC1L2P	100128016	-0.41095020	2.402159e-01	3.470637e-01
## HRH2	3274	0.10444430	2.402845e-01	3.471347e-01
## ATG101	60673	-0.05889193	2.403596e-01	3.472227e-01
## IGLV3-10	28803	0.41957828	2.403850e-01	3.472387e-01
## PRMT9	90826	-0.04344898	2.405092e-01	3.473975e-01
## ZNF713	349075	0.11863121	2.406440e-01	3.475715e-01
## SSBL4P	441904	0.43499933	2.407420e-01	3.476923e-01
## IFT56	79989	-0.04294803	2.408584e-01	3.478397e-01
## LCIIAR	100130111	0.11336722	2.411048e-01	3.481750e-01
## CIDECP1	152302	0.05464439	2.411476e-01	3.482160e-01
## CDHR5	53841	-0.16493251	2.411984e-01	3.482480e-01
## CCDC88C-DT	105370625	0.35074562	2.411955e-01	3.482480e-01
## TMEM139-AS1	105375545	-0.17182479	2.412356e-01	3.482811e-01
## WDR74	54663	0.05139219	2.413718e-01	3.484559e-01
## PLA2G1B	5319	0.18004488	2.413893e-01	3.484559e-01
## DRG1	4733	0.05273552	2.414141e-01	3.484559e-01
## LINC01724	105371673	1.01747713	2.413998e-01	3.484559e-01
## H3C2	8358	0.75550833	2.415211e-01	3.485897e-01
## RN7SL663P	106481103	-0.33742147	2.416438e-01	3.487461e-01
## GCFC2	6936	-0.06011703	2.416906e-01	3.487928e-01
## TMEM18	129787	-0.05041554	2.417121e-01	3.488031e-01
## FAAP20	199990	0.12212327	2.417275e-01	3.488047e-01
## WASF4P	644739	0.26834388	2.417804e-01	3.488604e-01
## SMARCAD1	56916	-0.05027148	2.419015e-01	3.490084e-01
## GLUD1P2	414212	-0.14449941	2.419118e-01	3.490084e-01

## SLC24A2	25769	-0.22222526	2.419348e-01	3.490210e-01
## TMPRSS5	80975	-0.18264307	2.420181e-01	3.490997e-01
## HCAR1	27198	0.12495837	2.420175e-01	3.490997e-01
## NAPA	8775	-0.05025996	2.420327e-01	3.491000e-01
## PMS2	5395	0.05380645	2.421548e-01	3.492554e-01
## HDHD3	81932	0.09502342	2.422069e-01	3.493097e-01
## MTPN	136319	-0.04283429	2.422580e-01	3.493616e-01
## LINC02696	101928812	-0.15177157	2.422716e-01	3.493616e-01
## PIGP	51227	-0.05795705	2.423860e-01	3.495058e-01
## UBE2Z	65264	0.02979283	2.425705e-01	3.497511e-01
## ZZEF1	23140	-0.04977208	2.425933e-01	3.497632e-01
## FADS2	9415	0.14141713	2.427091e-01	3.499095e-01
## CAND1	55832	0.03467822	2.429231e-01	3.501972e-01
## TGS1	96764	-0.04240799	2.431752e-01	3.505386e-01
## CLEC6A	93978	0.33109906	2.431888e-01	3.505386e-01
## UPP2	151531	0.20993962	2.432398e-01	3.505914e-01
## CCL16	6360	0.18527180	2.433324e-01	3.507041e-01
## SLC26A4-AS1	286002	-0.20047051	2.433746e-01	3.507440e-01
## CHMP3-AS1	105374845	-0.29548562	2.434461e-01	3.508262e-01
## EPB41L3	23136	0.07731599	2.434737e-01	3.508452e-01
## HLA-DRB1	3123	0.10933788	2.434897e-01	3.508475e-01
## RBBP5	5929	0.04200854	2.435086e-01	3.508539e-01
## SNORA54	677833	0.43490835	2.436767e-01	3.510754e-01
## ACAA2P1	100420869	0.15603845	2.438019e-01	3.512349e-01
## PIBF1	10464	0.06078450	2.439319e-01	3.514013e-01
## MORC2-AS1	150291	0.09990961	2.440371e-01	3.515320e-01
## LRRTM1	347730	-0.20795299	2.440906e-01	3.515883e-01
## AKAP7	9465	0.05161024	2.443285e-01	3.519101e-01
## IFI35	3430	0.07878194	2.444180e-01	3.520182e-01
## HEATR5A	25938	-0.04977912	2.445503e-01	3.521878e-01
## MIR137HG	400765	0.84800210	2.445849e-01	3.522167e-01
## CDK6-AS1	101927497	0.25082153	2.446010e-01	3.522191e-01
## NOL3	8996	-0.08290278	2.446797e-01	3.523115e-01
## MSI1	4440	0.10119294	2.447973e-01	3.524600e-01
## ANKRD62P1-PARP4P3	23783	-0.54392408	2.448835e-01	3.525632e-01
## NAP1L4	4676	0.02695371	2.449923e-01	3.526780e-01
## DMTF1-AS1	101927420	0.09882353	2.449845e-01	3.526780e-01
## SCPEP1	59342	0.05204804	2.450620e-01	3.527248e-01
## SORD	6652	0.14329384	2.450507e-01	3.527248e-01
## SPHKAP	80309	-0.23563766	2.450683e-01	3.527248e-01
## CHILL1	<NA>	-0.17945975	2.451769e-01	3.528602e-01
## TMEM230	29058	0.05032923	2.452251e-01	3.529087e-01
## AANAT	15	0.27570762	2.452839e-01	3.529724e-01
## MTARC1	64757	-0.06949465	2.453592e-01	3.530598e-01
## MIF-AS1	284889	-0.13230283	2.454087e-01	3.531101e-01
## MYBBP1A	10514	0.05985802	2.455237e-01	3.532436e-01
## ASMT	438	0.29823521	2.455305e-01	3.532436e-01
## PPM1F-AS1	100286925	0.11884721	2.455755e-01	3.532874e-01
## SDHDP2	647081	-0.27652131	2.456019e-01	3.533045e-01
## PPP4R4	57718	0.13405751	2.456462e-01	3.533473e-01
## SETD3	84193	-0.05108368	2.457583e-01	3.534802e-01
## PA2G4P2	170533	0.30466938	2.457677e-01	3.534802e-01
## PAK5	57144	-0.15697775	2.457922e-01	3.534944e-01
## TM4SF1	4071	-0.09920510	2.458120e-01	3.535020e-01

## LPA	4018	-0.25475289	2.459006e-01	3.536085e-01
## MKX-AS1	101929202	0.59594064	2.459940e-01	3.537219e-01
## SHOX	6473	1.12381056	2.460971e-01	3.538493e-01
## DCAF12L1	139170	0.13703294	2.461274e-01	3.538718e-01
## GYS1	2997	0.09849865	2.461861e-01	3.539354e-01
## SLC22A7	10864	0.16605886	2.462012e-01	3.539361e-01
## SLC44A3	126969	-0.09215631	2.462575e-01	3.539961e-01
## ZNF85	7639	0.05843509	2.464838e-01	3.543004e-01
## GUSBP18	643373	0.15845775	2.465682e-01	3.544007e-01
## AKR1E2	83592	0.11338009	2.466993e-01	3.545683e-01
## STK24-AS1	100874069	-0.14737699	2.467263e-01	3.545861e-01
## FGF13-AS1	100129662	0.18256868	2.469683e-01	3.549129e-01
## CERT1	10087	0.04923825	2.470342e-01	3.549865e-01
## COPRS	55352	0.08010704	2.471098e-01	3.550742e-01
## PFDN2	5202	0.06401560	2.472771e-01	3.552935e-01
## MYLK	4638	0.07511394	2.473563e-01	3.553865e-01
## DNAAF4	161582	-0.09446176	2.473870e-01	3.554095e-01
## POLR1C	9533	0.04027130	2.474805e-01	3.555228e-01
## RPS15AP14	100127924	0.21377208	2.475300e-01	3.555728e-01
## LRRC3B-AS1	105377003	0.77381460	2.476701e-01	3.557532e-01
## HNF1A	6927	-0.12880630	2.477594e-01	3.558183e-01
## GIP	2695	1.28963705	2.477590e-01	3.558183e-01
## THAP12P7	100422712	0.21391490	2.477560e-01	3.558183e-01
## PDK2	5164	0.09456735	2.477769e-01	3.558224e-01
## SEPTIN9	10801	-0.07219061	2.478168e-01	3.558587e-01
## IDE	3416	-0.04167400	2.480416e-01	3.561604e-01
## CHTF18	63922	0.11915587	2.480643e-01	3.561720e-01
## SETBP1-DT	101927943	0.06162323	2.482562e-01	3.564264e-01
## RMDN1	51115	-0.04432023	2.483094e-01	3.564706e-01
## SRSF3P1	100506569	-0.34171854	2.483163e-01	3.564706e-01
## UPK1A	11045	0.28183569	2.484207e-01	3.565784e-01
## RPS19P1	85486	-0.32312224	2.484073e-01	3.565784e-01
## ADAMTS17	170691	-0.11580561	2.485240e-01	3.566768e-01
## LAMTOR5-AS1	101410535	-0.09579434	2.485308e-01	3.566768e-01
## LINC00462	100129597	-0.44697146	2.485333e-01	3.566768e-01
## CSNK1A1P1	161635	0.20220252	2.485499e-01	3.566796e-01
## SH2B1	25970	-0.05143629	2.485816e-01	3.567040e-01
## MXD1	4084	0.05500536	2.486211e-01	3.567395e-01
## NLRP10	338322	-0.38904041	2.486980e-01	3.568266e-01
## FNBP1P1	100533642	0.14552190	2.487111e-01	3.568266e-01
## DGKI	9162	0.11597071	2.488342e-01	3.569822e-01
## SCUBE3-AS1	101929285	0.15541129	2.489542e-01	3.571332e-01
## STK11	6794	0.06812697	2.490621e-01	3.572669e-01
## DYNC1I2P1	728532	0.11484039	2.491948e-01	3.574361e-01
## RNF8	9025	0.04098623	2.492373e-01	3.574761e-01
## THOC3	84321	0.09587887	2.493435e-01	3.575910e-01
## UTP4	84916	0.09048689	2.493653e-01	3.575910e-01
## LINC01361	101927498	-0.23916007	2.493595e-01	3.575910e-01
## JMJD1C-AS1	84989	0.12403667	2.493763e-01	3.575910e-01
## CTAGE9	643854	0.41366896	2.493980e-01	3.576010e-01
## MFSD11	79157	0.04232784	2.495111e-01	3.577209e-01
## TES	26136	0.07612477	2.495100e-01	3.577209e-01
## DPYS	1807	0.15828263	2.495663e-01	3.577790e-01
## RETSAT	54884	0.08101462	2.496120e-01	3.578233e-01

## KRT18P4	391256	0.21185824	2.496322e-01	3.578312e-01
## TCTN1	79600	0.04113814	2.496588e-01	3.578482e-01
## CCDC188BP	107985555	-0.46753877	2.497691e-01	3.579852e-01
## ANTKMT	65990	-0.14831540	2.497942e-01	3.580000e-01
## OCRL	4952	-0.03225067	2.498923e-01	3.581195e-01
## BET1	10282	0.04536345	2.499547e-01	3.581879e-01
## LINC02512	107986241	-0.29825317	2.500175e-01	3.582567e-01
## AQP8	343	0.54217544	2.500379e-01	3.582648e-01
## STAG1	10274	0.04062803	2.501313e-01	3.583505e-01
## GLIS1	148979	-0.11805368	2.501567e-01	3.583505e-01
## NYNRIN	57523	-0.12964704	2.501470e-01	3.583505e-01
## ZNF487	642819	0.05849441	2.501324e-01	3.583505e-01
## SDHBP1	127460886	-0.44021875	2.503426e-01	3.585956e-01
## NARS2	79731	-0.03858416	2.504487e-01	3.587265e-01
## SNORA9B	109616977	0.36434200	2.504841e-01	3.587561e-01
## AMPD2	271	0.06219383	2.506409e-01	3.589446e-01
## ZNF644	84146	0.05443227	2.506453e-01	3.589446e-01
## PADI2	11240	0.21259262	2.509524e-01	3.593632e-01
## RDH16	8608	-0.13822747	2.509791e-01	3.593802e-01
## OVCH2	341277	-0.12389031	2.511403e-01	3.595899e-01
## TMSB4Y	9087	-0.38647417	2.511646e-01	3.596035e-01
## CES1	1066	0.21708699	2.511904e-01	3.596193e-01
## SLC35E1	79939	-0.03700768	2.513076e-01	3.597659e-01
## LPIN1	23175	-0.06816653	2.513251e-01	3.597698e-01
## LRRC7	57554	-0.14595608	2.515001e-01	3.599991e-01
## B3GALT1-AS1	105616981	0.44337926	2.515656e-01	3.600715e-01
## SMIM19	114926	0.07591012	2.516540e-01	3.601769e-01
## RPL36AP40	554234	-0.54391463	2.517626e-01	3.603111e-01
## RING1	6015	-0.04093473	2.518645e-01	3.604358e-01
## ELOCP2	283747	-0.45828976	2.519245e-01	3.605003e-01
## POT1	25913	0.03346509	2.520521e-01	3.606618e-01
## CLIP2	7461	0.11377819	2.522022e-01	3.608553e-01
## MIA2	4253	-0.07122574	2.523026e-01	3.609776e-01
## RN7SL513P	106481062	0.62602102	2.524561e-01	3.611578e-01
## ARF4-AS1	106144532	-0.10810492	2.524582e-01	3.611578e-01
## PRSS45P	377047	-0.55788991	2.524946e-01	3.611673e-01
## LINC03047	107986898	0.59858378	2.524898e-01	3.611673e-01
## INGX	27160	0.43870280	2.526071e-01	3.613070e-01
## PCDH17	27253	-0.11510994	2.527265e-01	3.614564e-01
## UBR5	51366	-0.06047456	2.528814e-01	3.616567e-01
## SUGT1P3	283507	-0.12626981	2.529038e-01	3.616675e-01
## MP RIP	23164	0.05349214	2.529440e-01	3.616919e-01
## LINC02000	100507210	-0.21304851	2.529507e-01	3.616919e-01
## SRP14P2	111644132	0.18839074	2.530446e-01	3.618049e-01
## CCDC33	80125	0.22216904	2.531213e-01	3.618933e-01
## DNAAF5	54919	-0.05010736	2.531379e-01	3.618958e-01
## PDZD4	57595	0.10888449	2.531841e-01	3.619305e-01
## LGR5	8549	0.32091021	2.531920e-01	3.619305e-01
## PSMA2	5683	0.06576855	2.532940e-01	3.620550e-01
## TTC41P	253724	-0.11006118	2.533811e-01	3.621582e-01
## MAFA-AS1	104326051	0.47040975	2.534169e-01	3.621881e-01
## CCNB1IP1	57820	-0.07202697	2.535454e-01	3.623504e-01
## RFX6	222546	0.64073833	2.535974e-01	3.623821e-01
## LINC02940	102724740	0.17987559	2.535904e-01	3.623821e-01

## CIBAR1-DT	642924	0.12477546	2.536617e-01	3.624526e-01
## GALR1	2587	-0.21794195	2.537370e-01	3.625389e-01
## GAPDHP63	442231	0.26630303	2.538957e-01	3.626805e-01
## HCCS-DT	121847985	0.18189973	2.538661e-01	3.626805e-01
## PSMD14-DT	101929512	0.27948932	2.538902e-01	3.626805e-01
## EOLA1-DT	100131434	-0.24021228	2.538858e-01	3.626805e-01
## SAP30L	79685	0.03695352	2.539237e-01	3.626991e-01
## ZNF551	90233	0.04436110	2.540512e-01	3.628600e-01
## ZNF563	147837	-0.07073397	2.542068e-01	3.630608e-01
## ELOVL4	6785	-0.13272438	2.543548e-01	3.632295e-01
## MROCKI	285758	0.15444849	2.543401e-01	3.632295e-01
## RPL29P7	100270972	-0.47727644	2.544216e-01	3.633035e-01
## TUFM	7284	-0.05329668	2.545046e-01	3.634007e-01
## NFE4	58160	0.40953446	2.545211e-01	3.634029e-01
## GDF5	8200	0.24752072	2.546922e-01	3.636258e-01
## IQCC	55721	0.06966982	2.547345e-01	3.636648e-01
## WASF2	10163	0.05526677	2.547962e-01	3.637316e-01
## GPR162	27239	-0.10515231	2.548954e-01	3.638518e-01
## HUWE1	10075	-0.04927137	2.549602e-01	3.639229e-01
## ACAT1	38	-0.08452428	2.550225e-01	3.639905e-01
## GCLC-AS1	105375095	0.45825097	2.550947e-01	3.640722e-01
## ZNF157	7712	0.13177335	2.551632e-01	3.641485e-01
## ZHX2	22882	0.03893811	2.552924e-01	3.643115e-01
## RPL34P24	100271309	-0.39804549	2.553087e-01	3.643134e-01
## PPDPF	79144	0.13600942	2.554008e-01	3.644234e-01
## PRELID1P1	728666	0.21910829	2.554896e-01	3.645287e-01
## VMAC	400673	0.07813695	2.555781e-01	3.646335e-01
## BFSP2	8419	0.16855322	2.556925e-01	3.647754e-01
## ANKRD12	23253	0.09451959	2.562315e-01	3.654799e-01
## LINC01166	101927590	-0.29956774	2.562315e-01	3.654799e-01
## MTCYBP24	107075132	0.29728079	2.562218e-01	3.654799e-01
## NEK3	4752	-0.07136958	2.564024e-01	3.657023e-01
## ASL	435	0.08409279	2.564658e-01	3.657712e-01
## DNAJA1P3	644588	0.30454303	2.565998e-01	3.659409e-01
## RPL21P95	100271427	0.43058465	2.566660e-01	3.659922e-01
## PCDHGB8P	56120	0.26810527	2.566520e-01	3.659922e-01
## FLT3	2322	-0.23290299	2.569463e-01	3.662931e-01
## HCN4	10021	-0.14390017	2.569326e-01	3.662931e-01
## TCF7L2	6934	0.05819826	2.569005e-01	3.662931e-01
## GLT1D1	144423	0.19857943	2.569430e-01	3.662931e-01
## SLIT2-IT1	100505893	0.50456671	2.569523e-01	3.662931e-01
## UFC1	51506	0.06275412	2.570443e-01	3.664027e-01
## ZSCAN4	201516	0.33798762	2.571174e-01	3.664855e-01
## LINC01167	103695432	-0.34265171	2.571691e-01	3.665375e-01
## PHF23	79142	0.04053280	2.572042e-01	3.665661e-01
## PRKN	5071	-0.06604881	2.576501e-01	3.671740e-01
## RNA5SP82	100873316	0.26369856	2.576609e-01	3.671740e-01
## PRTG	283659	0.09396805	2.576808e-01	3.671807e-01
## CAPS2	84698	-0.07673756	2.579022e-01	3.674644e-01
## ZNF587	84914	0.09770946	2.579101e-01	3.674644e-01
## AAR2	25980	-0.03758138	2.579579e-01	3.674870e-01
## CHMP1A	5119	0.05328845	2.579713e-01	3.674870e-01
## DCUN1D5	84259	0.03914636	2.579434e-01	3.674870e-01
## CHRNB2	1141	0.15511225	2.580255e-01	3.675095e-01

## NKX6-1	4825	-0.29693448	2.580325e-01	3.675095e-01
## PHB1	5245	0.06978762	2.580108e-01	3.675095e-01
## TMEM105	284186	0.21250945	2.581073e-01	3.675730e-01
## MTND5P12	100873257	0.22669478	2.580950e-01	3.675730e-01
## LATS2	26524	0.04796402	2.582399e-01	3.677402e-01
## ERAP1	51752	0.07044296	2.582857e-01	3.677840e-01
## NRIP3-DT	105376541	-0.29491516	2.584821e-01	3.680421e-01
## DSCAM	1826	0.29733116	2.585209e-01	3.680757e-01
## NDUFV1	4723	0.06104384	2.585542e-01	3.681015e-01
## AGPAT4	56895	-0.09874102	2.585939e-01	3.681025e-01
## H4C8	8365	-0.10949270	2.585807e-01	3.681025e-01
## HBM	3042	0.70582991	2.586003e-01	3.681025e-01
## RNY1	6084	-0.38502751	2.587107e-01	3.682381e-01
## GNB2	2783	-0.07303693	2.587631e-01	3.682912e-01
## TCF3P1	100129107	0.53559281	2.588132e-01	3.683409e-01
## PATL1-DT	105369318	0.22615018	2.590027e-01	3.685889e-01
## LINC02389	400046	-0.22775221	2.590326e-01	3.686099e-01
## NAALADL2	254827	-0.08345610	2.592040e-01	3.688322e-01
## DDX19B	11269	-0.03536330	2.592575e-01	3.688652e-01
## BTG3-AS1	110806272	-0.13125239	2.592455e-01	3.688652e-01
## RPL21P28	100131205	0.21474890	2.593411e-01	3.689442e-01
## GNG10	2790	-0.18293511	2.593435e-01	3.689442e-01
## RNASEK	440400	0.08230901	2.593916e-01	3.689910e-01
## ZRSR2	8233	0.04919088	2.597227e-01	3.694405e-01
## CFAP251	144406	-0.09971358	2.597821e-01	3.695034e-01
## DOK7	285489	0.18195864	2.598051e-01	3.695145e-01
## ARHGEF2-AS1	107985210	-0.62173480	2.598773e-01	3.695955e-01
## PKN1	5585	0.07827592	2.599390e-01	3.696616e-01
## TONSL-AS1	100287098	-0.15506241	2.600261e-01	3.697638e-01
## PRPF19-DT	107984333	0.10962401	2.600450e-01	3.697691e-01
## POLR2C	5432	0.04652713	2.601659e-01	3.699193e-01
## CLNK	116449	-0.15765802	2.602260e-01	3.699832e-01
## TENT5C	54855	-0.08036239	2.602584e-01	3.700075e-01
## CDAN1	146059	0.04254308	2.603292e-01	3.700866e-01
## GET3	439	0.05989815	2.603986e-01	3.701636e-01
## LINC02747	105379407	0.23592490	2.604567e-01	3.702244e-01
## GLYATL1P2	100129933	0.32761104	2.604757e-01	3.702299e-01
## KCNH3	23416	0.10023541	2.605019e-01	3.702315e-01
## GLUD1	2746	-0.07896557	2.605073e-01	3.702315e-01
## IQSEC3-AS1	105369592	-0.16746088	2.605361e-01	3.702507e-01
## WDSUB1	151525	-0.06502241	2.607608e-01	3.705268e-01
## BOLA2-SMG1P6	107282092	-0.26809223	2.607501e-01	3.705268e-01
## DDX19A	55308	-0.02847709	2.608042e-01	3.705668e-01
## NAP1L4P1	728589	-0.17023995	2.608463e-01	3.706049e-01
## BBS4	585	0.04780017	2.609729e-01	3.707631e-01
## CHKB-CPT1B	386593	-0.33855071	2.609951e-01	3.707729e-01
## UNGP1	57004	-0.29852431	2.610477e-01	3.708047e-01
## TUFMP1	645668	0.33464901	2.610480e-01	3.708047e-01
## DR1	1810	0.02825969	2.614347e-01	3.713324e-01
## LINC02387	101929027	-0.45949356	2.614897e-01	3.713888e-01
## IER5L	389792	-0.16691404	2.615835e-01	3.715003e-01
## NFAT5	10725	-0.11441729	2.616179e-01	3.715273e-01
## IGHG3	3502	-0.26835512	2.616906e-01	3.716089e-01
## LINC03109	105374166	0.57122254	2.617144e-01	3.716210e-01

## FBXO46	23403	-0.07168839	2.617473e-01	3.716460e-01
## TMSB4XP6	7120	0.28729108	2.618476e-01	3.717666e-01
## AVPI1	60370	-0.08139762	2.619509e-01	3.718916e-01
## ATP5MC2P4	654480	-0.21649531	2.620300e-01	3.719822e-01
## UBE2MP1	606551	-0.24098076	2.621778e-01	3.721702e-01
## ACTBP15	391334	-0.35949069	2.622022e-01	3.721831e-01
## SEMA4C	54910	-0.07433155	2.622731e-01	3.722621e-01
## COX6C	1345	-0.07724706	2.623365e-01	3.723188e-01
## DUSP8P5	106903081	-0.12881953	2.623437e-01	3.723188e-01
## SRMP1	170552	-0.59472227	2.623834e-01	3.723534e-01
## LIAS	11019	0.07218306	2.624235e-01	3.723886e-01
## VGLL4	9686	-0.03212695	2.624457e-01	3.723983e-01
## SNX18P9	644576	0.38514265	2.624747e-01	3.724176e-01
## OOEP	441161	0.23192524	2.625295e-01	3.724736e-01
## CTNNA1P1	1498	0.32403550	2.625673e-01	3.725056e-01
## ZNF492	57615	0.16717548	2.627533e-01	3.727477e-01
## MGME1	92667	0.04804554	2.628778e-01	3.728808e-01
## RPL34-DT	285456	-0.10252420	2.628671e-01	3.728808e-01
## HEATR4	399671	-0.17302291	2.629575e-01	3.729721e-01
## SMCO4	56935	0.06845184	2.629967e-01	3.730059e-01
## SZT2-AS1	100873952	0.34981104	2.630585e-01	3.730717e-01
## RPL29P14	100270974	0.45146258	2.630920e-01	3.730975e-01
## ZDHHC4	55146	0.06574741	2.631916e-01	3.731952e-01
## EEF1B2P2	1934	-0.60887840	2.631845e-01	3.731952e-01
## RBBP4P1	642954	0.21622054	2.632353e-01	3.732353e-01
## CASP9	842	-0.04337420	2.632598e-01	3.732483e-01
## RPS4XP17	100128140	-0.25582693	2.633320e-01	3.733290e-01
## RPL21P54	100271168	-0.32141103	2.633648e-01	3.733536e-01
## ATP5PBP5	100128516	0.10095101	2.635671e-01	3.736187e-01
## RBX1P2	100500934	-0.14593455	2.635880e-01	3.736265e-01
## HMBS	3145	0.06451855	2.639443e-01	3.741097e-01
## RNU6-925P	106479975	-0.25131375	2.639769e-01	3.741340e-01
## SULT1C2	6819	-0.10393542	2.640195e-01	3.741726e-01
## RCCD1-AS1	116435297	-0.29655640	2.641703e-01	3.743646e-01
## RBFADN	100506070	0.21205585	2.642643e-01	3.744758e-01
## ESX1	80712	1.31556597	2.644255e-01	3.746825e-01
## NR2E1	7101	-0.23952148	2.645594e-01	3.748503e-01
## GDPD3	79153	0.14793569	2.646710e-01	3.749866e-01
## SHKBP1	92799	-0.06547491	2.647699e-01	3.751049e-01
## ARHGEF38-IT1	100874374	-0.36873149	2.648932e-01	3.752576e-01
## IGSF11	152404	-0.13906037	2.650690e-01	3.754847e-01
## CSTF1	1477	0.03028418	2.651311e-01	3.755509e-01
## PALS2	51678	-0.05712053	2.652333e-01	3.756577e-01
## SNRPA1	6627	-0.05184551	2.652375e-01	3.756577e-01
## KRBOX5	124411	0.05295101	2.652625e-01	3.756713e-01
## RBM12B-AS1	55472	-0.37357700	2.653520e-01	3.757762e-01
## AP4E1	23431	-0.05043798	2.655853e-01	3.760846e-01
## DYNC2I1	55112	-0.05806635	2.656478e-01	3.761293e-01
## LINC02268	101928509	0.34007690	2.656478e-01	3.761293e-01
## TLR2	7097	-0.08842193	2.657006e-01	3.761822e-01
## EIF2A	83939	0.04202416	2.658070e-01	3.763109e-01
## RDH10-AS1	101926926	-0.26707285	2.660386e-01	3.765948e-01
## ORAI1	84876	-0.08846030	2.660231e-01	3.765948e-01
## BRD7P4	100287229	0.45048534	2.661097e-01	3.766735e-01

## ZNF148	7707	-0.05031058	2.661624e-01	3.767262e-01
## SNRPB	6628	0.06047946	2.663266e-01	3.769367e-01
## RNA5SP154	100873420	-0.18203639	2.663571e-01	3.769578e-01
## TPTE2	93492	0.28377141	2.663858e-01	3.769725e-01
## RN7SL832P	106479524	-0.12151280	2.663985e-01	3.769725e-01
## SMC2	10592	0.05678569	2.665654e-01	3.771429e-01
## TAC3	6866	0.58030885	2.665525e-01	3.771429e-01
## DCLRE1A	9937	0.04783540	2.665385e-01	3.771429e-01
## L2HGDH	79944	-0.08781726	2.666380e-01	3.772236e-01
## ELOVL2-AS1	100506409	0.55291221	2.666956e-01	3.772832e-01
## TLE2	7089	-0.09101231	2.667327e-01	3.773136e-01
## METAP2	10988	0.03428960	2.667551e-01	3.773157e-01
## ZNF256	10172	-0.04859629	2.667652e-01	3.773157e-01
## MPZL3	196264	-0.06120422	2.669300e-01	3.775269e-01
## RSPH10B	222967	0.33690813	2.669934e-01	3.775725e-01
## CCT6P1	643253	-0.13158013	2.669846e-01	3.775725e-01
## TUG1	55000	0.04764179	2.675378e-01	3.783204e-01
## FCAR	2204	0.24258597	2.676402e-01	3.783992e-01
## KRT8P28	391099	-0.52850850	2.676257e-01	3.783992e-01
## COQ7-DT	102723385	-0.17612413	2.676155e-01	3.783992e-01
## FAM66D	100132923	-0.11278805	2.678268e-01	3.786410e-01
## CLTA	1211	-0.06172955	2.678725e-01	3.786836e-01
## SMIM7	79086	0.05002971	2.680064e-01	3.788508e-01
## ZC3HC1	51530	0.04117226	2.682447e-01	3.791575e-01
## MIR5587	100847028	0.36499133	2.682546e-01	3.791575e-01
## CTRB1	1504	0.54447555	2.683284e-01	3.792398e-01
## IFT122P3	653712	0.17980862	2.685289e-01	3.795011e-01
## MIR140	406932	-0.33969877	2.685887e-01	3.795635e-01
## UQCC1	55245	-0.03726711	2.686219e-01	3.795820e-01
## EGFL8	80864	0.18617520	2.686330e-01	3.795820e-01
## STAG3L1	54441	0.22451406	2.687702e-01	3.797538e-01
## LSS	4047	-0.06323421	2.688702e-01	3.798730e-01
## SCARNA9	619383	-0.29680349	2.689768e-01	3.800015e-01
## KLHL7-DT	100775104	-0.15557482	2.689980e-01	3.800093e-01
## MIR8075	102465874	0.45516253	2.691111e-01	3.801469e-01
## TNFAIP3	7128	0.10010103	2.691470e-01	3.801757e-01
## CAT	847	0.07133103	2.692827e-01	3.803231e-01
## ARHGAP35	2909	-0.04526692	2.692763e-01	3.803231e-01
## MANBAL	63905	0.04801539	2.693405e-01	3.803826e-01
## EMC8	10328	0.04526912	2.694178e-01	3.804697e-01
## AHR	196	0.07532834	2.695081e-01	3.805750e-01
## FRG1	2483	0.04322901	2.695557e-01	3.806202e-01
## TCAF2	285966	0.06797239	2.695944e-01	3.806527e-01
## RPL12P13	100129926	-0.37761325	2.696113e-01	3.806544e-01
## ANKS6	203286	-0.03511338	2.696452e-01	3.806802e-01
## BIRC7	79444	0.30596124	2.697902e-01	3.808628e-01
## CYP3A7	1551	0.23620362	2.698729e-01	3.809392e-01
## ZHX1	11244	-0.04400404	2.698757e-01	3.809392e-01
## TIE1	7075	-0.10365435	2.699545e-01	3.810247e-01
## SPINT3	10816	-0.53917861	2.699676e-01	3.810247e-01
## INA	9118	-0.24560315	2.700418e-01	3.811073e-01
## LINC01971	105371927	0.37960453	2.701620e-01	3.812548e-01
## ERP29P1	100420612	0.27144753	2.702482e-01	3.813543e-01
## PROC	5624	-0.13627200	2.703635e-01	3.814947e-01

## DND1P1	644157	-0.14670910	2.703796e-01	3.814954e-01
## SCN7A	6332	-0.12146264	2.704801e-01	3.815802e-01
## MIR548AA2	100500895	0.49052709	2.704777e-01	3.815802e-01
## RPS15AP6	100271141	0.59738722	2.704869e-01	3.815802e-01
## INO80	54617	0.04133453	2.705173e-01	3.816010e-01
## MTMR1	8776	-0.02710962	2.706693e-01	3.817711e-01
## TPI1	7167	-0.06507387	2.706578e-01	3.817711e-01
## DANT2	642776	0.15536925	2.707457e-01	3.818345e-01
## DAP-DT	105374652	0.29663520	2.707446e-01	3.818345e-01
## RPL13AP15	100271279	0.31430029	2.708069e-01	3.818986e-01
## IMPDH1P8	131961	-0.18768506	2.709128e-01	3.820258e-01
## KHSRP	8570	-0.05409949	2.710353e-01	3.821542e-01
## TMEM214	54867	-0.05960359	2.710324e-01	3.821542e-01
## LINC02100	107986408	0.56078893	2.711660e-01	3.823164e-01
## RBBP7	5931	0.02713543	2.712646e-01	3.824332e-01
## ALDH1B1	219	0.10085826	2.712888e-01	3.824451e-01
## PER1	5187	0.09203997	2.713148e-01	3.824596e-01
## WTAP	9589	-0.04024822	2.715017e-01	3.827008e-01
## FHIT	2272	0.07666592	2.716135e-01	3.828363e-01
## ABRACL	58527	-0.09053466	2.718926e-01	3.832074e-01
## HADHBP1	100287928	-0.30262810	2.719089e-01	3.832082e-01
## IFNL1	282618	0.74554879	2.719803e-01	3.832866e-01
## ERGIC1	57222	-0.04948779	2.720380e-01	3.833456e-01
## PRKCQ	5588	-0.13870875	2.720939e-01	3.834021e-01
## PPIL6	285755	0.06627503	2.722293e-01	3.835708e-01
## FCF1P1	100422533	0.50450743	2.723431e-01	3.837089e-01
## ZNF222	7673	0.05879805	2.724642e-01	3.838573e-01
## SH3TC2-DT	255187	0.49717993	2.725152e-01	3.839028e-01
## RN7SL444P	106479384	0.54144932	2.725282e-01	3.839028e-01
## CYP7A1	1581	-0.36312171	2.726057e-01	3.839452e-01
## OR2G6	391211	-0.22560789	2.726047e-01	3.839452e-01
## SNX30-DT	122455334	-0.14310562	2.725985e-01	3.839452e-01
## NAA35	60560	-0.04316730	2.727076e-01	3.840443e-01
## TMEM31	203562	-0.20516684	2.727023e-01	3.840443e-01
## TUB-AS1	101927917	0.22049265	2.727470e-01	3.840774e-01
## CCDC116	164592	-0.20611175	2.728968e-01	3.842661e-01
## ABHD10	55347	0.06863986	2.729291e-01	3.842894e-01
## MGST2	4258	0.07368906	2.731043e-01	3.845138e-01
## RNU6-341P	106481287	0.49865632	2.731583e-01	3.845676e-01
## RPS20P10	100271081	0.35811669	2.732920e-01	3.847335e-01
## BMS1P1	399761	0.16174363	2.734353e-01	3.849128e-01
## GTF2H2	2966	-0.13996342	2.735807e-01	3.850953e-01
## ABO	28	-0.14761093	2.736126e-01	3.851179e-01
## ADIPOQ-AS1	100874095	1.18223269	2.737900e-01	3.853452e-01
## RENBP	5973	0.12175070	2.738464e-01	3.853576e-01
## PMVK	10654	0.07147427	2.738149e-01	3.853576e-01
## WDR45P1	594841	-0.33324793	2.738344e-01	3.853576e-01
## MKRN5P	7683	0.32339326	2.738985e-01	3.854086e-01
## LINC01597	400841	0.14656533	2.739272e-01	3.854267e-01
## DELE1	9812	-0.02898371	2.740302e-01	3.855493e-01
## LINC02582	100505817	0.47482524	2.742420e-01	3.858250e-01
## ADAM7	8756	0.21853429	2.742711e-01	3.858436e-01
## HSPE1P11	106481673	0.44442661	2.743091e-01	3.858747e-01
## ERAL1	26284	-0.03979488	2.743480e-01	3.858847e-01

## LINC01727	101929625	0.21365548	2.743452e-01	3.858847e-01
## CETN2	1069	0.05974896	2.743922e-01	3.859245e-01
## PLA2G4B	100137049	0.24441070	2.744914e-01	3.860417e-01
## SHLD2P1	414241	-0.27683740	2.746167e-01	3.861956e-01
## MIS18A	54069	0.04162558	2.748341e-01	3.864790e-01
## LINC01996	400568	0.15716873	2.749384e-01	3.866033e-01
## RPL23P2	54028	0.16196512	2.751223e-01	3.868394e-01
## MOCS2-DT	257396	0.08063371	2.753184e-01	3.870928e-01
## RPL12P14	729500	-0.45569293	2.754244e-01	3.872195e-01
## ADAL	161823	-0.05344884	2.755945e-01	3.874138e-01
## LINC00942	100292680	0.23915644	2.755789e-01	3.874138e-01
## SSC4D	136853	-0.07747940	2.756657e-01	3.874914e-01
## FBXO42	54455	0.02826792	2.756956e-01	3.875111e-01
## URAD	646625	0.47416066	2.757879e-01	3.876184e-01
## MIR3657	100500889	0.49423097	2.758545e-01	3.876896e-01
## ZNF582	147948	-0.04608902	2.758839e-01	3.877085e-01
## PDXDC2P	109731405	0.26492455	2.761022e-01	3.879928e-01
## TMEM161B-DT	100505894	-0.11385130	2.761617e-01	3.880540e-01
## ARHGEF15	22899	0.07314878	2.762197e-01	3.881130e-01
## LINC02388	101927653	0.51526190	2.762617e-01	3.881495e-01
## ARHGAP26	23092	0.06068251	2.763347e-01	3.882297e-01
## SNORD100	594838	0.22906777	2.763575e-01	3.882393e-01
## HSPD1P9	646910	0.43604455	2.764741e-01	3.883807e-01
## YY1	7528	-0.02236709	2.765897e-01	3.885205e-01
## RILPL2	196383	0.04217385	2.766901e-01	3.886392e-01
## NLRP9	338321	-0.50933645	2.767599e-01	3.887110e-01
## RN7SL67P	106479248	0.53058091	2.767732e-01	3.887110e-01
## COQ4	51117	0.06367235	2.768501e-01	3.887516e-01
## RPL23AP2	401904	0.39128464	2.768402e-01	3.887516e-01
## TRBV8-2	28587	-0.45782046	2.768279e-01	3.887516e-01
## PMEL	6490	0.06914678	2.769413e-01	3.888571e-01
## GLRX	2745	-0.09056381	2.771147e-01	3.890782e-01
## TRIM26	7726	0.03680432	2.771516e-01	3.891075e-01
## RANBP17	64901	0.09628538	2.774577e-01	3.895147e-01
## ZNF577	84765	0.08290628	2.776586e-01	3.897517e-01
## NBEAP1	606	0.22462932	2.776457e-01	3.897517e-01
## NDST4	64579	-0.41758597	2.776970e-01	3.897831e-01
## EMD	2010	-0.06776657	2.779141e-01	3.900038e-01
## GDAP1L1	78997	0.33189271	2.778852e-01	3.900038e-01
## SEC14L1P1	729799	0.12843347	2.779184e-01	3.900038e-01
## MYO1D-DT	102724715	0.41327640	2.778909e-01	3.900038e-01
## PCDHB7	56129	-0.10761441	2.779385e-01	3.900094e-01
## RPL5P14	100270835	0.29085901	2.779555e-01	3.900107e-01
## GPR75	10936	0.11312774	2.779837e-01	3.900278e-01
## CRABP1	1381	0.16237931	2.780619e-01	3.901151e-01
## POLR1A	25885	-0.04021044	2.781015e-01	3.901481e-01
## SAMD15	161394	-0.08780027	2.781739e-01	3.901820e-01
## MED23	9439	0.04477343	2.781506e-01	3.901820e-01
## FAM13A-AS1	285512	-0.14939808	2.781714e-01	3.901820e-01
## LINC01331	104310351	0.39328060	2.782846e-01	3.903149e-01
## USP15	9958	0.04887908	2.783083e-01	3.903256e-01
## FGF7P8	100113421	-0.21439128	2.783676e-01	3.903861e-01
## RPS23P6	100271367	-0.31451127	2.784743e-01	3.905133e-01
## PKHD1L1	93035	-0.20122500	2.785007e-01	3.905277e-01

## RC3H1	149041	0.05145372	2.785389e-01	3.905587e-01
## RPS27P8	653805	-0.33246621	2.785679e-01	3.905768e-01
## CAMK1G	57172	-0.11386815	2.786795e-01	3.907109e-01
## PARD3	56288	-0.03908658	2.787250e-01	3.907521e-01
## DOC2B	8447	0.08810229	2.788764e-01	3.909418e-01
## ZNF687-AS1	100507670	0.11179428	2.789192e-01	3.909792e-01
## LINC01489	101928340	0.23709489	2.792668e-01	3.914439e-01
## KIAA0586	9786	0.04661980	2.792875e-01	3.914503e-01
## ADAR	103	0.03529436	2.793190e-01	3.914719e-01
## RPL30P4	100131230	0.26187814	2.795210e-01	3.917324e-01
## LRRC45	201255	0.07186542	2.795592e-01	3.917408e-01
## OR7E2P	8587	0.43711362	2.795511e-01	3.917408e-01
## NAA25	80018	0.05484381	2.797819e-01	3.920302e-01
## APBA3	9546	0.07341210	2.798663e-01	3.920806e-01
## GCK	2645	-0.17367967	2.798628e-01	3.920806e-01
## TAGLN2P1	100418887	0.19548532	2.798510e-01	3.920806e-01
## RPL36AL	6166	0.06713654	2.798875e-01	3.920877e-01
## GAPDHP60	2601	0.16017885	2.799530e-01	3.921569e-01
## LDHAP3	442013	-0.38074977	2.799874e-01	3.921824e-01
## DPM2	8818	-0.06055938	2.800143e-01	3.921976e-01
## LNCRNA-IUR	101929295	-0.07813383	2.801470e-01	3.923608e-01
## KLHDC8A	55220	0.19672560	2.803312e-01	3.925961e-01
## TMSB15A	11013	-0.13621029	2.807068e-01	3.930959e-01
## NRARP	441478	-0.10984271	2.807204e-01	3.930959e-01
## ZNF584	201514	-0.03082826	2.808459e-01	3.932490e-01
## ACTG1P3	75	-0.23486457	2.809981e-01	3.934395e-01
## OR13A1	79290	0.50640499	2.810190e-01	3.934460e-01
## GTF2IP5	100420546	0.22420356	2.810654e-01	3.934883e-01
## ZNF415	55786	-0.06519059	2.811991e-01	3.936528e-01
## DUSP19	142679	-0.05964195	2.813867e-01	3.938928e-01
## GUSBP2	387036	0.15804545	2.814423e-01	3.939478e-01
## ZNF497	162968	-0.09930305	2.816002e-01	3.941462e-01
## LETMD1	25875	0.04860218	2.817076e-01	3.942738e-01
## SMIM31	100505989	0.45559657	2.817736e-01	3.943435e-01
## MIR4733HG	105371722	-0.11756587	2.818124e-01	3.943751e-01
## GSE1	23199	-0.05131573	2.818349e-01	3.943838e-01
## LAS1L	81887	-0.02776496	2.818524e-01	3.943856e-01
## CIB4	130106	0.46829805	2.819110e-01	3.944449e-01
## COMMD9	29099	0.05390383	2.819625e-01	3.944942e-01
## ARHGEF18-AS1	118827816	0.27636458	2.820112e-01	3.945397e-01
## RPL7P7	644896	0.69503004	2.821159e-01	3.946635e-01
## SLC16A8	23539	0.20062335	2.821659e-01	3.947107e-01
## RPS6KA2	6196	-0.04868638	2.821948e-01	3.947284e-01
## WDTC1	23038	-0.04215530	2.823966e-01	3.949879e-01
## ACTG1	71	0.08061936	2.824881e-01	3.950932e-01
## EBLN3P	100506710	-0.04621306	2.825435e-01	3.951479e-01
## ADAMTS15	170689	-0.14141109	2.826094e-01	3.952174e-01
## HIGD1B	51751	-0.23305144	2.826953e-01	3.952919e-01
## AFMID	125061	-0.09829859	2.826930e-01	3.952919e-01
## GSTCD	79807	-0.04643533	2.827362e-01	3.953143e-01
## PNMA6B	728513	-0.40211856	2.827439e-01	3.953143e-01
## ZMAT2	153527	-0.04137417	2.828238e-01	3.953806e-01
## TERF1P7	646127	0.32226075	2.828154e-01	3.953806e-01
## RANGAP1	5905	0.04701129	2.829618e-01	3.955508e-01

## SNORA72	26775	-0.22424098	2.831910e-01	3.958256e-01
## LINC01730	101929125	-0.29628161	2.831902e-01	3.958256e-01
## MIR4730	100616359	-0.34426873	2.832150e-01	3.958364e-01
## RINT1	60561	-0.02858123	2.833752e-01	3.960376e-01
## FOXJ3	22887	0.03628474	2.834614e-01	3.961353e-01
## LINGO1	84894	-0.11927240	2.835234e-01	3.961991e-01
## LINC03059	127379717	-0.31973684	2.835887e-01	3.962676e-01
## VCF2	90736	0.05843557	2.836601e-01	3.963217e-01
## ZNF285DP	<NA>	0.42982604	2.836518e-01	3.963217e-01
## RNF4	6047	-0.02654825	2.836871e-01	3.963367e-01
## MTCO2P11	107075214	0.50268646	2.837991e-01	3.964704e-01
## ZBED4	9889	0.04800308	2.838403e-01	3.965051e-01
## SDHAF1	644096	0.06379832	2.839678e-01	3.966604e-01
## FRMD4A	55691	-0.05420086	2.841032e-01	3.968268e-01
## NUP93	9688	0.04770699	2.843163e-01	3.971016e-01
## CDA	978	0.09153406	2.843886e-01	3.971798e-01
## LRRIQ1	84125	-0.10947314	2.845574e-01	3.973927e-01
## HOXA11-AS	221883	-0.13179891	2.846146e-01	3.974497e-01
## NKTR	4820	0.12646658	2.846522e-01	3.974565e-01
## TRIM5	85363	0.05173833	2.846458e-01	3.974565e-01
## SMIM14	201895	-0.03902440	2.846899e-01	3.974863e-01
## RB1CC1	9821	0.05770037	2.848412e-01	3.976709e-01
## RPS12P16	100271352	0.54614556	2.848548e-01	3.976709e-01
## MTFMT	123263	0.04831096	2.849928e-01	3.978265e-01
## ARID3BP1	646555	0.48429376	2.849991e-01	3.978265e-01
## PCGF6	84108	0.04734688	2.850386e-01	3.978588e-01
## LMNB2	84823	0.06764477	2.850644e-01	3.978707e-01
## RPS24P8	100216336	0.17870270	2.850798e-01	3.978707e-01
## MIR217HG	104355290	0.30670653	2.850966e-01	3.978712e-01
## NEIL1	79661	-0.12094417	2.851558e-01	3.979081e-01
## CCNO-DT	121009647	-0.33362190	2.851407e-01	3.979081e-01
## KIF5A	3798	-0.09571537	2.852484e-01	3.980145e-01
## CA5A	763	-0.42674263	2.854293e-01	3.982441e-01
## TIA1	7072	0.10552998	2.854624e-01	3.982675e-01
## RASL10B	91608	-0.15687874	2.855020e-01	3.982998e-01
## FBXO15	201456	0.08696581	2.855494e-01	3.983431e-01
## UNC93A	54346	-0.18966817	2.856821e-01	3.985053e-01
## MED28P1	100420207	-0.51616645	2.857392e-01	3.985621e-01
## GPR199P	653160	0.13182047	2.858229e-01	3.986559e-01
## TMPOP2	100533619	-0.29630826	2.859230e-01	3.987727e-01
## PPIAP73	391587	0.41605338	2.860012e-01	3.988589e-01
## LINC01907	151475	0.23893280	2.861188e-01	3.989999e-01
## KBTBD6	89890	0.03955824	2.861388e-01	3.990049e-01
## MICOS13	125988	-0.09067308	2.861666e-01	3.990208e-01
## ZNF839	55778	0.05126745	2.865964e-01	3.995971e-01
## NECTIN3-AS1	100506555	-0.10920606	2.866455e-01	3.996427e-01
## RELA	5970	-0.06372101	2.867131e-01	3.997141e-01
## DDTL	100037417	-0.28316186	2.867534e-01	3.997472e-01
## ZNF750	79755	0.11031607	2.868101e-01	3.997805e-01
## C20orf96	140680	-0.04677637	2.867990e-01	3.997805e-01
## PPP1R35-AS1	101927632	-0.20845454	2.868421e-01	3.998021e-01
## ATRAID	51374	0.06024189	2.870106e-01	4.000140e-01
## LYPD9P	101928226	-0.25581648	2.870606e-01	4.000608e-01
## RAB6B	51560	-0.11039159	2.871191e-01	4.001193e-01

## MLLT10	8028	0.05705660	2.871780e-01	4.001785e-01
## TIGD7	91151	0.05224019	2.872048e-01	4.001929e-01
## DNAH11	8701	0.21717775	2.872454e-01	4.002264e-01
## ODAD1	93233	0.13195506	2.873280e-01	4.003187e-01
## NPHP3	27031	0.11363318	2.873882e-01	4.003577e-01
## MSNP1	4479	0.17732098	2.874055e-01	4.003577e-01
## OSGEPL1-AS1	101409258	0.12172505	2.873921e-01	4.003577e-01
## PRKG2	5593	0.12212064	2.874756e-01	4.004324e-01
## TEX264	51368	-0.06043049	2.875059e-01	4.004516e-01
## SCO2	9997	0.07928679	2.876614e-01	4.006453e-01
## RNU6-8	101954278	0.15166764	2.877004e-01	4.006767e-01
## STRCP1	554225	0.37976775	2.877794e-01	4.007637e-01
## ANGPTL3	27329	-0.14352006	2.878415e-01	4.008272e-01
## P2RX3	5024	0.37628204	2.879345e-01	4.009337e-01
## ARL14EP-DT	105376607	0.32090126	2.881465e-01	4.012060e-01
## PNPLA7	375775	0.10105718	2.881719e-01	4.012184e-01
## ITGAL-AS1	128667228	0.14089814	2.882296e-01	4.012757e-01
## LINC01117	102724224	-0.07985884	2.882790e-01	4.013215e-01
## B4GALT6	9331	0.06767469	2.884782e-01	4.015758e-01
## CA5B	11238	-0.05196274	2.888043e-01	4.020067e-01
## HYMAI	57061	-0.26390064	2.889248e-01	4.021514e-01
## CTAGE3P	220112	-0.18402881	2.889609e-01	4.021787e-01
## GOLT1B	51026	-0.04815195	2.890322e-01	4.022548e-01
## PCMTD1	115294	-0.05058201	2.890837e-01	4.023034e-01
## RPS13P2	729236	0.12777338	2.891982e-01	4.024397e-01
## CCDC175	729665	-0.35256214	2.894614e-01	4.027830e-01
## COL18A1-AS2	100874236	-0.30764365	2.894808e-01	4.027868e-01
## LRP4-AS1	100507401	0.32654850	2.895253e-01	4.028258e-01
## LINC01814	101929567	-0.13889441	2.896360e-01	4.029567e-01
## ABI1	10006	0.02743573	2.896866e-01	4.030040e-01
## EEFSEC	60678	-0.07094033	2.897687e-01	4.030951e-01
## LINC01355	100996511	0.15247001	2.897948e-01	4.031084e-01
## SLC9C2	284525	-0.25337847	2.898204e-01	4.031209e-01
## CDRT4	284040	0.18059954	2.898451e-01	4.031322e-01
## CYP4F32P	107133497	0.26589397	2.899445e-01	4.032474e-01
## TRAJ39	28716	0.38125471	2.900513e-01	4.033728e-01
## DCTPP1	79077	0.06547306	2.900752e-01	4.033829e-01
## EIF5-DT	105370687	0.09770424	2.901810e-01	4.035070e-01
## MIR7515HG	102800314	1.29026659	2.902744e-01	4.036097e-01
## MIR1270	100302179	0.23128122	2.902881e-01	4.036097e-01
## SMARCA2	6595	0.04130497	2.903425e-01	4.036623e-01
## ADH5P4	642443	-0.15262253	2.905163e-01	4.038807e-01
## PTPN23-DT	119863865	0.09055488	2.905514e-01	4.039066e-01
## IGLV5-37	28783	0.76983049	2.906239e-01	4.039842e-01
## RPL23AP87	388574	0.35112883	2.906507e-01	4.039983e-01
## TCP10L2	401285	-0.27101914	2.907500e-01	4.041132e-01
## RN7SKP23	106479105	0.17543242	2.907749e-01	4.041248e-01
## S100A3	6274	0.16823884	2.909106e-01	4.042670e-01
## LRP2BP-AS1	107986206	0.22908423	2.909049e-01	4.042670e-01
## EXOC2	55770	0.03024779	2.909573e-01	4.043089e-01
## GATB	5188	0.04771062	2.909841e-01	4.043198e-01
## CLDND1	56650	-0.03251280	2.909985e-01	4.043198e-01
## POM121L2	94026	-0.36978019	2.910487e-01	4.043665e-01
## FAM163A	148753	0.26098117	2.914675e-01	4.049253e-01

## LDC1P	149086	-0.22214981	2.915128e-01	4.049649e-01
## SCAF8	22828	-0.03341430	2.915347e-01	4.049723e-01
## PACS1	55690	0.06197280	2.917095e-01	4.051339e-01
## TSGA10IP	254187	0.42702876	2.917177e-01	4.051339e-01
## RNU6-323P	106481281	0.33090910	2.917026e-01	4.051339e-01
## LINC01255	101927433	0.25283697	2.917133e-01	4.051339e-01
## RPL32P32	100271488	-0.53945752	2.918585e-01	4.053063e-01
## ZNF48	197407	-0.04144044	2.919170e-01	4.053643e-01
## TDP2	51567	-0.07633542	2.920063e-01	4.054651e-01
## P2RY2	5029	-0.12186216	2.920412e-01	4.054904e-01
## HS6ST1P1	388605	-0.38408412	2.923134e-01	4.058452e-01
## MDN1-AS1	101929057	0.20362769	2.925047e-01	4.060876e-01
## RUVBL2	10856	-0.05452141	2.925922e-01	4.061859e-01
## RNU6-1189P	106480646	-0.27176144	2.926444e-01	4.062352e-01
## TSEN34	79042	0.06249879	2.927946e-01	4.064204e-01
## SPDYA	245711	0.19894108	2.929659e-01	4.066349e-01
## CIB1	10519	-0.07302110	2.930273e-01	4.066970e-01
## SATB2-AS1	150538	-0.11282144	2.930931e-01	4.067650e-01
## ZNF23	7571	-0.12858042	2.931822e-01	4.068654e-01
## RRAGAP1-AS1	120766148	-0.39939519	2.932440e-01	4.069279e-01
## PAN3-AS1	100288730	0.08126010	2.933023e-01	4.069856e-01
## STAT5B	6777	-0.03102658	2.933429e-01	4.070188e-01
## ATP5MK	84833	-0.08609953	2.936155e-01	4.073737e-01
## ACSM2A	123876	-0.13607545	2.937713e-01	4.075666e-01
## WWC3	55841	0.05306726	2.940127e-01	4.078781e-01
## MORF4L1	10933	0.02932678	2.942301e-01	4.081565e-01
## NAGPA	51172	-0.04964177	2.943521e-01	4.083024e-01
## PTPDC1	138639	0.06408724	2.943952e-01	4.083390e-01
## CEBPB	1051	-0.13272556	2.944765e-01	4.084284e-01
## JTB-DT	123706540	-0.08765148	2.946446e-01	4.086382e-01
## RNU6-1138P	106480641	0.60423391	2.946902e-01	4.086619e-01
## MRPL38	64978	0.12873677	2.946954e-01	4.086619e-01
## RABGAP1L	9910	0.04589866	2.947142e-01	4.086647e-01
## WDR86-AS1	100131176	-0.13934077	2.947571e-01	4.087009e-01
## H3P47	115482706	0.30471722	2.949225e-01	4.089069e-01
## GOT2P3	644138	-0.33725133	2.950110e-01	4.090062e-01
## RALBP1	10928	-0.03657390	2.950699e-01	4.090372e-01
## GTF3C3	9330	-0.02547088	2.951343e-01	4.090372e-01
## B3GAT3P1	402146	-0.33324800	2.951027e-01	4.090372e-01
## UBE2V1	7335	0.07687256	2.950702e-01	4.090372e-01
## LINC02145	401172	-0.19029964	2.950908e-01	4.090372e-01
## C1GALT1P1	729409	-0.28818595	2.951295e-01	4.090372e-01
## CENPB	1059	-0.06936460	2.951730e-01	4.090441e-01
## C16orf46	123775	0.42612732	2.951577e-01	4.090441e-01
## MIR4728	100616132	-0.37283816	2.952013e-01	4.090600e-01
## KDM1B	221656	-0.03922289	2.953539e-01	4.092482e-01
## TTC4	7268	0.07180661	2.956997e-01	4.097040e-01
## MIR145	406937	0.22130603	2.958002e-01	4.098199e-01
## TOB2	10766	0.04876424	2.958554e-01	4.098730e-01
## INPP5F	22876	-0.03637330	2.958780e-01	4.098809e-01
## EDDM13	100506374	-0.23906398	2.959177e-01	4.099125e-01
## TMCO6	55374	0.04482346	2.960168e-01	4.100031e-01
## SLC16A6P1	440459	0.42936967	2.960136e-01	4.100031e-01
## TRPM3	80036	0.12101342	2.961239e-01	4.101084e-01

## TMEM269	100129924	-0.18505977	2.961266e-01	4.101084e-01
## FAM98C	147965	-0.05947814	2.961772e-01	4.101551e-01
## SKA2	348235	-0.03600408	2.962746e-01	4.102666e-01
## PTPRQ	374462	-0.19374248	2.964024e-01	4.104202e-01
## PTP4A1	7803	-0.22538459	2.964716e-01	4.104926e-01
## TBC1D32	221322	0.06778667	2.966059e-01	4.106552e-01
## RPL7AP26	728128	0.28696750	2.966337e-01	4.106703e-01
## HSD17B10	3028	0.06784283	2.966574e-01	4.106797e-01
## ASXL1	171023	-0.03698915	2.967088e-01	4.107041e-01
## LINC03095	100506289	0.14631075	2.966925e-01	4.107041e-01
## MHENCR	100505771	0.09097165	2.967458e-01	4.107085e-01
## NDUFB10P1	100128711	0.50036005	2.967297e-01	4.107085e-01
## DNALI1	7802	0.05386626	2.969202e-01	4.109265e-01
## CEP162	22832	0.07559855	2.970271e-01	4.110510e-01
## ECMXP	105373381	0.35509596	2.970771e-01	4.110968e-01
## EXOSC3P1	100151640	0.28881183	2.971752e-01	4.111857e-01
## VPS13B-DT	105375666	0.09417900	2.971751e-01	4.111857e-01
## UBQLN4P1	285329	0.24153507	2.972469e-01	4.112615e-01
## ETNPPL	64850	0.20259542	2.974241e-01	4.114832e-01
## ACSM1	116285	-0.13935429	2.975499e-01	4.116339e-01
## AKR1D1	6718	0.44945909	2.977083e-01	4.118295e-01
## DIP2A	23181	0.05100147	2.977933e-01	4.119237e-01
## MYO1E	4643	0.05233231	2.978479e-01	4.119758e-01
## FABP5P3	220832	0.30300021	2.979661e-01	4.121158e-01
## BCAS2	10286	-0.04388816	2.981467e-01	4.123422e-01
## PFN1P2	767846	-0.19899220	2.982747e-01	4.124957e-01
## RPS3P6	645000	-0.42952037	2.984175e-01	4.126697e-01
## RNF186	54546	-0.16421312	2.985537e-01	4.128299e-01
## LINC01126	100129726	-0.18596474	2.985674e-01	4.128299e-01
## EEF1A1P38	124199	-0.30647324	2.985960e-01	4.128460e-01
## KCNK7	10089	0.18269755	2.986178e-01	4.128527e-01
## KRT10	3858	-0.06449674	2.987672e-01	4.130357e-01
## VDAC1P2	10064	-0.19313999	2.988142e-01	4.130771e-01
## LRRC37A6P	387646	-0.11567665	2.989167e-01	4.131954e-01
## GPRC6A	222545	-0.17315315	2.990054e-01	4.132944e-01
## OR2T3	343173	-0.46543826	2.991334e-01	4.134479e-01
## ZNF527	84503	0.04468864	2.991694e-01	4.134741e-01
## SNORA14B	677802	0.25947231	2.992095e-01	4.135060e-01
## GPS2P1	392281	-0.18123222	2.993881e-01	4.137294e-01
## FAM229A	100128071	-0.10887884	2.994877e-01	4.138434e-01
## PGD	5226	-0.04644938	2.995190e-01	4.138631e-01
## ABCC10	89845	-0.05380804	2.998534e-01	4.143017e-01
## PGBD2	267002	0.04791334	2.998821e-01	4.143178e-01
## SQSTM1	8878	0.06066774	3.001018e-01	4.145977e-01
## PRKCH	5583	0.05645642	3.002920e-01	4.148369e-01
## AKT2	208	0.04808369	3.003914e-01	4.149423e-01
## PTPMT1	114971	-0.05414830	3.004172e-01	4.149423e-01
## PREB	10113	0.04171641	3.004195e-01	4.149423e-01
## FOXI2	399823	0.13941911	3.004483e-01	4.149548e-01
## RNU1-73P	106481616	0.42003159	3.004628e-01	4.149548e-01
## RAI2	10742	-0.05933450	3.005461e-01	4.150463e-01
## LINC01004	100216546	-0.12088377	3.007077e-01	4.152460e-01
## LINC00159	100551499	0.44244653	3.008263e-01	4.153861e-01
## LINC02925	122149302	0.10403304	3.010928e-01	4.157304e-01

## WASH4P	374677	-0.26239305	3.011294e-01	4.157574e-01
## CRNDE	643911	-0.13065900	3.012947e-01	4.159620e-01
## KLHL30-AS1	394261	0.42500464	3.016668e-01	4.164520e-01
## IGLV5-45	28781	-0.36324797	3.017131e-01	4.164923e-01
## DCAF13P3	100132724	-0.28599493	3.017327e-01	4.164957e-01
## RB1-DT	100862704	-0.13096163	3.018209e-01	4.165938e-01
## SPRYD4	283377	-0.05246266	3.019925e-01	4.168070e-01
## PGR-AS1	101054525	0.18573319	3.020618e-01	4.168789e-01
## METTL14	57721	0.03094394	3.020930e-01	4.168983e-01
## FAM192BP	152667	-0.21259082	3.022525e-01	4.170947e-01
## BCAS3	54828	0.04330324	3.023387e-01	4.171698e-01
## ACTBL2	345651	0.62435589	3.023539e-01	4.171698e-01
## ALMS1-IT1	100874291	-0.15594152	3.023584e-01	4.171698e-01
## LRRIQ3	127255	0.08826394	3.024437e-01	4.172638e-01
## DNAJB6P2	100289047	0.19009609	3.031400e-01	4.182007e-01
## SCN1A-AS1	101929680	0.19273121	3.031848e-01	4.182387e-01
## ETV2	2116	0.09852575	3.032380e-01	4.182884e-01
## GAPDHP14	54050	-0.28076973	3.032584e-01	4.182927e-01
## ATOSA	56204	-0.05595249	3.033002e-01	4.183267e-01
## RNA5SP195	100873457	0.46855964	3.033238e-01	4.183355e-01
## MCF2L2	23101	0.13396060	3.034960e-01	4.185493e-01
## ZFPL1	7542	0.05720315	3.035754e-01	4.186349e-01
## SRSF8BP	643118	0.26671638	3.036302e-01	4.186868e-01
## SLC6A19	340024	0.17145634	3.036971e-01	4.187553e-01
## PTPN12	5782	0.04256476	3.037337e-01	4.187819e-01
## GABPB1-IT1	55056	0.05491590	3.039199e-01	4.190149e-01
## SUMO3	6612	-0.04346524	3.040310e-01	4.191443e-01
## MTA3	57504	-0.02171240	3.044091e-01	4.196417e-01
## ZNF346-IT1	106480741	-0.21191284	3.045127e-01	4.197608e-01
## ASMTL	8623	0.05208562	3.045538e-01	4.197936e-01
## C10orf88	80007	-0.03313345	3.045729e-01	4.197961e-01
## LRRFIP2	9209	0.05078866	3.046379e-01	4.198619e-01
## TAAR9	134860	0.36058027	3.047033e-01	4.199282e-01
## PBX3-DT	51145	0.55627868	3.047535e-01	4.199603e-01
## MICOS10P2	100289489	-0.32702110	3.047611e-01	4.199603e-01
## SLC31A1	1317	-0.05947311	3.050404e-01	4.203213e-01
## CTU1	90353	-0.10593628	3.052044e-01	4.205234e-01
## FUNDC2P1	220793	0.23453401	3.052778e-01	4.206007e-01
## PRPF4B	<NA>	-0.05667369	3.054056e-01	4.207530e-01
## FAM182B	728882	0.12876135	3.055138e-01	4.208781e-01
## WWP1	11059	0.03496906	3.055509e-01	4.209054e-01
## RPS12P27	100271552	0.42001127	3.055998e-01	4.209490e-01
## UBALD1	124402	0.08693041	3.056626e-01	4.210116e-01
## LYSMD4	145748	0.04848311	3.057454e-01	4.211017e-01
## SNORA59B	677882	0.28301746	3.057813e-01	4.211273e-01
## COX6B2	125965	0.24683503	3.060118e-01	4.214208e-01
## COL6A5	256076	-0.36276633	3.060346e-01	4.214283e-01
## FBXW9	84261	0.05812627	3.063055e-01	4.217775e-01
## IQGAP1	8826	0.05747868	3.063470e-01	4.218108e-01
## ITGA10	8515	0.15816831	3.064610e-01	4.219438e-01
## SPOPLP1	100127903	-0.27506942	3.065002e-01	4.219500e-01
## MIR3944	100500911	-0.44758802	3.064901e-01	4.219500e-01
## KRBA2	124751	-0.09813836	3.066879e-01	4.221845e-01
## USP41P	373856	0.54388827	3.069405e-01	4.225083e-01

## CDKN1B	1027	0.03182884	3.070949e-01	4.226969e-01
## ANKRD42-DT	100506282	-0.09598572	3.071197e-01	4.227070e-01
## NEMP2	100131211	0.03411116	3.072688e-01	4.228883e-01
## MVB12A	93343	0.07352186	3.073081e-01	4.229185e-01
## ZNF695	57116	0.20737546	3.075264e-01	4.231949e-01
## RETREG3	162427	0.02804863	3.075828e-01	4.232486e-01
## CNFN	84518	-0.12220906	3.077809e-01	4.234972e-01
## LINC00994	100287879	0.34008284	3.078168e-01	4.235226e-01
## LINC01229	101928248	-0.14497263	3.078696e-01	4.235712e-01
## CERS4	79603	-0.07644717	3.080081e-01	4.237378e-01
## SDCBP2-AS1	100507495	0.06366273	3.080677e-01	4.237958e-01
## LAMB2	3913	0.08334285	3.082106e-01	4.239684e-01
## TRMT5	57570	0.02483101	3.082881e-01	4.240509e-01
## SNORA55	677834	-0.24021995	3.083553e-01	4.241194e-01
## ENTPD3-AS1	285266	0.05668530	3.084081e-01	4.241440e-01
## EIF1B-AS1	440952	0.05668530	3.084081e-01	4.241440e-01
## DEPDC4	120863	0.08178922	3.085767e-01	4.243039e-01
## MUS81	80198	0.04614399	3.085642e-01	4.243039e-01
## TDRD12	91646	-0.23804423	3.085643e-01	4.243039e-01
## GPRACR	401554	0.16998920	3.086557e-01	4.243885e-01
## TRMT12	55039	-0.02771376	3.087631e-01	4.245122e-01
## LINC02356	105369984	0.27235509	3.087886e-01	4.245232e-01
## GSDME	1687	0.05445115	3.088537e-01	4.245887e-01
## FRYL	285527	0.06201742	3.089297e-01	4.245971e-01
## CTSF	8722	0.06732350	3.088849e-01	4.245971e-01
## KIAA1191P2	100127938	0.17441415	3.088989e-01	4.245971e-01
## CDRT15P10	100420811	-0.28823863	3.089236e-01	4.245971e-01
## LINC00390	105370183	0.14047133	3.090161e-01	4.246678e-01
## RPL5P17	100270839	-0.39864319	3.090079e-01	4.246678e-01
## PLA2G10CP	127525785	-0.48895546	3.091266e-01	4.247956e-01
## LINC01001	100133161	0.22942585	3.091567e-01	4.248129e-01
## TBL2	26608	-0.03766108	3.092590e-01	4.249295e-01
## AURKAIP1	54998	-0.08613321	3.092846e-01	4.249407e-01
## MPHOSPH10P1	643802	0.12988835	3.094802e-01	4.251854e-01
## NR2C1	7181	0.03811632	3.095617e-01	4.252732e-01
## TRPC7	57113	-0.19481816	3.097216e-01	4.254618e-01
## PSMD9	5715	0.05359597	3.097340e-01	4.254618e-01
## TRIM62	55223	0.04771280	3.098044e-01	4.255105e-01
## ZNF876P	642280	-0.10464227	3.097960e-01	4.255105e-01
## GRIA2	2891	-0.18402111	3.098278e-01	4.255186e-01
## LCN1P1	286310	-0.28322683	3.098505e-01	4.255257e-01
## CHRFAM7A	89832	0.21412405	3.099468e-01	4.255857e-01
## UGT1A10	54575	-0.35064558	3.099455e-01	4.255857e-01
## TRIM52-AS1	100507602	0.08434501	3.099151e-01	4.255857e-01
## VCL	7414	0.06472642	3.100850e-01	4.257275e-01
## TCF19	6941	0.06952749	3.100846e-01	4.257275e-01
## C2CD2L	9854	-0.06497221	3.101331e-01	4.257453e-01
## LINC02576	102724233	0.59179910	3.101285e-01	4.257453e-01
## ZNF354A	6940	-0.05283992	3.102893e-01	4.259117e-01
## FAM200B	285550	0.05909476	3.102814e-01	4.259117e-01
## HAUS6P3	102723574	-0.39202228	3.103414e-01	4.259350e-01
## RNU7-57P	100151652	0.50034785	3.103260e-01	4.259350e-01
## PPP1R9A	55607	-0.07120689	3.104006e-01	4.259474e-01
## MAP9	79884	-0.07495305	3.103736e-01	4.259474e-01

## DNAAF8	146562	0.06790167	3.104030e-01	4.259474e-01
## ACOT7	11332	0.10947235	3.107150e-01	4.263515e-01
## PACSIN2	11252	-0.04026802	3.108859e-01	4.264897e-01
## GOLGA6L4	643707	-0.25067223	3.108720e-01	4.264897e-01
## LINC00885	401109	-0.10835242	3.108612e-01	4.264897e-01
## CAHM	100526820	-0.10732129	3.108617e-01	4.264897e-01
## PPP1R16A	84988	0.09524066	3.111125e-01	4.267765e-01
## RN7SL559P	106481849	0.32968448	3.112785e-01	4.269801e-01
## CD164	8763	-0.05293953	3.114232e-01	4.271407e-01
## GNG4	2786	-0.15825832	3.114307e-01	4.271407e-01
## LINC01340	102546227	0.38176666	3.115295e-01	4.272520e-01
## SOX21	11166	0.60293135	3.117474e-01	4.275026e-01
## RMDN2-AS1	101410544	-0.34323324	3.117304e-01	4.275026e-01
## JMJD7-PLA2G4B	8681	0.15903932	3.117850e-01	4.275301e-01
## CAP1	10487	-0.03850576	3.121797e-01	4.280229e-01
## ZNF665	79788	0.07921668	3.121657e-01	4.280229e-01
## MAPK7	5598	0.05484572	3.122586e-01	4.281070e-01
## TAB2	23118	0.02816975	3.123389e-01	4.281929e-01
## POLD1	5424	-0.06937439	3.124647e-01	4.283412e-01
## HSPA1B	3304	-0.07297585	3.124936e-01	4.283567e-01
## IFIT5	24138	0.04420134	3.126034e-01	4.284830e-01
## DOCK6	57572	-0.06342095	3.126785e-01	4.285508e-01
## NHEG1	100294720	1.23641051	3.126881e-01	4.285508e-01
## LINC02367	101930452	0.27527364	3.128124e-01	4.286969e-01
## IGLV1-40	28825	0.26656329	3.128971e-01	4.287888e-01
## ZNF205	7755	0.07219942	3.130106e-01	4.289202e-01
## CA5BP1	340591	0.05249334	3.132262e-01	4.291673e-01
## RNF138P1	379013	-0.30645762	3.132155e-01	4.291673e-01
## PPM1D	8493	-0.03274539	3.132606e-01	4.291902e-01
## NCBP2L	392517	-0.28768068	3.132907e-01	4.292072e-01
## SLC22A24	283238	0.14419008	3.134465e-01	4.293965e-01
## GOSR2-DT	119139904	0.26172409	3.134701e-01	4.294046e-01
## FAIM	55179	-0.05110747	3.136106e-01	4.295728e-01
## ARAF	369	-0.04913000	3.136723e-01	4.296331e-01
## KLHL9	55958	-0.03305867	3.137217e-01	4.296523e-01
## ARHGAP8	23779	-0.15328261	3.137083e-01	4.296523e-01
## ARSA	410	-0.08359764	3.139572e-01	4.299022e-01
## ST13	6767	-0.04786775	3.139439e-01	4.299022e-01
## SH2D4B	387694	0.24684390	3.139265e-01	4.299022e-01
## NPAS1	4861	0.12879004	3.140619e-01	4.300213e-01
## NICOL1	401115	-0.23989029	3.140946e-01	4.300419e-01
## ZNF75D	7626	0.06176618	3.141156e-01	4.300463e-01
## RWDD4	201965	-0.03656126	3.141700e-01	4.300847e-01
## MRPS31P5	100887750	0.15985647	3.141790e-01	4.300847e-01
## DMWD	1762	-0.04991638	3.142925e-01	4.302158e-01
## FAM88E	103908605	0.10367103	3.144096e-01	4.303519e-01
## KCNV1	27012	0.19713483	3.144595e-01	4.303718e-01
## CHL1-AS2	101927174	0.13446293	3.144446e-01	4.303718e-01
## TAS2R5	54429	0.17548962	3.144878e-01	4.303758e-01
## OXR1	55074	-0.07316668	3.144979e-01	4.303758e-01
## HNRNPA3P5	387933	-0.17283651	3.147157e-01	4.306496e-01
## PDCL	5082	0.03400494	3.147857e-01	4.307211e-01
## LINC01970	101929511	-0.18930091	3.149621e-01	4.309382e-01
## UGDH	7358	-0.06923482	3.150160e-01	4.309878e-01

## ZNF490	57474	-0.03817179	3.151504e-01	4.311473e-01
## BTF3-DT	118568828	-0.10282175	3.153716e-01	4.314256e-01
## CNTF	1270	-0.10267218	3.154217e-01	4.314699e-01
## LINC00881	100498859	0.37396855	3.157119e-01	4.318426e-01
## MIR3619	100500828	0.56316893	3.160126e-01	4.322296e-01
## HDHD5-AS1	100130717	0.12671715	3.160483e-01	4.322541e-01
## NUCB2	4925	0.05199800	3.161024e-01	4.323037e-01
## NSUN5P2	260294	0.11727735	3.161793e-01	4.323648e-01
## TEAD4	7004	0.11351923	3.161827e-01	4.323648e-01
## RPL19P21	392557	0.34923145	3.162715e-01	4.324376e-01
## RPL34P18	100271003	0.16641887	3.162589e-01	4.324376e-01
## SRP14	6727	-0.04960268	3.164476e-01	4.326541e-01
## AP3S2	10239	-0.04104968	3.165546e-01	4.327246e-01
## CDHR17P	127566420	0.30784817	3.165327e-01	4.327246e-01
## ARNILA	116435288	-0.11930227	3.165704e-01	4.327246e-01
## PEG13	359809	0.09345444	3.165354e-01	4.327246e-01
## LINC00174	285908	0.12353686	3.166048e-01	4.327312e-01
## SMG7-AS1	284649	-0.14720213	3.166108e-01	4.327312e-01
## FTOP1	100874223	0.25282813	3.166840e-01	4.328067e-01
## FGF5	2250	0.19374215	3.168032e-01	4.329454e-01
## MTRF1	9617	-0.05273095	3.169176e-01	4.330774e-01
## ATG4A	115201	0.04481098	3.169597e-01	4.331105e-01
## CCDC125	202243	0.05785504	3.171212e-01	4.333068e-01
## PSG8	440533	0.96953013	3.172055e-01	4.333734e-01
## TAF1A-AS1	100506161	0.08221909	3.171950e-01	4.333734e-01
## TAS2R3	50831	0.29017375	3.173358e-01	4.335269e-01
## LINC02961	100130249	-0.36342931	3.173603e-01	4.335361e-01
## HMGXB3	22993	0.02806889	3.175244e-01	4.337279e-01
## LRRC46	90506	-0.09252668	3.175364e-01	4.337279e-01
## ADCY10P1	221442	0.10653977	3.176421e-01	4.338235e-01
## SLC35B4	84912	-0.05008755	3.176376e-01	4.338235e-01
## NPY5R	4889	-0.09654598	3.176821e-01	4.338536e-01
## MAPKAPK3	7867	-0.04648057	3.177690e-01	4.339237e-01
## ABHD18	80167	-0.05606444	3.177685e-01	4.339237e-01
## PTH2R	5746	-0.07699754	3.178354e-01	4.339899e-01
## PLGLB1	5343	0.18847118	3.181102e-01	4.343408e-01
## TMEM81	388730	-0.07016433	3.181380e-01	4.343542e-01
## SNX17	9784	0.04437069	3.181636e-01	4.343648e-01
## ACTL6A	86	-0.04036276	3.185245e-01	4.348331e-01
## HORMAD2-AS1	101929664	0.14843460	3.186092e-01	4.349242e-01
## RPS12P3	344423	0.22944267	3.186694e-01	4.349821e-01
## EXD3	54932	0.07388180	3.187221e-01	4.350295e-01
## PRKDC	5591	0.04739034	3.188680e-01	4.352043e-01
## TMEM147	10430	-0.07677481	3.189263e-01	4.352349e-01
## ZFAND2B	130617	0.05643951	3.189243e-01	4.352349e-01
## LINC02227	101927697	-0.33271100	3.190026e-01	4.353145e-01
## CES2	8824	0.08862959	3.190227e-01	4.353175e-01
## YJEFN3	374887	0.17101935	3.191776e-01	4.355045e-01
## BCL6	604	0.10269320	3.192220e-01	4.355407e-01
## MRPL55	128308	0.07261977	3.192777e-01	4.355922e-01
## LINC00240	100133205	-0.10224461	3.193410e-01	4.356540e-01
## CRACDL	343990	0.04823998	3.193733e-01	4.356736e-01
## NPY1R	4886	-0.09354298	3.194478e-01	4.357509e-01
## CLCN4	1183	-0.05973320	3.195379e-01	4.358493e-01

## EEF1A1P13	133283	0.11200285	3.196625e-01	4.359947e-01
## COX7CP2	100506672	-0.25813184	3.202604e-01	4.367857e-01
## ZNF277-AS1	124901728	-0.46655533	3.202962e-01	4.368100e-01
## POM121L9P	29774	0.18087551	3.204247e-01	4.369608e-01
## RNVU1-30	124904627	0.33833200	3.204837e-01	4.370167e-01
## IGIP	492311	0.06138420	3.205318e-01	4.370577e-01
## GABRA5	2558	0.33979201	3.207202e-01	4.372901e-01
## DPP9	91039	-0.05177495	3.208791e-01	4.374822e-01
## TMEM231P1	100420067	0.15879688	3.210068e-01	4.376318e-01
## NDUFAF5	79133	-0.05690280	3.213665e-01	4.380976e-01
## CAPN10	11132	-0.06458643	3.215002e-01	4.382489e-01
## HCG20	105375013	0.15298949	3.215135e-01	4.382489e-01
## SPAG6	9576	0.16031075	3.215964e-01	4.382885e-01
## LRRC3C	100505591	-0.31156746	3.215749e-01	4.382885e-01
## ATP6AP1L	92270	0.08457399	3.215967e-01	4.382885e-01
## ZNF784	147808	0.06015481	3.217696e-01	4.384995e-01
## ENTPD2	954	-0.09615119	3.218688e-01	4.386101e-01
## GUCY1B2	2974	0.29077238	3.220278e-01	4.388021e-01
## MCEE	84693	0.06020553	3.221295e-01	4.388670e-01
## TAF9B	51616	0.03556844	3.221205e-01	4.388670e-01
## ZNF805	390980	0.05038190	3.221018e-01	4.388670e-01
## MIR3171HG	728755	0.47585237	3.221720e-01	4.389002e-01
## EDNRB-AS1	100505518	0.37558277	3.222868e-01	4.390074e-01
## AGAP7P	653268	0.44591376	3.222811e-01	4.390074e-01
## JAG2	3714	-0.11773417	3.223723e-01	4.390993e-01
## FGF20	26281	-0.27707083	3.224668e-01	4.391787e-01
## CACTIN-AS1	404665	0.14848447	3.224533e-01	4.391787e-01
## SCARB2	950	-0.04070711	3.224887e-01	4.391839e-01
## KIAA1191	57179	-0.08507708	3.225674e-01	4.392665e-01
## CREB3L4	148327	0.04918757	3.226164e-01	4.393086e-01
## FTH1P12	2504	-0.22685297	3.228837e-01	4.396480e-01
## RAD54L2	23132	-0.05435419	3.229152e-01	4.396662e-01
## EAF2	55840	0.11838753	3.230330e-01	4.398001e-01
## CPNE7	27132	0.15487485	3.230678e-01	4.398001e-01
## LINC02887	105377826	0.25082916	3.230522e-01	4.398001e-01
## RIBC1	158787	0.06637219	3.231016e-01	4.398214e-01
## DUXAP1	503630	-0.35711067	3.231399e-01	4.398489e-01
## SCGB1C1	147199	0.36806661	3.231865e-01	4.398877e-01
## TENT2	167153	0.03845110	3.232811e-01	4.399918e-01
## ZMYND10	51364	0.09277629	3.233897e-01	4.400657e-01
## SURF1	6834	0.07672500	3.233707e-01	4.400657e-01
## SLC38A8	146167	-0.25648592	3.233894e-01	4.400657e-01
## CHPF	79586	0.11604486	3.235774e-01	4.402965e-01
## TRIM69	140691	-0.04826704	3.236183e-01	4.403274e-01
## LINC02574	111216282	0.53861821	3.236931e-01	4.404046e-01
## RPS4XP3	128580	0.23382434	3.237221e-01	4.404194e-01
## VKORC1	79001	0.09225275	3.238374e-01	4.405269e-01
## NIF3L1	60491	-0.03096870	3.238291e-01	4.405269e-01
## RSL24D1P6	140757	-0.43691627	3.241332e-01	4.409046e-01
## ZNF264	9422	0.04333079	3.243061e-01	4.411151e-01
## MLX	6945	-0.04180032	3.244504e-01	4.412867e-01
## CD177	57126	0.17900360	3.245422e-01	4.413868e-01
## MRPL30	51263	0.03607574	3.246823e-01	4.415526e-01
## ZNF497-AS1	105372483	-0.10497431	3.247284e-01	4.415906e-01

## SLC03A1	28232	-0.09532386	3.247923e-01	4.416528e-01
## PTMAP9	100506248	0.18098449	3.248392e-01	4.416919e-01
## TSPAN33	340348	-0.08154016	3.251156e-01	4.420429e-01
## SCGB2A2	4250	-1.00101637	3.251600e-01	4.420538e-01
## EEF1A1P3	100421865	0.25993125	3.251430e-01	4.420538e-01
## CTSLP1	118945	0.14736794	3.252311e-01	4.421258e-01
## WDR35-DT	101928222	-0.11769572	3.253097e-01	4.422079e-01
## ST20-AS1	283687	0.08923428	3.253381e-01	4.422218e-01
## CCDC28A-AS1	100507462	0.09672329	3.253590e-01	4.422254e-01
## GCNT1P1	170517	0.36205050	3.254295e-01	4.422966e-01
## RARRES2P1	643255	-0.32542285	3.254486e-01	4.422978e-01
## UBE2V1P2	730052	0.28084454	3.256267e-01	4.424903e-01
## LINC02275	100506085	0.12705824	3.256167e-01	4.424903e-01
## LRRC42	115353	0.03202230	3.257348e-01	4.425878e-01
## TSHZ3-AS1	107985311	0.34793282	3.257220e-01	4.425878e-01
## RPL12P7	326275	0.28386066	3.257810e-01	4.426258e-01
## LDHAP5	729666	-0.28748063	3.258122e-01	4.426434e-01
## FAM156A	29057	0.18607975	3.259380e-01	4.427895e-01
## TMED1	11018	-0.04760473	3.260120e-01	4.427953e-01
## IFITM3P3	100101247	-0.38432031	3.260037e-01	4.427953e-01
## RPL15P7	728576	-0.19727304	3.260151e-01	4.427953e-01
## ZNF594-DT	100130950	0.08281729	3.260090e-01	4.427953e-01
## C9orf163	158055	-0.12615008	3.262671e-01	4.431127e-01
## SCDP1	645313	0.51935365	3.263696e-01	4.432273e-01
## RBM41	55285	0.07217314	3.265336e-01	4.434252e-01
## NDUFAB1	4706	-0.07341502	3.267605e-01	4.436974e-01
## GARRE1	9710	0.04511150	3.267706e-01	4.436974e-01
## GYPB	2994	0.26027660	3.268513e-01	4.437821e-01
## HMGB1P41	100873896	0.26918471	3.268754e-01	4.437901e-01
## RNF39	80352	-0.28957986	3.269554e-01	4.438739e-01
## CYBC1	79415	-0.05908976	3.269936e-01	4.439010e-01
## CYP1A1	1543	-0.22855482	3.270267e-01	4.439211e-01
## KLRK1-AS1	101928100	0.10940827	3.270726e-01	4.439587e-01
## CAB39	51719	0.03322067	3.272323e-01	4.441506e-01
## COQ9	57017	-0.04968253	3.272916e-01	4.441815e-01
## COPS8P2	375350	0.24636700	3.272779e-01	4.441815e-01
## GSTA3	2940	0.38641082	3.273366e-01	4.441929e-01
## WFDC10B	280664	0.46314459	3.273303e-01	4.441929e-01
## PLPPR3	79948	0.34207710	3.275718e-01	4.444624e-01
## ZNF564	163050	-0.14974633	3.275600e-01	4.444624e-01
## MTF2	22823	0.05150846	3.277660e-01	4.447011e-01
## GAPDHP65	389849	0.17405385	3.278691e-01	4.447945e-01
## PSMB3P1	121131	0.24167957	3.278714e-01	4.447945e-01
## OGA	10724	-0.04747802	3.279463e-01	4.448712e-01
## MRO	83876	0.17593730	3.279792e-01	4.448910e-01
## SNHG1	23642	0.08435881	3.280039e-01	4.448997e-01
## CNEP1R1P1	100130176	0.31631581	3.283376e-01	4.453026e-01
## CLASP1-AS1	107985942	0.16053496	3.283273e-01	4.453026e-01
## LCMT1-AS1	102723510	0.11124869	3.285284e-01	4.455365e-01
## DENND5B-AS1	100874249	0.30370838	3.286050e-01	4.456155e-01
## GOLGA6L17P	642402	0.28528953	3.287132e-01	4.457374e-01
## LINC02970	105372712	-0.21110705	3.287623e-01	4.457791e-01
## TXLNG	55787	-0.04198895	3.287935e-01	4.457965e-01
## C12orf57	113246	0.10249780	3.288282e-01	4.458187e-01

## NAA38	84316	0.08910789	3.289498e-01	4.459560e-01
## MIR138-1	406929	0.44078360	3.289662e-01	4.459560e-01
## ACBD7	414149	0.08660794	3.290271e-01	4.460137e-01
## SENP6	26054	-0.04478562	3.291965e-01	4.462185e-01
## TNPO1P1	100418919	0.36145626	3.293922e-01	4.464588e-01
## LINC00457	100874179	0.61772846	3.294694e-01	4.465385e-01
## CPLANE1-AS1	105374727	-0.10018309	3.295091e-01	4.465674e-01
## PAICSP1	780814	-0.21781073	3.295685e-01	4.466048e-01
## LINC01738	107984953	-0.17021040	3.295734e-01	4.466048e-01
## RNU6-6P	26826	0.38315043	3.296065e-01	4.466247e-01
## BDNF-AS	497258	-0.06402665	3.297962e-01	4.468568e-01
## ESYT2	57488	0.04079322	3.298520e-01	4.469075e-01
## CCDC25	55246	0.02748278	3.299454e-01	4.470092e-01
## UBE2D2	7322	-0.04060287	3.300608e-01	4.471406e-01
## DUX4L35	106632270	-0.25402769	3.300901e-01	4.471554e-01
## NEO1	4756	-0.05058378	3.301850e-01	4.472340e-01
## APCDD1L	164284	0.09661595	3.301821e-01	4.472340e-01
## HMGN2P3	728632	0.26204995	3.302378e-01	4.472806e-01
## AHCTF1	25909	-0.04421919	3.303498e-01	4.474074e-01
## OTC	5009	0.28831232	3.305335e-01	4.476062e-01
## SG01-AS1	100874028	0.14000346	3.305325e-01	4.476062e-01
## GDPD2	54857	0.14691132	3.306396e-01	4.477250e-01
## TMEM183A	92703	-0.03812704	3.307274e-01	4.477940e-01
## IGLV10-54	28772	0.40456202	3.307117e-01	4.477940e-01
## SMASR	102723481	0.63396663	3.307700e-01	4.478267e-01
## TEX261	113419	-0.03555183	3.308117e-01	4.478307e-01
## LINC02778	105378760	0.22573271	3.308250e-01	4.478307e-01
## RNU7-47P	100147834	-0.39494082	3.308282e-01	4.478307e-01
## OR4F13P	390651	0.42213762	3.309102e-01	4.479167e-01
## CORIN	10699	-0.12075974	3.309616e-01	4.479613e-01
## ZBED1P1	645145	-0.46108922	3.310012e-01	4.479900e-01
## KRT20	54474	1.17839988	3.310807e-01	4.480726e-01
## RPL15P11	402694	0.37033833	3.311122e-01	4.480903e-01
## VASP	7408	0.07081239	3.311716e-01	4.481458e-01
## CCND3	896	0.05509204	3.312833e-01	4.482720e-01
## ATP6V0E1	8992	-0.06072819	3.313575e-01	4.483473e-01
## MAP1LC3B	81631	-0.03548444	3.314455e-01	4.484415e-01
## RPL5P5	730213	0.32629785	3.316824e-01	4.487370e-01
## GDNF-AS1	100861519	0.14222457	3.317252e-01	4.487700e-01
## CFAP144	440585	0.12605357	3.321200e-01	4.492790e-01
## CCT2	10576	-0.03159219	3.322040e-01	4.493676e-01
## EPPIN	57119	-0.49508609	3.322441e-01	4.493799e-01
## HERC2	8924	-0.05073191	3.322500e-01	4.493799e-01
## WWC2-AS2	152641	-0.07000981	3.322916e-01	4.494111e-01
## CENPV	201161	-0.06333162	3.324975e-01	4.496646e-01
## SP3	6670	0.03658189	3.325590e-01	4.497227e-01
## SLC25A11	8402	-0.05968366	3.326169e-01	4.497760e-01
## ERBB3	2065	-0.07633529	3.326373e-01	4.497784e-01
## KIF9	64147	0.06627097	3.328508e-01	4.500421e-01
## BMS1P2	642826	0.22748407	3.328762e-01	4.500514e-01
## SSBL2P	653588	0.37867299	3.329365e-01	4.500828e-01
## NPBP3-AS1	348808	0.19443365	3.329187e-01	4.500828e-01
## KANSL1-AS1	644246	0.13156891	3.329915e-01	4.501322e-01
## TEX15	56154	0.27052029	3.332902e-01	4.504880e-01

## GOLGB1	2804	-0.05514968	3.332918e-01	4.504880e-01
## HOOK3	84376	0.06995846	3.333357e-01	4.505222e-01
## ZNF132	7691	0.04000753	3.335323e-01	4.507630e-01
## ICA1L	130026	-0.06900020	3.335916e-01	4.508180e-01
## RPL13AP12	100271277	0.31188346	3.336136e-01	4.508227e-01
## LCLAT1	253558	0.05845223	3.336720e-01	4.508765e-01
## PIN1-DT	100996288	-0.21190117	3.337422e-01	4.509464e-01
## KRT7-AS	109729127	-0.17248305	3.337907e-01	4.509868e-01
## PLPP2	8612	0.12571707	3.338547e-01	4.510482e-01
## PROS2P	5628	-0.47263395	3.338878e-01	4.510678e-01
## RNU7-171P	106479089	0.24837602	3.339565e-01	4.511356e-01
## ELFN1-AS1	101927125	-0.32476810	3.341179e-01	4.513145e-01
## RPL12P37	100129801	-0.55242562	3.341447e-01	4.513145e-01
## ZNF658	26149	0.05244104	3.341392e-01	4.513145e-01
## LINC02757	101928813	0.18721663	3.342018e-01	4.513665e-01
## SETD9	133383	-0.05955754	3.343022e-01	4.514770e-01
## SUGT1-DT	116435302	0.13917792	3.343237e-01	4.514810e-01
## OR6K3	391114	0.54724361	3.343539e-01	4.514967e-01
## GNGT1	2792	-0.15231866	3.344508e-01	4.516024e-01
## RABGEF1P2	122149301	0.46591718	3.345031e-01	4.516479e-01
## CNN2P8	205272	0.20502708	3.345565e-01	4.516949e-01
## C6orf120	387263	0.02392302	3.346188e-01	4.517540e-01
## KISS1R	84634	-0.27555803	3.347531e-01	4.519102e-01
## ZNF30-AS1	102723513	-0.14290085	3.349013e-01	4.520851e-01
## ASPA	443	0.09494143	3.349635e-01	4.521264e-01
## SNORA31	677814	0.38354781	3.349691e-01	4.521264e-01
## NUDT18	79873	0.05347652	3.351063e-01	4.522865e-01
## SNORA11F	109617000	-0.20817846	3.352436e-01	4.524467e-01
## NUPR1	26471	-0.08955279	3.353655e-01	4.525860e-01
## COPG2IT1	53844	0.13301658	3.353995e-01	4.526068e-01
## IDS	3423	0.08426886	3.355618e-01	4.527771e-01
## RPL36AP24	100271508	0.34427003	3.355629e-01	4.527771e-01
## GOLGA6L3P	100133220	0.26533864	3.356268e-01	4.528381e-01
## MIR708	100126333	0.41456583	3.357873e-01	4.530295e-01
## FAM88C	102724238	-0.17079189	3.361392e-01	4.534546e-01
## TAS2R64P	338412	0.31107361	3.361397e-01	4.534546e-01
## AQP7P3	441432	0.44734620	3.363013e-01	4.536473e-01
## PPARA	5465	-0.07141137	3.364790e-01	4.538619e-01
## SCYL1	57410	-0.03371347	3.365094e-01	4.538778e-01
## RPP38	10557	-0.03777912	3.365473e-01	4.539036e-01
## DOCK11	139818	0.09020852	3.366673e-01	4.540403e-01
## ALX1	8092	-0.17457604	3.367510e-01	4.541280e-01
## LINC00592	283404	0.55419281	3.367767e-01	4.541374e-01
## PRR12	57479	-0.07652912	3.369080e-01	4.542893e-01
## DCTN4	51164	-0.02234795	3.370413e-01	4.544186e-01
## ZNF606	80095	0.04675959	3.370397e-01	4.544186e-01
## LINC02601	105373185	-0.26693670	3.370895e-01	4.544450e-01
## SLC9A3R1-AS1	105371893	0.13758831	3.370983e-01	4.544450e-01
## LINC01561	404216	-0.12023906	3.372349e-01	4.546039e-01
## LINC02733	100507521	-0.25924655	3.374282e-01	4.548393e-01
## RNU6-944P	106479983	-0.24968165	3.375152e-01	4.549313e-01
## WSPAR	105664404	-0.21417979	3.376877e-01	4.551385e-01
## CRADD	8738	0.06070755	3.379398e-01	4.554531e-01
## RNF227	284023	0.04710088	3.379712e-01	4.554702e-01

## LINC01889	105373597	-0.46920532	3.379959e-01	4.554783e-01
## POLD4	57804	0.06772414	3.381306e-01	4.556345e-01
## LRRC8D	55144	0.04603520	3.381686e-01	4.556604e-01
## TSSK1A	23752	0.16253769	3.383095e-01	4.558250e-01
## IGKV3-11	28914	0.24807081	3.383459e-01	4.558487e-01
## TESC	54997	-0.13073300	3.385319e-01	4.560740e-01
## VARS2	57176	-0.18796530	3.387479e-01	4.563397e-01
## MFSD14CP	84278	0.07197725	3.388079e-01	4.563952e-01
## ATP5PBP1	100422523	0.59254117	3.388793e-01	4.564662e-01
## EAPP	55837	0.04107876	3.389791e-01	4.565752e-01
## HMGB3P10	100129320	-0.28797626	3.391456e-01	4.567742e-01
## PLG	5340	-0.15589296	3.391749e-01	4.567883e-01
## ZNF503	84858	-0.07933356	3.391943e-01	4.567891e-01
## HELLS	3070	0.07435276	3.394478e-01	4.571052e-01
## FAM157A	728262	-0.18020102	3.395026e-01	4.571536e-01
## LRRC69	100130742	0.13551959	3.395487e-01	4.571905e-01
## DYDC1	143241	0.44039457	3.396193e-01	4.572601e-01
## GNRHR2	114814	0.06770259	3.397206e-01	4.573712e-01
## CCDC30	728621	0.07633607	3.399758e-01	4.576894e-01
## F3	2152	0.08198176	3.400082e-01	4.577077e-01
## ABHD4	63874	-0.04084770	3.402289e-01	4.579794e-01
## RPL7AP14	140756	0.51723174	3.404512e-01	4.582533e-01
## TCERG1L	256536	0.26579524	3.404906e-01	4.582809e-01
## NANOGP8	388112	0.34305193	3.406224e-01	4.584330e-01
## TRAPPC6A	79090	0.07917339	3.406867e-01	4.584940e-01
## PGGT1BP1	653895	-0.24123637	3.407118e-01	4.585025e-01
## R3HDM2-DT	120766140	-0.32058413	3.408259e-01	4.586306e-01
## H2BC13	8340	0.46847399	3.411415e-01	4.590044e-01
## PRRT1	80863	-0.10716374	3.411312e-01	4.590044e-01
## CTAGE7P	119437	0.24264692	3.413990e-01	4.593254e-01
## FIBCD1	84929	-0.40552413	3.416125e-01	4.595860e-01
## TP53RK-DT	118597844	0.12274977	3.416305e-01	4.595860e-01
## NAE1	8883	0.03040910	3.416616e-01	4.596025e-01
## CADPS2	93664	-0.04552315	3.417773e-01	4.596794e-01
## DENND10	404636	0.03612531	3.417860e-01	4.596794e-01
## ARHGEF37	389337	-0.04817737	3.418048e-01	4.596794e-01
## KRTDAP	388533	-0.35011721	3.418133e-01	4.596794e-01
## LORICRIN	4014	-0.89973011	3.417439e-01	4.596794e-01
## ZDHHC11B	653082	-0.13866047	3.418945e-01	4.597630e-01
## YBX1P10	158373	0.10361746	3.419440e-01	4.598041e-01
## GPR160	26996	-0.07797330	3.420042e-01	4.598596e-01
## LINC01141	339505	0.19809842	3.420382e-01	4.598800e-01
## ST13P15	100422603	0.24429379	3.423142e-01	4.602256e-01
## RCC2P6	100421131	-0.16587790	3.423772e-01	4.602848e-01
## RSPH6A	81492	-0.41126597	3.424260e-01	4.603250e-01
## NOP56P1	646192	-0.32781585	3.424703e-01	4.603590e-01
## MED13L	23389	0.05812114	3.425602e-01	4.604359e-01
## TGM4	7047	0.61660174	3.425654e-01	4.604359e-01
## SGCB	6443	-0.03841909	3.426570e-01	4.605336e-01
## STMND1	401236	0.37823715	3.426879e-01	4.605496e-01
## SCN10A	6336	0.84663642	3.428807e-01	4.607833e-01
## EVI5L	115704	-0.05346967	3.429353e-01	4.608312e-01
## FOSL1	8061	0.18029260	3.430000e-01	4.608926e-01
## LINC00987	100499405	0.08187504	3.430211e-01	4.608955e-01

## METTL14-DT	101929741	-0.12972906	3.431280e-01	4.610137e-01
## CIBAR1P1	729073	-0.16956540	3.431819e-01	4.610351e-01
## RNU6-37P	106478920	0.39581477	3.431632e-01	4.610351e-01
## C2CD5	9847	-0.04833743	3.432486e-01	4.610992e-01
## SNRNP200	23020	-0.03042726	3.432889e-01	4.611278e-01
## ESCO1	114799	0.06532239	3.435253e-01	4.614199e-01
## BAHCC1	57597	-0.07269786	3.436205e-01	4.615222e-01
## MCOLN1	57192	-0.05136545	3.436985e-01	4.615760e-01
## NTRK1	4914	0.10178466	3.436880e-01	4.615760e-01
## SLC2A6	11182	0.11808894	3.439556e-01	4.618957e-01
## PRUNE2	158471	0.08007489	3.440074e-01	4.619398e-01
## SLC7A7	9056	-0.13851932	3.440508e-01	4.619637e-01
## GOLGA8Q	727909	-0.46128058	3.440632e-01	4.619637e-01
## STRA6	64220	0.17617659	3.441124e-01	4.620042e-01
## NME5	8382	-0.07673943	3.441339e-01	4.620074e-01
## STXBP5L	9515	0.35312711	3.443048e-01	4.622114e-01
## HDAC1P2	100419489	0.40495651	3.443523e-01	4.622497e-01
## COA5	493753	0.04429210	3.444117e-01	4.623038e-01
## MEN1	4221	-0.03344953	3.445080e-01	4.624076e-01
## FAM187B2P	100421621	0.15078150	3.446322e-01	4.625487e-01
## OGFOD2	79676	0.09005891	3.447020e-01	4.626169e-01
## TAGLN	6876	0.13210512	3.447774e-01	4.626925e-01
## NUP43	348995	0.03754542	3.450327e-01	4.630095e-01
## HS3ST3A1	9955	-0.10406451	3.450884e-01	4.630587e-01
## H4C14	8370	0.18986461	3.451086e-01	4.630603e-01
## SUZ12P1	440423	0.07771896	3.451291e-01	4.630622e-01
## MIR4786	100616417	-0.32642897	3.452136e-01	4.631500e-01
## MIR3149	100422921	0.28285209	3.453389e-01	4.632926e-01
## EFHC2	80258	-0.08101750	3.453610e-01	4.632965e-01
## SMARCB1	6598	-0.02977752	3.454887e-01	4.634379e-01
## PDCL3	79031	-0.03791741	3.455045e-01	4.634379e-01
## PJA1	64219	0.04113541	3.455240e-01	4.634385e-01
## ACP6	51205	-0.06445725	3.459383e-01	4.639686e-01
## KRT18P59	399965	0.15400738	3.460062e-01	4.640286e-01
## HADHAP2	399994	-0.15752969	3.460213e-01	4.640286e-01
## MIR200B	406984	-0.24438131	3.460938e-01	4.641002e-01
## SLC6A15	55117	-0.20518431	3.461661e-01	4.641716e-01
## RPP21	79897	-0.15380287	3.463021e-01	4.643284e-01
## SLC4A5	57835	-0.12557017	3.463228e-01	4.643305e-01
## KRT85	3891	-0.15212362	3.463740e-01	4.643735e-01
## AZGP1P2	401393	-0.20673445	3.467017e-01	4.647872e-01
## COPS6	10980	0.04536940	3.467338e-01	4.648001e-01
## TUBB2BP1	100132153	-0.37794372	3.467495e-01	4.648001e-01
## OR2AE1	81392	-0.35595321	3.467815e-01	4.648173e-01
## CYP4F29P	54055	0.17942621	3.468154e-01	4.648371e-01
## PDSS2	57107	-0.05017268	3.470188e-01	4.650840e-01
## FOXG1	2290	0.40598587	3.470546e-01	4.651064e-01
## FRA10AC1	118924	0.03881549	3.470739e-01	4.651066e-01
## MLPH	79083	-0.15198810	3.472222e-01	4.652796e-01
## CHST5	23563	0.22681704	3.472580e-01	4.653019e-01
## COL18A1	80781	-0.08159915	3.473134e-01	4.653505e-01
## ZBTB5	9925	-0.02720869	3.473445e-01	4.653665e-01
## CARD14	79092	-0.17398317	3.473743e-01	4.653808e-01
## ATP12A	479	-0.16289527	3.475576e-01	4.656008e-01

## AHI1	54806	0.06605155	3.476018e-01	4.656343e-01
## SYT9	143425	-0.07363619	3.476576e-01	4.656833e-01
## RPL19P6	100270946	0.22106449	3.477476e-01	4.657783e-01
## C1orf56	54964	-0.05901549	3.479360e-01	4.660049e-01
## ZNF213-AS1	100507458	0.05800781	3.480870e-01	4.661814e-01
## PLAU	5328	-0.13301962	3.481143e-01	4.661842e-01
## MZT2A	653784	0.10029473	3.481275e-01	4.661842e-01
## EBF3-AS1	105378558	0.31769194	3.482088e-01	4.662675e-01
## RPS8P4	646119	0.29978240	3.483007e-01	4.663648e-01
## SEPTIN11	55752	0.04263058	3.483473e-01	4.664015e-01
## AKR1C8	340811	0.23746111	3.483954e-01	4.664403e-01
## COMMD8	54951	0.06813195	3.484355e-01	4.664682e-01
## ATP11B	23200	-0.04222052	3.486333e-01	4.667072e-01
## SASS6	163786	0.05859065	3.486860e-01	4.667522e-01
## TOP2B	7155	-0.03301831	3.487302e-01	4.667598e-01
## TRPC6P10	123464518	-0.30320825	3.487240e-01	4.667598e-01
## PRR14L	253143	0.03745552	3.489476e-01	4.670251e-01
## TPBGL-AS1	105369388	0.37446782	3.489698e-01	4.670291e-01
## TRAPPC3	27095	0.04302075	3.492076e-01	4.673217e-01
## TMEM249	340393	0.44307060	3.492632e-01	4.673703e-01
## CDH10	1008	-0.15189024	3.493931e-01	4.675185e-01
## LRP2BP	55805	-0.05658996	3.495053e-01	4.676427e-01
## FNIP1	96459	0.03824327	3.496392e-01	4.677961e-01
## ARL2	402	0.07307591	3.497965e-01	4.679651e-01
## IFT74-AS1	101929602	0.27092563	3.498232e-01	4.679651e-01
## LINC02405	101927592	0.51484176	3.498184e-01	4.679651e-01
## CHDH	55349	0.09361703	3.499197e-01	4.680426e-01
## PCOTH	542767	0.08638609	3.499063e-01	4.680426e-01
## MED29	55588	0.02355850	3.499846e-01	4.681037e-01
## SPA17P1	171424	-0.24574980	3.500069e-01	4.681077e-01
## ARMCX2	9823	-0.04158140	3.501378e-01	4.682571e-01
## MIR641	693226	0.19802405	3.501968e-01	4.683102e-01
## RPL3P7	642741	0.14528621	3.502582e-01	4.683666e-01
## ITGA2-AS1	121232372	-0.28086731	3.505999e-01	4.687976e-01
## MOCS1	4337	-0.06205062	3.506683e-01	4.688632e-01
## LRRC51	120356739	-0.04639541	3.507189e-01	4.689052e-01
## IPP	3652	0.04190955	3.507828e-01	4.689647e-01
## PACRG	135138	-0.07529775	3.509495e-01	4.691618e-01
## ZNF723	646864	-0.28867533	3.509928e-01	4.691939e-01
## BOD1L1	259282	0.06412552	3.512197e-01	4.694715e-01
## DYNLT2B	255758	-0.09341575	3.512512e-01	4.694876e-01
## DYNLT3P2	100381215	-0.28448425	3.513602e-01	4.695823e-01
## LINC00676	101409253	0.31957069	3.513607e-01	4.695823e-01
## COL11A2	1302	0.12869405	3.514156e-01	4.696299e-01
## GTF2H2B	653238	-0.20507834	3.515086e-01	4.697283e-01
## ZDHHC20-IT1	100874367	0.25351043	3.515523e-01	4.697610e-01
## FOXRED2	80020	0.06767242	3.517190e-01	4.699375e-01
## RPL21P44	402176	0.23653837	3.517231e-01	4.699375e-01
## MREG	55686	0.07854501	3.517608e-01	4.699620e-01
## SUMO2P21	728825	0.18365824	3.517943e-01	4.699809e-01
## FBXL13	222235	0.06525180	3.518773e-01	4.700659e-01
## CLCA4-AS1	105378828	0.40282785	3.519016e-01	4.700726e-01
## ZCCHC14	23174	0.04127430	3.519857e-01	4.701591e-01
## MIR320E	100422913	0.27404473	3.520761e-01	4.702540e-01

## BARX2	8538	-0.07172611	3.523007e-01	4.705281e-01
## SEPTIN7P13	100287497	-0.09812992	3.523206e-01	4.705288e-01
## SHANK3	85358	-0.06719393	3.525800e-01	4.708494e-01
## CYP4Z1	199974	-0.18678169	3.525999e-01	4.708501e-01
## MED24	9862	-0.03388407	3.527479e-01	4.710218e-01
## PCSK6	5046	-0.08200915	3.528000e-01	4.710655e-01
## NDRG4	65009	-0.08649804	3.529496e-01	4.712191e-01
## IGFL3	388555	1.19700496	3.529538e-01	4.712191e-01
## KRT8P33	100418737	-0.13391260	3.531819e-01	4.714978e-01
## ADGRG6	57211	0.06494447	3.532440e-01	4.715547e-01
## ILKAP	80895	0.03320811	3.532721e-01	4.715663e-01
## LINC01395	101929557	0.27477665	3.533101e-01	4.715911e-01
## PPP4R1L	55370	0.08712816	3.533470e-01	4.715935e-01
## GTF2IP23	101929580	0.15570831	3.533689e-01	4.715935e-01
## PIK3CD-AS2	101929074	0.09497435	3.533701e-01	4.715935e-01
## STRN4	29888	-0.04087811	3.534258e-01	4.716420e-01
## SCML1	6322	-0.09605021	3.537953e-01	4.721068e-01
## ZNF598	90850	0.06143240	3.538129e-01	4.721068e-01
## DTD1	92675	0.05102725	3.538727e-01	4.721605e-01
## CYCSP24	360177	-0.22886662	3.539870e-01	4.722871e-01
## BBS1	582	-0.11946722	3.541987e-01	4.725436e-01
## PSMA1	5682	0.05601311	3.543091e-01	4.726649e-01
## LHB	3972	-0.26493274	3.543489e-01	4.726921e-01
## PAIP1P2	645139	-0.05085362	3.544294e-01	4.727736e-01
## ODAPH	152816	0.35959175	3.545077e-01	4.728521e-01
## GDF7	151449	0.07701806	3.546647e-01	4.729836e-01
## UBE2Q2P1	388165	0.12748553	3.546533e-01	4.729836e-01
## RPL21P14	729208	-0.42940931	3.546556e-01	4.729836e-01
## GSAP	54103	-0.06699955	3.547242e-01	4.730110e-01
## CYLD-AS2	105371251	-0.41791332	3.547107e-01	4.730110e-01
## SF3A3	10946	-0.02217397	3.548601e-01	4.731403e-01
## PPP2R5CP	140921	-0.24125553	3.548489e-01	4.731403e-01
## EDEM2	55741	-0.03510595	3.549598e-01	4.732473e-01
## ZNF132-DT	118827803	-0.10465030	3.550609e-01	4.733561e-01
## EIF5AP3	1987	0.37965291	3.552132e-01	4.735331e-01
## TENT5D	169966	-0.24897366	3.555404e-01	4.739434e-01
## TUBBP1	92755	-0.09463345	3.556000e-01	4.739448e-01
## ZNF146	7705	0.03342911	3.555854e-01	4.739448e-01
## MIR17HG	407975	0.16371559	3.555879e-01	4.739448e-01
## LRRC37A4P	55073	0.12184837	3.556603e-01	4.739992e-01
## SLC47A2	146802	-0.12031618	3.557860e-01	4.741407e-01
## BCL9	607	-0.03279754	3.558289e-01	4.741718e-01
## WDR73	84942	-0.04756502	3.559263e-01	4.742756e-01
## MYL12AP1	157667	0.29864577	3.560582e-01	4.744254e-01
## ZRANB1	54764	0.03257688	3.561827e-01	4.745653e-01
## LINC02302	101927351	-0.23485984	3.562100e-01	4.745756e-01
## LINC01342	254099	0.18995473	3.563721e-01	4.747656e-01
## JAKMIP1-DT	285484	0.33849886	3.565343e-01	4.749555e-01
## DCDC2	51473	0.08633223	3.566434e-01	4.750749e-01
## AFF2	2334	-0.11527822	3.567696e-01	4.752169e-01
## NDST3	9348	-0.12646858	3.568184e-01	4.752559e-01
## POP4	10775	0.03691545	3.568411e-01	4.752601e-01
## STPG4	285051	0.38314124	3.568720e-01	4.752753e-01
## ADIPOR1	51094	-0.03749399	3.569018e-01	4.752889e-01

## CACHD1	57685	0.06773605	3.569861e-01	4.753751e-01
## TRIM23	373	0.04380146	3.570400e-01	4.754207e-01
## BACH1-IT1	<NA>	0.13670525	3.571129e-01	4.754918e-01
## EIF1AXP1	280661	-0.13381159	3.572204e-01	4.756088e-01
## RNU5A-1	26831	-0.43521980	3.572623e-01	4.756386e-01
## THBS2-AS1	101929523	0.05157836	3.573739e-01	4.757611e-01
## UGT2B26P	54570	0.21732008	3.574007e-01	4.757707e-01
## ANKRD34C	390616	-0.22259461	3.574540e-01	4.758156e-01
## ARSF	416	0.15425090	3.574817e-01	4.758187e-01
## RPL7P1	6174	0.17263552	3.574955e-01	4.758187e-01
## OPN5	221391	0.41074927	3.576427e-01	4.759886e-01
## USP35	57558	0.04565684	3.577313e-01	4.760629e-01
## ZNF610	162963	0.05477230	3.577515e-01	4.760629e-01
## RPS3AP20	643932	0.30356127	3.577573e-01	4.760629e-01
## C18orf32	497661	-0.05018201	3.582081e-01	4.766105e-01
## SEPTIN9-DT	105371907	-0.30914184	3.582026e-01	4.766105e-01
## CHST8	64377	-0.20320434	3.583757e-01	4.768074e-01
## YAE1	57002	0.04626306	3.584388e-01	4.768653e-01
## EP400P1	347918	0.09820038	3.585240e-01	4.769525e-01
## MYH11	4629	0.14032184	3.585999e-01	4.770012e-01
## KMT2E-AS1	100216545	-0.07450895	3.585877e-01	4.770012e-01
## NDUFB4P12	402175	-0.19234574	3.586865e-01	4.770155e-01
## EGFR-AS1	100507500	-0.18546530	3.586496e-01	4.770155e-01
## GUSBP14	11039	-0.24030872	3.586891e-01	4.770155e-01
## LINC00624	100289211	-0.17543342	3.586555e-01	4.770155e-01
## ACAP2-IT1	100874306	-0.18281371	3.587374e-01	4.770536e-01
## HNRNPDL4	100421657	0.30064354	3.588856e-01	4.772246e-01
## TEAD1	7003	0.05156505	3.589468e-01	4.772798e-01
## SLC17A1	6568	0.11886005	3.589809e-01	4.772990e-01
## ATXN7L3-AS1	101926967	-0.28886574	3.590266e-01	4.773338e-01
## SLC35F2	54733	0.05402368	3.591508e-01	4.774727e-01
## MAN2A2	4122	-0.04670591	3.594214e-01	4.778063e-01
## ALX3	257	0.34742314	3.595649e-01	4.779709e-01
## MIR615	693200	0.39470292	3.598035e-01	4.782620e-01
## MIRLET7I	406891	0.25355743	3.599970e-01	4.784774e-01
## WASH5P	375690	-0.14363208	3.600050e-01	4.784774e-01
## NUCB1-AS1	100874085	-0.17870447	3.600395e-01	4.784971e-01
## BDH2	56898	-0.07081657	3.600977e-01	4.785221e-01
## NPIPBP10P	730153	0.44419607	3.600928e-01	4.785221e-01
## YPEL3-DT	101928595	0.06835087	3.601187e-01	4.785239e-01
## CCDC12	151903	-0.03738172	3.601824e-01	4.785824e-01
## SLC39A11	201266	0.05150451	3.602296e-01	4.786189e-01
## VWA7	80737	0.06850050	3.602575e-01	4.786298e-01
## MRPL40P1	645328	0.37894703	3.602804e-01	4.786340e-01
## NRADDP	100129354	0.24164907	3.603177e-01	4.786574e-01
## RNU6-4P	106478914	-0.30156603	3.603625e-01	4.786908e-01
## AGGF1	55109	0.03717213	3.604216e-01	4.787432e-01
## SSU72	29101	0.04724849	3.604492e-01	4.787524e-01
## FXN	2395	0.03466747	3.604680e-01	4.787524e-01
## TMEM141	85014	-0.08001391	3.605621e-01	4.788512e-01
## PAFAH2	5051	-0.04513124	3.606005e-01	4.788761e-01
## H2BC4	8347	-0.07725719	3.606572e-01	4.789252e-01
## DOCK4	9732	-0.05376995	3.606840e-01	4.789346e-01
## TARS3	123283	-0.03799946	3.607138e-01	4.789480e-01

## CSNK1G1	53944	0.03838013	3.609380e-01	4.792195e-01
## MTRES1	51250	-0.04166866	3.610296e-01	4.793150e-01
## RTKN	6242	-0.06464989	3.611493e-01	4.794476e-01
## SCMH1	22955	-0.02763952	3.612159e-01	4.795098e-01
## LINC01881	728323	-0.07278739	3.613675e-01	4.796849e-01
## SIRT4	23409	0.05758826	3.614739e-01	4.798000e-01
## CYP1A2	1544	-0.23353141	3.615975e-01	4.799378e-01
## LINC02604	644794	0.10225305	3.617565e-01	4.801226e-01
## C12orf60	144608	0.05957812	3.618447e-01	4.801872e-01
## RHOA-IT1	106480739	-0.22542271	3.618383e-01	4.801872e-01
## ITGB1BP1	9270	-0.06517255	3.619586e-01	4.803121e-01
## CCNL2	81669	0.09820916	3.620359e-01	4.803885e-01
## PLEKHA5	54477	0.06162249	3.621590e-01	4.805255e-01
## MAPRE1	22919	-0.03030798	3.621944e-01	4.805464e-01
## SNAPC4	6621	-0.05142206	3.622309e-01	4.805685e-01
## KREMEN1	83999	-0.04203152	3.623274e-01	4.806703e-01
## TMED10P1	286102	0.28339001	3.624523e-01	4.808097e-01
## COX18	285521	0.04284440	3.624749e-01	4.808135e-01
## PPIAP16	5488	0.35614403	3.625307e-01	4.808613e-01
## EZR-AS1	101409257	-0.20847293	3.625722e-01	4.808900e-01
## C7orf25	79020	0.08451232	3.625951e-01	4.808942e-01
## RPL27P5	100270969	0.37871482	3.626444e-01	4.809333e-01
## MAP3K8	1326	0.07976431	3.626676e-01	4.809379e-01
## RNA5SP122	100873392	0.48569957	3.627448e-01	4.810140e-01
## LINC02029	105374177	-0.37065458	3.629829e-01	4.813035e-01
## QRFP	347148	0.43432338	3.630517e-01	4.813683e-01
## FAM86GP	387745	0.24426625	3.630948e-01	4.813992e-01
## EIF2S2P4	728350	0.07743771	3.633387e-01	4.816700e-01
## RNA5S9	100169760	-0.50174863	3.633298e-01	4.816700e-01
## RNU6-26P	100873741	0.25120759	3.636902e-01	4.821097e-01
## ZFYVE16	9765	-0.05132753	3.638881e-01	4.823458e-01
## LCN6	158062	-0.37510331	3.640434e-01	4.825253e-01
## PRSS35	167681	-0.12893817	3.640638e-01	4.825260e-01
## TIMM8A	1678	-0.03883977	3.641181e-01	4.825716e-01
## CA2	760	-0.07774042	3.641727e-01	4.826177e-01
## NUP133-DT	101927478	-0.29851889	3.642762e-01	4.827022e-01
## MKRN9P	400058	0.40395733	3.642618e-01	4.827022e-01
## EDRF1-DT	399821	0.08069988	3.643243e-01	4.827396e-01
## TXN2P1	100505690	0.42117693	3.643805e-01	4.827878e-01
## EVC	2121	-0.06003454	3.645349e-01	4.829661e-01
## KRT19P1	441160	-0.30584689	3.647160e-01	4.831797e-01
## TVP23CP1	100421599	0.62168095	3.647540e-01	4.832037e-01
## HNRNPKP1	389322	0.20711252	3.649702e-01	4.834637e-01
## NDUFC1	4717	-0.07147984	3.652265e-01	4.837767e-01
## ATP8B1	5205	-0.06554497	3.652802e-01	4.838215e-01
## NUP98	4928	-0.02335117	3.653697e-01	4.839138e-01
## LINC02901	100130967	-0.10791652	3.656157e-01	4.841603e-01
## WEE2-AS1	285962	0.07124603	3.656023e-01	4.841603e-01
## PXN-AS1	100506649	-0.05855060	3.656080e-01	4.841603e-01
## GOT2P7	100422628	0.59970823	3.656793e-01	4.842182e-01
## TTC36	143941	0.14653707	3.657131e-01	4.842365e-01
## ZUP1	221302	-0.03807435	3.657751e-01	4.842923e-01
## RPL21P13	319144	0.31073412	3.658527e-01	4.843687e-01
## CRYBG3	131544	0.06021875	3.659519e-01	4.844736e-01

## MIR3193	100422904	-0.43979420	3.661906e-01	4.847631e-01
## MIR221	407006	0.24519178	3.662302e-01	4.847891e-01
## NFU1	27247	-0.05086124	3.662836e-01	4.848335e-01
## MIR124-1HG	157627	0.22035224	3.663417e-01	4.848575e-01
## LINC03101	129810497	0.40564286	3.663267e-01	4.848575e-01
## DOCK3	1795	0.09579251	3.665096e-01	4.850533e-01
## TARDBPP2	440142	0.21203693	3.666765e-01	4.852478e-01
## DTX3L	151636	0.06277836	3.667215e-01	4.852810e-01
## WNK1	65125	-0.06764034	3.668582e-01	4.854321e-01
## ANKRD37	353322	-0.07072648	3.668913e-01	4.854321e-01
## NUTM2B-AS1	101060691	-0.04066564	3.668957e-01	4.854321e-01
## DDX23	9416	0.01996680	3.669535e-01	4.854822e-01
## RNLS	55328	0.05935595	3.669875e-01	4.855007e-01
## LINC02572	105373615	-0.14163154	3.671378e-01	4.856732e-01
## RPE65	6121	0.51095245	3.673366e-01	4.859097e-01
## VPS51	738	-0.07017727	3.676035e-01	4.862363e-01
## MIR559	693144	-0.24444478	3.676986e-01	4.863356e-01
## PURB	5814	-0.03724426	3.677257e-01	4.863450e-01
## TAS1R1	80835	0.20065612	3.679525e-01	4.866184e-01
## CRYBG1	202	-0.04323451	3.679769e-01	4.866242e-01
## ELOVL5	60481	0.06290039	3.680694e-01	4.867201e-01
## KLHL5	51088	0.03499114	3.682591e-01	4.869180e-01
## WARS2	10352	-0.02892064	3.682462e-01	4.869180e-01
## PLSCR4	57088	-0.04467254	3.684567e-01	4.871368e-01
## DOCK6-AS1	105372273	-0.11111613	3.684647e-01	4.871368e-01
## ZNF101P2	730190	0.37600767	3.685228e-01	4.871871e-01
## DNAAF9	25943	-0.04124041	3.686445e-01	4.873215e-01
## ZDHHC1	29800	-0.05499593	3.687030e-01	4.873660e-01
## OXLD1	339229	0.05297875	3.687183e-01	4.873660e-01
## TRAPPC12	51112	-0.03568935	3.688090e-01	4.874594e-01
## SCGB1D2	10647	0.13401345	3.688955e-01	4.875472e-01
## MIR1285-1	100302218	0.28727613	3.692476e-01	4.879859e-01
## RNU6-883P	106481921	-0.37021427	3.693632e-01	4.881122e-01
## DPP9-AS1	100131094	0.39469273	3.694077e-01	4.881445e-01
## OR7E126P	81176	-0.38693342	3.696144e-01	4.883910e-01
## FAM87A	157693	-0.27245427	3.696401e-01	4.883985e-01
## NISCH	11188	-0.03502590	3.697146e-01	4.884703e-01
## TCF7L1	83439	0.07137086	3.699786e-01	4.887926e-01
## ASAP3	55616	-0.04915703	3.700110e-01	4.888088e-01
## ALS2	57679	0.03683281	3.700629e-01	4.888261e-01
## RPS27AP12	100130446	-0.34615934	3.700643e-01	4.888261e-01
## LINC01933	101927115	-0.16486066	3.701828e-01	4.889560e-01
## CCDC13-AS2	729083	0.18068111	3.702508e-01	4.890193e-01
## BCAN-AS2	126568844	0.19531262	3.703097e-01	4.890438e-01
## ATP5PDP4	246723	-0.20716994	3.702954e-01	4.890438e-01
## MDP1	145553	0.28022295	3.704378e-01	4.891864e-01
## TUBGCP5	114791	0.04039838	3.705617e-01	4.893235e-01
## SYNDIG1	79953	-0.08200009	3.706013e-01	4.893492e-01
## CPA6	57094	0.23977652	3.708124e-01	4.895747e-01
## HNRNPKP2	389053	-0.10870658	3.707959e-01	4.895747e-01
## BTBD2	55643	0.06731805	3.709226e-01	4.896936e-01
## CCDC61	729440	-0.04662089	3.709563e-01	4.897115e-01
## UBXN10	127733	0.04802960	3.710206e-01	4.897697e-01
## MAGEC3	139081	0.39715760	3.711038e-01	4.898530e-01

## HEY2-AS1	105377986	0.10697939	3.711792e-01	4.899260e-01
## GUCA2A	2980	0.77670880	3.713640e-01	4.900773e-01
## ZNRF2P1	441208	0.09813513	3.713597e-01	4.900773e-01
## LINC02615	100507487	0.10219787	3.713227e-01	4.900773e-01
## NDUFV2P1	4730	-0.11833861	3.713746e-01	4.900773e-01
## MBL3P	50639	0.38522269	3.714452e-01	4.901439e-01
## GRHL3-AS1	105376871	0.44789528	3.715962e-01	4.903166e-01
## CHTOP	26097	0.02685973	3.719489e-01	4.907552e-01
## MARCHF9	92979	0.04729226	3.719912e-01	4.907577e-01
## ZNF251	90987	0.05949283	3.719830e-01	4.907577e-01
## ZBTB40-IT1	100874345	-0.21271155	3.720218e-01	4.907715e-01
## HSPE1P4	100287369	-0.29432912	3.721148e-01	4.908675e-01
## ERVK13-1	100507321	-0.10414213	3.722493e-01	4.909917e-01
## MAN1B1-DT	100289341	-0.07472964	3.722295e-01	4.909917e-01
## PDS5B	23047	-0.03674232	3.724414e-01	4.911492e-01
## CSE1L	1434	0.02755529	3.724379e-01	4.911492e-01
## TMED4	222068	-0.04145872	3.724304e-01	4.911492e-01
## RNU6-5P	106478913	0.33407996	3.724496e-01	4.911492e-01
## VPS11	55823	0.02215685	3.724999e-01	4.911640e-01
## LINC01797	101927577	0.42785724	3.725012e-01	4.911640e-01
## ITGA9-AS1	101928153	0.05443087	3.727118e-01	4.914150e-01
## SNORD46	94161	0.26808639	3.727796e-01	4.914777e-01
## RASA4EP	131554430	0.27180929	3.728401e-01	4.915309e-01
## PLCZ1	89869	0.20704252	3.728817e-01	4.915590e-01
## APOF	319	-0.41586966	3.729402e-01	4.916094e-01
## ACSS3	79611	-0.05595980	3.730658e-01	4.916959e-01
## TLE1	7088	-0.07250446	3.730564e-01	4.916959e-01
## PGA3	643834	0.48867174	3.730665e-01	4.916959e-01
## IGHV3-73	28409	0.25357897	3.731548e-01	4.917791e-01
## MIR4482	100616323	0.26071147	3.731701e-01	4.917791e-01
## FN3KRP	79672	0.04442872	3.732155e-01	4.918122e-01
## TJAP1	93643	0.03592402	3.733347e-01	4.919427e-01
## HTATIP2	10553	0.05656086	3.734271e-01	4.920377e-01
## LRIG2	9860	-0.05580362	3.735118e-01	4.921227e-01
## SDHAF4	135154	0.05476646	3.735539e-01	4.921515e-01
## TMEM82	388595	0.11959475	3.736164e-01	4.922071e-01
## ACVRL1	94	0.05948664	3.737157e-01	4.923112e-01
## ITGB3BP	23421	0.07210013	3.740037e-01	4.926639e-01
## DNAI7	55259	-0.07341146	3.743419e-01	4.930687e-01
## SLC6A12-AS1	101929384	0.24546605	3.743516e-01	4.930687e-01
## RAB3GAP1	22930	-0.02685756	3.745382e-01	4.932454e-01
## DOCK7-DT	121832810	0.13731526	3.745669e-01	4.932454e-01
## RPL7P24	100127893	-0.26686859	3.745475e-01	4.932454e-01
## DSG2-AS1	100652770	-0.19064595	3.745370e-01	4.932454e-01
## BAMBI	25805	-0.05030410	3.747581e-01	4.934545e-01
## OR51E1	143503	0.10796626	3.747663e-01	4.934545e-01
## LINC01269	103695436	0.55975083	3.748498e-01	4.935377e-01
## HERC2P9	440248	0.12212164	3.749285e-01	4.936145e-01
## FAM86LP	641924	0.51154617	3.749722e-01	4.936454e-01
## WDR24	84219	-0.05367040	3.753247e-01	4.940826e-01
## MYCNOS	10408	-0.14825892	3.753519e-01	4.940916e-01
## THAP5P1	285872	0.42215919	3.754619e-01	4.942098e-01
## COQ5	84274	0.04027905	3.756704e-01	4.944573e-01
## FAM117A	81558	0.03746028	3.757850e-01	4.945814e-01

## CTR9	9646	-0.02921243	3.759065e-01	4.947146e-01
## ARID4B	51742	0.05354390	3.760676e-01	4.948998e-01
## SEC61A1	29927	-0.04572224	3.761277e-01	4.949323e-01
## LONRF1	91694	0.05075919	3.761331e-01	4.949323e-01
## PGAM1P5	100132594	-0.20194984	3.761966e-01	4.949891e-01
## MSANTD2-AS1	100507283	-0.09178565	3.765072e-01	4.953709e-01
## INCENP	3619	0.04533203	3.766008e-01	4.954637e-01
## KRT39	390792	-0.46866018	3.766389e-01	4.954637e-01
## LYPLA2P2	388499	-0.23478339	3.766192e-01	4.954637e-01
## NIT2	56954	0.06807122	3.766811e-01	4.954767e-01
## MID1IP1-AS1	100874211	0.19301319	3.766895e-01	4.954767e-01
## SNORA75	654321	0.19826363	3.767924e-01	4.955852e-01
## SNORA80B	100302743	-0.35971935	3.768566e-01	4.956428e-01
## ANKRD20A5P	440482	0.10815907	3.769902e-01	4.957917e-01
## FAM124B	79843	0.13039192	3.771302e-01	4.959490e-01
## SLC25A34-AS1	110806303	-0.27020009	3.771957e-01	4.959814e-01
## GOLGA8IP	283796	-0.23388978	3.771927e-01	4.959814e-01
## MORN4	118812	-0.05652871	3.773060e-01	4.960728e-01
## EEF1B2P1	1932	0.33754461	3.773043e-01	4.960728e-01
## WTAPP1	100288077	-0.12734074	3.774045e-01	4.961755e-01
## UNC119	9094	-0.03975984	3.775112e-01	4.962889e-01
## LINC02346	100128714	0.53306637	3.776875e-01	4.964938e-01
## RAD50	10111	0.04976235	3.777326e-01	4.965262e-01
## ARHGAP28	79822	0.06835367	3.778442e-01	4.966461e-01
## NELFCD	51497	0.03269394	3.778973e-01	4.966621e-01
## FAM178B	51252	0.19298602	3.778804e-01	4.966621e-01
## GK-IT1	106480740	0.31661465	3.779339e-01	4.966833e-01
## TFE3	7030	-0.03884847	3.780918e-01	4.968102e-01
## SLC25A43	203427	-0.04308107	3.780790e-01	4.968102e-01
## GAPDHP40	100131743	0.25003566	3.780560e-01	4.968102e-01
## ACOT1	641371	-0.10253088	3.781690e-01	4.968848e-01
## C6orf226	441150	-0.08681309	3.783073e-01	4.970397e-01
## TTC14	151613	0.09097484	3.784127e-01	4.971513e-01
## IFT57	55081	-0.04246041	3.785355e-01	4.972857e-01
## TCAM1P	146771	0.27572852	3.791287e-01	4.980381e-01
## CYP26A1	1592	0.37645892	3.791982e-01	4.980971e-01
## ZNF626	199777	0.05152002	3.792146e-01	4.980971e-01
## FUZ	80199	0.06008159	3.792577e-01	4.981267e-01
## RPS27P3	654365	0.20872529	3.792842e-01	4.981347e-01
## TCP1P1	647047	-0.22457876	3.797333e-01	4.986976e-01
## RANP8	100420519	0.42476989	3.797993e-01	4.987573e-01
## HSD11B1	3290	0.13160722	3.799471e-01	4.989244e-01
## BCORL1	63035	0.04616932	3.801430e-01	4.991547e-01
## GLRA3	8001	-0.31189326	3.802585e-01	4.992793e-01
## RN7SKP296	106481823	0.33793579	3.804075e-01	4.994480e-01
## CCT5P1	402226	0.37840166	3.805463e-01	4.996032e-01
## TMEM203	94107	0.04100934	3.807663e-01	4.998380e-01
## YWHAZP3	143371	0.17567341	3.807459e-01	4.998380e-01
## FOXK1	221937	0.04116462	3.809444e-01	5.000448e-01
## RSPH1	89765	-0.08145234	3.810253e-01	5.001239e-01
## BNIP3P5	100421724	0.21200288	3.811915e-01	5.003152e-01
## NPIPBP2	729978	-0.18805979	3.813739e-01	5.005118e-01
## RNU4ATAC18P	106481866	0.19575756	3.813826e-01	5.005118e-01
## ERG	2078	-0.05474523	3.814470e-01	5.005423e-01

## STAG1-DT	119139906	-0.22864610	3.814387e-01	5.005423e-01
## LINC01686	284648	0.15778369	3.815429e-01	5.006412e-01
## STIM2-AS1	105374546	0.13854808	3.815847e-01	5.006690e-01
## NKX6-2	84504	0.39477957	3.816925e-01	5.007833e-01
## IGLV2-28	28812	0.53796411	3.817163e-01	5.007875e-01
## PPIAP14	5486	0.88345406	3.817464e-01	5.008000e-01
## LINC01033	104355136	0.23121697	3.818254e-01	5.008766e-01
## RPL21P40	100271158	-0.32305827	3.819951e-01	5.010721e-01
## MED30	90390	0.04924617	3.820192e-01	5.010768e-01
## RPL7P23	648000	-0.19003010	3.821392e-01	5.012070e-01
## SLC35G5	83650	0.23229673	3.822607e-01	5.013394e-01
## MTCYBP35	109729150	-0.12370495	3.823389e-01	5.014149e-01
## DLX6	1750	-0.31210574	3.824799e-01	5.014644e-01
## TMEM126A	84233	0.06158537	3.824392e-01	5.014644e-01
## TMEM270	135886	0.26358175	3.824411e-01	5.014644e-01
## GRAPL	400581	-0.25344612	3.824690e-01	5.014644e-01
## SLC25A6P2	138412	-0.27162269	3.824384e-01	5.014644e-01
## MIR6505	102466657	0.37083755	3.825673e-01	5.015520e-01
## NMT1	4836	-0.01967983	3.825912e-01	5.015563e-01
## SNORD94	692225	0.15685476	3.827336e-01	5.017158e-01
## CLRN2	645104	0.41792919	3.831180e-01	5.021927e-01
## PHACTR2P1	100533676	0.28667163	3.832409e-01	5.023267e-01
## NARF-IT1	100506001	0.18002042	3.833356e-01	5.024238e-01
## LINC03054	101929217	0.50060037	3.833589e-01	5.024272e-01
## CCS	9973	-0.05032418	3.834445e-01	5.025123e-01
## RAD52	5893	0.06591771	3.836748e-01	5.027836e-01
## FBXW12	285231	0.34758229	3.836930e-01	5.027836e-01
## VPS16	64601	0.02790820	3.840411e-01	5.032127e-01
## LINC02147	102467224	0.13201823	3.840746e-01	5.032294e-01
## MOB1A	55233	0.02707582	3.841852e-01	5.033281e-01
## GIGYF1	64599	-0.05972526	3.841913e-01	5.033281e-01
## PAN2	9924	-0.06294173	3.843497e-01	5.034670e-01
## CFAP44	55779	0.11418856	3.843642e-01	5.034670e-01
## LINC00582	100287814	0.55092504	3.843243e-01	5.034670e-01
## KRT8P10	344320	-0.29228714	3.843848e-01	5.034670e-01
## EEF1A1P10	100421829	0.23820356	3.844010e-01	5.034670e-01
## TAS2R10	50839	0.19784577	3.844422e-01	5.034939e-01
## MAK	4117	0.15625324	3.845014e-01	5.035227e-01
## LRRC37A16P	651250	-0.28512689	3.845056e-01	5.035227e-01
## ETV3	2117	0.02938297	3.847399e-01	5.037881e-01
## PSMB6	5694	0.05478629	3.847498e-01	5.037881e-01
## TTC12-DT	124902814	0.17206189	3.848090e-01	5.038347e-01
## MIR7851	102467003	-0.38468437	3.848268e-01	5.038347e-01
## BANF2	140836	-0.30263734	3.850314e-01	5.040754e-01
## CHRNA7	1139	-0.09976842	3.853254e-01	5.044332e-01
## CUTA	51596	0.06275986	3.856842e-01	5.048485e-01
## DCST1-AS1	100505666	-0.09750580	3.856686e-01	5.048485e-01
## CENPC	1060	0.05187778	3.857289e-01	5.048798e-01
## KLHL32	114792	-0.06225028	3.857586e-01	5.048914e-01
## LOXL2-AS1	100507156	-0.08977567	3.857857e-01	5.048998e-01
## OR3A2	4995	0.20096674	3.859089e-01	5.049876e-01
## SNX18P14	100418972	0.42604147	3.859002e-01	5.049876e-01
## FBXL19-AS1	283932	-0.07853955	3.859151e-01	5.049876e-01
## ZNF524	147807	0.07948826	3.860503e-01	5.051100e-01

## SUGT1P4-STR	100499484	0.10614735	3.860310e-01	5.051100e-01
## SEPSECS	51091	-0.05346918	3.861082e-01	5.051586e-01
## MIR1180	100302256	-0.32905748	3.861918e-01	5.052407e-01
## RBP4	5950	0.14707172	3.862467e-01	5.052854e-01
## ATXN8OS	6315	-0.44872201	3.863151e-01	5.053476e-01
## NMBR	4829	0.17543445	3.865547e-01	5.056338e-01
## LINC00992	728342	-0.09880737	3.865770e-01	5.056358e-01
## LINC02926	105372278	-0.14658997	3.866467e-01	5.056998e-01
## PRKCZ	5590	-0.06964766	3.868480e-01	5.059213e-01
## BSN	8927	0.07069132	3.868577e-01	5.059213e-01
## LINC01416	101927273	0.22318447	3.869326e-01	5.059919e-01
## BAZ2B	29994	0.06759954	3.870135e-01	5.060433e-01
## RNF185	91445	-0.02705222	3.869942e-01	5.060433e-01
## MIER2	54531	0.07035865	3.873137e-01	5.064086e-01
## EHHADH-AS1	339926	-0.32367177	3.873998e-01	5.064939e-01
## N4BP2L2	10443	0.05677519	3.874602e-01	5.065456e-01
## ACSM6	142827	-0.25465370	3.875240e-01	5.066018e-01
## SCOPC1	317767	-0.22243193	3.875985e-01	5.066719e-01
## HOXA6	3203	0.06900350	3.876769e-01	5.067472e-01
## RBM12B-DT	105375645	0.17471386	3.877100e-01	5.067631e-01
## FSCN3	29999	0.18201052	3.878074e-01	5.068632e-01
## SNORD14E	85391	0.19448155	3.878353e-01	5.068724e-01
## MED31	51003	0.04811978	3.878658e-01	5.068850e-01
## EPO	2056	0.27602602	3.879135e-01	5.069201e-01
## SEC24A	10802	-0.04105202	3.879671e-01	5.069628e-01
## PRPF31-AS1	121832802	0.15755007	3.884548e-01	5.075729e-01
## GRPR	2925	-0.13095297	3.885452e-01	5.075882e-01
## EPHA7	2045	0.07597857	3.884910e-01	5.075882e-01
## H3-5	440093	0.16970056	3.885501e-01	5.075882e-01
## RN7SL364P	106479356	0.38612115	3.885123e-01	5.075882e-01
## POLI	11201	0.05270402	3.887789e-01	5.078325e-01
## ATP5PF	522	-0.05864232	3.887656e-01	5.078325e-01
## HMGN3	9324	-0.04768613	3.888989e-01	5.079347e-01
## CLEC20A	400797	0.20624498	3.888852e-01	5.079347e-01
## THAP12P1	728748	0.30879390	3.889756e-01	5.080076e-01
## TGFBR1	7046	-0.04579061	3.891625e-01	5.082243e-01
## F7	2155	-0.09935104	3.892229e-01	5.082759e-01
## NACAD	23148	-0.08010350	3.893120e-01	5.083650e-01
## NPIP B12	440353	0.14237054	3.894185e-01	5.084766e-01
## TRMU	55687	0.04380777	3.894546e-01	5.084965e-01
## LINC00305	221241	-0.44604228	3.895095e-01	5.085408e-01
## AK4P4	100128705	0.34179049	3.897674e-01	5.088502e-01
## IMPACT	55364	0.02793562	3.897908e-01	5.088535e-01
## MAGI2-AS3	100505881	-0.06468996	3.901645e-01	5.093139e-01
## GPHA2	170589	0.18298264	3.905451e-01	5.097560e-01
## PDCL3P4	285359	-0.13602079	3.905340e-01	5.097560e-01
## LINC01545	724087	-0.14887339	3.906298e-01	5.098391e-01
## LINC01393	102724386	-0.19759785	3.907647e-01	5.099878e-01
## STX16	8675	0.04885260	3.908723e-01	5.100460e-01
## ZMYM5	9205	0.04684952	3.908468e-01	5.100460e-01
## PGGHG	80162	-0.12680468	3.908524e-01	5.100460e-01
## NDRG1	10397	-0.05602656	3.909049e-01	5.100569e-01
## CFLAR-AS1	65072	0.20293752	3.909226e-01	5.100569e-01
## ESD	2098	0.03723987	3.910046e-01	5.101365e-01

## ZC3H15	55854	0.03049752	3.910547e-01	5.101744e-01
## USP34	9736	0.04566089	3.912013e-01	5.103109e-01
## AQP7	364	0.07512860	3.911948e-01	5.103109e-01
## MUC19	283463	0.21846331	3.912495e-01	5.103191e-01
## MYLK-AS2	100873940	0.30502683	3.912322e-01	5.103191e-01
## ISCA1P1	389293	-0.23874686	3.913416e-01	5.103843e-01
## FAM86EP	348926	0.03786020	3.913329e-01	5.103843e-01
## THSD7B	80731	0.07818727	3.914065e-01	5.104417e-01
## PIGC	5279	-0.03041441	3.915796e-01	5.106386e-01
## P2RY4	5030	-0.19580602	3.915996e-01	5.106386e-01
## LYRM7	90624	0.05121809	3.917143e-01	5.107608e-01
## SNAPC5	10302	0.04278011	3.918458e-01	5.109049e-01
## NBPF17P	401967	0.23096473	3.920311e-01	5.111191e-01
## ANKRD16	54522	0.03548779	3.921167e-01	5.111758e-01
## EPS8L3	79574	-0.25164284	3.921114e-01	5.111758e-01
## SH3BP5-AS1	100505696	0.11274233	3.921749e-01	5.112242e-01
## RBMS2P1	643427	0.16564515	3.922630e-01	5.113117e-01
## RPL4P3	391135	-0.31691134	3.924060e-01	5.114706e-01
## TCN2	6948	-0.07570595	3.925428e-01	5.116215e-01
## SMILR	105375734	0.88590381	3.925689e-01	5.116281e-01
## ENO2	2026	0.09361468	3.925968e-01	5.116370e-01
## EPHX1	2052	-0.07392658	3.928321e-01	5.119162e-01
## IGHV4-34	28395	0.24560269	3.932142e-01	5.123866e-01
## ACTG1P14	100418910	-0.22825283	3.933028e-01	5.124746e-01
## FBXO47	494188	0.24598215	3.933362e-01	5.124906e-01
## SELENOO	83642	0.06526696	3.934275e-01	5.125821e-01
## GREB1L-DT	101927496	0.45491628	3.934986e-01	5.126472e-01
## HTR1D	3352	0.36302809	3.938420e-01	5.130671e-01
## SLC4A1APP1	100288436	0.26007604	3.940278e-01	5.132541e-01
## CPEB2-DT	441009	-0.15041832	3.940199e-01	5.132541e-01
## SNORD9	692053	-0.36435321	3.940637e-01	5.132734e-01
## DNAH3	55567	0.13658487	3.942374e-01	5.134722e-01
## DZANK1	55184	0.04453904	3.942620e-01	5.134767e-01
## RPL13AP11	100271276	0.17259609	3.943193e-01	5.135238e-01
## TSFM	10102	0.07545835	3.944095e-01	5.136137e-01
## TEFM	79736	0.04350623	3.946203e-01	5.138607e-01
## LINC01621	89758	0.22325936	3.947039e-01	5.139420e-01
## PHF10	55274	0.03278703	3.947996e-01	5.140109e-01
## PABIR3	159091	0.04494529	3.948203e-01	5.140109e-01
## MCTS1	28985	0.04054250	3.948019e-01	5.140109e-01
## DCDC2C	728597	0.22140327	3.948500e-01	5.140221e-01
## GNG8	94235	0.17627137	3.948958e-01	5.140542e-01
## IKZF5	64376	-0.03925899	3.949474e-01	5.140938e-01
## FZD1	8321	0.04918651	3.952405e-01	5.144477e-01
## TMEM184B	25829	0.05663094	3.955861e-01	5.148700e-01
## PSENEN	55851	-0.05901111	3.957522e-01	5.150586e-01
## SLC25A27	9481	-0.11927141	3.958118e-01	5.151086e-01
## MRGPRE	116534	0.20811378	3.958592e-01	5.151427e-01
## MDH1B	130752	-0.06604021	3.959602e-01	5.152465e-01
## DGLUCY	80017	0.02721521	3.961680e-01	5.154893e-01
## LINC01836	107985343	-0.10857909	3.961934e-01	5.154948e-01
## PRDX1	5052	-0.05303588	3.962892e-01	5.155515e-01
## RPE	6120	0.02874868	3.963006e-01	5.155515e-01
## RARA-AS1	101929693	-0.06589326	3.962721e-01	5.155515e-01

## CCDC85A	114800	-0.10285603	3.963576e-01	5.155946e-01
## KCNJ15	3772	0.08994973	3.963762e-01	5.155946e-01
## EIF5A2P1	100506058	-0.30142108	3.965725e-01	5.158224e-01
## LEMD1	93273	-0.18001746	3.967693e-01	5.160507e-01
## CCDC57	284001	0.07854116	3.970793e-01	5.164262e-01
## POGZ	23126	0.04028611	3.972251e-01	5.165449e-01
## AMER3	205147	0.31087815	3.972343e-01	5.165449e-01
## LINC02201	101927379	0.28750904	3.972047e-01	5.165449e-01
## FCF1	51077	0.02239391	3.973227e-01	5.166046e-01
## RPL21P75	728501	0.22178939	3.973121e-01	5.166046e-01
## ASIC4	55515	0.31073506	3.974708e-01	5.167202e-01
## SUPV3L1	6832	-0.02656266	3.974455e-01	5.167202e-01
## HMGB1P49	100420013	0.24710838	3.974755e-01	5.167202e-01
## FGF8	2253	-0.22783879	3.976609e-01	5.168909e-01
## VPS51P2	127379702	-0.29572917	3.976705e-01	5.168909e-01
## LINC00165	727701	0.54931783	3.976404e-01	5.168909e-01
## MBNL2	10150	0.03797760	3.978062e-01	5.170396e-01
## CASC15	401237	-0.08795564	3.978743e-01	5.171004e-01
## TSPAN3	10099	-0.03293363	3.981730e-01	5.174231e-01
## YIPF5	81555	0.02731993	3.981773e-01	5.174231e-01
## CFAP46	54777	0.05715962	3.981864e-01	5.174231e-01
## SPNS2	124976	0.05445030	3.983366e-01	5.175905e-01
## SRGN	5552	-0.09021981	3.984073e-01	5.176091e-01
## AP2A1	160	0.05028553	3.984148e-01	5.176091e-01
## KRT223P	643115	0.21375883	3.983917e-01	5.176091e-01
## NDUFAF7	55471	0.03755941	3.984891e-01	5.176502e-01
## VN1R85P	100312830	-0.16378331	3.984680e-01	5.176502e-01
## RNASE13	440163	-0.28886651	3.985163e-01	5.176579e-01
## GRWD1	83743	-0.04339453	3.985602e-01	5.176693e-01
## CR2	1380	0.19988217	3.985676e-01	5.176693e-01
## ZC3H13	23091	-0.03839007	3.988617e-01	5.180236e-01
## MIPEPP3	650794	-0.06999954	3.989232e-01	5.180757e-01
## SLC44A1	23446	0.03278141	3.990047e-01	5.180985e-01
## NPPA	4878	0.48873429	3.989927e-01	5.180985e-01
## TRAF3IP2-AS1	643749	0.05423118	3.989742e-01	5.180985e-01
## NRDC	4898	0.03853419	3.994443e-01	5.186229e-01
## GMEB1	10691	0.02378041	3.994513e-01	5.186229e-01
## SLAIN2	57606	0.02293065	3.995121e-01	5.186743e-01
## LINC02853	100507480	-0.15268622	3.997451e-01	5.189448e-01
## RNVU1-27	124904621	0.43935958	3.997633e-01	5.189448e-01
## TAB1	10454	0.02479558	3.997944e-01	5.189499e-01
## TYW5	129450	-0.04895590	3.998099e-01	5.189499e-01
## MTX3	345778	0.04788572	4.001286e-01	5.193175e-01
## BLTP3B-DT	120766146	0.13231514	4.001358e-01	5.193175e-01
## CFAP99	402160	-0.07797345	4.005094e-01	5.197746e-01
## RBAK	57786	-0.04692626	4.005456e-01	5.197938e-01
## PRR4	11272	-0.15285198	4.007752e-01	5.200639e-01
## FZD4-DT	100506368	-0.05678653	4.008556e-01	5.201406e-01
## ST3GAL1	6482	0.07960050	4.009872e-01	5.202821e-01
## GJB7	375519	0.35675049	4.010075e-01	5.202821e-01
## SOX30	11063	-0.13608634	4.010865e-01	5.203568e-01
## PABPN1	8106	-0.05465839	4.012240e-01	5.204892e-01
## RPS28P4	645899	-0.18033080	4.012314e-01	5.204892e-01
## EEF1GP1	646837	0.29723362	4.013394e-01	5.205737e-01

## MIR542	664617	0.51359652	4.013228e-01	5.205737e-01
## SHH	6469	0.07835785	4.017158e-01	5.210342e-01
## DCTN1	1639	-0.03930691	4.017463e-01	5.210458e-01
## MAGI1-IT1	151877	0.18734507	4.017729e-01	5.210526e-01
## RN7SL12P	106480926	0.31674941	4.018391e-01	5.211106e-01
## LINC02133	101927132	-0.36972901	4.019837e-01	5.212704e-01
## RPS3AP5	439992	-0.13112445	4.020100e-01	5.212766e-01
## TAF6	6878	-0.03320407	4.021647e-01	5.214226e-01
## NELFB	25920	0.04418671	4.021655e-01	5.214226e-01
## SPSB2	84727	0.06004947	4.022511e-01	5.215058e-01
## DHX34	9704	-0.04606403	4.023087e-01	5.215527e-01
## PTPA	5524	-0.04048629	4.023604e-01	5.215918e-01
## PM20D1-AS1	284581	-0.21274830	4.024351e-01	5.216608e-01
## CELF4	56853	-0.10328258	4.025367e-01	5.217646e-01
## INPPL1	3636	0.03323610	4.026358e-01	5.218653e-01
## CYCSP10	360166	-0.21293905	4.028646e-01	5.221341e-01
## TTC23L	153657	-0.09619996	4.029305e-01	5.221916e-01
## IRAK2	3656	0.05198772	4.030176e-01	5.222546e-01
## SEPTIN7P7	100130564	0.21503214	4.030436e-01	5.222546e-01
## GTF2A1L	11036	-0.33803093	4.030326e-01	5.222546e-01
## SIGMAR1	10280	0.04091861	4.034207e-01	5.226911e-01
## HTR3C	170572	-0.32272199	4.034235e-01	5.226911e-01
## SLC25A36P1	106480240	0.26258906	4.034461e-01	5.226925e-01
## KIFAP3	22920	-0.02435076	4.036336e-01	5.229075e-01
## CNTN1	1272	0.07213049	4.037080e-01	5.229761e-01
## SSPOP	23145	-0.11732943	4.038226e-01	5.230966e-01
## CCDC88C	440193	0.04810670	4.039175e-01	5.231407e-01
## ASNSD1	54529	0.03163191	4.038956e-01	5.231407e-01
## TMEM244	253582	-0.29314262	4.039212e-01	5.231407e-01
## INTS2	57508	-0.04123893	4.039482e-01	5.231478e-01
## ABHD16B	140701	-0.30964817	4.039759e-01	5.231558e-01
## COX7BP3	100507586	0.40168776	4.041457e-01	5.233446e-01
## FLNB-AS1	105377105	-0.22221395	4.041648e-01	5.233446e-01
## FAM200A	221786	0.02920665	4.042647e-01	5.234462e-01
## GMPSP1	728564	0.19748486	4.042869e-01	5.234470e-01
## HNRNPLP2	644390	0.09267876	4.043430e-01	5.234917e-01
## BLTP2	9703	-0.03317513	4.045434e-01	5.237232e-01
## ACAA1	30	0.08183245	4.045798e-01	5.237425e-01
## RPSAP47	389672	-0.56592891	4.046136e-01	5.237583e-01
## ZNF136	7695	-0.03513317	4.046771e-01	5.238127e-01
## CEACAM7	1087	-0.17487659	4.046987e-01	5.238127e-01
## ADPRH	141	-0.05662418	4.048107e-01	5.239298e-01
## PSMA6	5687	-0.05034042	4.048872e-01	5.239729e-01
## HCG21	102723346	-0.50615847	4.048676e-01	5.239729e-01
## TFCP2	7024	0.01637435	4.049936e-01	5.240827e-01
## LRRC37A5P	652972	0.13380385	4.050193e-01	5.240881e-01
## LRRC37A11P	342666	0.10394655	4.052259e-01	5.243275e-01
## HPS6	79803	-0.03659497	4.052842e-01	5.243750e-01
## MIR9-1HG	10485	0.18340576	4.055553e-01	5.246978e-01
## TXNP4	124974	-0.20415940	4.055915e-01	5.247168e-01
## CEP295	85459	0.06989465	4.056492e-01	5.247635e-01
## ALDH1L1-AS1	100874204	0.20924794	4.057105e-01	5.248147e-01
## BCRP4	616	-0.46211099	4.057613e-01	5.248525e-01
## ELL2P1	646270	0.19490081	4.057919e-01	5.248642e-01

## RNU6-658P	106479858	-0.27391314	4.058536e-01	5.249161e-01
## LIPJ	142910	0.14550985	4.060128e-01	5.250940e-01
## CFAP90	134121	-0.07716346	4.061541e-01	5.251980e-01
## ARPC4	10093	-0.04554537	4.061580e-01	5.251980e-01
## GOLGA8S	653061	-0.28534942	4.061276e-01	5.251980e-01
## LINC03085	128266841	-0.18966197	4.064096e-01	5.254953e-01
## USP27X	389856	-0.03229494	4.067920e-01	5.259618e-01
## AKTIPP2	100130746	-0.18494399	4.069046e-01	5.260794e-01
## ARPC1AP4	260422	-0.11224311	4.069849e-01	5.261553e-01
## MAP1LC3A	84557	0.06576017	4.070384e-01	5.261964e-01
## GPATCH8	23131	0.03904270	4.072591e-01	5.264537e-01
## USP32P3	347716	0.14729717	4.073742e-01	5.265679e-01
## LINC00852	84657	-0.07475213	4.073908e-01	5.265679e-01
## MATR3P3	100499497	0.25560362	4.074308e-01	5.265916e-01
## ZKSCAN1	7586	-0.04132315	4.074622e-01	5.266043e-01
## RNU1-103P	106481623	-0.21047715	4.076444e-01	5.268117e-01
## LINC01902	105372079	0.47556358	4.078417e-01	5.270386e-01
## PAGE2B	389860	0.34338452	4.080215e-01	5.272429e-01
## ARHGEF9	23229	0.03221528	4.081023e-01	5.272725e-01
## HPN-AS1	100128675	0.26094446	4.081095e-01	5.272725e-01
## ANOS2P	3734	0.25981831	4.081079e-01	5.272725e-01
## ALKBH3	221120	0.03872902	4.082072e-01	5.273147e-01
## HAPSTR2	389895	0.26047077	4.081892e-01	5.273147e-01
## RN7SL105P	106480487	0.32765198	4.082068e-01	5.273147e-01
## ZFHX2-AS1	109729160	0.11995807	4.082919e-01	5.273887e-01
## LOXHD1	125336	0.13609466	4.083079e-01	5.273887e-01
## KPNA2	3838	0.04607065	4.083461e-01	5.274100e-01
## DUX4L26	100996350	0.29321462	4.085044e-01	5.275864e-01
## CHD2	1106	0.04718414	4.085769e-01	5.276240e-01
## RNPS1P1	643446	-0.17989477	4.085693e-01	5.276240e-01
## ERVFRD-3	100533725	0.26013747	4.087972e-01	5.278804e-01
## KIF26A-DT	105370708	0.46781298	4.093255e-01	5.285344e-01
## SLC22A3	6581	-0.05519454	4.094886e-01	5.286889e-01
## RBM33	155435	-0.04860020	4.094673e-01	5.286889e-01
## PLBD1	79887	0.03746975	4.096749e-01	5.289013e-01
## CYP2D6	1565	0.17364615	4.098909e-01	5.290678e-01
## RSU1	6251	0.03862718	4.098698e-01	5.290678e-01
## DIP2A-IT1	100862692	0.26359671	4.098438e-01	5.290678e-01
## CISTR	102216268	-0.25366052	4.098690e-01	5.290678e-01
## TMEM222	84065	0.04572526	4.100007e-01	5.291540e-01
## GPR155-DT	105373748	0.07678904	4.100012e-01	5.291540e-01
## NSMF	26012	0.05567347	4.100377e-01	5.291729e-01
## NANOGP5	414133	0.50601099	4.101601e-01	5.293028e-01
## RPS17P2	6219	-0.34131437	4.102755e-01	5.294236e-01
## MAP3K10	4294	-0.05562226	4.105092e-01	5.296971e-01
## SMS	6611	-0.03572258	4.106207e-01	5.298128e-01
## COA6-AS1	101927765	0.08267490	4.107004e-01	5.298594e-01
## IGLV2-8	28817	0.23323842	4.106789e-01	5.298594e-01
## CYP26C1	340665	0.16335826	4.109269e-01	5.301234e-01
## FAM131A	131408	0.03260508	4.113545e-01	5.306469e-01
## PYGO2	90780	-0.02927456	4.113775e-01	5.306484e-01
## ODC1	4953	-0.04074575	4.114197e-01	5.306746e-01
## CCT5P2	390415	0.31699337	4.115815e-01	5.308552e-01
## SUMO2P1	285829	0.17537561	4.116050e-01	5.308573e-01

## ZNF160	90338	0.05448812	4.116763e-01	5.308954e-01
## FAM3C	10447	0.03299286	4.116783e-01	5.308954e-01
## SLC4A9	83697	0.11803900	4.117837e-01	5.310033e-01
## RAB37	326624	0.08688098	4.119013e-01	5.311267e-01
## CSE1L-DT	102723483	0.24562392	4.120704e-01	5.313166e-01
## RPS29P3	642892	-0.27047479	4.121240e-01	5.313575e-01
## SLC25A13	10165	-0.05081718	4.122040e-01	5.313761e-01
## LINC00114	400866	0.33077249	4.121776e-01	5.313761e-01
## RSPH1-DT	101930094	0.48972303	4.122026e-01	5.313761e-01
## HSDL2	84263	0.04066493	4.123376e-01	5.315201e-01
## PABPN1P1	100420758	-0.30703192	4.124239e-01	5.316032e-01
## RPS15AP29	100128863	0.49678803	4.126630e-01	5.318831e-01
## RPL6P13	643974	0.49603944	4.127293e-01	5.319403e-01
## CCT7	10574	-0.03212501	4.127615e-01	5.319536e-01
## SLC66A1	54896	-0.03709008	4.128522e-01	5.319576e-01
## FOXO3	2309	-0.03906839	4.128414e-01	5.319576e-01
## LRRC32	2615	-0.07600628	4.128317e-01	5.319576e-01
## CACYBPP2	644877	0.08572495	4.128440e-01	5.319576e-01
## CTSC	1075	-0.04452375	4.128871e-01	5.319744e-01
## ACTR1A	10121	-0.03637418	4.131550e-01	5.322632e-01
## ELOCP19	100462880	-0.13437732	4.131512e-01	5.322632e-01
## RIIAD1	284485	0.12755283	4.132641e-01	5.323754e-01
## SNORA14A	677801	0.42234360	4.133260e-01	5.324270e-01
## ITIH6	347365	-0.27888419	4.134892e-01	5.326090e-01
## ZSCAN5B	342933	-0.18881692	4.135397e-01	5.326458e-01
## NAA16	79612	-0.05111651	4.139646e-01	5.331648e-01
## SYMPK	8189	0.02656990	4.140794e-01	5.332668e-01
## LINC00222	387111	-0.18259947	4.140877e-01	5.332668e-01
## ARMCX4	100131755	-0.05463979	4.142309e-01	5.334229e-01
## UBE2D3P1	100037280	0.09628061	4.143364e-01	5.335305e-01
## AKAP10	11216	0.02318336	4.147181e-01	5.339938e-01
## CFL1P5	1074	0.15360529	4.147821e-01	5.340197e-01
## LINC01843	101927934	-0.08806650	4.147610e-01	5.340197e-01
## CTDSP2	51496	-0.03297550	4.148548e-01	5.340579e-01
## SCHIP1	29970	0.10100045	4.148558e-01	5.340579e-01
## KCNMB3	27094	-0.10697960	4.148931e-01	5.340776e-01
## ZNF12	7559	-0.02793252	4.149408e-01	5.341107e-01
## MTMR8	55613	0.04842752	4.149981e-01	5.341279e-01
## WDR88	126248	0.13483436	4.149766e-01	5.341279e-01
## IGHG2	3501	0.20372421	4.152742e-01	5.344550e-01
## POLR1B	84172	-0.02389203	4.152967e-01	5.344556e-01
## ZNF440	126070	-0.04381951	4.155272e-01	5.347239e-01
## ZNF484	83744	0.04195934	4.157940e-01	5.350389e-01
## SETDB2	83852	-0.03932768	4.158575e-01	5.350716e-01
## DOCK1	1793	-0.03620731	4.158855e-01	5.350716e-01
## PCNPP5	100507361	0.17894282	4.158744e-01	5.350716e-01
## ASLP1	436	0.14704473	4.159829e-01	5.351686e-01
## RASGEF1C	255426	-0.16740793	4.161702e-01	5.353813e-01
## SNORD11	692058	-0.30096753	4.162629e-01	5.354721e-01
## RNU12-2P	26823	0.28158273	4.163130e-01	5.355082e-01
## CIBAR1	137392	-0.04031355	4.165221e-01	5.357284e-01
## TUBG1P	442673	0.40485925	4.165282e-01	5.357284e-01
## PLA2G12AP1	100420258	0.12052234	4.165914e-01	5.357814e-01
## STUB1-DT	105371184	-0.13219997	4.166590e-01	5.358399e-01

## LINC02749	100506082	-0.21323008	4.168608e-01	5.360710e-01
## DCST1	149095	-0.35310305	4.169077e-01	5.361030e-01
## ZNF488	118738	0.09736130	4.169360e-01	5.361110e-01
## HMGN4	10473	-0.02319883	4.169890e-01	5.361508e-01
## GCC2-AS1	644903	0.12123771	4.171342e-01	5.363091e-01
## ZNF567	163081	0.04302171	4.172707e-01	5.364094e-01
## PTGES3P2	101929293	-0.09441489	4.172574e-01	5.364094e-01
## CHD1-DT	102724810	-0.07817350	4.172785e-01	5.364094e-01
## ZNF699	374879	0.04816768	4.173317e-01	5.364145e-01
## PTMAP4	5761	0.08787360	4.173322e-01	5.364145e-01
## MIR6859-1	102466751	0.15200027	4.173486e-01	5.364145e-01
## RSL24D1	51187	0.04131472	4.174821e-01	5.365577e-01
## CCDC66	285331	0.05802559	4.176384e-01	5.367302e-01
## SERPINB7	8710	0.12129312	4.177410e-01	5.368337e-01
## SPTBN5	51332	-0.12176812	4.179130e-01	5.370262e-01
## LINC00677	105370683	-0.37707528	4.180685e-01	5.371977e-01
## SECISBP2	79048	0.03870151	4.183548e-01	5.375372e-01
## RN7SL359P	106479354	0.35844227	4.184545e-01	5.376368e-01
## LINC02236	109729133	0.20598239	4.186143e-01	5.378137e-01
## GAPDHP23	391075	0.23023891	4.187357e-01	5.379412e-01
## TNFAIP8L1	126282	0.04641832	4.187733e-01	5.379611e-01
## UBTFL9	100128427	0.28538249	4.188256e-01	5.379714e-01
## ARHGAP44-AS1	100128006	0.31009835	4.188164e-01	5.379714e-01
## SUPT16H	11198	-0.02031740	4.188974e-01	5.380352e-01
## C3orf18	51161	0.04751559	4.189544e-01	5.380799e-01
## LRP5L	91355	-0.09700531	4.189814e-01	5.380862e-01
## TIMD4	91937	0.09228884	4.190214e-01	5.381091e-01
## KRT8P52	100887068	-0.19056783	4.190536e-01	5.381220e-01
## ZNF285CP	646915	-0.25716685	4.191498e-01	5.382015e-01
## THRB-AS1	644990	-0.06919839	4.191819e-01	5.382015e-01
## ACBD6	84320	0.02739535	4.191758e-01	5.382015e-01
## NAT10	55226	0.02282350	4.192171e-01	5.382182e-01
## RANGRF	29098	0.04886220	4.193732e-01	5.383902e-01
## LINC01096	285548	0.34717998	4.193981e-01	5.383937e-01
## ARRDC1-AS1	85026	0.04675514	4.194745e-01	5.384634e-01
## LINC01016	100507584	0.18131827	4.196437e-01	5.386520e-01
## PIK3R2	5296	-0.30698010	4.196721e-01	5.386600e-01
## C9orf78P2	391636	-0.36311063	4.197429e-01	5.387225e-01
## PCNX4	64430	0.03409943	4.197994e-01	5.387666e-01
## SLC35E3	55508	-0.02972540	4.198748e-01	5.388349e-01
## LAMB2P1	22973	-0.07267054	4.200205e-01	5.389934e-01
## SLC25A26	115286	0.04181027	4.201077e-01	5.390769e-01
## AKR7A2P1	246182	0.24700641	4.201311e-01	5.390784e-01
## UNC93B3	285296	-0.21000011	4.202749e-01	5.392345e-01
## PAQR5-DT	102723548	0.08582370	4.203163e-01	5.392591e-01
## MACIR	90355	0.03084855	4.204797e-01	5.394337e-01
## ARL4AP5	101928788	0.42946466	4.204968e-01	5.394337e-01
## KIAA1549L	25758	-0.12508630	4.205959e-01	5.394759e-01
## KASH5	147872	-0.37977289	4.205901e-01	5.394759e-01
## C1QTNF8	390664	-0.38554378	4.206185e-01	5.394759e-01
## CYP4F59P	100132340	0.43526543	4.206180e-01	5.394759e-01
## MAN2C1	4123	-0.04486407	4.206446e-01	5.394810e-01
## EXOSC9	5393	-0.03337116	4.207809e-01	5.396272e-01
## FADS6	283985	-0.13997627	4.210006e-01	5.398805e-01

## INTS5	80789	-0.04214985	4.210247e-01	5.398829e-01
## RMI1	80010	-0.03310117	4.213263e-01	5.402127e-01
## DPP3-DT	101928069	0.06822022	4.213055e-01	5.402127e-01
## RRP36	88745	0.03015774	4.215262e-01	5.404405e-01
## ZNF528-AS1	102724105	-0.06500643	4.216635e-01	5.405880e-01
## SDCBP	6386	0.04198872	4.216866e-01	5.405890e-01
## THUMPD3P1	100419989	0.42476887	4.218705e-01	5.407963e-01
## MIR4519	100616231	-0.43738577	4.219373e-01	5.408534e-01
## IGLV4-69	28784	0.24681210	4.221182e-01	5.410282e-01
## TMEM256-PLSCR3	100529211	0.31357625	4.221006e-01	5.410282e-01
## TSSC4	10078	0.05476762	4.221914e-01	5.410935e-01
## PRSS44P	729756	0.16017076	4.222709e-01	5.411668e-01
## AKAP1-DT	119139901	-0.05724144	4.222953e-01	5.411696e-01
## H2BC9	8345	0.18100396	4.223706e-01	5.412375e-01
## RNU6-646P	106481386	0.38178569	4.224079e-01	5.412567e-01
## SNRPEP2	414153	0.21915258	4.225692e-01	5.414349e-01
## RN7SKP173	106635535	0.28125342	4.226006e-01	5.414465e-01
## HIRIP3	8479	-0.02651524	4.226928e-01	5.414791e-01
## PRXL2B	127281	-0.04441200	4.226761e-01	5.414791e-01
## YWHAZP2	150554	0.12275209	4.226518e-01	5.414791e-01
## FAXC	84553	-0.07288888	4.227171e-01	5.414816e-01
## NPM1P24	100422312	0.19339545	4.227946e-01	5.415238e-01
## DBNDD2	55861	0.10231906	4.227808e-01	5.415238e-01
## PCDHA8	56140	0.24030720	4.229486e-01	5.416926e-01
## DGCR8	54487	0.02605100	4.234104e-01	5.422269e-01
## PSPHP1	8781	0.36892538	4.234031e-01	5.422269e-01
## RAB6C	84084	0.15098912	4.234477e-01	5.422461e-01
## RNU6-1223P	106481566	0.30618381	4.235396e-01	5.423351e-01
## HNRNPCL1	343069	0.26084354	4.237642e-01	5.425942e-01
## LINC01311	100652736	0.09885535	4.239012e-01	5.427409e-01
## IGHV7-4-1	57289	0.42462188	4.239318e-01	5.427516e-01
## TNPO3	23534	0.02102484	4.239901e-01	5.427976e-01
## C20orf203	284805	0.26787810	4.240172e-01	5.428037e-01
## MIR3942	100500904	-0.23627176	4.240677e-01	5.428398e-01
## MET	4233	-0.04814753	4.241748e-01	5.429482e-01
## MATCAP1	653319	-0.10093590	4.242832e-01	5.430584e-01
## BRCC3	79184	-0.03066741	4.243284e-01	5.430876e-01
## COX4I2	84701	0.12068270	4.244434e-01	5.431776e-01
## CNOT8	9337	0.01974539	4.244295e-01	5.431776e-01
## KRT18P51	391703	0.37012126	4.245998e-01	5.433492e-01
## STRAP	11171	-0.02674717	4.249117e-01	5.437196e-01
## RIOK3	8780	-0.03105705	4.249671e-01	5.437426e-01
## RLN2	6019	-0.10529114	4.250263e-01	5.437426e-01
## TRAJ35	28720	0.32197055	4.250416e-01	5.437426e-01
## LINC01418	102724001	0.19361348	4.249750e-01	5.437426e-01
## SNX29P2	440352	-0.39854526	4.250062e-01	5.437426e-01
## NPIPBP3	23117	0.09216428	4.250898e-01	5.437757e-01
## LINC00320	387486	0.29706570	4.255522e-01	5.443385e-01
## DMRTA2	63950	0.38935593	4.258104e-01	5.446402e-01
## FOXO4	4303	0.03374362	4.260166e-01	5.448753e-01
## LINC02344	105370154	0.47506374	4.261769e-01	5.450516e-01
## PYDC1	260434	0.33332184	4.262884e-01	5.450794e-01
## LRRC63	220416	-0.18288577	4.262817e-01	5.450794e-01
## AGER	177	0.11854729	4.262756e-01	5.450794e-01

## TMEM191B	728229	-0.15576311	4.262580e-01	5.450794e-01
## HTATSF1	27336	0.03021952	4.264070e-01	5.452023e-01
## CITED4	163732	-0.08826222	4.266810e-01	5.455240e-01
## ALG1L2	644974	0.21280663	4.268279e-01	5.456831e-01
## WIZ	58525	-0.04615458	4.269449e-01	5.458040e-01
## MAP3K11	4296	-0.05002440	4.270125e-01	5.458617e-01
## XPNPEP2	7512	0.12311968	4.273062e-01	5.461797e-01
## ACOXL	55289	-0.12933767	4.272945e-01	5.461797e-01
## LINC01102	150568	-0.28226707	4.273786e-01	5.462435e-01
## GRIN3A	116443	0.14338416	4.274107e-01	5.462557e-01
## PEX5	5830	0.03710033	4.275053e-01	5.463193e-01
## TERB1	283847	0.27629953	4.275047e-01	5.463193e-01
## ANKRD20A21P	102723552	-0.20739136	4.276097e-01	5.464239e-01
## DNAJC6	9829	0.06610661	4.276956e-01	5.464474e-01
## SPATA41	388182	-0.08549574	4.276867e-01	5.464474e-01
## ZNF100	163227	-0.05428599	4.276880e-01	5.464474e-01
## AGR2	10551	0.12127402	4.278902e-01	5.466327e-01
## ATP8B5P	158381	-0.10292378	4.279306e-01	5.466327e-01
## HNRNPA1L3	642659	-0.04853385	4.278896e-01	5.466327e-01
## USP51	158880	0.04333495	4.279290e-01	5.466327e-01
## LNPEP	4012	-0.05027078	4.279543e-01	5.466343e-01
## RSL24D1P11	284288	0.26508352	4.280930e-01	5.467827e-01
## PAK2	5062	-0.03188643	4.282571e-01	5.469636e-01
## MPHOSPH10P3	100652840	0.32773965	4.282867e-01	5.469726e-01
## LINC01431	100505683	-0.08324089	4.284840e-01	5.471671e-01
## UPK3BL3P	122149306	-0.09410111	4.284787e-01	5.471671e-01
## SLC22A6	9356	0.13067122	4.285563e-01	5.472067e-01
## IGLV2-5	28818	0.33370601	4.285600e-01	5.472067e-01
## OR2A42	402317	-0.19497020	4.286673e-01	5.472861e-01
## MIR4737	100616210	0.08277100	4.286601e-01	5.472861e-01
## TOP3BP1	23751	0.35409338	4.287579e-01	5.473730e-01
## PRELID1	27166	0.06011274	4.288773e-01	5.474967e-01
## ZNF143	7702	0.02213533	4.289864e-01	5.476072e-01
## CFL1P6	390996	0.38783593	4.292289e-01	5.478880e-01
## RCBTB1	55213	0.04477886	4.293117e-01	5.479649e-01
## MIRLET7IHG	120766144	-0.09121712	4.294811e-01	5.481448e-01
## ANKRD20A1	84210	0.22391942	4.294978e-01	5.481448e-01
## LTBP1	4052	0.12347165	4.295777e-01	5.482180e-01
## ARHGEF35-AS1	101928605	-0.07362830	4.296339e-01	5.482610e-01
## CCDC51	79714	-0.04242972	4.297465e-01	5.483758e-01
## SUMO4	387082	0.23078839	4.297947e-01	5.484086e-01
## DOC2A	8448	-0.15134436	4.298185e-01	5.484101e-01
## TRIM47	91107	-0.06469736	4.298934e-01	5.484768e-01
## ZNG1B	150472	0.02829208	4.299332e-01	5.484989e-01
## H2AC6	8334	0.05872816	4.299644e-01	5.485051e-01
## RPL31P52	100271476	0.25288454	4.299832e-01	5.485051e-01
## RBISP3	127379684	-0.32296028	4.300453e-01	5.485555e-01
## ZNF572	137209	-0.04646853	4.301061e-01	5.486042e-01
## AMMECR1	9949	-0.03281910	4.302190e-01	5.487195e-01
## IGHGP	3505	-0.22165319	4.303995e-01	5.489209e-01
## RGN	9104	-0.07663876	4.304964e-01	5.490157e-01
## EIF1P6	106480277	-0.18052908	4.305553e-01	5.490619e-01
## CDKL1	8814	-0.05677529	4.306718e-01	5.491611e-01
## TRADD	8717	-0.05351073	4.306782e-01	5.491611e-01

## MATR3	9782	0.10481922	4.309473e-01	5.494754e-01
## B3GNT4	79369	-0.10998055	4.311609e-01	5.497188e-01
## NCKAP5-AS2	101928161	-0.08811818	4.312052e-01	5.497465e-01
## USP14	9097	-0.02076225	4.312377e-01	5.497590e-01
## HIF1A-AS3	105370526	0.20004029	4.313111e-01	5.498238e-01
## PAPPA-AS2	103611155	0.24845831	4.314076e-01	5.499180e-01
## MIR3145	100423001	0.35280995	4.315632e-01	5.500874e-01
## POU5F1B	5462	-0.09775443	4.316399e-01	5.501415e-01
## PCBP2P2	286157	0.05929074	4.316509e-01	5.501415e-01
## PPP3CC	5533	-0.03026425	4.318265e-01	5.503365e-01
## SRSF10	10772	-0.03266851	4.318602e-01	5.503506e-01
## OGT	8473	0.05518983	4.318991e-01	5.503713e-01
## FGF2	2247	0.07289730	4.323638e-01	5.509346e-01
## RARS1	5917	0.02345376	4.323922e-01	5.509418e-01
## NME2P1	283458	0.11654240	4.324583e-01	5.509972e-01
## RGS7	6000	-0.10829540	4.325806e-01	5.511056e-01
## NDUFA4	4697	-0.05688491	4.325888e-01	5.511056e-01
## RPL7P38	120872	-0.40938871	4.328074e-01	5.513552e-01
## LLPH	84298	0.03346739	4.328807e-01	5.514197e-01
## CAMTA1-AS3	127138864	-0.31908119	4.330830e-01	5.516485e-01
## TMEM223	79064	-0.05363746	4.331635e-01	5.516643e-01
## STEAP1B-AS1	100506178	0.11593724	4.331225e-01	5.516643e-01
## PSME2P1	257093	0.11166738	4.331495e-01	5.516643e-01
## HESX1	8820	0.06324189	4.333577e-01	5.518538e-01
## TPK1	27010	0.03672098	4.333470e-01	5.518538e-01
## POU4F3	5459	-0.14362043	4.338655e-01	5.524715e-01
## KIAA2012	100652824	0.22159361	4.339474e-01	5.525179e-01
## SPATA20P1	100874060	0.08857352	4.339342e-01	5.525179e-01
## RPL7P6	90193	-0.24775354	4.339725e-01	5.525208e-01
## PKIA-AS1	101927003	-0.28494320	4.341417e-01	5.527073e-01
## HMGB1P1	10357	0.16080770	4.345985e-01	5.532448e-01
## HMGB1P6	645292	0.08321924	4.346094e-01	5.532448e-01
## HOXB-AS1	100874362	0.08423410	4.347011e-01	5.533326e-01
## SNORA59A	677885	-0.17602101	4.347741e-01	5.533965e-01
## ZBTB37	84614	0.07017159	4.351035e-01	5.537867e-01
## ZNF428	126299	-0.06020066	4.351988e-01	5.538500e-01
## WNT9B	7484	-0.09168069	4.351762e-01	5.538500e-01
## PRDM12	59335	0.31243529	4.352963e-01	5.539212e-01
## DDX39B-AS1	106478957	-0.16172881	4.353003e-01	5.539212e-01
## THSD8	111644133	0.30388469	4.354308e-01	5.540582e-01
## MTHFD2	10797	0.07339626	4.354761e-01	5.540869e-01
## NEFM	4741	-0.12653908	4.357405e-01	5.543361e-01
## MST1R	4486	0.09150232	4.356972e-01	5.543361e-01
## KCTD9P2	643535	0.31408192	4.357301e-01	5.543361e-01
## ADAM7-AS2	101929315	-0.36311752	4.358219e-01	5.543817e-01
## MIR4635	100616479	0.16980553	4.358189e-01	5.543817e-01
## TPI1P1	729708	0.07117407	4.360892e-01	5.546927e-01
## BAGE2	85319	-0.72325526	4.362615e-01	5.548828e-01
## LRRC2-AS1	83598	-0.15235545	4.364193e-01	5.550545e-01
## TMEM147-AS1	100506469	0.08635684	4.366157e-01	5.552752e-01
## TMEM87B	84910	0.04310935	4.367141e-01	5.553212e-01
## ZFP36L1	677	0.04373104	4.367439e-01	5.553212e-01
## RNU6-312P	106479706	0.21153673	4.367730e-01	5.553212e-01
## FAM21EP	100421577	-0.08781085	4.367890e-01	5.553212e-01

## SNRPCP17	106481702	0.35724793	4.367607e-01	5.553212e-01
## SF3A3P2	449645	-0.28374938	4.367216e-01	5.553212e-01
## CAMTA1	23261	-0.04561959	4.368487e-01	5.553390e-01
## PSMG3-AS1	114796	-0.04407476	4.368485e-01	5.553390e-01
## MAP1S	55201	-0.08209231	4.369147e-01	5.553938e-01
## SNHG25	105376843	-0.09909712	4.369582e-01	5.554201e-01
## IL36RN	26525	-0.50311976	4.369862e-01	5.554266e-01
## PEF1-AS1	107985471	-0.19511865	4.371205e-01	5.555617e-01
## ABHD17AP3	648359	-0.45980530	4.371382e-01	5.555617e-01
## RNPC3	55599	0.08882435	4.372042e-01	5.556165e-01
## TPTEP1	387590	-0.06595739	4.372840e-01	5.556686e-01
## RNA5SP474	100873716	0.29290337	4.372909e-01	5.556686e-01
## ADK	132	0.02902607	4.375143e-01	5.559234e-01
## ZMYM2	7750	0.03128286	4.377712e-01	5.562208e-01
## CEP20	123811	0.02245191	4.377969e-01	5.562243e-01
## FAM185BP	641808	-0.07917399	4.378395e-01	5.562494e-01
## MYCBP2-AS1	100874212	-0.18778013	4.378970e-01	5.562933e-01
## RABL2B	11158	0.02879094	4.379425e-01	5.563221e-01
## AFAP1-AS1	84740	0.18751138	4.380911e-01	5.564817e-01
## CHUK-DT	122152368	0.14719376	4.381784e-01	5.565635e-01
## NAT2	10	-0.10978545	4.382436e-01	5.566148e-01
## CALML3	810	0.17000516	4.382646e-01	5.566148e-01
## ATP5MKP1	100288307	0.14002876	4.382895e-01	5.566173e-01
## ZKSCAN2	342357	0.02889776	4.384405e-01	5.567580e-01
## NAIPP2	728519	0.11044566	4.384460e-01	5.567580e-01
## ST13P7	155019	0.20051195	4.385145e-01	5.568158e-01
## TXLNGY	246126	0.25434335	4.386450e-01	5.569524e-01
## RNASEH1	246243	0.02665345	4.386711e-01	5.569564e-01
## FUNDC2	65991	0.04350805	4.388478e-01	5.571517e-01
## TPRKB	51002	-0.04884486	4.390897e-01	5.574006e-01
## NHS-AS1	100873920	0.14252242	4.390780e-01	5.574006e-01
## EHHADH	1962	0.08149393	4.391824e-01	5.574456e-01
## NOXRED1	122945	0.11814076	4.391847e-01	5.574456e-01
## RNF139	11236	0.02356958	4.391961e-01	5.574456e-01
## EEF1A1P25	646612	0.30664216	4.392311e-01	5.574456e-01
## CSPG4P12	728121	0.20142450	4.392399e-01	5.574456e-01
## CTSLP3	644021	0.12727791	4.392698e-01	5.574544e-01
## TAGLN3	29114	0.11251973	4.393844e-01	5.575708e-01
## DDX17	10521	0.06591239	4.395651e-01	5.577542e-01
## ATG10	83734	0.03861070	4.395748e-01	5.577542e-01
## SRI	6717	-0.03673955	4.397310e-01	5.579201e-01
## BBS7	55212	-0.02417082	4.397515e-01	5.579201e-01
## TEPSIN	146705	0.06688130	4.398352e-01	5.579971e-01
## SH3GL1P2	6459	0.28505294	4.398657e-01	5.580067e-01
## SPEN	23013	0.04413781	4.400319e-01	5.581884e-01
## DYNLT4	343521	0.16339394	4.401027e-01	5.582491e-01
## MTUS1	57509	-0.03399644	4.402173e-01	5.583070e-01
## ISX	91464	-0.17275009	4.402135e-01	5.583070e-01
## GTF3C2-AS1	100505624	0.33042818	4.401901e-01	5.583070e-01
## PPP4R3B-DT	107985885	0.07014471	4.402443e-01	5.583121e-01
## NACA4P	83955	0.16637779	4.403920e-01	5.584703e-01
## LRIF1	55791	0.02691176	4.404184e-01	5.584747e-01
## SNTB1	6641	-0.03795434	4.405211e-01	5.585757e-01
## KLHL42	57542	0.03510375	4.405920e-01	5.586365e-01

## TSNARE1	203062	-0.04598847	4.406405e-01	5.586688e-01
## MRPL13	28998	0.04889488	4.408661e-01	5.589256e-01
## EMC9	51016	0.06004625	4.409599e-01	5.590095e-01
## NECTIN1-DT	102724301	0.15147509	4.409783e-01	5.590095e-01
## ATP2B1	490	0.03710594	4.410453e-01	5.590160e-01
## NFKBIZ	64332	-0.10902977	4.410523e-01	5.590160e-01
## RN7SL809P	106479516	-0.18192035	4.410248e-01	5.590160e-01
## RAB11FIP3	9727	0.06256010	4.411547e-01	5.590873e-01
## RTL4	340595	-0.10938271	4.411536e-01	5.590873e-01
## FAM174A-DT	121232371	-0.15743365	4.414713e-01	5.594594e-01
## SPTSSB	165679	0.16907700	4.419150e-01	5.599390e-01
## FAM66B	100128890	0.08088608	4.419188e-01	5.599390e-01
## LINC03065	105370833	0.12105693	4.419114e-01	5.599390e-01
## CCNO	10309	-0.11976773	4.419818e-01	5.599895e-01
## RPS15AP36	100271650	0.16378739	4.420529e-01	5.600336e-01
## MED28-DT	121232375	0.15869519	4.420626e-01	5.600336e-01
## IL23R	149233	0.20536400	4.420875e-01	5.600358e-01
## PRDM10	56980	-0.03742841	4.424945e-01	5.605223e-01
## SEC22B	9554	-0.02181538	4.425239e-01	5.605302e-01
## GAPDHP52	100421313	-0.26090416	4.426566e-01	5.606691e-01
## CNGB3	54714	-0.32614911	4.427998e-01	5.608212e-01
## DHDDS-AS1	101928324	0.15116365	4.428528e-01	5.608591e-01
## TIAM1	7074	0.05969707	4.429031e-01	5.608937e-01
## FAM86KP	100287013	-0.24525566	4.432199e-01	5.612656e-01
## LINC01187	100507267	-0.11654698	4.433502e-01	5.614014e-01
## GORASP2	26003	0.02963709	4.435712e-01	5.616520e-01
## GAPDHP76	100287725	0.23767006	4.436028e-01	5.616626e-01
## ZBTB1	22890	0.03670855	4.437464e-01	5.617890e-01
## WHAMM	123720	-0.03866842	4.437488e-01	5.617890e-01
## CENATAC	338657	-0.07316315	4.438019e-01	5.618269e-01
## NPAT	4863	0.03300126	4.439129e-01	5.619230e-01
## LIF-AS2	91370	0.25431446	4.439240e-01	5.619230e-01
## DHX16	8449	-0.01922375	4.442340e-01	5.622861e-01
## GALR3	8484	-0.39857941	4.443299e-01	5.623782e-01
## LINC02848	107986806	-0.08275620	4.444185e-01	5.624610e-01
## SNRPGP2	100130003	-0.13016237	4.446432e-01	5.627161e-01
## DAP3P1	359804	0.27490756	4.449200e-01	5.630371e-01
## CRYZL2P-SEC16B	111240474	-0.12405015	4.450585e-01	5.631830e-01
## FAM27B	100133121	-0.23792074	4.452070e-01	5.633415e-01
## SNORA16B	692157	-0.27182639	4.453368e-01	5.634765e-01
## PTGES3P1	284672	0.07191459	4.454995e-01	5.636530e-01
## PRPF19	27339	0.02499816	4.455758e-01	5.637202e-01
## ZNF470-DT	112268241	0.05837416	4.457226e-01	5.638766e-01
## TOE1	114034	-0.02177284	4.458998e-01	5.640508e-01
## DPPA4P3	100037267	-0.28081080	4.459067e-01	5.640508e-01
## RAD51-AS1	100505648	-0.08052755	4.460259e-01	5.641721e-01
## PLPPR1	54886	0.07428771	4.461295e-01	5.642738e-01
## IGKV1D-43	28891	0.48607600	4.465535e-01	5.647807e-01
## ALPK1	80216	-0.04027039	4.466329e-01	5.648227e-01
## ZNG1C	445571	-0.08437520	4.466332e-01	5.648227e-01
## ZFP2	80108	0.04549283	4.466666e-01	5.648355e-01
## GPR84	53831	0.17675081	4.467400e-01	5.648696e-01
## GUF1	60558	-0.03005774	4.467169e-01	5.648696e-01
## CYB5R3	1727	-0.05228839	4.468127e-01	5.649321e-01

## PCDHGB9P	84055	0.14838579	4.470164e-01	5.651602e-01
## FAM185A	222234	-0.02697409	4.470514e-01	5.651752e-01
## PROZ	8858	0.12684499	4.471152e-01	5.652034e-01
## TCP1P3	400013	0.22765391	4.471203e-01	5.652034e-01
## MAGEE2	139599	-0.12027544	4.471506e-01	5.652123e-01
## PFN1P11	100873784	0.18377247	4.471756e-01	5.652145e-01
## SLC41A3-AS1	<NA>	-0.05954775	4.473164e-01	5.653630e-01
## INSYN2A	642938	0.15170896	4.475346e-01	5.655979e-01
## CHORDC1P4	727896	0.20760206	4.475487e-01	5.655979e-01
## FKTN	2218	0.03829025	4.477855e-01	5.658677e-01
## SNORA53	677832	-0.18413375	4.478186e-01	5.658800e-01
## CNOT10	25904	-0.01518079	4.478514e-01	5.658921e-01
## HOXD4	3233	0.06012939	4.479239e-01	5.659543e-01
## RARRES2P11	107075248	-0.36859187	4.480173e-01	5.660429e-01
## LINC02470	100506159	0.43148235	4.481304e-01	5.661563e-01
## MAPK3	5595	0.04592699	4.481630e-01	5.661681e-01
## FAM50A	9130	-0.03276655	4.483266e-01	5.663454e-01
## CAMKV	79012	0.47209284	4.483594e-01	5.663573e-01
## DNAJC8P1	319111	0.20900845	4.484084e-01	5.663898e-01
## CTAGE13P	100421638	0.29545708	4.484636e-01	5.664300e-01
## CCDC32	90416	-0.03219494	4.487597e-01	5.667745e-01
## PHLDA2	7262	-0.13185970	4.488716e-01	5.668864e-01
## WAC	51322	-0.01831840	4.490129e-01	5.670059e-01
## PRPF4BP1	653155	0.36326413	4.490059e-01	5.670059e-01
## LIPF	8513	0.18301509	4.491337e-01	5.670995e-01
## H4C16	121504	-0.07647324	4.491185e-01	5.670995e-01
## DHX8	1659	-0.02156424	4.494066e-01	5.673557e-01
## WDR97	340390	-0.16027532	4.493976e-01	5.673557e-01
## RN7SL481P	106481054	0.19025245	4.493946e-01	5.673557e-01
## GNAS	2778	0.03883766	4.495770e-01	5.675414e-01
## SLC38A4-AS1	100288798	0.06014259	4.497038e-01	5.676719e-01
## GAPDH-DT	112268089	-0.14294804	4.497728e-01	5.677295e-01
## CNGA4	1262	-0.11869060	4.498321e-01	5.677749e-01
## MIR4489	100616284	0.37844182	4.499356e-01	5.678761e-01
## RPS26P15	644928	0.35042299	4.499946e-01	5.679205e-01
## EEF1A1P19	100421796	0.09765768	4.500176e-01	5.679205e-01
## CYP4Z2P	163720	-0.23675181	4.500442e-01	5.679246e-01
## CCT8	10694	-0.02732816	4.501634e-01	5.680455e-01
## C6orf163	206412	0.10071292	4.502413e-01	5.681143e-01
## NFKBIE	4794	0.05712912	4.504368e-01	5.683315e-01
## KHK	3795	0.09386059	4.505172e-01	5.683866e-01
## LINC00858	170425	-0.19396277	4.505335e-01	5.683866e-01
## LINC02641	105378531	0.26954830	4.505506e-01	5.683866e-01
## AK3P3	100419075	-0.13151305	4.505902e-01	5.684070e-01
## CITED1	4435	-0.32859881	4.506798e-01	5.684533e-01
## HSD17B2-AS1	105371363	-0.10020604	4.506843e-01	5.684533e-01
## ALOX12P2	245	-0.11255364	4.506971e-01	5.684533e-01
## DUSP5-DT	105378481	0.19464962	4.507415e-01	5.684799e-01
## OOEPP2	117751741	0.27656610	4.509534e-01	5.687176e-01
## PDILT	204474	-0.34644063	4.509984e-01	5.687448e-01
## AK4P1	206	-0.17609177	4.512648e-01	5.690512e-01
## UPF3A	65110	-0.03389326	4.516154e-01	5.694638e-01
## APOE	348	-0.10068542	4.517445e-01	5.695674e-01
## ATAD3B	83858	-0.08060461	4.517370e-01	5.695674e-01

## H1-4	3008	-0.21293041	4.519062e-01	5.697418e-01
## HDX	139324	0.03928596	4.519534e-01	5.697717e-01
## PRPF38A	84950	0.02030174	4.521806e-01	5.700285e-01
## SMG1P3	100271836	0.08807636	4.522446e-01	5.700733e-01
## DTX2P1-UPK3BP1-PMS2P11	441263	0.19654253	4.522630e-01	5.700733e-01
## ZNF229	7772	0.04330088	4.523587e-01	5.701643e-01
## GLYATL1	92292	0.10617552	4.526143e-01	5.704569e-01
## ZNF700	90592	-0.05873151	4.527339e-01	5.705780e-01
## MRPL36	64979	0.05272264	4.528869e-01	5.707413e-01
## MTND6P25	107075262	-0.37534954	4.529808e-01	5.708301e-01
## MORC2	22880	-0.01916849	4.531559e-01	5.709618e-01
## LDHAP2	100190799	-0.24713561	4.531421e-01	5.709618e-01
## MRPL33	9553	-0.05494570	4.531162e-01	5.709618e-01
## SLITRK3	22865	-0.16875312	4.533552e-01	5.711242e-01
## CEP43	11116	0.06028935	4.533518e-01	5.711242e-01
## GRK3-AS1	100996404	0.37607585	4.533434e-01	5.711242e-01
## TUBE1	51175	-0.04754426	4.534185e-01	5.711743e-01
## CLK2	1196	0.05360077	4.534872e-01	5.712312e-01
## DLGAP1-AS5	284215	-0.33677517	4.535597e-01	5.712633e-01
## FMR1-AS1	100126270	0.12454101	4.535597e-01	5.712633e-01
## P2RX1	5023	0.12455148	4.539909e-01	5.717492e-01
## PDE6H	5149	-0.28318350	4.539925e-01	5.717492e-01
## MED12	9968	0.03433394	4.542050e-01	5.719872e-01
## MLLT3	4300	0.03528919	4.545689e-01	5.723719e-01
## IGHV1-24	28467	-0.29124955	4.545805e-01	5.723719e-01
## NANOGP4	414132	0.34356839	4.545812e-01	5.723719e-01
## MIR103A2	406896	-0.12213468	4.546160e-01	5.723860e-01
## SLC36A2	153201	-0.12530207	4.548450e-01	5.726076e-01
## RNU6-1160P	106481546	-0.26957370	4.548626e-01	5.726076e-01
## RN7SL771P	106481132	-0.40853490	4.548322e-01	5.726076e-01
## CLIC1P1	390363	0.19605992	4.549220e-01	5.726527e-01
## CTNNA1-AS1	105379194	-0.14718444	4.549853e-01	5.727027e-01
## YWHAEP5	440917	0.18240482	4.550427e-01	5.727452e-01
## SLITRK4	139065	-0.06974719	4.550747e-01	5.727559e-01
## C10orf53	282966	0.40799918	4.551769e-01	5.728548e-01
## ZBED9-AS1	121676925	-0.26074104	4.552437e-01	5.729093e-01
## AIG1	51390	-0.04834634	4.552791e-01	5.729241e-01
## DRG2	1819	0.02782998	4.553241e-01	5.729511e-01
## MADCAM1-AS1	105372232	0.12650344	4.553481e-01	5.729516e-01
## CLGN	1047	-0.08274640	4.554398e-01	5.730373e-01
## ENO1P3	100419069	0.66700796	4.557328e-01	5.733763e-01
## ARPC5L	81873	0.03568503	4.558722e-01	5.734923e-01
## STEAP3-AS1	100874111	0.16859431	4.558609e-01	5.734923e-01
## BNAT1	101928745	-0.05661264	4.559950e-01	5.736171e-01
## TRIM66	9866	0.07008394	4.561816e-01	5.738221e-01
## KCTD5P1	100422094	0.29184641	4.562620e-01	5.738935e-01
## KCNIP1-AS1	105377716	0.27788778	4.563320e-01	5.739519e-01
## HSPA4L	22824	-0.06062486	4.564543e-01	5.740525e-01
## ANKRD18A	253650	-0.09557790	4.564593e-01	5.740525e-01
## CDH3	1001	0.07941912	4.564849e-01	5.740550e-01
## SRD5A3	79644	0.05506309	4.565436e-01	5.740991e-01
## CCDC157	550631	-0.04469411	4.566270e-01	5.741446e-01
## CCNT2-AS1	100129961	-0.05018362	4.566236e-01	5.741446e-01
## RHD	6007	0.49854758	4.567322e-01	5.742471e-01

## IL21R-AS1	283888	0.17907835	4.568483e-01	5.743634e-01
## IGHV1-3	28473	-0.25135808	4.568798e-01	5.743733e-01
## TXNDC2	84203	0.18354305	4.570518e-01	5.745598e-01
## LKAAEAR1	198437	0.40055640	4.571672e-01	5.746540e-01
## LINC02620	101927523	0.37473884	4.571740e-01	5.746540e-01
## NRG2	9542	0.05309177	4.572327e-01	5.746683e-01
## DIO2-AS1	100628307	0.57915656	4.572186e-01	5.746683e-01
## KLHL23	151230	-0.03604677	4.572985e-01	5.747213e-01
## MEIS3P1	4213	-0.05459654	4.574873e-01	5.749289e-01
## PKD2L2	27039	-0.12274676	4.575302e-01	5.749530e-01
## NDUFV1-DT	100505621	-0.10538165	4.575574e-01	5.749574e-01
## PLSCR3	57048	0.16320176	4.578958e-01	5.753308e-01
## IGKV5-2	28907	0.41937027	4.579019e-01	5.753308e-01
## GPS2	2874	-0.08996339	4.580332e-01	5.754661e-01
## MPHOSPH10	10199	0.03527556	4.583980e-01	5.758946e-01
## HS1BP3	64342	0.03516503	4.585729e-01	5.760640e-01
## CAGE1	285782	-0.19840272	4.586988e-01	5.760640e-01
## NPIPBP15	440348	0.17285501	4.586407e-01	5.760640e-01
## GCNT2P1	644378	-0.18816471	4.586804e-01	5.760640e-01
## JARID2-AS1	100506681	-0.15007723	4.586351e-01	5.760640e-01
## SELENOKP1	100129085	0.17123154	4.586772e-01	5.760640e-01
## LINC03104	102724219	-0.24876665	4.586424e-01	5.760640e-01
## UGP2	7360	-0.03244547	4.587914e-01	5.761208e-01
## PNN-AS1	123466206	0.19344988	4.587808e-01	5.761208e-01
## KIF21A	55605	-0.05409904	4.588435e-01	5.761564e-01
## LPL	4023	-0.10393859	4.589359e-01	5.762427e-01
## CALB1	793	-0.12410223	4.590026e-01	5.762966e-01
## SNORD3A	780851	-0.18822899	4.590606e-01	5.763398e-01
## HNRNPA1P6	729423	0.40819246	4.591156e-01	5.763790e-01
## SDHCP2	100128302	-0.34474534	4.592307e-01	5.764938e-01
## TMEM191C	645426	-0.11836948	4.592576e-01	5.764977e-01
## AKR7A3	22977	0.09109542	4.594089e-01	5.766281e-01
## ZNF285BP	147711	-0.39899376	4.593950e-01	5.766281e-01
## ZNF593OS	118568799	0.16828954	4.594453e-01	5.766440e-01
## MGAT3	4248	0.06732506	4.599544e-01	5.772531e-01
## CHERP	10523	-0.03559859	4.601697e-01	5.774935e-01
## QNG1	84267	-0.01991057	4.602523e-01	5.775384e-01
## SMN2	6607	0.08302071	4.602530e-01	5.775384e-01
## TMEM41A	90407	-0.02888475	4.604095e-01	5.777049e-01
## MCCD1	401250	0.10684698	4.605907e-01	5.779025e-01
## TMEM86A	144110	-0.04981326	4.610171e-01	5.783786e-01
## RNF111	54778	-0.02542445	4.610178e-01	5.783786e-01
## PABPC1L	80336	0.12470554	4.610535e-01	5.783920e-01
## CCDC115	84317	0.02444999	4.610904e-01	5.783920e-01
## EBAG9P1	100422254	0.12980789	4.610999e-01	5.783920e-01
## PLSCR1	5359	-0.05147925	4.611296e-01	5.783994e-01
## RINL	126432	0.03858228	4.612264e-01	5.784909e-01
## ART5	116969	0.07288117	4.613963e-01	5.786144e-01
## ACAA2	10449	0.05460965	4.613542e-01	5.786144e-01
## MAB21L4	79919	0.14482299	4.613773e-01	5.786144e-01
## NUBP2	10101	0.06063211	4.614722e-01	5.786500e-01
## FBXL19	54620	-0.04893419	4.614579e-01	5.786500e-01
## LINC01980	105377007	0.40769617	4.615443e-01	5.787105e-01
## SLC41A3	54946	-0.03406817	4.618814e-01	5.790561e-01

## RPSAP21	729079	0.49346958	4.619052e-01	5.790561e-01
## CTSLP8	1518	0.54762364	4.619087e-01	5.790561e-01
## HIKESHIP2	117751740	0.30539993	4.619153e-01	5.790561e-01
## SERPINA12	145264	-0.61654738	4.620508e-01	5.791961e-01
## ZNF418	147686	0.06646126	4.621228e-01	5.792565e-01
## RBM22P12	100131641	-0.18488684	4.625678e-01	5.797844e-01
## MRPL23	6150	0.05890393	4.626474e-01	5.798542e-01
## LARP4B	23185	0.02068146	4.626798e-01	5.798649e-01
## CFAP58-DT	100505869	-0.10938300	4.630433e-01	5.802907e-01
## IQSEC3P1	100132450	0.31616579	4.631013e-01	5.803333e-01
## APH1A	51107	0.03182954	4.632236e-01	5.804430e-01
## LINC01532	100505835	-0.06868760	4.632366e-01	5.804430e-01
## EHD4	30844	-0.03940747	4.633525e-01	5.805455e-01
## KRT8P15	645834	0.32571176	4.633661e-01	5.805455e-01
## BMS1P4	729096	-0.14335842	4.633910e-01	5.805467e-01
## TBCAP1	494540	-0.15177172	4.634428e-01	5.805817e-01
## SKIC3	9652	0.03089530	4.635285e-01	5.806591e-01
## LINC00205	642852	0.04879182	4.636004e-01	5.806893e-01
## TCEAL3-AS1	100874119	0.26184194	4.635853e-01	5.806893e-01
## ACOT2	10965	0.06273107	4.637051e-01	5.807906e-01
## RN7SL153P	106480490	0.28312042	4.637921e-01	5.808696e-01
## RPLP0P2	113157	-0.16442291	4.638538e-01	5.809169e-01
## CLPP	8192	0.05577726	4.638804e-01	5.809202e-01
## ZNF76	7629	0.03088817	4.639168e-01	5.809328e-01
## CLIC4P3	442447	0.29228667	4.639382e-01	5.809328e-01
## RGS5	8490	-0.07044765	4.641647e-01	5.811865e-01
## SOST	50964	-0.13137051	4.642740e-01	5.812933e-01
## FAM117B	150864	0.03199190	4.643105e-01	5.813091e-01
## TPM3P8	646839	0.25542216	4.646429e-01	5.816952e-01
## STPG3-AS1	100129722	-0.14711094	4.647324e-01	5.817774e-01
## CDPF1P1	100128027	0.06432466	4.647852e-01	5.818135e-01
## CSNK1G3	1456	0.02687114	4.648535e-01	5.818690e-01
## L3MBTL1	26013	0.09395247	4.649077e-01	5.819069e-01
## WASHC2C	253725	0.03062819	4.650501e-01	5.820551e-01
## RPS10P3	158104	-0.21474393	4.650961e-01	5.820827e-01
## ANKUB1	389161	-0.45676387	4.652296e-01	5.822199e-01
## IDH1P1	644051	0.33899464	4.653569e-01	5.823492e-01
## LYPD2	137797	0.30354946	4.653933e-01	5.823647e-01
## PPP1R13B-DT	145216	-0.23025325	4.654633e-01	5.824223e-01
## ZNF252P	286101	-0.03350223	4.655548e-01	5.825068e-01
## MYRFL	196446	-0.10782393	4.656457e-01	5.825905e-01
## NEK10	152110	-0.07014618	4.658193e-01	5.827777e-01
## FHL5	9457	-0.08680822	4.659064e-01	5.828567e-01
## MTCO3P23	107075182	-0.28039872	4.659455e-01	5.828756e-01
## KATNAL2	83473	-0.04804171	4.660010e-01	5.829151e-01
## MRPL41	64975	-0.08539525	4.661967e-01	5.831299e-01
## LINC02594	105371786	0.29188455	4.663382e-01	5.832768e-01
## MYCBPAP	84073	0.09138404	4.665997e-01	5.835739e-01
## HIGD2A	192286	0.05705882	4.666704e-01	5.836322e-01
## KPNB1	3837	0.01914965	4.668293e-01	5.838009e-01
## LINC00471	151477	0.09421794	4.669993e-01	5.839834e-01
## SPSB3	90864	-0.04752332	4.670436e-01	5.840088e-01
## GMCL1P2	100420975	0.31538156	4.671586e-01	5.841225e-01
## NF2	4771	0.03343712	4.673934e-01	5.843861e-01

## RIPPLY2	134701	0.24088790	4.675484e-01	5.845498e-01
## TMEM186	25880	-0.03025715	4.677600e-01	5.847842e-01
## BTBD7	55727	0.03291523	4.678498e-01	5.848547e-01
## TRMO	51531	0.02485076	4.678645e-01	5.848547e-01
## CPT1B	1375	-0.16220507	4.680331e-01	5.849752e-01
## SRPK2P	100419416	0.29724252	4.680184e-01	5.849752e-01
## CD2BP2-DT	101928707	-0.04389717	4.680045e-01	5.849752e-01
## MTDHP1	100418814	0.39030111	4.683797e-01	5.853782e-01
## HSPD1P10	644016	-0.16680770	4.686603e-01	5.856988e-01
## SNRNP70	6625	-0.05345156	4.687574e-01	5.857901e-01
## ENG	2022	-0.06542143	4.691106e-01	5.862013e-01
## ACE2	59272	-0.09819635	4.691367e-01	5.862037e-01
## SUMO1	7341	0.02905663	4.691746e-01	5.862210e-01
## ITGB4	3691	-0.06798834	4.692725e-01	5.862601e-01
## LMO1	4004	-0.13301138	4.692969e-01	5.862601e-01
## GLUD2	2747	0.04864692	4.692392e-01	5.862601e-01
## CLRN1-AS1	116933	-0.24905566	4.693024e-01	5.862601e-01
## NUTM2A	728118	-0.11182700	4.693870e-01	5.863238e-01
## ZNF433	163059	-0.04791845	4.694258e-01	5.863238e-01
## LEISA1	100126784	0.09690331	4.694031e-01	5.863238e-01
## SLC52A1	55065	0.08191284	4.696076e-01	5.864767e-01
## PMF1	11243	-0.04050223	4.696206e-01	5.864767e-01
## EIF3LP2	143341	0.22244329	4.695835e-01	5.864767e-01
## HSP90AA4P	3323	-0.24516225	4.696514e-01	5.864851e-01
## BACE2-IT1	282569	0.33341756	4.696993e-01	5.865148e-01
## AOX3P	107126360	-0.17673147	4.697487e-01	5.865462e-01
## HNRNPK-AS1	123706516	-0.23792429	4.698728e-01	5.866710e-01
## EXOC6B	23233	-0.02267527	4.700652e-01	5.868811e-01
## ARAP2	116984	-0.05033648	4.701695e-01	5.869209e-01
## CCDC6	8030	0.03010441	4.701559e-01	5.869209e-01
## ATP5MC1P3	646619	-0.29022574	4.701347e-01	5.869209e-01
## HMGB1P3	10356	0.35285725	4.704445e-01	5.872341e-01
## OR6N1	128372	-0.40353690	4.704993e-01	5.872722e-01
## MKS1	54903	-0.02106839	4.708226e-01	5.876456e-01
## EIF4G1	1981	-0.02801768	4.709000e-01	5.877120e-01
## RND2	8153	-0.05369632	4.709761e-01	5.877768e-01
## PATE1	160065	-0.31517596	4.713562e-01	5.881907e-01
## HSPA8P8	100287551	0.13281432	4.713417e-01	5.881907e-01
## FEM1AP2	390834	-0.24063299	4.714496e-01	5.882771e-01
## NFKBIL1	4795	0.04943117	4.715721e-01	5.883764e-01
## PRKAR2A-AS1	100506637	-0.04615133	4.716018e-01	5.883764e-01
## CCNYL7	100419017	-0.32880538	4.715921e-01	5.883764e-01
## SEPTIN7P2	641977	0.06570616	4.718042e-01	5.885986e-01
## SYCE1L	100130958	0.10826754	4.718869e-01	5.886716e-01
## SYNGR4	23546	0.16744367	4.720239e-01	5.888123e-01
## TRIM37	4591	0.02366642	4.722668e-01	5.890851e-01
## KMT5AP1	57108	0.26935081	4.723690e-01	5.891823e-01
## OR5E1P	26343	0.42293244	4.725516e-01	5.893798e-01
## C5orf34-AS1	105374749	-0.14258843	4.727632e-01	5.896135e-01
## MRPS18A	55168	0.04000441	4.728099e-01	5.896415e-01
## AMT	275	0.14254719	4.728604e-01	5.896439e-01
## MT1P1	493987	0.27088849	4.728423e-01	5.896439e-01
## REPIN1-AS1	105375563	0.09445913	4.730076e-01	5.897972e-01
## NLGN3	54413	-0.06147565	4.733712e-01	5.902203e-01

## RFESD	317671	0.05352944	4.740016e-01	5.909760e-01
## RPS3AP13	100129742	0.24570741	4.741888e-01	5.911791e-01
## RPL36AP54	100271612	-0.14391877	4.742492e-01	5.912241e-01
## PLA2G6	8398	0.08087665	4.743239e-01	5.912869e-01
## SIAH2-AS1	105374155	0.09957220	4.744453e-01	5.914078e-01
## VN1R87P	100312832	-0.26843097	4.745304e-01	5.914835e-01
## GSS	2937	0.04138687	4.746089e-01	5.915207e-01
## ZNF33BP1	100419868	0.24495676	4.745867e-01	5.915207e-01
## SDR9C7	121214	0.42488514	4.747157e-01	5.916235e-01
## MIR548AT	100847030	0.37189176	4.748113e-01	5.917122e-01
## ZNF518A	9849	0.05966968	4.749763e-01	5.918876e-01
## ZNF613	79898	0.03393614	4.753373e-01	5.922591e-01
## RPS2P17	400963	0.35342171	4.753476e-01	5.922591e-01
## ARL5AP3	106480778	-0.18487026	4.753098e-01	5.922591e-01
## ADD1	118	-0.02353454	4.755242e-01	5.924394e-01
## RPS29P19	100271383	0.27808826	4.755411e-01	5.924394e-01
## PDPR	55066	-0.04015304	4.756279e-01	5.925172e-01
## VDAC1P1	642585	0.07889813	4.756632e-01	5.925306e-01
## RNU6-652P	106481388	-0.17236685	4.756874e-01	5.925306e-01
## YPEL5	51646	0.02298123	4.758667e-01	5.927235e-01
## GRIN1	2902	-0.22481173	4.759270e-01	5.927683e-01
## HMGN1P36	728851	0.21771010	4.759639e-01	5.927839e-01
## IMPA2	3613	0.05354830	4.759949e-01	5.927921e-01
## IGLV3-9	28804	0.29677386	4.760914e-01	5.928819e-01
## GNAT2	2780	0.14036508	4.761582e-01	5.928952e-01
## ZNF729	100287226	-0.19525000	4.761898e-01	5.928952e-01
## LRRFIP1P1	101290506	-0.10454594	4.761997e-01	5.928952e-01
## SOWAHCP5	100419815	-0.22101464	4.761782e-01	5.928952e-01
## CLCA1	1179	2.06365559	4.764081e-01	5.930659e-01
## SLC25A36	55186	-0.04591864	4.763991e-01	5.930659e-01
## SRP14P1	390284	0.21486568	4.764100e-01	5.930659e-01
## PRIMA1	145270	-0.11086157	4.764706e-01	5.930866e-01
## LINC01630	100287225	0.42741936	4.764999e-01	5.930866e-01
## ENPP7P4	100421816	0.37682923	4.764834e-01	5.930866e-01
## TH	7054	0.19170417	4.767591e-01	5.933789e-01
## RPL5P23	100270840	0.12505563	4.771160e-01	5.937926e-01
## LINC02410	105369920	-0.16617704	4.771591e-01	5.938159e-01
## MDGA2	161357	0.10932639	4.771848e-01	5.938175e-01
## SMURF2P1	107133516	-0.18700316	4.773591e-01	5.940040e-01
## LINC02181	440390	0.16778653	4.774669e-01	5.940773e-01
## SNX25P1	100419028	0.10971813	4.774531e-01	5.940773e-01
## PPIB	5479	0.04125250	4.775108e-01	5.941015e-01
## TSPAN9	10867	0.02991839	4.776682e-01	5.942488e-01
## NUP188	23511	0.02682293	4.776782e-01	5.942488e-01
## BPTF	2186	0.04083493	4.779526e-01	5.945294e-01
## SLC25A5P3	222005	-0.24501643	4.779404e-01	5.945294e-01
## HEATR6-DT	105371849	0.12268820	4.779934e-01	5.945497e-01
## ITGA1	3672	0.03912539	4.780585e-01	5.945698e-01
## AJM1	389813	-0.06475450	4.780489e-01	5.945698e-01
## WDR55	54853	-0.01770458	4.784438e-01	5.950186e-01
## RPL32P2	654388	-0.18022231	4.785516e-01	5.951222e-01
## RN7SKP292	106479225	0.33463664	4.786905e-01	5.952550e-01
## LINC02642	105376388	0.29736021	4.787074e-01	5.952550e-01
## TTLL10	254173	-0.13631135	4.788283e-01	5.953748e-01

## GLIS3-AS2	107986989	-0.12983046	4.789195e-01	5.954578e-01
## NXNL2	158046	-0.09926665	4.789551e-01	5.954715e-01
## PPP1R15A	23645	0.04556641	4.790577e-01	5.955410e-01
## NHLRC3	387921	-0.03423585	4.790599e-01	5.955410e-01
## PCYT1B	9468	-0.11624064	4.790915e-01	5.955498e-01
## DMTF1	9988	0.06816363	4.791419e-01	5.955820e-01
## B3GNT8	374907	0.06981503	4.799846e-01	5.965974e-01
## SPATA45	149643	0.12352468	4.800079e-01	5.965974e-01
## LINC02551	100507431	0.19279255	4.801295e-01	5.967180e-01
## PMS2P4	5382	-0.04982855	4.801720e-01	5.967403e-01
## SMC3	9126	-0.02285345	4.803879e-01	5.969781e-01
## VTI1B	10490	-0.02469340	4.804861e-01	5.970180e-01
## SPEN-AS1	729614	-0.05240247	4.804938e-01	5.970180e-01
## FRG1GP	101930531	0.08241057	4.804664e-01	5.970180e-01
## RPL21P119	653737	-0.19491962	4.805633e-01	5.970739e-01
## LINC02562	105377283	0.26236268	4.805895e-01	5.970760e-01
## MTCO1P22	107075165	-0.12948471	4.807521e-01	5.972475e-01
## MIR765	768220	-0.26572570	4.808919e-01	5.973906e-01
## ZNF603P	493821	0.23271795	4.809320e-01	5.974099e-01
## FAM219B	57184	0.02359920	4.809918e-01	5.974536e-01
## PRANCR	101928062	0.05367846	4.811859e-01	5.976642e-01
## SETP14	389168	0.07394301	4.813679e-01	5.978596e-01
## SEMA5B	54437	-0.05672733	4.815031e-01	5.979359e-01
## MRPL32	64983	-0.03785191	4.815018e-01	5.979359e-01
## TGFBRAP1	9392	0.01781623	4.814974e-01	5.979359e-01
## IGLV6-57	28778	-0.17784501	4.816655e-01	5.981070e-01
## UCKL1-AS1	100113386	-0.14259357	4.817121e-01	5.981342e-01
## ZNF606-AS1	100128398	-0.05905796	4.817676e-01	5.981726e-01
## SLC39A5	283375	0.09810513	4.818985e-01	5.982952e-01
## ADAM15	8751	0.07019727	4.819156e-01	5.982952e-01
## SLC5A11	115584	0.10922175	4.823813e-01	5.988123e-01
## LRRC26	389816	-0.40817898	4.823750e-01	5.988123e-01
## SPON1-AS1	109729138	0.14688442	4.824184e-01	5.988277e-01
## IPO11	51194	0.02139057	4.828574e-01	5.993419e-01
## PIK3CA	5290	0.02985054	4.829071e-01	5.993730e-01
## FATE1	89885	-0.12253939	4.829969e-01	5.994540e-01
## TM4SF19-AS1	100874214	-0.09060772	4.831514e-01	5.995944e-01
## FOXC2-AS1	103752587	0.24747339	4.831594e-01	5.995944e-01
## MIMT1	100073347	0.21705890	4.832793e-01	5.997126e-01
## TATDN1	83940	-0.03580239	4.833592e-01	5.997810e-01
## LINC02636	102723350	-0.24617926	4.834771e-01	5.998968e-01
## GOLGA1	2800	-0.02155298	4.835934e-01	5.999737e-01
## ZNF33A	7581	0.04297455	4.836133e-01	5.999737e-01
## NSUN5P1	155400	0.09222251	4.836033e-01	5.999737e-01
## OR2T35	403244	0.15798173	4.836740e-01	6.000185e-01
## DAD1	1603	-0.04484920	4.837566e-01	6.000903e-01
## TXNRD1	7296	-0.03347007	4.838250e-01	6.001311e-01
## ZNF865	100507290	-0.06504904	4.838388e-01	6.001311e-01
## BRF1	2972	0.03198491	4.839014e-01	6.001780e-01
## BHMT2	23743	0.06997490	4.840558e-01	6.003389e-01
## KRT40	125115	-0.39661298	4.841877e-01	6.004718e-01
## CCNB3	85417	-0.07459487	4.842471e-01	6.004842e-01
## CTSL3P	392360	-0.13269840	4.842420e-01	6.004842e-01
## ZNF827	152485	0.02963580	4.843603e-01	6.005939e-01

## SMC3P1	550644	0.23263765	4.843861e-01	6.005952e-01
## MIR4720	100616150	0.16429704	4.844174e-01	6.006035e-01
## RN7SL812P	106479518	0.22368660	4.845371e-01	6.007212e-01
## SLC25A3P2	100128618	0.19740199	4.850024e-01	6.012674e-01
## TRIR	79002	-0.04887161	4.851598e-01	6.014319e-01
## PPIG	9360	-0.03294730	4.852532e-01	6.015169e-01
## MKRN3	7681	0.18408420	4.853764e-01	6.016106e-01
## IGHV3-49	28423	-0.23954878	4.853783e-01	6.016106e-01
## CFL1P2	391039	0.29761939	4.854556e-01	6.016758e-01
## LINC01644	101927722	0.25882887	4.854820e-01	6.016778e-01
## PRKD3-DT	101929542	0.22205116	4.855699e-01	6.017561e-01
## HSDL1	83693	0.01949857	4.856515e-01	6.018265e-01
## HGFAC	3083	-0.10150671	4.856998e-01	6.018556e-01
## PSMC1P9	643668	0.21611351	4.857904e-01	6.019372e-01
## SERINC5	256987	0.04036187	4.859238e-01	6.020718e-01
## FAM240C	285095	0.24321340	4.859605e-01	6.020866e-01
## ZBTB11-AS1	100009676	-0.03122677	4.860913e-01	6.022180e-01
## PNPLA4	8228	0.05595357	4.863017e-01	6.024172e-01
## DPCD	25911	0.04018130	4.862846e-01	6.024172e-01
## ZPLD1	131368	-0.13396176	4.863899e-01	6.024957e-01
## UBE3D	90025	0.03139543	4.864789e-01	6.025139e-01
## ADAMTS13	11093	0.06788064	4.864782e-01	6.025139e-01
## TDRD6	221400	-0.10609995	4.864302e-01	6.025139e-01
## RNF121	55298	-0.02304646	4.865353e-01	6.025222e-01
## SLC25A21	89874	-0.04974194	4.865136e-01	6.025222e-01
## AP1G2-AS1	102724814	0.09942941	4.866385e-01	6.026194e-01
## RN7SL388P	106479365	0.35509082	4.867539e-01	6.027315e-01
## KLK13	26085	-0.24425910	4.868487e-01	6.028183e-01
## PIP5K1C	23396	0.04733555	4.869055e-01	6.028578e-01
## PCNX1	22990	0.03489973	4.869532e-01	6.028862e-01
## SORD2P	653381	0.11667789	4.873225e-01	6.032972e-01
## TXNDC11-AS1	127379753	-0.06165466	4.873349e-01	6.032972e-01
## SSBP1	6742	-0.03767594	4.875288e-01	6.035066e-01
## MIR99B	407056	-0.33149041	4.876560e-01	6.036333e-01
## BCYRN1	618	-0.34045555	4.877166e-01	6.036775e-01
## H2BC2P	100288742	0.18486808	4.877881e-01	6.037352e-01
## KPNB1-DT	112268184	-0.06479161	4.880507e-01	6.040296e-01
## RNY1P16	106480312	-0.19873174	4.881609e-01	6.041351e-01
## OMP	4975	-0.14130826	4.882233e-01	6.041816e-01
## SFXN4	119559	-0.04223891	4.883211e-01	6.042514e-01
## LINC02278	105374411	0.23210585	4.883294e-01	6.042514e-01
## ANK2	287	0.07048785	4.884783e-01	6.044049e-01
## SRSF9	8683	0.02778728	4.885130e-01	6.044170e-01
## LINC02818	107985229	0.17396352	4.885804e-01	6.044697e-01
## SELENOK	58515	-0.04645734	4.887270e-01	6.045586e-01
## ABHD2	11057	-0.03914573	4.887067e-01	6.045586e-01
## RAMAC	83640	-0.02616806	4.887031e-01	6.045586e-01
## GTPBP8	29083	0.02439698	4.887630e-01	6.045724e-01
## ZNF669	79862	0.03039693	4.889408e-01	6.047616e-01
## CFAP70	118491	0.07892302	4.889856e-01	6.047861e-01
## POU2AF2	341032	0.19225464	4.891846e-01	6.050015e-01
## SLC47A1	55244	-0.07371494	4.893644e-01	6.051931e-01
## SMIM2	79024	-0.21218805	4.895580e-01	6.054017e-01
## LINC00863	439994	0.05537767	4.897113e-01	6.055605e-01

## POLN	353497	-0.08703651	4.898040e-01	6.056443e-01
## KLC4-AS1	112267958	-0.14215469	4.898558e-01	6.056775e-01
## RAB34	83871	0.04948854	4.899272e-01	6.057041e-01
## MROH7-TTC4	100527960	-0.20425565	4.899066e-01	6.057041e-01
## TBC1D3E	102723859	0.28487525	4.899556e-01	6.057084e-01
## SNORA11	677799	-0.14369601	4.900822e-01	6.058341e-01
## LINC01592	100505718	0.36831840	4.901468e-01	6.058831e-01
## MTX1LP	4581	0.29790067	4.902695e-01	6.060040e-01
## GABRQ	55879	-0.12583211	4.905778e-01	6.063543e-01
## PRICKLE4	29964	0.36469509	4.907264e-01	6.065071e-01
## BDH2P1	389416	0.11310655	4.908296e-01	6.066038e-01
## LACTB	114294	0.02790285	4.909024e-01	6.066320e-01
## GOLGA6L23P	<NA>	0.36716024	4.909020e-01	6.066320e-01
## MIR302CHG	109864269	-0.27613292	4.913676e-01	6.071760e-01
## WHAMMP2	440253	-0.08276582	4.914245e-01	6.072155e-01
## IGHE	3497	0.27574976	4.915296e-01	6.072527e-01
## MED8-AS1	107984947	-0.27355761	4.914911e-01	6.072527e-01
## CALR3	125972	-0.21471473	4.915107e-01	6.072527e-01
## UBE2V1P1	170556	0.24989113	4.915965e-01	6.073045e-01
## RNA5SP268	100873521	0.22448502	4.916527e-01	6.073430e-01
## NPIPA1	9284	0.08096710	4.917248e-01	6.074012e-01
## SPDYE16	102723555	-0.40665686	4.917783e-01	6.074365e-01
## NDUFS5	4725	-0.05219435	4.918185e-01	6.074552e-01
## MKRN7P	7686	0.18886261	4.918857e-01	6.075073e-01
## EEF1DP4	442325	-0.18409760	4.919207e-01	6.075197e-01
## YAE1-DT	105375240	0.18251051	4.920233e-01	6.075888e-01
## DNAH17-AS1	100996295	-0.27648423	4.920266e-01	6.075888e-01
## FGF12-AS3	100873988	0.37401197	4.920577e-01	6.075962e-01
## RN7SL745P	106481858	-0.34886385	4.921252e-01	6.076487e-01
## RPL35AP9	100271311	0.36118075	4.922551e-01	6.077782e-01
## USP34-DT	105377633	-0.04500371	4.924034e-01	6.079304e-01
## MALINC1	100505636	0.03974853	4.924909e-01	6.080076e-01
## RPS2P55	286444	0.18317855	4.925288e-01	6.080235e-01
## HYDIN	54768	-0.05839091	4.925984e-01	6.080786e-01
## CCDC183-AS1	100131193	-0.06106879	4.927072e-01	6.081819e-01
## USP30	84749	-0.02581776	4.929119e-01	6.083884e-01
## ENTPD4	9583	-0.02547861	4.929246e-01	6.083884e-01
## GDNF	2668	-0.09192617	4.931447e-01	6.086292e-01
## IGKV6D-21	28870	0.45534859	4.932890e-01	6.087764e-01
## CACNA1F	778	-0.09351249	4.936430e-01	6.091823e-01
## ZNF514	84874	0.04928664	4.937611e-01	6.092972e-01
## UQCRC2	7385	-0.02900831	4.939399e-01	6.094799e-01
## PTMA	5757	-0.03331713	4.939593e-01	6.094799e-01
## NUMA1	4926	0.02916402	4.940728e-01	6.095889e-01
## SLC25A15P5	100422642	-0.31826724	4.941704e-01	6.096783e-01
## PTPRK-AS1	101928140	0.32526257	4.942998e-01	6.098071e-01
## MIR3667HG	348645	0.07164428	4.944767e-01	6.099943e-01
## ACE2-DT	104798195	-0.16023867	4.945658e-01	6.099957e-01
## SUCLA2-AS1	101929410	-0.15561635	4.945387e-01	6.099957e-01
## MPC1L	347411	-0.28282590	4.945353e-01	6.099957e-01
## MIR4300HG	101928989	0.33239599	4.945782e-01	6.099957e-01
## FNBP4	23360	0.05982059	4.946145e-01	6.100095e-01
## OTX1	5013	-0.24527149	4.948469e-01	6.102652e-01
## FAM90A1	55138	0.06951867	4.950085e-01	6.104025e-01

## LARP4B-DT	101927762	0.22843455	4.949963e-01	6.104025e-01
## ADGRF4	221393	-0.25540229	4.951556e-01	6.105529e-01
## VPS54	51542	0.02470912	4.952455e-01	6.106018e-01
## DNAAF3	352909	-0.07999249	4.952387e-01	6.106018e-01
## RNF169	254225	0.02566437	4.954201e-01	6.107861e-01
## CDK16	5127	-0.02941198	4.955220e-01	6.108560e-01
## ARL5B	221079	-0.03656231	4.955271e-01	6.108560e-01
## CSTPP1	79096	-0.03264371	4.956521e-01	6.109790e-01
## ZNF670-ZNF695	100533111	0.33103068	4.957218e-01	6.110340e-01
## SMIM11	54065	0.30312270	4.958132e-01	6.111157e-01
## STK31	56164	0.12782069	4.960458e-01	6.113713e-01
## RIMBP2	23504	-0.08406512	4.965248e-01	6.119307e-01
## RNA5SP383	100873638	-0.13356317	4.966841e-01	6.120960e-01
## C5orf24	134553	-0.03593394	4.968497e-01	6.122380e-01
## CATIP-AS1	101928513	-0.08396471	4.968397e-01	6.122380e-01
## SLC26A10P	65012	0.18945364	4.968970e-01	6.122652e-01
## ACTBP8	68	-0.25574902	4.969248e-01	6.122684e-01
## NPY	4852	-0.24920983	4.971200e-01	6.124586e-01
## ARHGAP32	9743	-0.03436605	4.971322e-01	6.124586e-01
## ABHD15	116236	0.04259514	4.971548e-01	6.124586e-01
## ZNF880	400713	0.05510937	4.972028e-01	6.124866e-01
## FAM83C-AS1	140846	0.16583157	4.972822e-01	6.125534e-01
## H2BC6	8344	-0.08510863	4.973320e-01	6.125837e-01
## PLOD2	5352	-0.05425978	4.974882e-01	6.127351e-01
## SMG1P1	641298	0.10433459	4.975053e-01	6.127351e-01
## ISCA2P1	100287193	-0.31589194	4.976649e-01	6.128385e-01
## BRINP3-DT	101929120	0.21707196	4.976534e-01	6.128385e-01
## LINC00927	283688	-0.20583364	4.976296e-01	6.128385e-01
## CRTC3-AS1	101926895	-0.09747611	4.977272e-01	6.128842e-01
## RPL36AP33	100191039	0.35451221	4.978892e-01	6.130526e-01
## DLGAP1-AS3	201477	0.20069355	4.979314e-01	6.130735e-01
## ZBTB8OS	339487	-0.03714212	4.980907e-01	6.132075e-01
## NGRN	51335	0.04882428	4.980867e-01	6.132075e-01
## ACOT8	10005	0.04202164	4.981707e-01	6.132749e-01
## FAM85B	105379219	-0.12328662	4.985016e-01	6.136511e-01
## RN7SL81P	106479253	0.14283186	4.991258e-01	6.143884e-01
## EIF2AK1P1	731755	-0.15263590	4.992320e-01	6.144880e-01
## FGF17	8822	-0.12742930	4.992858e-01	6.145231e-01
## LMNTD2-AS1	692247	-0.15905919	4.993713e-01	6.145972e-01
## MAP2K6	5608	-0.04437062	4.994066e-01	6.146096e-01
## BLTP3A	54887	0.03094362	4.994843e-01	6.146740e-01
## BCRP2	400892	-0.25395256	4.996119e-01	6.147688e-01
## LINC01359	101927084	-0.10495193	4.996026e-01	6.147688e-01
## INSRR	3645	-0.08833131	4.996417e-01	6.147744e-01
## DYNLT2	6991	-0.06443201	4.996835e-01	6.147946e-01
## IL13RA2	3598	-0.10157730	4.997337e-01	6.148253e-01
## VCPKMT	79609	0.04415245	4.997779e-01	6.148485e-01
## LINC01603	100505739	0.23987165	4.998455e-01	6.149006e-01
## FAM3D	131177	-0.15033567	5.000732e-01	6.151495e-01
## GNG5B	347687	-0.19728754	5.001110e-01	6.151649e-01
## ZNF429	353088	0.03940670	5.005783e-01	6.157086e-01
## ACE	1636	-0.08692647	5.007219e-01	6.158540e-01
## MAD2L1P1	326596	0.36005217	5.007992e-01	6.159178e-01
## ZFAT	57623	-0.05517543	5.009158e-01	6.160014e-01

## RAD21-AS1	644660	0.09746670	5.009178e-01	6.160014e-01
## MIR3939	100500857	0.19478402	5.009826e-01	6.160499e-01
## CTXN2-AS1	105370807	0.39802612	5.010500e-01	6.161017e-01
## RPS15AP24	648729	0.17039128	5.013517e-01	6.164415e-01
## VVN	254778	0.14516439	5.014686e-01	6.165539e-01
## NPEPL1	79716	-0.05466724	5.019663e-01	6.171346e-01
## UCHL1-DT	101410542	-0.25172106	5.020116e-01	6.171592e-01
## ZBTB45	84878	-0.05783750	5.021098e-01	6.172430e-01
## TUBA4A	7277	0.04933550	5.022065e-01	6.172430e-01
## PMS2P7	100101440	-0.09887687	5.021807e-01	6.172430e-01
## SNAP23P1	101290500	-0.29461106	5.021709e-01	6.172430e-01
## HOTAIRM1	100506311	0.08184800	5.022069e-01	6.172430e-01
## BNIP1	662	-0.03470360	5.023095e-01	6.173379e-01
## IL5	3567	-0.28564814	5.023757e-01	6.173569e-01
## TIGD1	200765	-0.04223318	5.023724e-01	6.173569e-01
## HINT1	3094	0.05109249	5.025669e-01	6.175606e-01
## MTND1P15	100288998	-0.12162656	5.026160e-01	6.175897e-01
## SI	6476	1.94250041	5.027034e-01	6.176308e-01
## SMYD3-IT1	106478975	0.39179411	5.027257e-01	6.176308e-01
## RNF216-IT1	100874342	0.41983206	5.026839e-01	6.176308e-01
## CYP2C19	1557	0.23307635	5.027517e-01	6.176315e-01
## LINC02849	105375622	-0.25599908	5.027885e-01	6.176455e-01
## CHKB-DT	100144603	0.06332817	5.028588e-01	6.177006e-01
## NTAN1P2	100420307	0.09936876	5.029387e-01	6.177675e-01
## ST6GALNAC4	27090	0.06575082	5.029954e-01	6.178059e-01
## SPTBN4	57731	0.05158588	5.031903e-01	6.179829e-01
## MBTPS1-DT	119863866	0.09572570	5.031883e-01	6.179829e-01
## UTP20	27340	0.03370192	5.033797e-01	6.180887e-01
## TRMT13	54482	-0.04766229	5.033474e-01	6.180887e-01
## EXOC6	54536	-0.02859752	5.033790e-01	6.180887e-01
## SLC27A2	11001	-0.08343476	5.033979e-01	6.180887e-01
## DM1-AS	109729182	0.06605916	5.034037e-01	6.180887e-01
## C2orf81	388963	0.04620998	5.036514e-01	6.183617e-01
## ZKSCAN2-DT	112577464	0.08523353	5.037498e-01	6.184512e-01
## FHL1P1	100128164	0.20461171	5.037792e-01	6.184561e-01
## HNRNPA1P15	100421353	0.19939194	5.039103e-01	6.185858e-01
## NT5C3A	51251	0.02919659	5.039700e-01	6.186279e-01
## OPN1SW	611	0.54846064	5.040197e-01	6.186576e-01
## HSPA5-DT	107987127	-0.29319706	5.040487e-01	6.186619e-01
## FECH	2235	-0.04749972	5.044031e-01	6.190344e-01
## XPNPEP3	63929	0.03280580	5.043943e-01	6.190344e-01
## LINC02508	105377610	0.32574823	5.044731e-01	6.190890e-01
## LINC02035	100129550	0.03563199	5.048760e-01	6.195522e-01
## TXNL1	9352	-0.02055116	5.049693e-01	6.196041e-01
## MPED1	758	0.38699179	5.049476e-01	6.196041e-01
## PDZPH1P	105379197	-0.33623541	5.050461e-01	6.196670e-01
## CEP120	153241	-0.03153526	5.053911e-01	6.200590e-01
## RNA5SP352	100873612	0.22793176	5.055527e-01	6.202260e-01
## MIR6819	102465491	0.29805442	5.059194e-01	6.206445e-01
## C9orf43	257169	-0.06001234	5.061379e-01	6.208812e-01
## EPHA6	285220	0.10843721	5.061989e-01	6.209247e-01
## IGKV2D-40	28878	-0.32293748	5.062994e-01	6.210167e-01
## FKBP8	23770	0.04857991	5.063271e-01	6.210192e-01
## ATP6V0E1P2	100874503	0.43317658	5.068431e-01	6.216208e-01

## CHD8	57680	-0.02521934	5.070075e-01	6.217910e-01
## PRIM2BP	100996481	0.25133230	5.070969e-01	6.218693e-01
## FAM168A	23201	-0.02358363	5.071628e-01	6.218873e-01
## MIR6081	102466518	0.44639472	5.071446e-01	6.218873e-01
## PPP4R1-AS1	101927323	0.13793064	5.072880e-01	6.220095e-01
## FAM133DP	728066	0.22216857	5.073741e-01	6.220522e-01
## HNRNPKP4	644063	0.06349419	5.073551e-01	6.220522e-01
## NDUFS8	4728	-0.06063487	5.075017e-01	6.221773e-01
## KRT18P15	729211	0.16589365	5.075510e-01	6.222063e-01
## PUM2	23369	0.02466078	5.076672e-01	6.222653e-01
## TMEM217	221468	-0.06161119	5.076608e-01	6.222653e-01
## PDC-AS1	102724919	0.08762906	5.077015e-01	6.222653e-01
## LINC02332	105370400	-0.11247374	5.076907e-01	6.222653e-01
## LRP6	4040	-0.04210194	5.077967e-01	6.223285e-01
## RN7SL521P	106479413	-0.15916292	5.078042e-01	6.223285e-01
## FBXO17	115290	-0.03454830	5.078525e-01	6.223562e-01
## APOA4	337	1.23536508	5.080660e-01	6.225649e-01
## NCCRP1	342897	-0.10153032	5.080741e-01	6.225649e-01
## TPT1P6	643870	0.15316476	5.082678e-01	6.227710e-01
## PLAAT5	117245	0.09798006	5.084556e-01	6.229696e-01
## FAM9B	171483	-0.32865440	5.085779e-01	6.230881e-01
## SLC30A9	10463	-0.03383704	5.090251e-01	6.235999e-01
## LIVAR	102724895	0.25263249	5.090470e-01	6.235999e-01
## SLC35E2B	728661	0.04191306	5.093075e-01	6.238876e-01
## IGHV4-4	28401	0.23358814	5.094076e-01	6.239787e-01
## PI4K2B	55300	-0.03075072	5.096844e-01	6.242307e-01
## SSR4	6748	0.05362332	5.096903e-01	6.242307e-01
## KRT18P52	100418769	0.40591062	5.096695e-01	6.242307e-01
## SLC34A1	6569	-0.11636762	5.098277e-01	6.243674e-01
## SPMIP1	100130705	0.04873423	5.098760e-01	6.243951e-01
## MAP3K1	4214	0.04957937	5.102396e-01	6.247710e-01
## PIAS3	10401	0.03389045	5.102902e-01	6.247710e-01
## SPATA31C2	645961	-0.20748017	5.102720e-01	6.247710e-01
## GET4	51608	0.08272958	5.102521e-01	6.247710e-01
## PCNX4-DT	105370524	-0.13862249	5.103222e-01	6.247710e-01
## LINC02204	101929151	-0.13683390	5.103372e-01	6.247710e-01
## PPIAP22	653214	-0.05724073	5.104293e-01	6.248522e-01
## CTCF	10664	-0.01540466	5.104727e-01	6.248739e-01
## ALOX15B	247	0.16614263	5.108934e-01	6.253574e-01
## SART3	9733	-0.01264852	5.110496e-01	6.255171e-01
## DYNC1I2	1781	-0.01699949	5.111555e-01	6.256152e-01
## NUPR2P1	129810496	-0.05949846	5.115158e-01	6.260246e-01
## ATP5MC1P5	390424	-0.20404508	5.115455e-01	6.260295e-01
## PCDHA13	56136	-0.08927899	5.116335e-01	6.261057e-01
## FLVCR1	28982	0.03488709	5.118255e-01	6.263090e-01
## MAPT-IT1	100130148	-0.16981906	5.119036e-01	6.263730e-01
## KCTD16	57528	-0.11133583	5.119363e-01	6.263816e-01
## AHCY	191	0.05761199	5.119863e-01	6.263930e-01
## ORC2	4999	0.02761799	5.120230e-01	6.263930e-01
## TSPAN7	7102	0.04022828	5.120181e-01	6.263930e-01
## SLC7A5P1	81893	0.28169556	5.121304e-01	6.264928e-01
## BBS2	583	-0.02427431	5.122479e-01	6.265736e-01
## RNU6ATAC14P	106481163	0.37611429	5.122445e-01	6.265736e-01
## PA2G4P1	389884	0.25441169	5.123582e-01	6.266769e-01

## PPP1R1C	151242	0.07819933	5.124016e-01	6.266984e-01
## SORBS3	10174	-0.04919563	5.125597e-01	6.268603e-01
## LAPTM4A-DT	105373463	0.16967333	5.132235e-01	6.276405e-01
## PSMC5	5705	-0.03027621	5.132765e-01	6.276738e-01
## CCAR1	55749	-0.03024516	5.133227e-01	6.276986e-01
## C1orf159	54991	-0.05291727	5.135055e-01	6.278906e-01
## SDHDP6	29768	0.15046760	5.138077e-01	6.282284e-01
## SUSD1	64420	-0.03481965	5.138606e-01	6.282615e-01
## CTAGE11P	647288	-0.12895514	5.140534e-01	6.284656e-01
## CFAP68	64776	0.05200827	5.141236e-01	6.285198e-01
## LINC00173	100287569	-0.09683725	5.142071e-01	6.285903e-01
## LNCPTCTS	132322117	-0.21087801	5.144590e-01	6.288666e-01
## ROPN1L	83853	0.08295957	5.146522e-01	6.290578e-01
## SLC6A18	348932	0.14274502	5.146672e-01	6.290578e-01
## TRIP12	9320	0.02199866	5.147431e-01	6.291189e-01
## VPS18	57617	-0.03281333	5.148296e-01	6.291238e-01
## PTRH1	138428	-0.05867136	5.148538e-01	6.291238e-01
## TMEM229A	730130	0.22053564	5.148765e-01	6.291238e-01
## ADGRl1-AS1	100507373	0.03714370	5.148701e-01	6.291238e-01
## MIR6793	102466737	0.23114131	5.148723e-01	6.291238e-01
## C3orf22	152065	-0.34434945	5.150231e-01	6.292467e-01
## RAB33B-AS1	107984036	-0.04625816	5.150289e-01	6.292467e-01
## GTF2H4	2968	-0.15039417	5.151171e-01	6.293229e-01
## LCA5L	150082	0.04684839	5.152256e-01	6.293921e-01
## CTNS-AS1	105371492	-0.12835018	5.152088e-01	6.293921e-01
## EEF1AKMT4	110599564	0.05425399	5.153168e-01	6.294719e-01
## TAFAZZIN	6901	-0.04049132	5.156762e-01	6.298599e-01
## CYP51A1P3	100422264	-0.27196008	5.156863e-01	6.298599e-01
## ONECUT2	9480	-0.10410434	5.157779e-01	6.299402e-01
## TPST1	8460	-0.03607726	5.158082e-01	6.299455e-01
## HNRNPA3P12	100421395	-0.16793305	5.161249e-01	6.303005e-01
## ZNF195	7748	0.03714523	5.164613e-01	6.306163e-01
## ZNF142	7701	0.02614232	5.164105e-01	6.306163e-01
## ABCA9-AS1	104355297	0.30705144	5.164525e-01	6.306163e-01
## LINC02233	109729132	0.44333659	5.165611e-01	6.307065e-01
## DRAM1	55332	0.03269331	5.167215e-01	6.308707e-01
## SHISA5	51246	0.04282752	5.167915e-01	6.309244e-01
## SLC38A7	55238	0.02410601	5.168802e-01	6.309692e-01
## RGL1	23179	0.04135027	5.168701e-01	6.309692e-01
## PSMD11	5717	0.02027805	5.169246e-01	6.309918e-01
## KDM3AP1	100420666	0.45404157	5.169681e-01	6.310132e-01
## NFE2L1	4779	-0.03118602	5.171188e-01	6.311654e-01
## CARF	79800	0.05053484	5.172862e-01	6.313063e-01
## ENSAP2	319114	-0.14268653	5.172853e-01	6.313063e-01
## ADPGK	83440	0.01791279	5.173950e-01	6.314074e-01
## SPATA2	9825	-0.02144166	5.175958e-01	6.315794e-01
## ZCCHC4	29063	0.01908603	5.175653e-01	6.315794e-01
## ANKRD20A11P	391267	0.16742411	5.176139e-01	6.315794e-01
## OR7E108P	81363	-0.26399327	5.177044e-01	6.316581e-01
## FMNL1-AS1	107985040	-0.12566772	5.177308e-01	6.316587e-01
## TUBGCP2	10844	-0.02704201	5.178018e-01	6.317135e-01
## KLF3-AS1	79667	0.07871643	5.178479e-01	6.317381e-01
## FAM114A2	10827	-0.01835025	5.182039e-01	6.320957e-01
## FAT1	2195	-0.04129470	5.182644e-01	6.320957e-01

## LHX2	9355	0.26108277	5.182550e-01	6.320957e-01
## LINC02935	107984158	-0.19921978	5.182627e-01	6.320957e-01
## GSTCD-AS1	101929529	-0.23595795	5.182711e-01	6.320957e-01
## GP9	2815	0.24411182	5.183407e-01	6.321488e-01
## WHRN	25861	-0.03854329	5.185183e-01	6.323020e-01
## MPV17	4358	0.03014651	5.185040e-01	6.323020e-01
## FOXRED1	55572	-0.02896616	5.186124e-01	6.323849e-01
## SEPTIN7P6	100418720	0.28137021	5.189171e-01	6.327248e-01
## SREK1IP1	285672	-0.02647821	5.189535e-01	6.327374e-01
## CLBA1	122616	-0.03224120	5.191525e-01	6.329214e-01
## OCSTAMP	128506	-0.14428529	5.191565e-01	6.329214e-01
## TATDN1P1	728737	-0.16900382	5.192043e-01	6.329480e-01
## CLK2P1	1197	0.24243616	5.192533e-01	6.329759e-01
## SFR1	119392	-0.03293684	5.193254e-01	6.330321e-01
## TREML4	285852	0.47219928	5.193661e-01	6.330499e-01
## PMS2P1	5379	0.03355997	5.194609e-01	6.330702e-01
## NAP1L6P	645996	-0.07780459	5.194433e-01	6.330702e-01
## EPHA5-AS1	100144602	-0.34324718	5.194112e-01	6.330702e-01
## PQBP1	10084	0.03031080	5.194915e-01	6.330757e-01
## NEUROD1	4760	-0.32289761	5.198037e-01	6.334245e-01
## COQ6	51004	0.03007167	5.198609e-01	6.334623e-01
## GPC1	2817	0.08038821	5.200236e-01	6.336288e-01
## GBP3	2635	0.08097393	5.200797e-01	6.336654e-01
## WDR43	23160	0.01977308	5.201958e-01	6.337751e-01
## CHN2-AS1	102724484	0.34112939	5.202542e-01	6.338145e-01
## PHRF1	57661	-0.03294340	5.203884e-01	6.339462e-01
## UPB1	51733	-0.09607989	5.204233e-01	6.339569e-01
## BRWD1	54014	0.03908955	5.204586e-01	6.339682e-01
## LINC01488	101928292	0.35416630	5.205856e-01	6.340911e-01
## MALSU1	115416	0.03931619	5.207580e-01	6.341762e-01
## ZNF540	163255	0.04832331	5.207044e-01	6.341762e-01
## LINC02050	105377175	-0.35346225	5.207164e-01	6.341762e-01
## CNPY2	10330	0.05263090	5.207599e-01	6.341762e-01
## FARP1-AS1	100874080	-0.17245642	5.207879e-01	6.341786e-01
## MRPL54	116541	0.04699171	5.208582e-01	6.342323e-01
## NFXL1	152518	0.02933669	5.210049e-01	6.343557e-01
## FAM47E	100129583	-0.05793640	5.210117e-01	6.343557e-01
## SMIM26	388789	0.04790321	5.211307e-01	6.344688e-01
## FXYD3	5349	0.22978738	5.211659e-01	6.344799e-01
## TFEB	7942	-0.03444430	5.212865e-01	6.345949e-01
## PCDHGA9	56107	0.06264320	5.213352e-01	6.346224e-01
## SRRM2-AS1	100128788	0.05011813	5.215992e-01	6.349120e-01
## ZDHHC12-DT	100506100	-0.06089279	5.217349e-01	6.350453e-01
## GGACT	87769	-0.11408520	5.219312e-01	6.352524e-01
## SCARNA22	677770	-0.42099731	5.219978e-01	6.353017e-01
## DDIT4	54541	0.05249952	5.220277e-01	6.353062e-01
## TBC1D5	9779	0.02247519	5.220605e-01	6.353143e-01
## SEC61B	10952	0.04122907	5.221175e-01	6.353348e-01
## ACYP1	97	-0.04695885	5.221297e-01	6.353348e-01
## TMEM44-AS1	100507297	0.05007086	5.221557e-01	6.353348e-01
## RNF103-CHMP3	100526767	-0.26714938	5.223481e-01	6.355370e-01
## RNU6-48P	100887744	0.37553921	5.223792e-01	6.355431e-01
## SLC25A52	147407	-0.22900845	5.224210e-01	6.355620e-01
## UBN2	254048	0.04895106	5.224753e-01	6.355963e-01

## IGLV1-36	28826	0.36565550	5.226500e-01	6.357770e-01
## CHKB	1120	0.13671814	5.227826e-01	6.358110e-01
## LENG8	114823	0.07535339	5.227622e-01	6.358110e-01
## ZNF781	163115	-0.05765988	5.227303e-01	6.358110e-01
## TTLL10-AS1	100506376	0.28455322	5.227507e-01	6.358110e-01
## KRT8P45	149501	-0.18268830	5.228705e-01	6.358861e-01
## SZT2	23334	-0.03155149	5.230370e-01	6.360567e-01
## PFDN1P1	127379723	0.26792947	5.231417e-01	6.361204e-01
## PRSS46P	100287362	-0.16182052	5.231362e-01	6.361204e-01
## NPHP3-ACAD11	100532724	-0.37364477	5.231983e-01	6.361573e-01
## C19orf81	342918	-0.15357631	5.236154e-01	6.366327e-01
## MLEC	9761	0.03270107	5.240869e-01	6.371740e-01
## TAFA2	338811	0.04570007	5.242722e-01	6.373675e-01
## RNU6-118P	106479618	0.17390232	5.243191e-01	6.373926e-01
## NUS1P1	729148	-0.10357577	5.244461e-01	6.375151e-01
## PABPC4-AS1	101929516	0.32717246	5.244840e-01	6.375293e-01
## ZMYM1	79830	-0.03975859	5.245246e-01	6.375468e-01
## STAG3L2	442582	-0.05454476	5.246349e-01	6.376489e-01
## RN7SL473P	106479396	0.29898493	5.247119e-01	6.377106e-01
## ELF1	1997	-0.02617977	5.248383e-01	6.378307e-01
## MIR5192	100847087	-0.33481612	5.248895e-01	6.378307e-01
## STAG3L5P-PVRIG2P-PILRB	101752399	0.15921257	5.248810e-01	6.378307e-01
## HELZ-AS1	101928021	-0.10952230	5.250488e-01	6.379924e-01
		col.label		
## THBS4		upregulated		
## KLHL41		upregulated		
## CA3		upregulated		
## COL11A1		upregulated		
## TNNC2		upregulated		
## ACTN2		upregulated		
## TTN		upregulated		
## ATP2A1		upregulated		
## TXLNB		upregulated		
## STAC3		upregulated		
## COL3A1		upregulated		
## MYL11		upregulated		
## COL1A1		upregulated		
## TCAP		upregulated		
## CTHRC1		upregulated		
## MYH7		upregulated		
## TNNT3		upregulated		
## CASQ1		upregulated		
## TRDN		upregulated		
## NEB		upregulated		
## MYOT		upregulated		
## SFRP2		upregulated		
## TNNI2		upregulated		
## MB		upregulated		
## CAVIN4		upregulated		
## ASPN		upregulated		
## ANKRD1		upregulated		
## PYGM		upregulated		
## SFRP4		upregulated		
## ADAM12		upregulated		

## CHIT1	upregulated
## LMOD3	upregulated
## CILP2	upregulated
## SYNPO2L	upregulated
## CILP	upregulated
## CTSK	upregulated
## COL1A2	upregulated
## FNDC1	upregulated
## MYOZ1	upregulated
## NRAP	upregulated
## PRG4	upregulated
## COMP	upregulated
## FAP	upregulated
## ENO3	upregulated
## COL5A2	upregulated
## CCL18	upregulated
## PRRX1	upregulated
## SIX1	upregulated
## PDGFRL	upregulated
## CKM	upregulated
## FABP4	upregulated
## LSP1	upregulated
## IGFN1	upregulated
## KLHL31	upregulated
## RAB7B	upregulated
## LRRC15	upregulated
## CCDC80	upregulated
## GALNT5	upregulated
## CCN5	upregulated
## CACNA1S	upregulated
## XIRP1	upregulated
## COL5A1	upregulated
## PDLIM3	upregulated
## COL6A3	upregulated
## LDB3	upregulated
## MYO18B	upregulated
## CRABP2	upregulated
## ELN	upregulated
## SLN	upregulated
## MYPN	upregulated
## APOBEC2	upregulated
## GXYLT2	upregulated
## XIRP2	upregulated
## SMPX	upregulated
## MEOX2	upregulated
## MYBPC1	upregulated
## MMP9	upregulated
## HHATL	upregulated
## MYOZ2	upregulated
## EEF1A2	upregulated
## MYOG	upregulated
## KCNQ5	upregulated
## SRPK3	upregulated
## ANK1	upregulated

```

## STYXL2 upregulated
## IL2RB upregulated
## DPT upregulated
## CD52 upregulated
## CHRNA1 upregulated
## TRIM72 upregulated
## AMPD1 upregulated
## UNC45B upregulated
## MYOZ3 upregulated
## FHL1 upregulated
## P4HA3 upregulated
## ACTC1 upregulated
## TNNC1 upregulated
## HJV upregulated
## MFAP5 upregulated
## MYLK2 upregulated
## CACNB1 upregulated
## TNFRSF9 upregulated
## MSS51 upregulated
## CALB2 upregulated
## LMOD2 upregulated
## SMYD1 upregulated
## CXCL9 upregulated
## MEOX1 upregulated
## PHKG1 upregulated
## DHRS9 upregulated
## ACTA1 upregulated
## HBA2 upregulated
## ZNF469 upregulated
## DUSP13B upregulated
## ADAMTS12 upregulated
## GBP5 upregulated
## EBF3 upregulated
## FBN1 upregulated
## TNNT1 upregulated
## TNFAIP6 upregulated
## HS3ST2 upregulated
## PLA2G7 upregulated
## CHRND upregulated
## XG upregulated
## OGN upregulated
## HBB upregulated
## IGDCC4 upregulated
## IL17D upregulated
## C10orf71 upregulated
## TNNT1 upregulated
## SYNC upregulated
## PI16 upregulated
## MYBPH upregulated
## ATP1B4 upregulated
## LRRC39 upregulated
## FSD2 upregulated
## GONLY upregulated
## PODN upregulated

```

## PLIN1	upregulated
## FBXO40	upregulated
## BMAL1	downregulated
## COL8A2	upregulated
## CIDEc	upregulated
## ADAMDEC1	upregulated
## VASH2	upregulated
## OLFML2B	upregulated
## NKG7	upregulated
## LEP	upregulated
## FAM78A	upregulated
## COX6A2	upregulated
## ADAMTS2	upregulated
## CSRP3	upregulated
## PPP1R27	upregulated
## MYF6	upregulated
## TRDC	upregulated
## MYH2	upregulated
## ACTN3	upregulated
## TBX15	upregulated
## MYOM1	upregulated
## TBX21	upregulated
## SERPINA1	downregulated
## MYH3	upregulated
## ADCY7	upregulated
## SGCG	upregulated
## FLNC	upregulated
## RAPSN	upregulated
## MUC6	downregulated
## MYBPC2	upregulated
## JSRP1	upregulated
## OSR1	upregulated
## TRARG1	upregulated
## IGF1	upregulated
## KLHL40	upregulated
## CACNG1	upregulated
## CEMIP	upregulated
## POPDC3	upregulated
## PITX1	upregulated
## CCL5	upregulated
## MYL2	upregulated
## CORO6	upregulated
## PRF1	upregulated
## MLIP	upregulated
## LUM	upregulated
## CD247	upregulated
## MYL1	upregulated
## MYL4	upregulated
## RBM24	upregulated
## FITM1	upregulated
## TRIM54	upregulated
## HSPB3	upregulated
## LRRN1	upregulated
## SCUBE2	upregulated

```

## DES upregulated
## ADD2 upregulated
## HPR downregulated
## CXCL11 upregulated
## ADIPOQ upregulated
## ANGPTL2 upregulated
## VGLL2 upregulated
## ITGBL1 upregulated
## TESPA1 upregulated
## CHGB downregulated
## ADAMTS14 upregulated
## CD6 upregulated
## TWIST1 upregulated
## MEST upregulated
## CIART upregulated
## FGFR2 downregulated
## CD36 upregulated
## ZFHX4 upregulated
## TRBC1 upregulated
## IL16 upregulated
## ASB5 upregulated
## BMPER upregulated
## MIR133A1HG upregulated
## CIMIP2B upregulated
## ITGAX upregulated
## CFD upregulated
## MYH6 upregulated
## LAMA4 upregulated
## LOXL2 upregulated
## CD2 upregulated
## HMCN1 upregulated
## EBF2 upregulated
## MFAP2 upregulated
## TBC1D10C upregulated
## GPX2 downregulated
## DCLK1 upregulated
## LINC01133 upregulated
## TRAC upregulated
## CARNS1 upregulated
## TRBC2 upregulated
## LRRN3 upregulated
## YIPF7 upregulated
## MAOA downregulated
## PPP1R3A upregulated
## TSHZ2 upregulated
## SCG2 upregulated
## THBS2 upregulated
## RYR1 upregulated
## SSC5D upregulated
## DCN upregulated
## SHOX2 upregulated
## SCARA5 upregulated
## KERA upregulated
## SGCD upregulated

```

```

## PIEZO2 upregulated
## BHLHE41 upregulated
## NR4A1 downregulated
## PCP4 downregulated
## KCNA7 upregulated
## SLA2 upregulated
## CD3G upregulated
## CACNG6 upregulated
## CXCR2P1 upregulated
## MYH1 upregulated
## PYHIN1 upregulated
## FBP2 upregulated
## ADCYAP1R1 upregulated
## LBP downregulated
## RASGRF1 downregulated
## PRKAG3 upregulated
## C1QTNF6 upregulated
## PLA2G2D upregulated
## HBA1 upregulated
## CCDC141 upregulated
## CAV3 upregulated
## LINC00861 upregulated
## UPK3B upregulated
## TIFAB upregulated
## GLIPR2 upregulated
## LINC02541 upregulated
## PRRT4 upregulated
## ADPRHL1 upregulated
## CD70 upregulated
## BTN3A1 small FC
## CPB1 upregulated
## TIGIT upregulated
## LRRN4CL upregulated
## SMOC2 upregulated
## CST7 upregulated
## SLAMF7 upregulated
## SYP downregulated
## CTSW upregulated
## CHRNG upregulated
## MIR1-1HG upregulated
## NCF1C upregulated
## HMCN2 upregulated
## SLC37A2 upregulated
## RPL3L upregulated
## VIT upregulated
## FGG downregulated
## LILRB5 upregulated
## CD3D upregulated
## RBFOX1 upregulated
## SPARC upregulated
## IL33 upregulated
## LRRC20 upregulated
## SIRPG upregulated
## WNT10B upregulated

```

## SERPINF1	upregulated
## SPN	upregulated
## PODNL1	upregulated
## CXCL10	upregulated
## CD28	upregulated
## COL10A1	upregulated
## CDH15	upregulated
## ZAP70	upregulated
## CDON	upregulated
## MMP16	upregulated
## FLRT2	upregulated
## CHAD	upregulated
## COL12A1	upregulated
## CADM3	upregulated
## WNT9A	upregulated
## CD96	upregulated
## ACAP1	upregulated
## VCAN	upregulated
## GZMA	upregulated
## CD3E	upregulated
## LILRB4	upregulated
## PRR33	upregulated
## HAPLN3	upregulated
## LOX	upregulated
## MPEG1	upregulated
## DMRT3	upregulated
## IDO1	upregulated
## CXCR3	upregulated
## ABRA	upregulated
## SLC05A1	upregulated
## FBLN2	upregulated
## NFIL3	small FC
## JPH1	upregulated
## CACNA1G	upregulated
## SMTNL1	upregulated
## KLRD1	upregulated
## ART3	upregulated
## NR1D2	small FC
## MMP2	upregulated
## MEGF10	upregulated
## FAM107A	small FC
## CD84	upregulated
## LRRC17	upregulated
## GPR174	upregulated
## CSRNPI	small FC
## FGA	downregulated
## SLC28A3	upregulated
## CD5	upregulated
## EPYC	upregulated
## P2RX7	upregulated
## CD48	upregulated
## SCNN1A	downregulated
## GADD45A	downregulated
## BIN2	upregulated

## AGBL1	upregulated
## ALOX15	upregulated
## ARHGAP30	upregulated
## DHRS7C	upregulated
## TCF7	upregulated
## RUNX3	upregulated
## CMYA5	upregulated
## GOLGA7B	upregulated
## TMEM119	upregulated
## GGTA1	upregulated
## MYOC	upregulated
## MYOD1	upregulated
## ARHGAP20	upregulated
## IL10RA	upregulated
## STRIT1	upregulated
## CTSS	upregulated
## ATP1A1	downregulated
## MAP1LC3C	upregulated
## CD8A	upregulated
## PARP15	upregulated
## COL6A2	upregulated
## RXRG	upregulated
## GZMH	upregulated
## PLA2G2A	upregulated
## GAS7	upregulated
## CD300LB	upregulated
## NCF2	upregulated
## EN1	upregulated
## SSPN	upregulated
## IGSF6	upregulated
## COL5A3	upregulated
## AHCYL1	small FC
## IKZF1	upregulated
## SP140	upregulated
## IDH3A	small FC
## AHNAK2	upregulated
## ABCB5	upregulated
## CD8B	upregulated
## PTPRC	upregulated
## PELATON	upregulated
## TPM2	upregulated
## MATK	upregulated
## TEF	small FC
## FSTL1	upregulated
## FOLR2	upregulated
## CYTH4	upregulated
## AGAP2	upregulated
## ITGAL	upregulated
## DOCK2	upregulated
## ANXA1	upregulated
## DCSTAMP	upregulated
## CCR7	upregulated
## RAC2	upregulated
## MAFA	upregulated

## CPXM1	upregulated
## NCF1	upregulated
## MYREM	upregulated
## SLAMF6	upregulated
## PLA2G5	upregulated
## EDA2R	upregulated
## MCUB	upregulated
## SELPLG	upregulated
## SLC8A3	upregulated
## MRAP	upregulated
## RETREG1	downregulated
## CAVIN2	small FC
## CRTAM	upregulated
## CYRIA	upregulated
## PRICKLE1	upregulated
## C16orf54	upregulated
## DPYSL3	upregulated
## PTPN22	upregulated
## IKZF3	upregulated
## SYNPO2	upregulated
## CDH11	upregulated
## ICOS	upregulated
## CASQ2	upregulated
## NFAM1	upregulated
## GADD45B	downregulated
## FGF16	upregulated
## ALDH1L2	upregulated
## FNDC5	upregulated
## SCRG1	upregulated
## SIGLEC1	upregulated
## RUBCNL	upregulated
## UCP3	upregulated
## SCN4A	upregulated
## DBP	upregulated
## ADCY2	upregulated
## LTBP2	upregulated
## ZNF831	upregulated
## OLFML1	upregulated
## MDFI	upregulated
## EMILIN2	upregulated
## E2F8	upregulated
## DKK2	upregulated
## TAGAP	upregulated
## COL16A1	upregulated
## RUNX1	upregulated
## UBASH3A	upregulated
## KCNA1	upregulated
## DUSP1	downregulated
## BCL2A1	upregulated
## SNX20	upregulated
## FPR3	upregulated
## RTN2	upregulated
## LINC01405	upregulated
## GPX8	upregulated

## TMEM273	upregulated
## PLEK	upregulated
## APOLD1	downregulated
## PLAC8	upregulated
## ARHGEF6	small FC
## GLT8D2	upregulated
## RASSF2	upregulated
## CMTM3	upregulated
## LY9	upregulated
## ASB11	upregulated
## CAMK1D	upregulated
## DNASE2B	upregulated
## CDKN2A	upregulated
## APCS	downregulated
## SH2D1A	upregulated
## TP63	upregulated
## ISLR	upregulated
## MIAT	upregulated
## SIT1	upregulated
## DOK2	upregulated
## RCSD1	upregulated
## GSC	upregulated
## CRACR2A	upregulated
## DUSP10	upregulated
## DPEP2	upregulated
## FOS	downregulated
## TNMD	upregulated
## NINJ2	upregulated
## PRND	upregulated
## MEDAG	upregulated
## CIDEA	upregulated
## CKB	downregulated
## NMRK2	upregulated
## FGF18	upregulated
## LINC01969	upregulated
## C9	downregulated
## SPAG4	downregulated
## SLC6A12	downregulated
## MYB	upregulated
## SH3RF2	upregulated
## ANOS1	upregulated
## COL14A1	upregulated
## COL6A6	upregulated
## BNC1	upregulated
## AQP3	downregulated
## TNFSF8	upregulated
## SGCA	upregulated
## GPR18	upregulated
## FAM180B	upregulated
## CARD11	upregulated
## BEND6	upregulated
## MIR193BHG	upregulated
## SELL	upregulated
## BTLA	upregulated

## SRPX	upregulated
## PCOLCE	upregulated
## LINC00996	upregulated
## APOC1	upregulated
## CCL24	upregulated
## MARCO	upregulated
## FN1	upregulated
## CD44	upregulated
## ZCCHC12	upregulated
## GZMK	upregulated
## NAV3	upregulated
## DCX	upregulated
## MIR142HG	upregulated
## MFSD2A	downregulated
## CD37	upregulated
## LINC02587	upregulated
## LVRN	upregulated
## ST3GAL3-AS1	upregulated
## IL1RL1	downregulated
## C11orf21	upregulated
## HAND2-AS1	upregulated
## P3H2	small FC
## RNASE4	downregulated
## NCF1B	upregulated
## MMP11	upregulated
## NREP	upregulated
## ANTXR1	upregulated
## ACHE	upregulated
## FGFBP2	upregulated
## PER3	upregulated
## SIX2	upregulated
## ITGAD	upregulated
## PLIN4	upregulated
## RAB42	upregulated
## PPDPFL	upregulated
## PIM3	small FC
## ITK	upregulated
## LFNG	upregulated
## NCKAP1L	upregulated
## SLC45A4	small FC
## PYCR1	upregulated
## MAP4K1	upregulated
## FMNL1	upregulated
## FCRL3	upregulated
## TMEM45A	upregulated
## MMP12	upregulated
## ETS2	small FC
## TREM2	upregulated
## PLXDC1	upregulated
## SLC40A1	small FC
## KLHL30	upregulated
## KCND2	upregulated
## NXPH3	upregulated
## KBTBD11	small FC

## ZFHX4-AS1	upregulated
## LINC03040	downregulated
## FASLG	upregulated
## GFPT2	upregulated
## CCL13	upregulated
## PENK	upregulated
## SDC1	downregulated
## MYADML2	upregulated
## SCML4	upregulated
## SH3PXD2B	upregulated
## PDK4	downregulated
## TMC8	upregulated
## ARHGAP22	upregulated
## CSF2RB	upregulated
## KLHL33	upregulated
## IL21R	upregulated
## EGR1	downregulated
## GRAP2	upregulated
## LIMD2	upregulated
## EEIG2	upregulated
## KLRB1	upregulated
## PSTPIP1	upregulated
## CD7	upregulated
## PDCD1LG2	upregulated
## TWIST2	upregulated
## AOAIIA	upregulated
## EPB41L5	small FC
## TLR6	upregulated
## GZMM	upregulated
## RASSF1	small FC
## CMA1	upregulated
## HTRA3	upregulated
## CYBRD1	upregulated
## SH3PXD2A	upregulated
## PTHLH	upregulated
## FRMD6	upregulated
## COL8A1	upregulated
## ADGRG2	upregulated
## KLRG1	small FC
## TECRL	upregulated
## PXDN	upregulated
## PIK3R5	upregulated
## HTR7	upregulated
## PKIA	upregulated
## SASH3	upregulated
## JDP2	small FC
## DSC3	upregulated
## B3GNT2	small FC
## SVEP1	upregulated
## SCX	upregulated
## MAP3K20	upregulated
## ZBP1	upregulated
## CD86	upregulated
## GRIN2D	upregulated

```

## CD200R1 upregulated
## PIK3R6 upregulated
## EOMES upregulated
## CERCAM upregulated
## FBN2 upregulated
## BTN3A3 small FC
## SRL upregulated
## CASP4LP upregulated
## GZMB upregulated
## CD27 upregulated
## CAMKK1 upregulated
## TP53INP2 small FC
## GPR132 upregulated
## VAV1 upregulated
## SAMD3 upregulated
## KLHL38 upregulated
## TNFSF13B upregulated
## NPAS2 small FC
## GCNT1 small FC
## KIF21B upregulated
## MMP3 upregulated
## OLAH downregulated
## CLEC10A upregulated
## MX2 upregulated
## ZNRF3 small FC
## FYN small FC
## LCK upregulated
## LYZ upregulated
## GDF10 upregulated
## FNDC1-AS1 upregulated
## FHL3 upregulated
## PAX7 upregulated
## ANGPTL5 upregulated
## THBS3 upregulated
## OTOF upregulated
## LCP1 upregulated
## GFRA1 upregulated
## BEST3 upregulated
## ASB2 upregulated
## CD40LG upregulated
## COL6A1 upregulated
## SMCO1 upregulated
## PRRX2 upregulated
## INKA2 small FC
## DEF6 upregulated
## P2RX5 upregulated
## MUSK upregulated
## LINC01638 upregulated
## TMEM182 upregulated
## ARPP21 upregulated
## OIP5 upregulated
## P2RY10 upregulated
## XCL2 upregulated
## P2RY13 upregulated

```

## LINP1	upregulated
## TPO	upregulated
## CARMIL2	upregulated
## SHISAL1	upregulated
## ZFPM2	upregulated
## CD160	upregulated
## ITGAM	upregulated
## IDI2	upregulated
## WDFY4	upregulated
## AMFR	small FC
## NDC80	upregulated
## GALNT8	upregulated
## JAML	upregulated
## CHST6	upregulated
## SVIL	upregulated
## TRG-AS1	upregulated
## BTK	upregulated
## WDR62	upregulated
## PCED1B-AS1	upregulated
## PDPN	upregulated
## OMG	upregulated
## SCG5	upregulated
## EVI2B	upregulated
## KLHL6	upregulated
## KCNK1	small FC
## TM4SF19	upregulated
## TRAF1	small FC
## HTR2A	upregulated
## RGMA	upregulated
## MAMSTR	upregulated
## SCUBE1	downregulated
## ADRA2C	downregulated
## LANCL1-AS1	upregulated
## TRIM22	upregulated
## MYO1G	upregulated
## ELAPOR1	upregulated
## CCL22	upregulated
## TYROBP	upregulated
## ATP1A2	upregulated
## PHEX	upregulated
## CD209	upregulated
## NFIX	upregulated
## MS4A1	upregulated
## PTGES3L	upregulated
## FCER2	upregulated
## LINC00887	downregulated
## CYCS	small FC
## LGALS9	upregulated
## AKNA	upregulated
## PPP1R15B	small FC
## DAPP1	upregulated
## TNXB	upregulated
## GCSAM	upregulated
## TSPOAP1-AS1	upregulated

```

## MN1 upregulated
## LRP1 upregulated
## FBLN7 upregulated
## TRAT1 upregulated
## ITGB2-AS1 upregulated
## TMEM108 upregulated
## KIAA0040 small FC
## THEMIS upregulated
## MYO1F upregulated
## LINC02461 upregulated
## RGS4 upregulated
## BASP1 upregulated
## HAS1 upregulated
## HRC upregulated
## RIMS4 upregulated
## HAND2 upregulated
## PPP1R3C upregulated
## ARHGAP6 small FC
## LRRC38 upregulated
## CAV1 upregulated
## EMB upregulated
## COLEC12 upregulated
## MEF2C upregulated
## LAIR2 upregulated
## AIM2 upregulated
## NEXN upregulated
## ADAM19 upregulated
## MLC1 upregulated
## ARHGAP25 small FC
## RSPO2 upregulated
## CD226 upregulated
## PTPRH upregulated
## NR4A2 downregulated
## ADA upregulated
## EPB41L2 small FC
## PVT1 upregulated
## BMAL2 upregulated
## LINC01121 upregulated
## TGFB3 upregulated
## EVI2A upregulated
## DOCK10 upregulated
## HCST upregulated
## SMPD1 small FC
## POSTN upregulated
## TRBV19 upregulated
## ITPRIP small FC
## TMEM61 downregulated
## TENT5A small FC
## GPSM3 upregulated
## MXRA5 upregulated
## TMEM233 upregulated
## PLEKHO1 upregulated
## Clorf127 upregulated
## LCP2 upregulated

```

```

## FMNL1-DT upregulated
## SIGLEC17P upregulated
## ZNF683 upregulated
## GRAMD2A downregulated
## CISH small FC
## SLFN12 small FC
## TSPAN32 upregulated
## LINC01871 upregulated
## TDO2 upregulated
## VWCE upregulated
## LGALS1 upregulated
## NCR3 upregulated
## SLC9A9 upregulated
## SNAI2 upregulated
## FAM131C downregulated
## PRODH downregulated
## TRBV7-9 upregulated
## CREB3L1 upregulated
## PKD1L2 upregulated
## TRIM80P downregulated
## LINC00968 upregulated
## RERE small FC
## ST8SIA4 upregulated
## JUP small FC
## MOB3C small FC
## IL7R upregulated
## EXTL1 upregulated
## CGN small FC
## CFH upregulated
## ZFAND5 small FC
## PTGDR upregulated
## BACH2 small FC
## FBLN1 upregulated
## RASSF5 upregulated
## RASA3 upregulated
## BOC upregulated
## CDCA2 upregulated
## LINC02446 upregulated
## CTNNA3 upregulated
## LINC01232 small FC
## DNAJC5B upregulated
## FMOD upregulated
## IHH downregulated
## RASD1 downregulated
## SHD upregulated
## TRBV2 upregulated
## CD248 upregulated
## RARG upregulated
## C1QTNF3 upregulated
## IRF4 upregulated
## FCGR2B upregulated
## VIM upregulated
## KCNA3 upregulated
## PRECSIT upregulated

```

```

## WNT2B upregulated
## ZIC1 upregulated
## SULT2B1 downregulated
## PTGER3 small FC
## ARHGEF4 upregulated
## TRAF3IP3 upregulated
## CLEC2B upregulated
## CELF2 upregulated
## FILIP1 upregulated
## DAPK2 upregulated
## ECM1 upregulated
## C6 downregulated
## TRGC2 upregulated
## TBX18 upregulated
## LINC00426 upregulated
## CAMK2A upregulated
## SDC4 small FC
## ADSS1 upregulated
## LOXL1 upregulated
## LEFTY2 upregulated
## FABP5 upregulated
## ITGB2 upregulated
## TMEM171 downregulated
## AKR1B15 upregulated
## MRC2 upregulated
## PLXNC1 small FC
## DLAT small FC
## MILR1 upregulated
## BSND downregulated
## ABCA9 upregulated
## PTAFR upregulated
## CD244 upregulated
## SLC24A4 upregulated
## KCNMA1 upregulated
## ARHGAP15 upregulated
## RASAL3 upregulated
## ANXA8 upregulated
## MISP3 small FC
## LTA upregulated
## ROR1-AS1 upregulated
## PALM3 small FC
## SEMA4B small FC
## DTHD1 upregulated
## ABCD2 upregulated
## SETD7 upregulated
## CTSG upregulated
## TRBV5-1 upregulated
## VEGFD upregulated
## LHFPL2 upregulated
## CCDC102B small FC
## RGS10 upregulated
## NCF4 upregulated
## PBK upregulated
## LINC02980 small FC

```

```

## TMEM154 upregulated
## GM2A small FC
## GLIPR1 upregulated
## ACTR3C small FC
## CCDC144NL-AS1 upregulated
## TMIGD3 upregulated
## PAMR1 upregulated
## RFTN1 small FC
## BCR small FC
## STAMBPL1 small FC
## FKBP10 upregulated
## OBSCN upregulated
## SACS upregulated
## IL2RG upregulated
## ALDH1A3 upregulated
## RRM2 upregulated
## APOBEC3A upregulated
## PRRG3 upregulated
## SCN5A upregulated
## AQP6 downregulated
## LRRC4 downregulated
## GPR65 upregulated
## TBC1D2B small FC
## SLAMF8 upregulated
## ESRP2 small FC
## SCN4B upregulated
## DDB2 small FC
## LINC02802 upregulated
## PHC2 small FC
## DUSP29 upregulated
## MFAP4 upregulated
## BCAM small FC
## MARVELD1 upregulated
## MMP19 upregulated
## KCNQ1 small FC
## TRBV6-5 upregulated
## SCIMP upregulated
## ST6GAL1 downregulated
## LMBRD1 small FC
## NLN small FC
## BCAT1 upregulated
## FOXF2 upregulated
## CA8 downregulated
## ABCA6 upregulated
## RUNX2 upregulated
## TRBV9 upregulated
## APOBEC3C upregulated
## DYRK2 small FC
## PDCD1 upregulated
## DHRS13 small FC
## PHLDA3 upregulated
## CALML6 upregulated
## GAL3ST4 upregulated
## SIGLEC6 upregulated

```

```

## KDELR3 upregulated
## TLR8 upregulated
## TLR7 upregulated
## FYB1 upregulated
## APOBEC3G upregulated
## SPP1 downregulated
## CSF1R upregulated
## PLAC9 upregulated
## SLC16A12 downregulated
## ENAH upregulated
## FCMR upregulated
## ATP2B2 upregulated
## FGGY-DT upregulated
## SH3BP4 small FC
## TMEM37 small FC
## ECM2 upregulated
## C1QTNF2 upregulated
## OAT small FC
## PCDH18 upregulated
## CD33 upregulated
## GAS6-AS1 upregulated
## ATAD2 small FC
## LPXN small FC
## PLAT small FC
## KAZALD1 upregulated
## GPA33 upregulated
## FLT1 small FC
## SLC36A4 small FC
## LINC02984 upregulated
## SYNE3 upregulated
## ZNF106 upregulated
## TTC39A downregulated
## OAS2 upregulated
## CCDC47 small FC
## GBP1 upregulated
## MSC-AS1 upregulated
## ERVMER34-1 small FC
## CD99 upregulated
## HSPB6 upregulated
## STK32B small FC
## CREB5 upregulated
## P2RY14 upregulated
## RAB23 small FC
## MSC upregulated
## TNS2-AS1 small FC
## IQGAP3 upregulated
## LAIR1 upregulated
## SPCS3 small FC
## RGS3 small FC
## LINC00900 upregulated
## HHIPL1 upregulated
## CPA3 upregulated
## RNASE1 upregulated
## CD300A upregulated

```

```

## KIF5C           downregulated
## C1orf105        upregulated
## IGFL2           upregulated
## SLC25A25         small FC
## LINC01091        upregulated
## IL12RB1          upregulated
## SYNM            upregulated
## CXCR5           upregulated
## PRRT3-AS1        upregulated
## PPP1R18          upregulated
## FAM20A           downregulated
## LAX1             upregulated
## TNFRSF13C        upregulated
## CSRP2            small FC
## MS4A2             upregulated
## TNFRSF18          upregulated
## ABTB3            small FC
## NNAT             upregulated
## FCHO1            upregulated
## RBPMS            small FC
## GFRA2             upregulated
## SLC7A5           downregulated
## LINC01894          upregulated
## MAP1A             upregulated
## JPH2             upregulated
## SYT7             downregulated
## CHSY3            upregulated
## PNRC1            small FC
## FA2H             small FC
## CDH16            small FC
## NIBAN3           upregulated
## CLEC12A          upregulated
## MBNL1-AS1         upregulated
## PEPB4             upregulated
## CARD16            small FC
## BTN3A2            small FC
## CBLN4             upregulated
## WWTR1-AS1          small FC
## CASP1             small FC
## FERMT3            upregulated
## FAM210B            small FC
## VIPR2             upregulated
## FOSB              downregulated
## LGALS12           upregulated
## ADGRB2            upregulated
## LINC02606          downregulated
## ARHGAP9           upregulated
## HLA-DQA1          upregulated
## CCR5              upregulated
## ZNRF2             small FC
## PIP4K2B            small FC
## CD163L1           upregulated
## EPHA3             upregulated
## NLRP6             downregulated

```

```

## GABARAPL1           small FC
## VWF                 upregulated
## ASB12               upregulated
## FOXCUT              downregulated
## P2RX6               upregulated
## CD180               upregulated
## TRAV26-1            upregulated
## RCN3                upregulated
## ARRB2               small FC
## TLR10               upregulated
## CLCNKA              downregulated
## MUC16               upregulated
## CCR4                upregulated
## IFI16               upregulated
## CFP                 upregulated
## CALCR              downregulated
## MYOM2               upregulated
## TRPV3               upregulated
## LINC01132            small FC
## CDKN2B              upregulated
## ASF1B               upregulated
## MIR223HG            upregulated
## TPM1                upregulated
## LINC03070            upregulated
## SREBF2              small FC
## PAX5                upregulated
## WIPF1               small FC
## FAS                 small FC
## TPX2                upregulated
## LDLR                downregulated
## HK2                 upregulated
## CLCN1               upregulated
## ZNF79               small FC
## STK38               small FC
## CHRNB4              upregulated
## KCNC3               small FC
## SPTA1               upregulated
## CASP3               small FC
## CNR2                upregulated
## TRANK1              small FC
## LRRC14B              upregulated
## PTGFRN              upregulated
## YPEL4                upregulated
## SLCO2A1              small FC
## KIF4A               upregulated
## CPZ                 upregulated
## ZNF496               small FC
## PPP2R3A              small FC
## LINC01320             downregulated
## CDKN3               upregulated
## POPDC2              upregulated
## CORO1A               upregulated
## PRKAB1              small FC
## KCNK2                upregulated

```

```

## CAAP1           small FC
## SPTB            upregulated
## RIPOR2          small FC
## NR1D1          upregulated
## ARHGAP36        upregulated
## CD276           upregulated
## UBTD2           small FC
## LINC02600       small FC
## NOD2            upregulated
## CD4             upregulated
## SNX10           small FC
## IL34            upregulated
## TRPM2           upregulated
## SPIB            upregulated
## KRT31           upregulated
## ITGB1BP2         upregulated
## TRBV20-1         upregulated
## ADAMTS7         upregulated
## TMEM245          small FC
## SERPINA3        downregulated
## ARX              upregulated
## ZCCHC24          upregulated
## CALHM2          upregulated
## CENPF            upregulated
## CSMD2            upregulated
## CKAP2           small FC
## CCBN2            upregulated
## P3H3             upregulated
## DIPK1C           upregulated
## PABPC1           small FC
## TRBV18           upregulated
## P2RY1            small FC
## SLFN5            small FC
## LINCADL          upregulated
## TRBV4-1           upregulated
## OASL              upregulated
## AQP9              upregulated
## IGF2              upregulated
## LPCAT3            small FC
## SPEG              upregulated
## STK3              small FC
## PTCH2            upregulated
## MS4A6A            upregulated
## BHLHE22          upregulated
## APOBEC3H          upregulated
## CENPU             small FC
## ZNF521             small FC
## CHRD              downregulated
## IGFBP3            small FC
## MYL6B            upregulated
## PRR15             small FC
## ETV1              small FC
## GPAM              upregulated
## LILRA4            upregulated

```

```

## LRRK1 upregulated
## ASB10 upregulated
## TRBV29-1 upregulated
## IHO1 upregulated
## ABHD3 small FC
## GNG2 small FC
## GASK1B upregulated
## CCDC88B upregulated
## MUC1 downregulated
## NFATC2 upregulated
## MYEOV upregulated
## HNRNPA2B1 small FC
## SCTR-AS1 downregulated
## KIF20A upregulated
## ZBED3 small FC
## PLPP7 upregulated
## DISP1 small FC
## KCNN4 upregulated
## DMTN small FC
## GALNT1 small FC
## MS4A7 upregulated
## LINC01215 upregulated
## GLI2 upregulated
## EZH2 small FC
## CRMA upregulated
## F2RL3 downregulated
## CERS2 small FC
## MXRA8 upregulated
## CRY1 small FC
## FGF7 upregulated
## ZNF684 small FC
## GPR55 upregulated
## CEBPD downregulated
## SCGN downregulated
## NIM1K upregulated
## CLC upregulated
## ELOVL7 small FC
## FBXO2 downregulated
## GREM1 upregulated
## DSCC1 small FC
## LINC01857 upregulated
## SERPINH1 upregulated
## PITPNM2 small FC
## TRBV6-1 upregulated
## CSF2RA upregulated
## GDF15 downregulated
## TRAV19 upregulated
## SESN3 small FC
## ARL4C upregulated
## PLCB2 upregulated
## PIK3IP1 small FC
## TRBV4-2 upregulated
## FEZ1 upregulated
## ARHGAP45 upregulated

```

```

## INPP5D           small FC
## ATP8B2          small FC
## HVCN1           small FC
## RPL26P6         upregulated
## KLRK1           upregulated
## PRDM6-AS1       upregulated
## IFNG            upregulated
## PARVG           upregulated
## STK10            small FC
## PTPN1            small FC
## C6orf47          small FC
## RORC             small FC
## VGLL3            upregulated
## NGFR             upregulated
## MAP4K4           small FC
## SAMHD1          upregulated
## NIBAN1          upregulated
## TPRN              small FC
## COPZ2            upregulated
## C1orf216          small FC
## TBC1D8B          small FC
## INHBA            upregulated
## OSCAR             upregulated
## DNASE1L3          small FC
## RFX2              small FC
## PTPN7            upregulated
## FAM111B           upregulated
## HIF1A             small FC
## MEX3B            upregulated
## LINC00607         upregulated
## MARCKS           upregulated
## TRBV3-1          upregulated
## TRAF3             small FC
## KIAA1671-AS1      upregulated
## HIVEP3            small FC
## CBR3              upregulated
## CSTA              upregulated
## TRBV10-3          upregulated
## IFFO1              small FC
## PTGIS             upregulated
## PCDH19            upregulated
## CPA4              upregulated
## CLCA2             upregulated
## GAP43             upregulated
## MYHAS             upregulated
## PHOSPHO1          upregulated
## RGS20             upregulated
## NSMAF              small FC
## ENDOD1            small FC
## CD79A             upregulated
## SLAMF1            upregulated
## KCNT1             upregulated
## MAP3K7CL          upregulated
## SOCS2              small FC

```

```

## SLC2A1           small FC
## TPSAB1          upregulated
## LAG3            upregulated
## NRP2            upregulated
## MS4A4A          upregulated
## MSL3             small FC
## MARCHF1         upregulated
## CCNA2           upregulated
## PPP2R3B         upregulated
## PRRG4            small FC
## RNF175          upregulated
## FRMPD3          upregulated
## CDHR4           upregulated
## CDH23           upregulated
## FAM107B          small FC
## STMN2           upregulated
## TPRG1           upregulated
## TIMP2            upregulated
## ASPM             upregulated
## CIT              small FC
## RTL9             upregulated
## TCF4             small FC
## TTYH2             small FC
## TOP2A           upregulated
## MARCHF3          upregulated
## TNC              upregulated
## ADGRD1           upregulated
## B3GNT3           downregulated
## TBC1D30          small FC
## RHOH             upregulated
## ZSCAN26          small FC
## NLRC5            small FC
## BMX              upregulated
## CD38             upregulated
## TRGV9            upregulated
## CYBB              upregulated
## TARDBP            small FC
## ABI3BP           upregulated
## GORASP1          small FC
## LRRC8D-DT         small FC
## TNFAIP2          upregulated
## MSR1              upregulated
## CDC6              upregulated
## TRAV3             upregulated
## SMPD3             upregulated
## TMIGD2            upregulated
## CD300LF           upregulated
## TPSB2             upregulated
## WAS               upregulated
## SPAAR             small FC
## KBTBD12          upregulated
## PHYHIPL          small FC
## CMKLR2           upregulated
## TRAV13-1          upregulated

```

```

## GPSM2 upregulated
## CCDC136 upregulated
## MMP17 upregulated
## SEMA3A upregulated
## ATP1B1 small FC
## ANKRD13B upregulated
## AK1 upregulated
## SESTD1 small FC
## KCNE5 upregulated
## RAB3C upregulated
## TRAV8-6 upregulated
## HYCC1 small FC
## E2F7 upregulated
## LINC01093 downregulated
## P2RX6P upregulated
## TRPV2 upregulated
## TRAV12-1 upregulated
## SEC24D small FC
## TRBV7-2 upregulated
## MCM7 small FC
## TSPO2 downregulated
## FAM216B upregulated
## ESRRB downregulated
## SSTR2 small FC
## RAP2B small FC
## STEAP1B upregulated
## DNM2 small FC
## TNFAIP8L2 upregulated
## LINC01426 upregulated
## ABTB2 small FC
## THRSP upregulated
## NPR1 small FC
## UMOD downregulated
## HAS2-AS1 upregulated
## LST1 upregulated
## OTOAP1 upregulated
## DOK3 upregulated
## TTC24 upregulated
## GJD2 downregulated
## XCR1 upregulated
## LINC01789 upregulated
## MDK upregulated
## GAS1 upregulated
## DNAH5 upregulated
## GOLPH3 small FC
## APOD upregulated
## TRAV29DV5 upregulated
## RYR3 upregulated
## LPAR4 upregulated
## S1PR4 upregulated
## SDC3 small FC
## CPA1 upregulated
## UBN1 small FC
## FAM131C2P downregulated

```

```

## POLE3           small FC
## CYTL1          upregulated
## TNFRSF8        upregulated
## E2F1           upregulated
## CD72           upregulated
## CSNK2A1         small FC
## SIGLEC8        upregulated
## REXO4           small FC
## NAGK            small FC
## EGFLAM          upregulated
## LINC02273       upregulated
## LINC00578       upregulated
## SPPL2A          small FC
## XYLT1           upregulated
## SPX             small FC
## ARL11           upregulated
## SLFN12L          upregulated
## MAP3K5-AS2       upregulated
## H19              upregulated
## COL4A6           small FC
## SYPL1           small FC
## RPIA             small FC
## PER2             small FC
## CLTCL1          upregulated
## TMOD1           upregulated
## GFRA4            downregulated
## CEBPA            small FC
## COL21A1          upregulated
## LILRB1           upregulated
## NEDD9            small FC
## TNF              upregulated
## OSBP2            small FC
## JPH4             small FC
## KCNIP2           upregulated
## WWP2              small FC
## TRBV5-4          upregulated
## ELMOD1          downregulated
## FLI1              small FC
## SNX33             small FC
## TRIM7            upregulated
## LGI3              downregulated
## BUB1              upregulated
## NLRC3             upregulated
## LAPTM5           upregulated
## CRISPLD1          upregulated
## ZKSCAN4            small FC
## LINC02343         downregulated
## ANG               small FC
## DOK1              small FC
## SAMD4A             small FC
## SKA3              upregulated
## GPR176             small FC
## TMEM33             small FC
## MFAP3L             small FC

```

```

## TNFSF14 upregulated
## ZFYVE27 small FC
## CLDN23 small FC
## DNAJC14 small FC
## CAMK2B upregulated
## LINC01303 downregulated
## LBX1 upregulated
## JUNB downregulated
## RASGRP4 upregulated
## TEDDM1 downregulated
## EYA1 upregulated
## HCAR2 upregulated
## ZNF423 upregulated
## VASH1 small FC
## SLC44A4 small FC
## TUBB2B small FC
## SPRN upregulated
## LGI1 upregulated
## RP1 downregulated
## MMP14 upregulated
## PKDCC small FC
## CNRIP1 small FC
## ADARB2 downregulated
## PGAM2 upregulated
## CD19 upregulated
## SLC24A3 upregulated
## XCL1 upregulated
## IFI44L upregulated
## C1QTNF9 upregulated
## LTB upregulated
## ANKRD39 small FC
## SPOCD1 upregulated
## PTCRA upregulated
## BLK upregulated
## ME1 small FC
## FAM199X small FC
## NUS1 small FC
## DACT1 upregulated
## OMD upregulated
## CD53 upregulated
## CCDC127 small FC
## EHBP1L1 upregulated
## DGAT2 upregulated
## IL1RN upregulated
## CD79B upregulated
## ZBTB32 upregulated
## LINC01915 upregulated
## FGFBP1 downregulated
## FMNL3 small FC
## RAB27B small FC
## POU2F2 upregulated
## C10orf71-AS1 upregulated
## CCL19 upregulated
## SLC9B2 small FC

```

```

## SIRPB1 upregulated
## MYF5 upregulated
## UCK2 small FC
## TMC3-AS1 upregulated
## ESCO2 upregulated
## HOXA10-AS small FC
## MAP3K4-AS1 upregulated
## FAM225A upregulated
## NAV1 small FC
## RGS17 upregulated
## CTLA4 upregulated
## ATP6AP1 small FC
## HMGCS1 small FC
## CCL4 upregulated
## CD22 upregulated
## PIGM small FC
## AGT downregulated
## VIPAS39 small FC
## SLC4A2 small FC
## ACKR1 upregulated
## C1QA upregulated
## LY96 upregulated
## SAMD5 small FC
## PRR15L downregulated
## TRAV4 upregulated
## FZD5 small FC
## MED9 small FC
## FFAR2 upregulated
## FLRT2-AS1 upregulated
## SEMG2 downregulated
## MXRA5Y upregulated
## ARHGAP11A small FC
## APOBR upregulated
## C21orf62 downregulated
## PRR11 small FC
## ST14 small FC
## NCAPG upregulated
## TGM2 downregulated
## LINC01618 small FC
## ODAD3 small FC
## TTC39C small FC
## PDHA1 small FC
## ACKR4 upregulated
## PCDH1 small FC
## GASK1A upregulated
## ZNF473 small FC
## PDCD6IP small FC
## CYTOR upregulated
## OAS3 small FC
## PLAAT1 upregulated
## CPED1 small FC
## PPP5C small FC
## TNIP3 upregulated
## ABCA8 upregulated

```

```

## TLCD3A           small FC
## TRAV12-3        upregulated
## ZBTB10          small FC
## GRIN2A          upregulated
## CD80            upregulated
## MEIS3           upregulated
## RET              small FC
## LINC02511       upregulated
## ATP2C2          downregulated
## MASP1            small FC
## ADAP2            small FC
## GBP1P1          upregulated
## CSF3R            upregulated
## LHFPL6           upregulated
## GFI1             upregulated
## CCIN              upregulated
## SLFN11           small FC
## ENPP4             small FC
## FAM13C           small FC
## PPARGC1A         small FC
## ZFP82             small FC
## MIR155HG         upregulated
## PLB1              upregulated
## MTURN             small FC
## ADAM8             upregulated
## GLI3              small FC
## SPINT2           small FC
## S1PR3             small FC
## TRBV12-3          upregulated
## MAD2L1           small FC
## ZFP69B            small FC
## FXYD5             upregulated
## ZNF2              small FC
## SLC2A10           small FC
## FCRLA             upregulated
## APLF               small FC
## POGLUT2           small FC
## CLINT1             small FC
## SFTA1P            upregulated
## PIP4K2C           small FC
## PPARD             small FC
## ADGRE3            upregulated
## FCRL1             upregulated
## SLC01C1           upregulated
## STARD5            small FC
## S100B              upregulated
## RAD51              small FC
## PRSS8              small FC
## LSMEM2            upregulated
## DGKD               small FC
## CYLD-AS1          upregulated
## GIMAP2             small FC
## TMCC1-DT           small FC
## ITGA4              upregulated

```

```

## ZNF18           small FC
## AADAC          upregulated
## KBTBD13         upregulated
## KCTD7           small FC
## LINC02669       upregulated
## CCL17           upregulated
## TPD52           small FC
## TRIM9            small FC
## CENPP            small FC
## LINC01140       upregulated
## TP73             upregulated
## PIK3CG          upregulated
## CCNF              small FC
## SNAI3            upregulated
## TRAV23DV6        upregulated
## COL15A1          upregulated
## SLC25A35         small FC
## HSH2D            upregulated
## MS4A14            upregulated
## HRH1              upregulated
## GRK3                small FC
## FCGR3B            upregulated
## SLC43A1          downregulated
## LINC00702        upregulated
## CXCR6            upregulated
## MYBL2             upregulated
## OTOS              downregulated
## TMEM116           small FC
## GRAMD2B           small FC
## DPP4-DT           upregulated
## GTSE1             upregulated
## LINC02609        upregulated
## TENM3             upregulated
## PTPRB              small FC
## CP                 upregulated
## IL1R2              downregulated
## COTL1              small FC
## PPP1R1A            downregulated
## KHDC1-AS1          small FC
## B3GNTL1            small FC
## TMPO               small FC
## ENC1               small FC
## CADM2              upregulated
## SEPTIN4            small FC
## NKD1               small FC
## PCED1B            small FC
## KCTD21            small FC
## LCMT2              small FC
## C3orf80            upregulated
## CDH19              downregulated
## ANLN               upregulated
## GAPLINC            upregulated
## C11orf24           small FC
## MNDA              upregulated

```

```

## SH2B3           small FC
## LIMK1           small FC
## TSPAN14          small FC
## NTM             upregulated
## CRLF3           small FC
## DAXX            small FC
## CDCA7           upregulated
## NEIL3           upregulated
## SMARCAL1         small FC
## SCD5            small FC
## MIR34AHG         upregulated
## TRAV8-4          upregulated
## CGAS             small FC
## PILRA            small FC
## STARD8           small FC
## EXO1             upregulated
## SKP2              small FC
## CDO1             upregulated
## MTHFD2L           small FC
## TRGV10            upregulated
## SLC43A3           upregulated
## STAP1             downregulated
## ZNF385A           upregulated
## LZTS3             small FC
## AKAP8             small FC
## TRAF2             small FC
## TRIM63            upregulated
## AQP2              downregulated
## PSMB9             small FC
## PRPH2             upregulated
## GTDC1             small FC
## SEMA6C            upregulated
## MIRLET7BHG         upregulated
## NCR1             upregulated
## H1-0               small FC
## CAP2               small FC
## MUC12             upregulated
## GVINP1            small FC
## GNG7               small FC
## LILRA6            upregulated
## CASKIN2           small FC
## FAM222A           small FC
## UBE2K             small FC
## DCLK3              upregulated
## HPGDS             upregulated
## MAPK8IP2          downregulated
## REG3G              downregulated
## GASK1B-AS1         upregulated
## SPHK1              upregulated
## SLC16A11           downregulated
## PHETA2             small FC
## SPC25             upregulated
## BMP3               upregulated
## RHOB               small FC

```

```

## SORT1                      small FC
## TRBV27                     upregulated
## LRG1                        downregulated
## ADAMTS4                     downregulated
## FBXO41                      small FC
## SLC1A3                      upregulated
## IDI1                        small FC
## TEKT1                       upregulated
## GRID1                       upregulated
## ST7-AS1                      small FC
## FANCI                        small FC
## FCN1                         upregulated
## TRAV21                       upregulated
## GPNMB                        upregulated
## TNK1                          small FC
## HDC                           upregulated
## PRKAG2                       small FC
## TNN                           upregulated
## BBC3                          small FC
## FGD2                           upregulated
## ST8SIA1                      upregulated
## VPREB3                        upregulated
## BIRC5                         upregulated
## MAPK12                        small FC
## SALL1                        small FC
## COQ7                          small FC
## HJURP                         upregulated
## LINC02762                     upregulated
## ISG20                         upregulated
## MSRB3                         small FC
## OCA2                           downregulated
## DCAF6                         small FC
## DDR1                           small FC
## KLF9                          small FC
## NEK2                           upregulated
## HES1                           small FC
## SIX4                           small FC
## IGSF8                          small FC
## NCAM1                         upregulated
## PIMREG                        upregulated
## GJA5                           small FC
## SAMD9L                        small FC
## CTBS                           small FC
## MELK                           upregulated
## TRAV9-2                       upregulated
## PTTG1                         upregulated
## GMFG                           small FC
## MIR4435-2HG                   small FC
## NLGN4X                        upregulated
## LOXL3                         upregulated
## MYCL                           small FC
## MAST2                          small FC
## PDGFD                          small FC
## PACSIN1                       downregulated

```

```

## RUNX1T1           small FC
## LINC01563        upregulated
## DNM3OS          upregulated
## GBP4            small FC
## SIPA1L3         small FC
## TREML1          upregulated
## POU2F2-AS2      upregulated
## CEACAM1         small FC
## PAX1            upregulated
## ROR2            upregulated
## LINC00543        small FC
## MAGEL2          upregulated
## FST             upregulated
## STAT4           small FC
## XAF1            upregulated
## TGFB2           small FC
## LMX1A          upregulated
## SMYD4           small FC
## MAFB            small FC
## OSR2            upregulated
## VAT1L           downregulated
## ZFP64            small FC
## FAM114A1        small FC
## CLVS1           upregulated
## F8              small FC
## IL1RL2          small FC
## P3H1            small FC
## COLGALT1        small FC
## RAB30           small FC
## SRD5A2          upregulated
## TASL            upregulated
## OLFML3          upregulated
## LINC02126        upregulated
## CCR2            upregulated
## PRKAB2           small FC
## RGS2            small FC
## RHPN2           small FC
## CDCA8           small FC
## PDE1A           small FC
## PIGO            small FC
## DENND2C          small FC
## SESN1           small FC
## MYH8            upregulated
## TRAV1-2          upregulated
## NRXN1           downregulated
## PTN             small FC
## COL23A1          small FC
## DUSP26          upregulated
## TMEM229B         small FC
## PRKAG2-AS2      downregulated
## FAM240A          downregulated
## FAAP24           small FC
## HMMR            small FC
## RTL3            upregulated

```

```

## FKBP7           small FC
## ATP1B3          small FC
## LINC00892      upregulated
## TICRR          upregulated
## PTGFR          small FC
## LPAR1          upregulated
## NCS1           small FC
## CUTC            small FC
## DHCR7          small FC
## BAG2            small FC
## TLCD3B          upregulated
## ARL4A           small FC
## ARAP1           small FC
## SPINT1          small FC
## LYAR            small FC
## LINC02289      downregulated
## LMTK3          downregulated
## GRK6            small FC
## MYL5            small FC
## DAB2IP          small FC
## KIFC1          upregulated
## CXCL13          upregulated
## DEPDC1          upregulated
## CAPN3           upregulated
## TCEAL7          small FC
## DTL             upregulated
## LINC02397      upregulated
## REG1A           downregulated
## CACNA1B          upregulated
## UNC5CL          downregulated
## ADGRE4P          upregulated
## FAM78B           small FC
## FCER1G          upregulated
## PID1             small FC
## CLCNKB          small FC
## DGKA            small FC
## ZBTB47           small FC
## SLC25A45          small FC
## ADRB2           upregulated
## PDCD4-AS1        small FC
## NAPSB           downregulated
## DTNA            upregulated
## TEK              small FC
## SLC45A1          small FC
## RAB20            small FC
## BRSK2           downregulated
## TRBV11-2          upregulated
## PRELID3B          small FC
## CXCR2           upregulated
## NBL1             small FC
## NUDT4            small FC
## CD9              small FC
## UNC5A            upregulated
## TXNDC11          small FC

```

## IL2RA	upregulated
## PLK2	small FC
## MAX	small FC
## SLC1A4	small FC
## IGSF3	small FC
## MYBL1	small FC
## FAM30A	upregulated
## DUSP9	downregulated
## TRAV14DV4	upregulated
## GALNT18	small FC
## TRAV17	upregulated
## PTPN6	small FC
## PEAK1	small FC
## TVP23A	small FC
## PKNOX1	small FC
## AOC3	upregulated
## LILRB3	upregulated
## FOXJ2	small FC
## MSTN	upregulated
## FXYD6-AS1	small FC
## NPTN	small FC
## LINC00327	upregulated
## TSPAN11	upregulated
## ZHX3	small FC
## ERO1B	small FC
## TMEM209	small FC
## SCN1B	upregulated
## LINC01579	upregulated
## CRY2	small FC
## KLHL34	upregulated
## RAB9B	upregulated
## BOD1	small FC
## RBM4B	small FC
## PAX3	upregulated
## SGK1	small FC
## EML1	small FC
## CNKSR2	upregulated
## BATF	upregulated
## GJA1	upregulated
## C3orf86P	downregulated
## PFKFB2	small FC
## OPTN	small FC
## SLC16A1-AS1	small FC
## C6orf141	upregulated
## ITPRIPL2	small FC
## TRIP13	small FC
## CHIA	downregulated
## HK3	upregulated
## MS4A6E	upregulated
## SMIM38	downregulated
## SPTLC1	small FC
## PF4	upregulated
## C3AR1	upregulated
## STK4	small FC

```

## SPI1 upregulated
## PIGA small FC
## INTS3 small FC
## EFEMP1 small FC
## LINC02823 upregulated
## PPP2CB small FC
## ZEB2 small FC
## TCIM small FC
## MICAL2 small FC
## TRAV12-2 upregulated
## PXYLP1 small FC
## ALKAL2 downregulated
## CCR8 upregulated
## NUDT11 upregulated
## SLC25A18 downregulated
## SLIT3 small FC
## KLRC1 upregulated
## OIT3 upregulated
## SOX9 downregulated
## PRSS21 upregulated
## GRM1 downregulated
## AVEN small FC
## ACSL3 small FC
## GPR182 small FC
## BAG5 small FC
## FHOD1 small FC
## LNX1 small FC
## LINC00632 upregulated
## NIPA1 small FC
## NKX3-2 upregulated
## C6orf89 small FC
## ETV7 upregulated
## PMP2 downregulated
## PLIN5 small FC
## COLQ upregulated
## DUXAP8 upregulated
## ACSS1 small FC
## MARCHF6 small FC
## CKAP2L upregulated
## TTK upregulated
## INKA2-AS1 small FC
## TG small FC
## HLA-DPB1 small FC
## STAB2 upregulated
## HCK upregulated
## TBCCD1 small FC
## POLR1E small FC
## PRDM16 small FC
## PMEPA1 small FC
## MYO9B small FC
## ART1 upregulated
## PLPP3 small FC
## NFATC1 small FC
## TTLL11 small FC

```

```

## ARMC7           small FC
## PHF19          small FC
## AMOTL1         small FC
## CLCN3          small FC
## RAB31          small FC
## ADAMTS5        small FC
## CNPY4          small FC
## ZNF416          small FC
## HK2-DT         upregulated
## CASR           downregulated
## ANXA2R         upregulated
## OPLAH          small FC
## ADAMTS8        downregulated
## LY6S-AS1       small FC
## NATD1          small FC
## FAM234B        small FC
## LINC01013      upregulated
## FKBP14         small FC
## LINC00963      small FC
## RBPMS-AS1      small FC
## MEGF6          upregulated
## SERTM1         upregulated
## NR4A3          downregulated
## DISC1          small FC
## PPP2R5C        small FC
## GNA15          upregulated
## CDCA5          small FC
## CABYR           upregulated
## MFSD6L         small FC
## NR3C1          small FC
## SOX11          upregulated
## RGS22           upregulated
## MAPK13          small FC
## PYGO1           small FC
## CHRNBT1        small FC
## HCAR3           upregulated
## C10orf105      upregulated
## KCNB1           upregulated
## LINC01702      downregulated
## TK2             small FC
## RNF34           small FC
## HS3ST1          downregulated
## HS6ST2         small FC
## EVPL            small FC
## CMKLR1          small FC
## SPTSSA          small FC
## AK7             small FC
## GAB3             small FC
## CFAP107         upregulated
## CD207           upregulated
## MTCO2P2         upregulated
## LAMP2           small FC
## ELAPOR2         small FC
## YBX3            upregulated

```

```

## PYCARD          upregulated
## AP5M1           small FC
## ARHGDIB         small FC
## ZNF438           small FC
## ADAMTS16         small FC
## HIF3A            downregulated
## KLHL20           small FC
## CD59             small FC
## FCRL6            upregulated
## ZFP36             small FC
## PLEKHO2          small FC
## UBQLN1           small FC
## GNB4              small FC
## TRGV8             upregulated
## TRBV7-6          upregulated
## MYMK              upregulated
## NHSL2             small FC
## ST18              downregulated
## SH2D1B            upregulated
## FLOT2              small FC
## CEP170             small FC
## CD24              small FC
## FZD10-AS1          upregulated
## MKX               upregulated
## NOMO1              small FC
## MARCHF5           small FC
## C1S                upregulated
## WDR41              small FC
## MERTK              small FC
## CFB                downregulated
## LMNB1              small FC
## ATG9B               upregulated
## NT5C1A              upregulated
## BCL2L1              small FC
## CRIP1               upregulated
## PDLM1              small FC
## HNRNPД              small FC
## PLEKHM2             small FC
## PSD3                small FC
## AIF1L               small FC
## SPOP                 small FC
## MLLT11              upregulated
## NCAPH               upregulated
## CDS2                 small FC
## LILRB2              upregulated
## FXYD1               upregulated
## CLUH                 small FC
## PTGER1              downregulated
## CES4A               downregulated
## CCR1                 small FC
## NDE1                 small FC
## CCDC88A              small FC
## GOT1                 small FC
## TIAM2                 small FC

```

## ETV4	upregulated
## ARL4D	small FC
## CLEC2D	upregulated
## DLGAP5	upregulated
## ZNF436	small FC
## F11R	small FC
## FBXO32	small FC
## ASTE1	small FC
## PPP2CA-DT	small FC
## GRK5	small FC
## ZNF526	small FC
## LINC00654	small FC
## SC5D	small FC
## FAR2	small FC
## AGRP	downregulated
## OSBP	small FC
## CLEC4G	upregulated
## PROM2	small FC
## TNFSF11	upregulated
## RAP1GAP	small FC
## MAMDC2	upregulated
## HIC1	upregulated
## MINDY1	small FC
## TJP3	small FC
## DUSP6	small FC
## FOXC1	small FC
## ITPRIPL1	small FC
## LINC03113	upregulated
## ANGPTL1	upregulated
## C1orf174	small FC
## NUMBL	small FC
## SLCO4A1	downregulated
## LINC01480	upregulated
## SEC14L1	small FC
## GGT7	small FC
## CD101	upregulated
## FCN3	downregulated
## ACVR1B	small FC
## GAS1RR	small FC
## GSDMC	upregulated
## USP43	small FC
## CD69	upregulated
## CMTM7	small FC
## ATAD1	small FC
## CDS1	small FC
## KLHL35	upregulated
## PPTC7	small FC
## NPFFR2	upregulated
## PDLIM7	upregulated
## TRIAP1	small FC
## PLXNB1	small FC
## IPPK	small FC
## LINC02202	upregulated
## GCSAML	upregulated

```

## IRF8                      small FC
## HLA-DOB                  upregulated
## ZC3H12D                  small FC
## TRIM32                   small FC
## CLEC3B                   small FC
## CREM                     small FC
## GEMIN4                   small FC
## ZNRF1                     small FC
## CLIC2                     small FC
## ALG2                      small FC
## GRIA1                     upregulated
## CCDC28B                  small FC
## KIAA0930                 small FC
## GTF3A                     small FC
## DDIAS                     small FC
## CLSTN2-AS1                downregulated
## TBX1                      upregulated
## APBB1IP                  upregulated
## EMP3                      small FC
## ALAS2                     upregulated
## SAA2                      upregulated
## DIAPH1                    small FC
## RGS18                     small FC
## TBC1D20                  small FC
## PROCR                     small FC
## C19orf48P                 small FC
## SLC2A13                  small FC
## LY6H                      upregulated
## BCHE                      upregulated
## FARP1                     small FC
## KY                        upregulated
## LINC02544                 upregulated
## NECAP2                    small FC
## IL18RAP                   upregulated
## BORCS5                    small FC
## NIN                       small FC
## TACC3                     small FC
## LBX1-AS1                  upregulated
## SLC41A1                  small FC
## AEN                       small FC
## LAT2                      small FC
## FXR1                      small FC
## FMN1                      small FC
## CACNA1I                   upregulated
## CNTD1                     small FC
## PLCL1                     small FC
## MKI67                     upregulated
## ASB16                     upregulated
## CYSLTR1                  small FC
## ASB14                     upregulated
## DSEL                      small FC
## SLC38A5                  upregulated
## CHEK1                     small FC
## EFNA2                     downregulated

```

```

## HDAC9           small FC
## MIOS-DT        small FC
## GAPT           upregulated
## KIF19          upregulated
## MYL3           upregulated
## STIMATE        small FC
## ICAM3          small FC
## PPM1M          small FC
## C11orf96       downregulated
## VSIR           small FC
## CCDC69          small FC
## S100A4          upregulated
## ALK            upregulated
## ADRA2A         upregulated
## LINC02303      upregulated
## HTRA4           upregulated
## DNAH12          upregulated
## CDKL2           small FC
## MYO10           small FC
## TRBV5-6         upregulated
## CYP51A1          small FC
## CLDN7           small FC
## TMEM161B         small FC
## CRYBB1          upregulated
## TMX2            small FC
## ARHGEF17-AS1    small FC
## GPR34           small FC
## HCN1            upregulated
## ATXN1           small FC
## SLC35A2          small FC
## ARSK            small FC
## TRMT2B          small FC
## TNFRSF1B         small FC
## B4GALT2          small FC
## GPR3             downregulated
## CRIPTO          downregulated
## PRSS56          upregulated
## WDCP            small FC
## ULK2            small FC
## NRROS           small FC
## REPS1           small FC
## SILC1           upregulated
## DOP1B            small FC
## SLC25A33         small FC
## CHEK2           small FC
## ANKRD35         upregulated
## ENO1            small FC
## BEAN1           upregulated
## TRDV1           upregulated
## PIF1            upregulated
## DEGS2           downregulated
## C1GALT1C1        small FC
## HASPIN          upregulated
## NXPE3           small FC

```

```

## GPR161           small FC
## DIRAS3          small FC
## EXOC3L2          small FC
## CCL3-AS1         upregulated
## HUNK             small FC
## PICALM          small FC
## SAA1             upregulated
## ARL10            small FC
## TGFBI            upregulated
## NMNAT2           upregulated
## ITM2A             small FC
## ATP6V1A          small FC
## SEMA6D            small FC
## PTPRG             small FC
## CD1E              upregulated
## GPR108            small FC
## TRAV41            upregulated
## HIPK2             small FC
## TREML2            upregulated
## TMCO4             small FC
## FGB               downregulated
## SVIL2P            upregulated
## DUSP23            small FC
## CD1C              upregulated
## LINC02244         upregulated
## SNX27             small FC
## C1QTNF9B          upregulated
## DNAJC3            small FC
## PAK6-AS1          small FC
## AEBP1              upregulated
## ROBO1             small FC
## EFEMP2            small FC
## SH3D19             small FC
## FERMT1            small FC
## LINC01605          upregulated
## REEP5              small FC
## C2CD4D            downregulated
## ENOPH1             small FC
## CXCL12            small FC
## ST6GALNAC3         small FC
## FNBP1              small FC
## IFRD2              small FC
## IGSF10             upregulated
## ALG12              small FC
## MAB21L2            upregulated
## CAVIN1             upregulated
## SNTN               upregulated
## LURAP1             small FC
## CSGALNACT2         small FC
## A4GALT             small FC
## CLEC17A            upregulated
## ANKRD2             upregulated
## ELFN1              small FC
## LNCTAM34A          upregulated

```

```

## EFHD1           small FC
## MCTP1          upregulated
## NID2           small FC
## AXIN2          small FC
## HLA-DMB        small FC
## SEC23B         small FC
## LAMA2          upregulated
## TRBV6-6        upregulated
## C4B            downregulated
## PATL2          upregulated
## LYRM4-AS1      small FC
## PPP1R10        small FC
## TRGV7          upregulated
## IFI44          small FC
## CCDC120        small FC
## TMEM30B        small FC
## TMEM88         small FC
## GOLM1          small FC
## PIK3CD         small FC
## PPIF            small FC
## LINC01762      downregulated
## PPP1R13B        small FC
## DMD             small FC
## MAL2            small FC
## SHISA4          upregulated
## KCNB2           upregulated
## HNRNPH2         small FC
## CADM3-AS1      upregulated
## KSR2            small FC
## FITM2           small FC
## PICK1           small FC
## ANP32E          small FC
## APP              small FC
## OAS1             small FC
## PLEKHF1         upregulated
## DRP2            upregulated
## RFFL             small FC
## SEMA4A          small FC
## MORC4           small FC
## LINC02154      upregulated
## LYPLA1          small FC
## DNAJB5          small FC
## FGF6             upregulated
## TTLL1            small FC
## SRSF12          small FC
## P4HTM           small FC
## SGO1             small FC
## PAX8             small FC
## AIF1             small FC
## MCM10            upregulated
## PABPC4          small FC
## PLA2G3          downregulated
## CDK4             small FC
## UNC13D           small FC

```

```

## ETV5                      small FC
## PLPPR4                    upregulated
## CPNE3                     small FC
## CYP19A1                   upregulated
## NAALADL1                  small FC
## METTL22                   small FC
## SDS                       upregulated
## RELT                      small FC
## MSX2                      upregulated
## ASH1L-AS1                 small FC
## MINAR1                    upregulated
## FUT7                      upregulated
## SLC4A11                   downregulated
## GRIK5                     small FC
## ALOX5                     small FC
## ANXA6                     small FC
## SLC35F6                   small FC
## SCD                       upregulated
## HYAL2                     small FC
## LINC03080                 downregulated
## TAMALIN                   small FC
## TREM1                      upregulated
## LINC00907                 upregulated
## HLA-F                     small FC
## TRBV30                    upregulated
## UBE2C                     upregulated
## KCTD20                    small FC
## ZDHHC2                    small FC
## CIMAP1C                   upregulated
## ZMYND19                   small FC
## PGK1                       small FC
## FAM83H                    small FC
## KIF2C                     small FC
## ADGRA2                    small FC
## SIRPB2                    upregulated
## ADAMTS18                  upregulated
## CD1B                      upregulated
## CCNE1                     small FC
## EPCAM                      small FC
## CAMK2D                     small FC
## LY86                       upregulated
## SPON2                     upregulated
## N6AMT1                    small FC
## SYT13                     small FC
## HOXD8                     small FC
## HNRNPU                    small FC
## SLC30A1                   small FC
## METTL21C                  upregulated
## LRFN5                     small FC
## ITLN1                     upregulated
## PRKCB                     upregulated
## SLC12A5                   upregulated
## RSL1D1                    small FC
## DKK3                     small FC

```

```

## CAND2           small FC
## LINC01684      upregulated
## NHSL3          small FC
## WAKMAR2        upregulated
## JCAD           small FC
## CCNJL          small FC
## RBM38-AS1      upregulated
## ITFG1          small FC
## KCNK6          small FC
## SPINK2         upregulated
## LINC01614      upregulated
## TMEM268        small FC
## FRMPD4         upregulated
## ANXA2          small FC
## ANTXR2         small FC
## GPR141         upregulated
## C4A            downregulated
## KCNJ2          small FC
## MRPS5          small FC
## PLEKHA8P1      small FC
## PDE12          small FC
## HAPLN2         downregulated
## KCTD1          small FC
## CCSAP          small FC
## LDAF1          small FC
## CDCA3          small FC
## PPBP           upregulated
## TUBB6          upregulated
## GORAB-AS1      upregulated
## OTOA           upregulated
## KBTBD8         small FC
## AEBP2          small FC
## EIF4E          small FC
## YEATS2         small FC
## LGALS3         small FC
## LINC01711      upregulated
## PKP4           small FC
## STOML3         upregulated
## IGHM           upregulated
## KIF18B         upregulated
## CFAP61         small FC
## ANGPT1         small FC
## RPUSD4         small FC
## EVL            small FC
## CYP4A22-AS1    downregulated
## SPATA17        small FC
## TMED7          small FC
## TSKS           upregulated
## APOL3          small FC
## IRF2           small FC
## LPAR5          small FC
## PRMT2          small FC
## NT5E           small FC
## KIF14          upregulated

```

```

## TMEM71           small FC
## SP110            small FC
## SHANK1           upregulated
## SULF1             small FC
## DMBT1           upregulated
## HYOU1             small FC
## CIMIP1           upregulated
## FAM225B          upregulated
## CLEC16A          small FC
## ST3GAL4          small FC
## FAM174A          small FC
## DCPS              small FC
## LMCD1             small FC
## TP53              small FC
## LRP10             small FC
## EGF                downregulated
## MARCKSL1          small FC
## HYLS1              small FC
## ADGRF5             small FC
## LINC01479         upregulated
## FSCN1              upregulated
## UTS2              upregulated
## ORC5              small FC
## PRMT6              small FC
## TMC4              small FC
## PLEKHG3             small FC
## NAP1L1             small FC
## Clorf226           small FC
## RHOV              small FC
## SHISA3             small FC
## FCN2                downregulated
## ST3GAL2             small FC
## CASP14              downregulated
## C21orf58           small FC
## MYADM              upregulated
## CENPE              upregulated
## RALGDS             small FC
## PPID                small FC
## GP1BA              upregulated
## PARP8              small FC
## TNFSF9              upregulated
## MAGI2              small FC
## FCGR3A              upregulated
## SEMA3C             small FC
## SLC6A17             small FC
## TPD52L2             small FC
## IMPDH2             small FC
## TSC22D1             small FC
## HENMT1             small FC
## SMG1-DT              small FC
## RAI14              small FC
## PITX2                upregulated
## APEX2              small FC
## SLC6A7              upregulated

```

```

## TMED5           small FC
## EFNA5          small FC
## ANXA8L1        upregulated
## MOB4           small FC
## PLTP           downregulated
## MSX1           upregulated
## EML2           small FC
## WFDC1          small FC
## RAD51AP1       small FC
## TRIM65         small FC
## LRRTM3         upregulated
## CYGB           small FC
## ADAMTSL4       upregulated
## PLAUR          upregulated
## PPP3CB          small FC
## CCDC117         small FC
## GPC2           upregulated
## VPS8            small FC
## RPL7P3         upregulated
## MSI2            small FC
## TRAV5           upregulated
## BMS1P8          upregulated
## NBPF1           small FC
## SH3TC2          small FC
## SASH1           small FC
## ZEB1            small FC
## NELL1           small FC
## RUNDC1          small FC
## SMAD6           small FC
## SSH2            small FC
## CFL2            small FC
## TRBV28          upregulated
## POLQ            upregulated
## MIR924HG        upregulated
## KCNJ1           small FC
## HOXA-AS3        small FC
## BUB1B           small FC
## CDT1            small FC
## FTLP3           small FC
## CYP2J2           small FC
## IL11RA          small FC
## SOCS3           downregulated
## AURKB           upregulated
## ZSWIM3          small FC
## TMEM98          small FC
## AKIRIN1         small FC
## CRYAA           downregulated
## CHRD1L1         small FC
## STAT2            small FC
## ZNF532           small FC
## SPIN2A          upregulated
## SLC16A5          small FC
## NELL2           upregulated
## PTX3            upregulated

```

```

## NR1H4                      small FC
## NCKIPSD                    small FC
## IFIT1                       small FC
## VPS26B                      small FC
## SERINC2                     small FC
## SERPINB9P1                  upregulated
## VNN2                         small FC
## YRDC                        small FC
## MFNG                        small FC
## PRSS12                      small FC
## LHX9                        upregulated
## ZNF552                      small FC
## PLXDC2                      small FC
## LY6L                         downregulated
## FCGR2C                      upregulated
## AGK                          small FC
## MGAT2                        small FC
## KAT7                         small FC
## GAB2                         small FC
## GSTM3                        small FC
## RHEBL1                      upregulated
## PPFIA4                      upregulated
## CTSH                         small FC
## SLC17A7                      upregulated
## GAREM2                      small FC
## UHRF1                        upregulated
## LIX1L                         small FC
## RECK                         small FC
## R3HDM1                       small FC
## LY6G5C                       small FC
## LINC01281                     upregulated
## MBOAT2                      small FC
## HNRNPH3                      small FC
## COL17A1                      upregulated
## TNFRSF10A                    small FC
## NLRC4                        small FC
## PGBD1                         small FC
## HAS2                          upregulated
## CDC20P1                      upregulated
## CTBP2                         small FC
## NLE1                          small FC
## KIR3DL1                      upregulated
## HNRNPA3                      small FC
## TUBB1                         upregulated
## TOMM20P2                      upregulated
## WNT1                          upregulated
## SYTL1                         small FC
## C6orf136                      small FC
## PIP4P2                        small FC
## PARP14                        small FC
## YPEL1                         small FC
## GYPC                          small FC
## JAZF1                         small FC
## SLC16A6                      small FC

```

```

## RFPL4B upregulated
## PALMD small FC
## LINC00944 upregulated
## ZNF474 upregulated
## TRABD2B small FC
## TSPYL4 small FC
## LRRC3 small FC
## NDUFA5 small FC
## GRID2IP small FC
## CD300C upregulated
## SH3BGR small FC
## JAK3 upregulated
## CMPK2 small FC
## SCOC small FC
## RNASE6 small FC
## CCM2 small FC
## ACYP2 small FC
## ACAT2 small FC
## FBXL3 small FC
## LY6E-DT small FC
## VWFP1 upregulated
## HEXIM2 small FC
## LINC01048 upregulated
## LINC01874 downregulated
## IRF2BPL small FC
## E2F2 upregulated
## LINC00841 upregulated
## CLMP upregulated
## NLRP1 small FC
## TRAV8-3 upregulated
## FHAD1 small FC
## CDC45 upregulated
## GPR39 small FC
## RNASEH2B small FC
## CENPA upregulated
## LINC02908 upregulated
## MTMR10 small FC
## LBH small FC
## SUGCT-AS1 upregulated
## ADAM23 upregulated
## MTHFD1L small FC
## COL2A1 upregulated
## PAX8-AS1 upregulated
## HLA-DPA1 small FC
## RAB5A small FC
## LINC02972 upregulated
## NOP56 small FC
## TROAP upregulated
## ARMC9 small FC
## TCL1A upregulated
## CERS1 upregulated
## SKA1 upregulated
## AFAP1L1 small FC
## GTF3C1 small FC

```

```

## MGARP           small FC
## LINC02542      small FC
## PIGZ            small FC
## TM9SF2          small FC
## VGF             downregulated
## CLSPN           upregulated
## GDF6            upregulated
## GSPT1           small FC
## TMEM41B         small FC
## THEMIS2         small FC
## STK17B           small FC
## TMEM45B         small FC
## ZIC4             upregulated
## CCL23           downregulated
## PCDH9            small FC
## PTPRN2-AS1      upregulated
## AGFG2            small FC
## GMIP             small FC
## LIPA             small FC
## SH3BP5L          small FC
## TCEAL3           small FC
## TDRP             small FC
## YWHAE            small FC
## ZFYVE28          small FC
## GPR4              small FC
## PRKX             small FC
## PTGDR2           upregulated
## HNRNPA1P21      upregulated
## TRBV24-1         upregulated
## IGFBP2           small FC
## DIAPH2           small FC
## CBLC              small FC
## FLOT1             small FC
## PRR16             upregulated
## ELF4              small FC
## USP28             small FC
## CCDC87            small FC
## PRODHLP          downregulated
## UBL3              small FC
## TOB1              small FC
## SOX2-OT           small FC
## THPO              small FC
## MAPRE2            small FC
## RPN1              small FC
## MRPL42            small FC
## LINC01144         small FC
## LINC02481         upregulated
## PANX1             small FC
## PAFAH1B2          small FC
## HIP1R              small FC
## NAPSA              small FC
## GCNT2              small FC
## BPIFA2           downregulated
## MTCO3P13          downregulated

```

## C2CD4D-AS1	small FC
## TADA2B	small FC
## RAB39A	small FC
## MVK	small FC
## RNF180	small FC
## OVOL1	small FC
## LARGE2	small FC
## RGS19	small FC
## SLC26A9	small FC
## ORC6	small FC
## ETNK2	small FC
## CEACAM21	upregulated
## AP1S2	small FC
## DUSP7	small FC
## G6PC1	downregulated
## LINC02432	small FC
## FRMD3	small FC
## CALHM6	upregulated
## HSPA7	upregulated
## MLNR	downregulated
## NAMPT	small FC
## TEKT3	upregulated
## IL31RA	upregulated
## SLC35F5	small FC
## HELT	downregulated
## TPPP3	small FC
## MEG3	upregulated
## DENR	small FC
## RPS6KC1	small FC
## SERINC1	small FC
## UPK3A	upregulated
## CLSTN2	small FC
## POLR2D	small FC
## HIGD1A	small FC
## ITPR1	small FC
## KCNK13	small FC
## PHTF2	small FC
## CCDC150	small FC
## HYAL1	small FC
## CFHR1	upregulated
## C1QC	upregulated
## LINC03073	small FC
## TRIM59	small FC
## ST3GAL5	small FC
## ARC	downregulated
## NEBL	small FC
## UBE2D4	small FC
## NLRP12	upregulated
## SLC11A2	small FC
## TPRG1-AS1	small FC
## TMPRSS3	small FC
## ARPC2	small FC
## EXO5	small FC
## THYN1	small FC

```

## C2orf42           small FC
## SLC15A1          small FC
## INKA1            small FC
## GNAI1            small FC
## APOL5            upregulated
## NRBF2            small FC
## C2orf88          small FC
## IDH2             small FC
## KCNIP3           small FC
## BTC              small FC
## FFAR4            upregulated
## TRBJ2-3          upregulated
## YIPF6             small FC
## TPTE2P3          downregulated
## PDRG1            small FC
## LINC01671         small FC
## CD302            small FC
## DYM              small FC
## PHF24             upregulated
## UPRT              small FC
## CCND2            small FC
## STK35             small FC
## ABCC9             small FC
## USP18             small FC
## CSF1              small FC
## TACSTD2          small FC
## IER3              small FC
## MAT1A             small FC
## AP3S1             small FC
## TINAGL1           small FC
## MAN1A1           small FC
## NRBP1             small FC
## LINC02812         upregulated
## BID               small FC
## HSD17B4           small FC
## TRAV2             upregulated
## SCN2B             small FC
## NUDT16            small FC
## PSPC1             small FC
## ISOC1             small FC
## TMEM164           small FC
## SSTR5             downregulated
## ELMOD3            small FC
## TRIM25            small FC
## FABP7             upregulated
## RESF1             small FC
## MAP7-AS1          small FC
## NRTN              small FC
## FILIP1L            small FC
## RGP1              small FC
## ENTPD8            small FC
## ATP1B2            small FC
## MUC15             downregulated
## RASGEF1A          small FC

```

## NEURL1	upregulated
## GIMAP5	small FC
## GALNT13	upregulated
## RGL4	upregulated
## TDP1	small FC
## P2RY12	small FC
## CD40	small FC
## LXR	small FC
## DACT2	small FC
## IFI6	upregulated
## IL20RB	upregulated
## NLRP3	small FC
## CADM1	small FC
## PHF8	small FC
## C2orf72	small FC
## HOXA7	small FC
## CAMKMT	small FC
## KPNA3	small FC
## JKAMP	small FC
## ABHD17C	small FC
## ADH1B	small FC
## RPGRIP1L	small FC
## FBXW4P1	small FC
## BAIAP3	small FC
## NNT	small FC
## AP1G1	small FC
## MAB21L1	upregulated
## SRPX2	upregulated
## RSAD2	small FC
## WNT4	upregulated
## ARMH1	small FC
## TRAV6	upregulated
## AACS	small FC
## CCN3	upregulated
## RAD51D	small FC
## RUFY4	upregulated
## PCDH7	small FC
## RAB11A	small FC
## RTN4IP1	small FC
## TRBV6-2	upregulated
## UBE2L6	small FC
## LINC02580	small FC
## ELL	small FC
## TPPP2	small FC
## CEND1	small FC
## LINC01929	upregulated
## MT1M	downregulated
## MEG8	upregulated
## CHAC1	small FC
## CCND2-AS1	upregulated
## ATP2C1	small FC
## LRRC10B	small FC
## NAPG	small FC
## ZNF317	small FC

```

## DENND5A           small FC
## TSPAN8            small FC
## DNAJC11          small FC
## IRX2              small FC
## DOK6              small FC
## RBFOX2            small FC
## CTNND2            small FC
## MRLN              upregulated
## CAD               small FC
## CDKN2B-AS1        upregulated
## RADX              small FC
## LINC00877         upregulated
## HMGCR             small FC
## DONSON            small FC
## ITSN1              small FC
## SNAP25            small FC
## ZDHHC5            small FC
## ADCY5              small FC
## SP7               upregulated
## CORO1C             small FC
## C19orf38          small FC
## TRIM13            small FC
## PDIA6              small FC
## PRSS23            small FC
## LINC01503          small FC
## BRCA2              small FC
## DYSF               small FC
## ORMDL3             small FC
## TCF23              upregulated
## SOWAHA            small FC
## ZNF74              small FC
## OLIG1              small FC
## C1RL               small FC
## ACAN               upregulated
## KCND1              small FC
## CDC25C              upregulated
## CHRAC1              small FC
## APBB1               small FC
## SYNPO2L-AS1        upregulated
## PLK1               small FC
## XRCC3              small FC
## LIPE               small FC
## PAK4               small FC
## PSEN2              small FC
## BAX                small FC
## TNFRSF4            upregulated
## SVOP               small FC
## TRIO               small FC
## PLEKHF2            small FC
## ZNF331              small FC
## CHRD2              upregulated
## LINC00243          upregulated
## MDGA1              small FC
## DCBLD1             small FC

```

## INIP	small FC
## GABRB3	small FC
## ITGAE	small FC
## FBXL16	small FC
## KIF11	small FC
## DMPK	small FC
## IGSF5	downregulated
## TOM1L2	small FC
## EME1	small FC
## LLGL2	small FC
## TRAV13-2	upregulated
## PGAP4	small FC
## RERGL	small FC
## CEACAM3	upregulated
## CUX2	upregulated
## IGF1R	small FC
## EZR	small FC
## SLC25A40	small FC
## FAM118B	small FC
## ERLIN2	small FC
## ARHGDIG	upregulated
## DUSP14	small FC
## NMT2	small FC
## TTC9	small FC
## NCALD	small FC
## WFDC21P	upregulated
## ALDH1A3-AS1	upregulated
## DDR2	small FC
## ZDHHC8BP	downregulated
## FAM110C	small FC
## GDPD5	small FC
## ITGA11	small FC
## LMBR1	small FC
## CEP55	upregulated
## FXYD7	upregulated
## NPTX2	upregulated
## MMP13	upregulated
## ATP2A1-AS1	upregulated
## ST6GAL2	small FC
## DLG4	small FC
## UGT8	small FC
## SLC15A3	small FC
## VAMP1	small FC
## LINC01854	upregulated
## TRBD1	upregulated
## BCAS4	small FC
## LSR	small FC
## PLEKHB1	small FC
## SLC39A13-AS1	small FC
## ZNF703	upregulated
## ADGRG5	small FC
## ARFGEF3	small FC
## ACKR3	small FC
## NGF-AS1	upregulated

## PFKP	small FC
## BPNT1	small FC
## CBARP	small FC
## ARTN	small FC
## DDX60L	small FC
## FLRT1	small FC
## ITGA5	small FC
## ERCC6L	upregulated
## VCF1	small FC
## RCAN1	small FC
## PSME3	small FC
## TSHZ3	small FC
## CYP27C1	upregulated
## CCDC167	small FC
## CXCL2	downregulated
## HDLBP	small FC
## KRTCAP3	small FC
## KRT8	small FC
## CENPI	small FC
## ISM1	small FC
## MIR497HG	small FC
## ACSL1	small FC
## MAP1B	small FC
## TMEM74B	small FC
## NDFIP1	small FC
## TAF1A	small FC
## PDE8B	small FC
## LINC01543	downregulated
## CST3	small FC
## TRAV20	upregulated
## MYOSLID	upregulated
## NDFIP2	small FC
## LTBR	small FC
## HECW2-AS1	upregulated
## USP13	small FC
## COL9A2	small FC
## IGFBP6	upregulated
## KLHDC3	small FC
## C4orf46	small FC
## TRIM16	small FC
## PIK3R5-DT	upregulated
## IDI2-AS1	upregulated
## ASAP1	small FC
## GPX7	small FC
## NAT8L	small FC
## KIF15	small FC
## SHMT2	small FC
## HTR3B	downregulated
## CLTC	small FC
## BMP7	small FC
## RIPK4	small FC
## C5AR2	small FC
## FAM171B	small FC
## PIGK	small FC

```

## RCOR2           upregulated
## CLDN22         downregulated
## ANKRD23        upregulated
## STMN1          small FC
## FTH1P22        upregulated
## OPN4           upregulated
## HOXB8          small FC
## TEX2           small FC
## SLC4A10        upregulated
## SUV39H2        small FC
## BRIP1          small FC
## HID1           small FC
## ISG15          small FC
## DEPTOR-AS1     small FC
## GIT2           small FC
## KCNA5          small FC
## CFAP276        upregulated
## PCSK2          small FC
## FAM53C          small FC
## PRDM8          upregulated
## PCK1           downregulated
## MB21D2          small FC
## IFNG-AS1        upregulated
## FAM217B        small FC
## TYMS           small FC
## DNAJC1         small FC
## FAM89B          small FC
## KCP            small FC
## PRR13          small FC
## ING4           small FC
## CCL4L2          upregulated
## SH3BP2          small FC
## TRIB1           small FC
## ADORA2B         upregulated
## DCHS1           small FC
## RNF125          small FC
## ERBB4           small FC
## NBPF8           small FC
## TP53AIP1        small FC
## CYLD            small FC
## HDAC2-AS2       small FC
## SLC16A7          small FC
## THAP12          small FC
## SLC16A12-AS1    upregulated
## HTR2B           small FC
## HHLA2           downregulated
## FAAH2           small FC
## GJD3            small FC
## C4orf54          upregulated
## ARHGEF18        small FC
## NEIL2           small FC
## SLC44A2          small FC
## EXT1            small FC
## EFNA1           small FC

```

```

## NXN                      small FC
## CA13                     small FC
## MIR23B                   upregulated
## DHX9                      small FC
## SNED1                     small FC
## SRP54                     small FC
## LGR4                      small FC
## L3MBTL2-AS1               small FC
## CANX                      small FC
## HPRT1                     small FC
## SEC23A                    small FC
## GNAL                      small FC
## PRPS2                     small FC
## MEX3A                     small FC
## ACTG2                     upregulated
## SCARA3                    upregulated
## MIR100HG                  small FC
## CRIM1                     small FC
## HTRA1                     small FC
## ODAD2                     upregulated
## FTL                       small FC
## C11orf87                  upregulated
## ADM                        small FC
## PLEKHG4                   small FC
## CPD                        small FC
## CENPH                      small FC
## TNFRSF25                  small FC
## ZNF706                     small FC
## ARSG                       small FC
## STEAP1                     small FC
## CDC42EP3-AS1               upregulated
## LINC01497                 upregulated
## CLDN11                     small FC
## LINC02671                 upregulated
## CD46                        small FC
## HABP2                      downregulated
## NFIA-AS2                  upregulated
## MTND4P18                  downregulated
## KCNA2                      small FC
## TMEM38B                    small FC
## C2orf27A                  small FC
## DUXAP10                    upregulated
## F12                         downregulated
## THG1L                      small FC
## GYG1                        small FC
## HEPH                        small FC
## AMACR                      small FC
## RHOBTB3                    small FC
## FMN2                        small FC
## IZUMO1R                    upregulated
## TRAV16                     upregulated
## BRCA1                      small FC
## SCML2                      small FC
## MYOF                       small FC

```

```

## CEBPA-DT           small FC
## CHRM2             upregulated
## IMPDH1            small FC
## CA9              upregulated
## MAP3K15           small FC
## MAP7D1            small FC
## RPL23AP82         small FC
## PNPLA1            upregulated
## PABIR1            small FC
## RNF128            small FC
## IFITM3P6          upregulated
## TLCD1             small FC
## GSN               small FC
## AASS              small FC
## FANCF             small FC
## LINC01852          small FC
## LARP1B             small FC
## PIP5K1B             small FC
## TRBV14             upregulated
## NEGR1              small FC
## NOPCHAP1           small FC
## PMP22              small FC
## LSMEM1             upregulated
## ELF3               small FC
## BCL2L14             upregulated
## GHDC              small FC
## LIAT1              small FC
## KIF7               small FC
## CLECL1P            upregulated
## TBX2               small FC
## NUDT1              small FC
## LINC01886           upregulated
## CFI                small FC
## LINC01615           upregulated
## GPI                small FC
## ARF6               small FC
## ABHD11             small FC
## CENPW              small FC
## LINC02611           upregulated
## RRAGD              small FC
## MS4A8              upregulated
## WDHD1              small FC
## FGD4               small FC
## VAPA              small FC
## TLL1               small FC
## CDCA7L              small FC
## SLC19A2             small FC
## NOS3               small FC
## SOHLH2             upregulated
## LINC02308           upregulated
## NRN1               small FC
## SYT15-AS1           small FC
## C19orf44            small FC
## GCGR              small FC

```

```

## ACOT11           small FC
## MSRB3-AS1       upregulated
## RS1             downregulated
## ADORA3          small FC
## MT1A            downregulated
## ANP32A          small FC
## C9orf85         small FC
## DDRGK1          small FC
## KLHL26          small FC
## TMSB4X          small FC
## HROB             small FC
## PRRG2            small FC
## IFI27            small FC
## TAF4             small FC
## GPR78            upregulated
## MPC1             small FC
## SOWAHB           small FC
## ARL9             upregulated
## LINC01679        small FC
## UNCX            downregulated
## FIBIN            small FC
## MYOCOS           downregulated
## MATN4            upregulated
## RNF149           small FC
## CCDC90B          small FC
## ZNF385D          small FC
## GNAO1            small FC
## CLU              small FC
## LINC02967        small FC
## BORA             small FC
## KCTD8            small FC
## MMP15            small FC
## APOBEC3D         small FC
## KIRREL2          small FC
## LLGL1            small FC
## LILRA2           small FC
## CTSZ              small FC
## KNDC1            small FC
## NECAP1           small FC
## GYPE              small FC
## AUNIP             upregulated
## WARS2-IT1         upregulated
## SEZ6L             upregulated
## AP4B1             small FC
## IER2              small FC
## TTC3              small FC
## ST6GALNAC5        upregulated
## ARNT              small FC
## DSTN              small FC
## UBE2Q2            small FC
## SH3BP1            small FC
## DPYSL2            small FC
## ATP2B3            downregulated
## FRY               small FC

```

```

## PPP1R12B           small FC
## GLDN              small FC
## DLL1              small FC
## GLYATL2           downregulated
## TP53INP1          small FC
## RBSN              small FC
## B3GALNT2          small FC
## RIN1              small FC
## LINC01634         upregulated
## ALG6               small FC
## PRSS36             small FC
## IPCEF1             small FC
## BRD9               small FC
## LINC00570         upregulated
## HP                downregulated
## LINC00870         small FC
## IMPA1              small FC
## HOXB9              small FC
## SLC35A5            small FC
## MIR3147HG         upregulated
## CCDC195             upregulated
## TRNP1              small FC
## CPM                small FC
## SRGAP1             small FC
## ZNF71              small FC
## WASL               small FC
## TMEM199             small FC
## CCDC184             small FC
## KCTD14              small FC
## CCNB1               small FC
## RILPL1              small FC
## GNA12               small FC
## WNT2                upregulated
## CDC42BPG            small FC
## LINC01354           upregulated
## CDK5RAP2             small FC
## LINC02084           upregulated
## SLC1A7              upregulated
## PLXNA1              small FC
## CARHSP1             small FC
## APOBEC3F             small FC
## MRPS30              small FC
## CNOT11              small FC
## CDC42EP4             small FC
## CBFA2T3              small FC
## BRF2                small FC
## LINC00595           upregulated
## LINC00856           upregulated
## SERPINE3            upregulated
## COMTD1              small FC
## BRI3BP              small FC
## NRXN2              small FC
## RAB21               small FC
## AFDN               small FC

```

```

## FAM76A           small FC
## RGS11            small FC
## LINC02437        small FC
## PDE2A-AS2        upregulated
## DSE              small FC
## BICC1            small FC
## PLCB1            small FC
## LINC01739        small FC
## FANCG            small FC
## ERBB2            small FC
## SMARCD3          small FC
## BICDL3P          downregulated
## KIF2A            small FC
## NRBP2            small FC
## PRUNE1           small FC
## ZMYM4             small FC
## LRRC30           upregulated
## HDAC1            small FC
## PDE5A             small FC
## APLNR             upregulated
## POU3F3           small FC
## MYH7B             upregulated
## LINC00652         small FC
## TMEM184C          small FC
## GPR171           upregulated
## IRX2-DT           small FC
## CYP26B1           small FC
## TMEM63B           small FC
## SH2D2A           upregulated
## BLM               small FC
## CYFIP2            small FC
## KIR2DS4           upregulated
## PGLYRP1           upregulated
## NALCN             small FC
## MIR210HG          small FC
## TGFB2-AS1         upregulated
## DHX15              small FC
## LRRN2              small FC
## PPIL2              small FC
## ETS2-AS1          downregulated
## CNPPD1            small FC
## MIS18BP1           small FC
## FCRL2              upregulated
## KLHL13             small FC
## CX3CR1            small FC
## MMP23B             upregulated
## PADI4              upregulated
## C10orf95           downregulated
## MECOM              small FC
## SELENOW            small FC
## SLC38A4            small FC
## IFFO2              small FC
## THSD1              small FC
## C1QB               small FC

```

## ESAM	small FC
## HCN2	small FC
## CENPL	small FC
## CEP128	small FC
## NEU3	small FC
## EPS8L1	small FC
## FAM167A	small FC
## SIRLN1	downregulated
## SERPINE1	upregulated
## LINC01936	small FC
## TMEM200C	small FC
## GSTM5	small FC
## NCAPD3	small FC
## NTF4	upregulated
## MRC1	small FC
## SLC05A1-AS1	upregulated
## ASCL5	upregulated
## CDR2	small FC
## TUFT1	small FC
## STARD9	small FC
## VIM-AS1	small FC
## RPL7AP64	upregulated
## TMEM165	small FC
## FOXM1	small FC
## CEL	small FC
## TPSD1	upregulated
## LINC00506	upregulated
## TRAFD1	small FC
## FBXL7	small FC
## HSPA2	small FC
## VAC14-AS1	small FC
## CPEB2	small FC
## CST2	upregulated
## LINC01914	upregulated
## SLA	small FC
## IKBKE	small FC
## ZNF70	small FC
## LAMB4	small FC
## RNF166	small FC
## STAU1	small FC
## TMCC1	small FC
## GRIN2C	upregulated
## CDC20B	upregulated
## PDE4B	small FC
## MTND4LP30	small FC
## ERVFRD-1	small FC
## CLDN3	small FC
## PRR5L	small FC
## LDB1	small FC
## SRM	small FC
## SLC5A3	small FC
## IGF2BP3	upregulated
## MMS22L	small FC
## MSMO1	small FC

```

## FAM171A1           small FC
## TRD-AS1            small FC
## WWTR1              small FC
## MYO5B              small FC
## IGHJ3P             upregulated
## STK32A             small FC
## SGTB               small FC
## SPCS2              small FC
## LINC01127          downregulated
## SLC19A3             small FC
## GREM2              upregulated
## PDGFRB             small FC
## CMTM1              small FC
## ATF4               small FC
## KLHL14              small FC
## BTG2               small FC
## DPYD               small FC
## GNMT               small FC
## SOX8               upregulated
## TRIM27              small FC
## TMEM52              upregulated
## TAF12-DT             upregulated
## GBP6               upregulated
## NEK6               small FC
## SFXN3              small FC
## LRRC75B             small FC
## HNRNPM              small FC
## LRRC73              small FC
## THSD7A              small FC
## TNIP2               small FC
## TIMP3               small FC
## ELP2                small FC
## SEC13               small FC
## MARK2               small FC
## SPRED1              small FC
## ARSI                small FC
## FGR                 small FC
## VAV2                small FC
## ARHGEF16             small FC
## IGFLR1              downregulated
## FKBP15              small FC
## GPR31               upregulated
## MMP25               small FC
## FSBP                small FC
## ZC3HAV1              small FC
## ILDR1               small FC
## KCNK15-AS1           upregulated
## CALN1               upregulated
## FXYD4               small FC
## CILK1               small FC
## BAIAP2L1              small FC
## IRF6                small FC
## Clorf198             small FC
## TACC1               small FC

```

## AHCYL2	small FC
## F13A1	small FC
## RCC1	small FC
## ATF6	small FC
## SGPP1	small FC
## CC2D1B	small FC
## CASP4	small FC
## CYP2U1-AS1	small FC
## LPIN3	small FC
## SGO2	small FC
## MAZ	small FC
## FZD9	upregulated
## PRKAA1	small FC
## TMBIM1	small FC
## TPM3	small FC
## CHN1	small FC
## SLC12A1	downregulated
## REM1	upregulated
## MX1	small FC
## NTN4	small FC
## PRX	small FC
## TUBGCP3	small FC
## KCNJ16	small FC
## SNHG26	small FC
## EXOSC5	small FC
## ENTR1	small FC
## GAMT	small FC
## APAF1	small FC
## RAP2A	small FC
## CD5L	upregulated
## AZIN2	small FC
## ZDHHC20	small FC
## PPP1R3B	small FC
## DNASE1	small FC
## ARMCX5	small FC
## PKP1	small FC
## MTND6P22	small FC
## FOXN3	small FC
## ARID3B	small FC
## PAQR4	small FC
## KIF13A	small FC
## ESRRG	small FC
## SH3RF3-AS1	small FC
## SLC22A15	small FC
## TRBV12-4	upregulated
## MAP3K6	small FC
## ROM1	small FC
## IFNLR1	small FC
## NUF2	small FC
## C1orf54	small FC
## UBE2T	small FC
## ELK3	small FC
## KLK4	upregulated
## ZNFX1	small FC

```

## TRAM2           small FC
## HES6            small FC
## SLC46A2         upregulated
## CNTRL           small FC
## SDE2            small FC
## RGMB            small FC
## TRAM1L1         small FC
## MAGEF1          small FC
## CNIH2           small FC
## PRTFDC1         small FC
## ITGA6           small FC
## APBA2           small FC
## ATP6V1E2        small FC
## NRSN2           small FC
## C1orf167        small FC
## EPHB2           small FC
## RTL10           small FC
## FTLP14           small FC
## PKM              small FC
## MAS1             upregulated
## ZNF519           small FC
## C18orf63         downregulated
## CCR9             downregulated
## LDLRAD2          upregulated
## KIF3C            small FC
## SQLE              small FC
## KIAA1549         small FC
## LINC01410        small FC
## SIAH2            small FC
## EEPD1            small FC
## PLA2G12A         small FC
## GPR158           small FC
## BCL2L2           small FC
## BPIFB4           upregulated
## MFSD4A           small FC
## GNAI2            small FC
## GOSR1            small FC
## IRX3              small FC
## PSRC1            small FC
## CPSF4            small FC
## FKRP              small FC
## IFIT3             small FC
## LINC01943        upregulated
## RTP4              small FC
## TNS4              small FC
## SELENOI          small FC
## HOOK1            small FC
## GOLPH3-DT        small FC
## VILL              small FC
## LAPTM4B          small FC
## ROR1              small FC
## TTC39A-AS1       downregulated
## RBM47             small FC
## LINC02408        upregulated

```

```

## NCK1                      small FC
## STXBP5                    small FC
## HOXB6                     small FC
## SSX2IP                    small FC
## L1TD1                     small FC
## MEFV                      small FC
## NTRK2                     small FC
## LRRC52                    downregulated
## SLC18B1                   small FC
## RECQL4                    small FC
## VSIG1                     upregulated
## PCDHGA12                  small FC
## ARFGAP3                   small FC
## LIPG                       small FC
## NUP62                      small FC
## TNFAIP1                   small FC
## CAPZA1                    small FC
## SFTA2                     downregulated
## TWNK                       small FC
## RAB32                      small FC
## SIGLEC22P                  upregulated
## DCAF5                      small FC
## GAL3ST3                   small FC
## RAB35-AS1                  small FC
## PLPP6                      small FC
## ELF3-AS1                  small FC
## RN7SL138P                  small FC
## ISYNA1                     small FC
## PAQR7                      small FC
## WNT3                       small FC
## HOXA5                      small FC
## OPRL1                      small FC
## PKD1L1                     small FC
## TMEM68                     small FC
## ARHGEF5                   small FC
## COG2                        small FC
## DLK1                        upregulated
## PPEF1                      downregulated
## NUDT10                     small FC
## SERTAD4                    small FC
## NPC1                        small FC
## SRRM4                      downregulated
## MTMR6                      small FC
## EXOC7                      small FC
## HOMER3-AS1                  small FC
## STAT3                       small FC
## NWD1                        downregulated
## PGM2L1                     small FC
## COX10                      small FC
## GLYR1                       small FC
## SERTAD4BP                  upregulated
## C20orf202                  small FC
## PTBP2                      small FC
## PRAM1                      small FC

```

```

## UBE2L5 upregulated
## HIVEP1 small FC
## IFT70A small FC
## SPATS2 small FC
## SLC38A6 small FC
## SH3KBP1 small FC
## ST8SIA5 small FC
## ARMC3 small FC
## RASAL1 small FC
## ALG8 small FC
## OTULIN small FC
## CTNS small FC
## ARRB1 small FC
## COLCA1 small FC
## ARHGEF25 small FC
## USP2-AS1 small FC
## BISPR small FC
## KLF10 small FC
## FAM200C small FC
## TRAIP small FC
## ZNF503-AS1 small FC
## AFF3 small FC
## CLEC2L upregulated
## RBM23 small FC
## MIDN small FC
## PCDHGC3 small FC
## POLR3D small FC
## AP3B2 small FC
## KLHL1 upregulated
## SOCS3-DT downregulated
## SEMA3G small FC
## UBD upregulated
## PACS2 small FC
## PLEKHA3 small FC
## TPST2 small FC
## ANGPT2 small FC
## PGAP6 small FC
## SLC34A2 downregulated
## EPAS1 small FC
## TRAV27 upregulated
## MTCO3P8 small FC
## RABEP1 small FC
## SIRT2 small FC
## GDI1 small FC
## LILRA1 small FC
## ZNF565 small FC
## C8orf89 upregulated
## KLHL15 small FC
## SUSD4 small FC
## NOS1 small FC
## IL18BP small FC
## SWINGN upregulated
## RABEPK small FC
## L3MBTL4-AS1 upregulated

```

```

## POU2AF1           upregulated
## FUCA1             small FC
## CAMK2N2           small FC
## CLIC3             small FC
## LINC02185          small FC
## HPCAL1             small FC
## MTND1P14           small FC
## LINC02524          downregulated
## P3H2-AS1            small FC
## ZDHHC18             small FC
## MLXIP               small FC
## IGF2BP2-AS1         upregulated
## PCBP1-AS1            small FC
## ASS1P1              upregulated
## HNRNPK               small FC
## PTCHD4               small FC
## PIM1                 small FC
## SLF2                 small FC
## GEMIN2               small FC
## TRBV15               upregulated
## AMZ2P1               small FC
## IRF1                 small FC
## MAFK                 small FC
## TAB3                 small FC
## REG1B                downregulated
## EPHX3               small FC
## LAMA5                small FC
## TTLL4                small FC
## CCNE2                small FC
## NTAN1                small FC
## UBASH3B              small FC
## TSNAX                small FC
## SMAGP                small FC
## PTTG1IP              small FC
## AFTP8-DT              small FC
## ELMO1                small FC
## ADAMTS3              small FC
## SIAE                 small FC
## HS6ST1               small FC
## RDM1                 upregulated
## RGS13                upregulated
## GRTP1                small FC
## LINC02934             small FC
## MIA2-AS1              small FC
## TMEM30A              small FC
## FKBP5                small FC
## TCEAL2               small FC
## GATA3                 small FC
## FNBP1L                small FC
## MTND6P4               small FC
## BCL11B                small FC
## PDE4DIP               small FC
## ARHGAP17               small FC
## CEP250               small FC

```

```

## MYO18A           small FC
## SMIM22          small FC
## FBXW11          small FC
## TMEM150C         small FC
## FLNB            small FC
## GIMAP4           small FC
## MPIG6B           upregulated
## FBXW2            small FC
## PPP1CC           small FC
## INSIG1           small FC
## BMERB1           small FC
## FNDC4            small FC
## UGCG             small FC
## CBLN3            small FC
## STX10            small FC
## IER5             small FC
## RASSF3           small FC
## LINC01659        downregulated
## GNE              small FC
## TMEM263          small FC
## PPM1B            small FC
## SLC7A1           small FC
## LINC02328        small FC
## ZC3H10           small FC
## MESP2            upregulated
## CARHSP1-DT       downregulated
## TSPAN1           small FC
## NBPF15           small FC
## ELMO3             small FC
## TMTC1             small FC
## DHX30             small FC
## KCNIP4            small FC
## EPB41L4A-DT       small FC
## WDR38             upregulated
## IDH1              small FC
## KCTD4             small FC
## CARD8-AS1         small FC
## MOAP1             small FC
## MICU2             small FC
## ST8SIA2           upregulated
## RFX8              upregulated
## SEPTIN1           small FC
## PCLAF             small FC
## AP4M1             small FC
## NAIP              small FC
## KLK15             downregulated
## HRCT1             small FC
## SPATA12           upregulated
## C14orf180          small FC
## SPON1             small FC
## COMETT            small FC
## IL27              upregulated
## GLT8D1            small FC
## ZNF93             small FC

```

```

## EXD2                      small FC
## LYPD6B                    small FC
## PARP2                      small FC
## RAB44                      upregulated
## LINC00242                  small FC
## MAP3K2-DT                  small FC
## PABIR2                     small FC
## B3GNT5                     small FC
## PLK4                        small FC
## SLC39A14                   small FC
## NKAIN4                     downregulated
## DUSP5P2                    downregulated
## SLC23A4P                   small FC
## SSTR5-AS1                  downregulated
## TMX4                        small FC
## QSOX2                       small FC
## DARS1                        small FC
## INPP5J                      small FC
## NPM2                        small FC
## HCRT2                       downregulated
## STX2                         small FC
## LINC02894                  small FC
## PDE9A                        small FC
## KDM5B                        small FC
## TFAP2B                      small FC
## TBC1D27P                   upregulated
## LRIT3                        small FC
## LINC00402                  upregulated
## GPR156                       small FC
## COL24A1                     small FC
## LUCAT1                      upregulated
## PPP2CA                      small FC
## PDCD2L                      small FC
## DCLRE1B                     small FC
## SREBF1                       small FC
## ZNRF3-AS1                   downregulated
## TM9SF1                      small FC
## MCM6                         small FC
## MRPS23                      small FC
## TTC22                        small FC
## ST8SIA5-DT                  small FC
## MAP7D3                      small FC
## FAT3                          small FC
## OTOGL                        upregulated
## PRELP                        upregulated
## SYTL4                         small FC
## EPGN                          upregulated
## ZBED10P                      small FC
## CD109-AS1                   small FC
## KIF18A                      small FC
## FGFR4                        small FC
## RDH12                        upregulated
## SKAP2                        small FC
## INSM1                        upregulated

```

```

## BATF3                      small FC
## ATP6V1H                     small FC
## RBFA                        small FC
## STAM2                        small FC
## ANXA2P2                     small FC
## EFS                          small FC
## KRT17P4                     upregulated
## GARNL3                       small FC
## SMIM5                        small FC
## LAMA5-AS1                    upregulated
## ATP8B1-AS1                   small FC
## LTB4R2                       small FC
## THAP4                        small FC
## FLT4                         small FC
## GAS5                         small FC
## TRIM21                       small FC
## BCRP3                        small FC
## HCLS1                        small FC
## GSDBMB                       small FC
## SPOCK2                       small FC
## GATA2-AS1                    small FC
## FURIN                         small FC
## MAGIX                         small FC
## FGD1                          small FC
## SLC20A2                      small FC
## KLF14                        upregulated
## CLEC11A                      small FC
## MAP4                          small FC
## LINC02968                     upregulated
## CD164L2                      downregulated
## ENTHD1                        upregulated
## SLC9A1                        small FC
## RFPL1S                        small FC
## SNCAIP                        small FC
## PBX3                          small FC
## TRBJ1-6                       upregulated
## TBX5-AS1                      upregulated
## MAPK1IP1L                     small FC
## RHOQ                          small FC
## STAC2                         small FC
## DCAF1                         small FC
## NHERF2                        small FC
## FIRRM                         small FC
## ETNK1                         small FC
## PLAGL1                        small FC
## ARRDC4                        small FC
## APLP2                         small FC
## NECTIN2                       small FC
## WLS                           small FC
## EIF3EP1                       small FC
## PI4KA                         small FC
## FAM98B                        small FC
## NCAPD2                        small FC
## SLAIN1                        small FC

```

```

## AXL                      small FC
## DUSP28                   small FC
## SLC6A8                   small FC
## LAMP3                     upregulated
## CWC25                   small FC
## FBXO34                   small FC
## EXOC4                     small FC
## ARSD                      small FC
## LINC02993                 small FC
## EWSR1                      small FC
## SPIC                     upregulated
## ANXA11                   small FC
## CLMN                      small FC
## THBS4-AS1                 upregulated
## KREMEN2                  upregulated
## SPARCL1                  small FC
## FIZ1                      small FC
## NUP54                     small FC
## FEZ2                      small FC
## RRAD                     upregulated
## RCC2                      small FC
## IL6ST                     small FC
## ZNF556                     small FC
## THBS3-AS1                 small FC
## TCF3                      small FC
## LEMD3                     small FC
## NDN                       small FC
## LRP4                      small FC
## TET3                      small FC
## NEDD4L                     small FC
## FBXO31                     small FC
## EYS                      upregulated
## OSBPL2                    small FC
## ASTILCS                  upregulated
## ARGLU1-DT                 small FC
## TRAF5                     small FC
## TENT5B                     small FC
## FGF10                     upregulated
## BICDL1                    small FC
## ASPRV1                    small FC
## ZNF853                     small FC
## ATRN                      small FC
## MYO19                      small FC
## FGF9                      small FC
## ATP6V0B                     small FC
## LINC02345                 upregulated
## RPN2                      small FC
## EHD2                      small FC
## STARD4                     small FC
## PEX26                      small FC
## GFPT1                      small FC
## RSPO3                     upregulated
## CAMSAP3                   small FC
## NFIA                      small FC

```

```

## EBF1                      small FC
## MADD                      small FC
## GGA2                      small FC
## GEMIN5                     small FC
## VAMP2                      small FC
## DHRS4-AS1                  small FC
## L1CAM                      small FC
## LINC02607                  upregulated
## LINC00540                  small FC
## STARD7-AS1                  small FC
## LNROP                      upregulated
## HSD17B13                   upregulated
## GPR27                      small FC
## ADRA2B                     small FC
## MYH10                      small FC
## KLC2                       small FC
## S1PR2                      small FC
## DUSP8                       small FC
## MAPK4                       small FC
## SOWAHC                     small FC
## SLAMF9                      upregulated
## NUS1P2                      small FC
## TNNI3                       upregulated
## HOATZ                      upregulated
## LINC01484                  small FC
## C17orf58                   small FC
## THY1                        small FC
## RBP1                        small FC
## APOL4                       small FC
## SLC39A9                     small FC
## ANKRD29                    small FC
## POLR2J4                     small FC
## RADIL                       small FC
## MED28                       small FC
## SLC17A3                     small FC
## IL10                        upregulated
## PARG                        small FC
## NFE2                        small FC
## PABPC5                      small FC
## CEROX1                      small FC
## PVR                         small FC
## DPP6                         small FC
## KDF1                         small FC
## LIMA1                       small FC
## CDKN1C                      small FC
## FAM120C                     small FC
## EPSTI1                      small FC
## AFAP1                        small FC
## RPS3AP38                    upregulated
## BMP5                         small FC
## TMED10P2                    small FC
## SARM1                        small FC
## TPBG                         small FC
## NVL                          small FC

```

```

## KNL1                      small FC
## LINC01094                  small FC
## TBC1D24                    small FC
## ZDHHC6                     small FC
## ABI3                       small FC
## ATP1A4                     upregulated
## KCNE4                       small FC
## TRIM2                       small FC
## Clorf21                     small FC
## WIF1                        upregulated
## PLEKHA2                     small FC
## TRAV25                      upregulated
## COQ8B                       small FC
## POLR1D                       small FC
## MBOAT1                      small FC
## TAF12                       small FC
## ARMCX6                      small FC
## GPR183                      small FC
## CTNND1                      small FC
## TMEM267                      small FC
## MMRN1                        upregulated
## FHL2                          small FC
## LARRPM                       small FC
## ENTPD6                       small FC
## LINC00517                    upregulated
## RFK                           small FC
## STARD7                       small FC
## TRBV7-3                      upregulated
## MYO16                         small FC
## AICDA                        upregulated
## LINC02550                    upregulated
## STRIP2                       small FC
## ANXA2R-AS1                   small FC
## PGPEP1L                      upregulated
## WDR5                          small FC
## UTP11                         small FC
## ZBTB47-AS1                   small FC
## FEM1A                         small FC
## ERP44                         small FC
## TRAV8-1                      upregulated
## SSTR1                         small FC
## HDAC4                         small FC
## RAP2CP1                      downregulated
## SPINDOC                      small FC
## COPDA1                        upregulated
## PIGS                          small FC
## PPP2R3C                       small FC
## OXCT1                         small FC
## DOCK5                         small FC
## RHOJ                           small FC
## MARVELD2                      small FC
## HPDL                           small FC
## ZFP90                         small FC
## MGP                            small FC

```

```

## SGPP2           small FC
## PROSER2        small FC
## PPIC          small FC
## GALC          small FC
## LIFR-AS1        small FC
## NDP            upregulated
## SAE1          small FC
## LINC01979      small FC
## EPPK1          small FC
## NIFK          small FC
## LRBA          small FC
## EMICERI        small FC
## CXCR4          small FC
## HNRNPDL        small FC
## TCTN2          small FC
## PLD4          small FC
## DENND3          small FC
## SS18          small FC
## DSC2          small FC
## POLR1G          small FC
## CACNG8          upregulated
## CCNP            downregulated
## LINC03088        downregulated
## KLC3          small FC
## TRIB1AL        small FC
## PYGL          small FC
## MEG9            upregulated
## SCAT8          upregulated
## TRPA1          small FC
## CDK5R1          small FC
## SOX9-AS1        small FC
## MAN2B1          small FC
## PDPK1          small FC
## RPL4P4          small FC
## MTMR7          small FC
## SLC25A17        small FC
## EMBP1          small FC
## ZFPM2-AS1        small FC
## ARHGEF2        small FC
## ILF2            small FC
## TTC7B          small FC
## CAPN2          small FC
## FGF1            small FC
## ADAMTS10        small FC
## PLXND1        small FC
## EMC10          small FC
## TBC1D8          small FC
## NUP62CL          small FC
## TCEANC          small FC
## KIR3DX1          upregulated
## BTBD6          small FC
## SFT2D3          small FC
## NCKAP1          small FC
## MT1DP          small FC

```

```

## CDC73           small FC
## PI4KB          small FC
## GALNT3          small FC
## CCR3           upregulated
## MEF2C-AS1      small FC
## NDUFAF4        small FC
## GABRB1          small FC
## IRF1-AS1        small FC
## SCLT1           small FC
## TMEM50B          small FC
## CYTIP           small FC
## EIF2D            small FC
## SAMD9            small FC
## LPCAT2           small FC
## LINC00683       small FC
## DNM1             small FC
## CNIH3            small FC
## RSPO1           upregulated
## CHST15          small FC
## FAM131B          small FC
## TRAV24          upregulated
## LINC02693       small FC
## HS3ST3B1        small FC
## RECQL           small FC
## KBTBD4           small FC
## BRWD1-AS2        small FC
## FANCC            small FC
## CXCL14           small FC
## HACD4            small FC
## LURAP1L          small FC
## CELSR2           small FC
## HLA-F-AS1         small FC
## SMC4             small FC
## SLC30A3          upregulated
## LDHA              small FC
## SLC45A2          small FC
## MCU               small FC
## STBD1             small FC
## EEF2K             small FC
## C2orf49           small FC
## SYN3-AS1          downregulated
## DIS3L2            small FC
## VAMP5             small FC
## KIAA0408          upregulated
## NEBL-AS1          small FC
## SLC17A8          upregulated
## TFDP1             small FC
## COQ8A             small FC
## ZG16B             small FC
## PLAAT4            small FC
## SPSB4             small FC
## SLCO2B1           small FC
## TCEAL5            small FC
## PFKFB1            small FC

```

```

## MRPS6                      small FC
## STUM                       small FC
## FOSL2                       small FC
## INHBC                       small FC
## TRGV2                      upregulated
## CXCR1                      upregulated
## EDA                         small FC
## CEP68                       small FC
## TICAM1                      small FC
## TGM1                         small FC
## MAP2K3                       small FC
## LINC01554                   downregulated
## SPRR2F                      upregulated
## CDK15                        small FC
## CARD8                        small FC
## ZNF485                        small FC
## CENPM                        small FC
## TYRP1                         small FC
## ZNF467                        small FC
## ZMIZ1-AS1                     small FC
## MKNK1                         small FC
## IFT52                         small FC
## KIR3DL2                      upregulated
## SIM1                          small FC
## C1QTNF4                      upregulated
## TUBA8                         upregulated
## EXTL2                         small FC
## WASL-DT                        small FC
## DAZAP1                        small FC
## NEURL1B                       small FC
## C2CD2                         small FC
## LMAN1                         small FC
## NAXD-AS1                       small FC
## WDR72                          small FC
## GALNT9                         small FC
## SUNO1                          small FC
## PIGR                           small FC
## HES2                           small FC
## PLEKHS1                      downregulated
## SACM1L                        small FC
## CCNC                           small FC
## DIRAS1                        small FC
## SLC49A4                       small FC
## DDX60                          small FC
## CAV2                           small FC
## TMEM169                        small FC
## SLC18A2                       small FC
## SCNM1                         small FC
## EIF4E2                        small FC
## TPM4                           small FC
## SP6                            small FC
## SPRR2G                        upregulated
## CKMT1A                         small FC
## LNCATV                        small FC

```

```

## RBP5           small FC
## GBA1LP        small FC
## SLC4A7        small FC
## IRX1          small FC
## APCDD1L-DT   small FC
## TMEM238L      downregulated
## RARB          small FC
## GNB5          small FC
## B3GNT7        small FC
## C16orf74     small FC
## GRK1          downregulated
## ANKRD44      small FC
## ATP6V1G2      small FC
## CYB5B         small FC
## METTL25B      small FC
## GET1          small FC
## S100PBP       small FC
## PAX9          upregulated
## PIGU          small FC
## USP46-DT      small FC
## PHF20          small FC
## RARS2          small FC
## TNFRSF13B     upregulated
## ISLR2          upregulated
## GAD1          small FC
## GPR85          small FC
## RPS6KA6        small FC
## EML4-AS1      upregulated
## HSPB7          upregulated
## KNG1          small FC
## CACNA1D        small FC
## CNEP1R1        small FC
## BCAT2          small FC
## DEPTOR         small FC
## C1QL1          small FC
## ZEB2-AS1      small FC
## EGFL6          upregulated
## MPP7          small FC
## ZDHHC13        small FC
## AKR1B10        upregulated
## SUN2          small FC
## UTP14A         small FC
## BPNT2          small FC
## GLYCTK         small FC
## PNPLA8         small FC
## MBIP           small FC
## APPL2          small FC
## LYG1           small FC
## TMEM236        small FC
## CKAP4          small FC
## PPP1R36        small FC
## LDLRAD4        small FC
## ZNF516          small FC
## SLC39A13       small FC

```

```

## DLG3                      small FC
## TTC4P1                   upregulated
## MON1A                      small FC
## CLSTN1                      small FC
## CERK                      small FC
## SLC33A1                      small FC
## RIC8B                      small FC
## OCLN                      small FC
## TFAP2E-AS1                 upregulated
## RGS14                      small FC
## NR3C2                      small FC
## UBQLN1-AS1                 small FC
## CA7                        upregulated
## SLC7A6OS                     small FC
## TMEM131L                     small FC
## ADGRA3P1                   upregulated
## STS                        small FC
## KHNYN                      small FC
## ERVV-2                     downregulated
## TINCR                      small FC
## ACTN1                      small FC
## SHC4                        small FC
## JUN                        small FC
## LCT-AS1                   upregulated
## CPAMD8                      small FC
## DDX24                      small FC
## GABRG1                     upregulated
## CALD1                      small FC
## RPL21P16                     small FC
## LSM11                      small FC
## GP2                        downregulated
## UXS1                      small FC
## SELENOP                     small FC
## TENM3-AS1                  small FC
## SGSM1                      small FC
## SLC8B1                      small FC
## SLC22A12                     small FC
## DNAL1                      small FC
## RTP3                        downregulated
## CABLES2                     small FC
## RDH11                      small FC
## HOXB2                      small FC
## DDX10                      small FC
## MTCO3P28                     small FC
## MYO1A                     upregulated
## PCGF5                      small FC
## GNPDA1                     small FC
## KDSR                      small FC
## ENAM                      small FC
## PLEKHG5                     small FC
## ACAD10                     small FC
## TMEM106B                     small FC
## GBF1                      small FC
## METAP1D                     small FC

```

## TRIM16L	small FC
## COBLL1	small FC
## DIAPH3	small FC
## PIGW	small FC
## CCL3	upregulated
## KAT14	small FC
## CLLU1	upregulated
## MGAT4A	small FC
## FAM174B	small FC
## TMEM168	small FC
## KANK3	small FC
## DDX3X	small FC
## EDNRB	small FC
## ESM1	small FC
## TRERF1	small FC
## CTDSP2	small FC
## PLA2G4F	small FC
## CHMP1B	small FC
## GID4	small FC
## PIP4K2A	small FC
## DIS3L	small FC
## SYAP1	small FC
## LARGE1	small FC
## CDH13-AS2	upregulated
## CA11	small FC
## CDK13-DT	small FC
## TM6SF1	small FC
## KIR2DL4	upregulated
## LINC02099	upregulated
## SLITRK1	downregulated
## ADSL	small FC
## CDH1	small FC
## CRIP3	small FC
## INSC	small FC
## PTEN	small FC
## TNS2	small FC
## HOXB5	small FC
## SSH1	small FC
## POR	small FC
## CLN5	small FC
## DAZAP2	small FC
## CCN1	small FC
## CNNM2	small FC
## BTG3	small FC
## MYL12A	small FC
## ITPKB	small FC
## IPO5	small FC
## KNOP1	small FC
## ANAPC5	small FC
## ASTN2	small FC
## SAFB2	small FC
## TMC2	upregulated
## ZFHX3-AS1	small FC
## MTCYBP3	small FC

## VSIG4	small FC
## GOT2	small FC
## MOB3B	small FC
## PLK3	small FC
## LINC01415	upregulated
## PRSS16	small FC
## SBF1	small FC
## CCDC62	small FC
## NCAM2	small FC
## NFASC	small FC
## FBP1	small FC
## STAB1	small FC
## KIRREL3	small FC
## CLDN19	small FC
## SMG9	small FC
## CTSD	small FC
## CALM3	small FC
## LINC01819	downregulated
## PLP1	upregulated
## FRMPD2	small FC
## GLI1	small FC
## BMP1	small FC
## AACSP1	small FC
## SP1	small FC
## TWF2	small FC
## ZNF280B	small FC
## MICB	small FC
## ZNF30	small FC
## ID4	small FC
## PHACTR1	small FC
## ABHD13	small FC
## LINC00926	small FC
## ESRRA	small FC
## LINC01203	upregulated
## RNF183	small FC
## ZNF3	small FC
## MUL1	small FC
## PHLPP1	small FC
## TNK2	small FC
## CACNA2D3	small FC
## LAMC1	small FC
## TEX10	small FC
## DUOX1	small FC
## ARHGEF40	small FC
## SYNE2	small FC
## TMEM129	small FC
## PKP3	small FC
## MYH14	small FC
## STON1	small FC
## FAM169A-AS1	small FC
## SEPTIN4-AS1	small FC
## KCNK17	upregulated
## LRRC75A	small FC
## LINC02012	small FC

```

## NENF           small FC
## RPL37P2        small FC
## CCDC68         small FC
## TAP1           small FC
## NUDT21         small FC
## PHETA1         small FC
## LINC02976      small FC
## PCDHGB4        small FC
## ATG12          small FC
## TCEANC2        small FC
## SBK1           small FC
## STK24          small FC
## ULK4            small FC
## SMC02          upregulated
## LAPTM4A         small FC
## SYNJ2BP         small FC
## TMEM179         upregulated
## LINC01124       small FC
## GRIN3B          downregulated
## DTX1            small FC
## FIGNL1          small FC
## RIBC2           small FC
## RFX7            small FC
## IKBIP           small FC
## ORC1            small FC
## GGTLC2          downregulated
## TAX1BP1          small FC
## CIITA            small FC
## SMC6             small FC
## ALS2CL           small FC
## ANGPTL8          downregulated
## TTC28            small FC
## CYTH3            small FC
## CCL11            upregulated
## COASY            small FC
## ARFIP1           small FC
## SH3TC1           small FC
## PPP1CB           small FC
## IL6-AS1          upregulated
## ITGA3            small FC
## PDZRN4           small FC
## CHI3L2            upregulated
## NCAPG2            small FC
## ZNF185            small FC
## CLEC4C            upregulated
## FNTA              small FC
## LEFTY1            upregulated
## JRK                small FC
## OSBPL6            small FC
## RPL29              small FC
## GINS2              small FC
## CPNE8              small FC
## CELSR3            small FC
## DESI2              small FC

```

```

## WBP2           small FC
## SLC27A6       upregulated
## EFHD2         small FC
## SRGAP2B       small FC
## GUCD1         small FC
## TRAV38-1      upregulated
## DUSP4         small FC
## MAFF          small FC
## CLPX          small FC
## ACP3          small FC
## DAG1          small FC
## CLEC4F        upregulated
## EXOC3L1       small FC
## KLRC2         upregulated
## RCVRN         upregulated
## KCNMB2        small FC
## KTN1-AS1      small FC
## HPD           small FC
## OSTN          upregulated
## PYROXD1       small FC
## TRIM55        small FC
## PHLDB1        small FC
## IGKV3-15      upregulated
## KCNQ5-DT      upregulated
## LRRTM4         upregulated
## LRRC27        small FC
## ERMP1          small FC
## MIR27B         small FC
## SLC12A2        small FC
## LINC02986     small FC
## GAS6-DT        small FC
## LINC03084     upregulated
## GLIPR1L1      upregulated
## MST1           small FC
## NOC2L          small FC
## PPM1F          small FC
## GRK4           small FC
## AP3D1          small FC
## GRINA          small FC
## CSK            small FC
## KCTD17         small FC
## DSG2           small FC
## ZNF124         small FC
## KLHL29         small FC
## LCTL           upregulated
## PSAT1P3        upregulated
## ZNF202         small FC
## LRRC8C          small FC
## TNFAIP8L3      small FC
## LPCAT4          small FC
## ZNF674-AS1      small FC
## CPEB4           small FC
## KIAA1210        upregulated
## C2CD4C          small FC

```

```

## TTL                      small FC
## UBA7                     small FC
## HLA-DPB2                 upregulated
## SRSF8                     small FC
## TSC22D2                  small FC
## LINC03062                 upregulated
## FBXO39                    upregulated
## LINC01785                 downregulated
## MICAL3                   small FC
## TMEM53                   small FC
## HLX                      small FC
## GTF2H2C                  small FC
## TSPYL5                   small FC
## KXD1                      small FC
## BAZ1A                     small FC
## SERPINA5                 small FC
## HS3ST5                   upregulated
## LIN7C                     small FC
## TOX                       small FC
## LINC00336                 downregulated
## STK19                     small FC
## RRP1B                     small FC
## SLC9A8                   small FC
## TRGV4                     upregulated
## PLS3-AS1                  small FC
## PTBP1                     small FC
## RASGRP3                  small FC
## RRBP1                     small FC
## ADIPOR2                  small FC
## PDZRN3                   small FC
## TUBA1A                   small FC
## PDK4-AS1                  small FC
## MROH1                     small FC
## CCDC34                    small FC
## CCRL2                     small FC
## FAM183DP                 downregulated
## BGN                       small FC
## LINC01270                 small FC
## MARS2                     small FC
## NPM3                      small FC
## PKMYT1                    small FC
## HAUS8                     small FC
## APOBEC3B                 small FC
## BHLHE40-AS1               small FC
## SAXO4                     small FC
## CARS2                     small FC
## LIG4                      small FC
## ZFYVE26                  small FC
## RBPJ                      small FC
## OXSR1                     small FC
## EHD4-AS1                  downregulated
## ATP13A1                   small FC
## MEGF11                    downregulated
## PPM1L                     small FC

```

```

## SYT12                      small FC
## HMGN2P46                   small FC
## PCDHGA7                    small FC
## C21orf91                   small FC
## PCDHA12                    small FC
## NBPF25P                     small FC
## C6orf118                   upregulated
## TMEM237                     small FC
## EIF2AK3-DT                  small FC
## FANCA                       small FC
## COQ10B                      small FC
## ID1                          small FC
## NPC2                         small FC
## COL4A3                      small FC
## BHLHE22-AS1                 upregulated
## PYY                          small FC
## SANBR                        small FC
## AKNAD1                      upregulated
## ING1                         small FC
## STX11                        small FC
## FYTTD1                       small FC
## TMEM38A                      small FC
## AGO4                         small FC
## NEDD4                        small FC
## JADE1                        small FC
## LINC00853                   small FC
## LINC02361                   small FC
## ZNF391                       small FC
## SLC6A20                      small FC
## FCHSD2                      small FC
## JAZF1-AS1                   upregulated
## ASRGL1                       small FC
## KLK11                        upregulated
## CDC42EP5                    small FC
## PGM3                         small FC
## F2R                           small FC
## LINC00689                   small FC
## SLC27A4                      small FC
## DUSP18                       small FC
## UBFD1                        small FC
## CORO1A-AS1                  upregulated
## FAM222A-AS1                 small FC
## CDCA4                        small FC
## TMEM263-DT                  small FC
## SYNDIG1L                     small FC
## KIF13B                       small FC
## TBCEL                        small FC
## GZF1                         small FC
## RALA                         small FC
## IL22RA1                      small FC
## PUS7                         small FC
## PAPPA                        small FC
## POU5F2                      upregulated
## APOC1P1                      upregulated

```

```

## FRY-AS1                      small FC
## PLEKHA4                      small FC
## AREL1                         small FC
## USP21                         small FC
## ACTG1P25                      small FC
## ESAM-AS1                      small FC
## PDIA3                         small FC
## SOX17                         small FC
## SLC5A6                         small FC
## C12orf76                      small FC
## SMAD1                         small FC
## SEC14L6                        small FC
## TEX51                          upregulated
## SH3GLB1                        small FC
## HIP1                           small FC
## SLC17A5                        small FC
## MTCO3P17                       small FC
## FOLR3                          small FC
## LINC01138                      small FC
## GPRC5C                         small FC
## RALYL                          small FC
## BAG4                           small FC
## ASB4                           upregulated
## SSBP3                          small FC
## STXBP3                         small FC
## TLL2                           small FC
## GPR135                         small FC
## TK1                            small FC
## ACSL5                          small FC
## KLF11                          small FC
## MAEA                           small FC
## HLCS-AS1                        small FC
## TEX26                          upregulated
## SMURF2                         small FC
## MS4A4E                          small FC
## AP5B1                          small FC
## SNORA73B                        upregulated
## DNM1L                           small FC
## ABCA4                           small FC
## PRSS23-AS1                      small FC
## ADISSL                         small FC
## GAS2L3                          small FC
## IL18R1                          small FC
## PNCK                           small FC
## USP38                           small FC
## SLC29A3                         small FC
## EIF3L                           small FC
## GJD4                           upregulated
## RPL4                           small FC
## RASSF4                         small FC
## RAB8B                           small FC
## KIR2DL3                         upregulated
## SENCR                          small FC
## AKAP6                          small FC

```

## ALDOC	small FC
## CKMT2	small FC
## GLG1	small FC
## RIC1	small FC
## CIZ1	small FC
## OSBPL10	small FC
## CDK1	small FC
## CD1A	upregulated
## MAS1L	upregulated
## DENND1C	small FC
## FOXC2	small FC
## AGPS	small FC
## NCOA7	small FC
## ZNF165	small FC
## FAM83E	upregulated
## SLC39A8	small FC
## ADCY8	downregulated
## HSPA8P4	upregulated
## ARGEF2	small FC
## IL21	upregulated
## MTND6P3	small FC
## DLG5	small FC
## HBEGF	small FC
## SMAP2	small FC
## TLK1	small FC
## UCHL5	small FC
## TM9SF4	small FC
## VPS39	small FC
## AMZ2	small FC
## SWI5	small FC
## TLNRD1	small FC
## CNTNAP1	small FC
## GABRE	small FC
## MRRF	small FC
## CA1	upregulated
## ZMYND15	small FC
## ESPNL	small FC
## RIGI	small FC
## SP100	small FC
## TMEM243	small FC
## MUC12-AS1	upregulated
## LINC01571	downregulated
## FUBP1	small FC
## KCNG3	small FC
## LMAN2L	small FC
## MFGE8	small FC
## CYP21A2	small FC
## CNOT9	small FC
## CCN4	small FC
## ARMH4	small FC
## SMARCA4	small FC
## DPF1	upregulated
## TMEM101	small FC
## SNX21	small FC

## PPP1R3G	small FC
## USP7	small FC
## PAK3	small FC
## CAMSAP1	small FC
## TRA2B	small FC
## SHF	small FC
## ECE1-AS1	upregulated
## MIR130AHG	small FC
## CA10	small FC
## ZNF326	small FC
## GRAMD1B	small FC
## DCAF10	small FC
## CDC16	small FC
## HSPB9	small FC
## RPL13A	small FC
## AIDA	small FC
## LIFR	small FC
## NOS1AP	small FC
## RAB4A	small FC
## DPH5	small FC
## TUBB3	upregulated
## GPD1L	small FC
## LAYN	small FC
## SPAG5-AS1	small FC
## PRCD	small FC
## RPP40	small FC
## EPS8L2	small FC
## MIR4280HG	upregulated
## ZNF227	small FC
## VMA21	small FC
## MICU1	small FC
## LINC00941	small FC
## REV3L	small FC
## LGR6	small FC
## DNAJC19	small FC
## MIR670HG	downregulated
## SIGLEC14	small FC
## NFKB1	small FC
## ZMAT3	small FC
## RRP15	small FC
## MTCYBP19	small FC
## EVA1A	small FC
## SREBF2-AS1	small FC
## KDM7A-DT	small FC
## POLH	small FC
## GLB1	small FC
## UTS2R	upregulated
## EPHA1	small FC
## C22orf39	small FC
## HDAC11	small FC
## SP2	small FC
## RUBCN	small FC
## TAF11	small FC
## ZBTB34	small FC

```

## STING1           small FC
## ADH4            small FC
## FAM222B         small FC
## MTCYBP13        small FC
## OIP5-AS1        small FC
## MYH4            upregulated
## CYP21A1P         small FC
## ANGPTL4          downregulated
## DNAJB4           small FC
## NOTCH1           small FC
## FBXO8            small FC
## ADH1A            upregulated
## VPS37A           small FC
## MCPH1-AS1        small FC
## TYRO3             small FC
## TBX5             upregulated
## PARP11            small FC
## TRABD2A           small FC
## NEFL              downregulated
## KIAA0319L         small FC
## LYRM4             small FC
## C3orf38           small FC
## POU5F1            small FC
## NMU               upregulated
## CYP4A11            small FC
## EPDR1             small FC
## TNFSF13            small FC
## FIGN              small FC
## ATP6V0CP3          downregulated
## CCDC91            small FC
## PRKG1             small FC
## CKMT1B            small FC
## VMP1              small FC
## THAP3              small FC
## TPSG1              downregulated
## CPT1A             small FC
## CMTM4             small FC
## CEP19              small FC
## TTC32              small FC
## ZNF850              small FC
## MYO3B              small FC
## EFNB1              small FC
## ADAMTS1            small FC
## HACD2              small FC
## TM9SF3             small FC
## CHRM3-AS2            small FC
## ICA1              small FC
## MYH15              upregulated
## GNGT2              small FC
## FAM13B             small FC
## TMEM92              upregulated
## SV2B              small FC
## ATG7              small FC
## RFWD3              small FC

```

```

## ABCA3           small FC
## TRAV35         upregulated
## TMIE           small FC
## FGD3           small FC
## METRN          small FC
## OTUB2           small FC
## TRIM45          small FC
## LINC01665      downregulated
## BTBD3           small FC
## FBN1-DT         upregulated
## JOSD1           small FC
## BSPRY           small FC
## MPZL1           small FC
## RXFP4           downregulated
## UCP2            small FC
## CHAC2           small FC
## GPRIN1          small FC
## ZNF35           small FC
## KCNH8           small FC
## MBD2            small FC
## SCAMP1          small FC
## MEGF9            small FC
## ARHGEF3          small FC
## SUCO             small FC
## ASPHD1          small FC
## PRELID3A         small FC
## RPGRIP1          small FC
## IFIT2            small FC
## GRM7             upregulated
## UBA1             small FC
## LSM10            small FC
## PLIN3            small FC
## SPDL1            small FC
## NYAP2            upregulated
## PLCD3            small FC
## DIO3              upregulated
## LEF1              small FC
## CRYM              small FC
## CASP16P          upregulated
## NOC3L             small FC
## CATSPERG          small FC
## LINC01589        downregulated
## CALR              small FC
## KRT222            small FC
## ENTREP1           small FC
## GPM6A             small FC
## KMO               small FC
## CARMIL1           small FC
## BCL7A             small FC
## POP1               small FC
## SPMIP4             small FC
## ASB1               small FC
## ZNF367             small FC
## URB1               small FC

```

```

## LINC01150           small FC
## ESRP1               small FC
## DLX5                upregulated
## APEX1               small FC
## TMEM138              small FC
## MTND1P2              small FC
## RTKN2               small FC
## EP300-AS1            downregulated
## GUCY1A2              small FC
## FANCD2              small FC
## PTPRE                small FC
## RNF216P1              small FC
## DLEU2                small FC
## IQCK                 small FC
## RALGAPA1              small FC
## SIM2                 small FC
## ACTRT3               small FC
## SEMA3F               small FC
## SNRK                 small FC
## COL4A5               small FC
## MTATP8P1              small FC
## EXPH5                small FC
## FZD10                upregulated
## EIF3E                small FC
## TMEM151A              upregulated
## AGRN                 small FC
## VKORC1L1              small FC
## ZMPSTE24-DT             small FC
## LINC01389             downregulated
## BSG                  small FC
## SCARB1               small FC
## SLC52A3               small FC
## ZDHHC24               small FC
## SP2-AS1               small FC
## RNF11                 small FC
## INHBB                 small FC
## TMEM240               small FC
## LARP4                 small FC
## B2M                  small FC
## LINC02910              small FC
## SLC1A3-AS1            upregulated
## ANKH                 small FC
## ZNF398               small FC
## OSER1                 small FC
## UGT2A3               small FC
## FAM86DP               small FC
## DMAC2L                small FC
## HOXC5                 small FC
## NIPAL3                small FC
## CDX1                  upregulated
## GPR15                 upregulated
## NKRF                  small FC
## RRAGC-DT               small FC
## RPS29P11              downregulated

```

```

## RIOK1           small FC
## KIFBP          small FC
## SRGAP2C        small FC
## MSL1           small FC
## TRBV5-5        upregulated
## C4orf19        small FC
## CSGALNACT1     small FC
## TRBV25-1       upregulated
## B3GALT2        small FC
## ABHD12         small FC
## NSD2           small FC
## MVB12B         small FC
## MKNK2          small FC
## LRRC37A3       small FC
## FAM124A        small FC
## GON7           small FC
## MISP            small FC
## ADTRP          small FC
## TTC23-AS1      upregulated
## ACTR6          small FC
## MANSC1         small FC
## LITAF          small FC
## TMSB4XP4       small FC
## KRT18          small FC
## PLCG1          small FC
## NARS1          small FC
## DNM1P35        small FC
## TAFA3          upregulated
## GLIS3          small FC
## ELAVL4         upregulated
## EMCN           small FC
## RASA4B         small FC
## PLA2G4C        small FC
## GCNT3          small FC
## FOXP4-AS1      small FC
## GOLGA3         small FC
## CCDC126        small FC
## CSMD1          small FC
## VAPB            small FC
## DCP1B          small FC
## CPS1            small FC
## NPM1P25        small FC
## ARPC5          small FC
## TRPM4          small FC
## BACE2          small FC
## PCDHGC5        upregulated
## EVA1C          small FC
## RFX5-AS1       small FC
## PERP            small FC
## DTX2            small FC
## CHAF1B          small FC
## ASB9            small FC
## SPATA13        small FC
## TRBJ1-4        upregulated

```

## GGCX	small FC
## HERC5	small FC
## POLA2	small FC
## ATOSB	small FC
## TMEM72	small FC
## KIT	small FC
## RAB5B	small FC
## DCUN1D1	small FC
## AARS2	small FC
## RABGGTA	small FC
## DOK5	small FC
## TMEM79	small FC
## SYPL2	small FC
## IGF2-AS	upregulated
## CHODL	small FC
## JPT2	small FC
## GPX4	small FC
## IRX5	small FC
## CASS4	small FC
## TMEM59	small FC
## C17orf67	small FC
## COG5	small FC
## TRIP6	small FC
## DPPA4	upregulated
## UTP15	small FC
## ADM5	small FC
## CEP85L	small FC
## PRICKLE2	small FC
## BET1L	small FC
## LINC01985	upregulated
## KPNA6	small FC
## MAP3K13	small FC
## BICD2	small FC
## ADAMTS7P3	upregulated
## RFLNB	small FC
## NUCB1	small FC
## ZNF285	small FC
## FGD5P1	small FC
## CHCHD7	small FC
## B4GAT1	small FC
## XAGE2	downregulated
## XPO6	small FC
## SORCS2	small FC
## EEF1E1	small FC
## IL17RB	small FC
## NRSN2-AS1	small FC
## TMSB15B	upregulated
## MMD	small FC
## PRDX4	small FC
## RBM11	small FC
## AMER1	small FC
## GRM7-AS3	upregulated
## DUXAP9	upregulated
## RFLNA	small FC

```

## CCDC134           small FC
## MICU3            small FC
## CYTH1            small FC
## PACSIN3          small FC
## BPGM             small FC
## DESI1             small FC
## NUP205            small FC
## MAFG              small FC
## TRIM61            small FC
## MAPKAPK2          small FC
## C5orf64-AS1      downregulated
## CRCP              small FC
## RAB6A             small FC
## NPNT              small FC
## SGK2              small FC
## ZNF736P9Y         upregulated
## BASP1-AS1         upregulated
## DTWD1             small FC
## ATP8B4             small FC
## TRMT6             small FC
## PRL               upregulated
## RERG-AS1           small FC
## HDAC3              small FC
## WNT7B             downregulated
## ZBTB42             small FC
## ARL14              upregulated
## ZNF501             small FC
## RPS19              small FC
## RASL11B            small FC
## STAC              small FC
## DNAI2              upregulated
## CRMP1              small FC
## ITGA7              small FC
## GRPEL1             small FC
## PUM3               small FC
## SPTBN2             small FC
## TEDC2              small FC
## DCUN1D3            small FC
## USP3-AS1           small FC
## H3-7               small FC
## ANKRD50            small FC
## LINC00954          small FC
## MMP2-AS1           upregulated
## KCND3              small FC
## SMAD3-DT            small FC
## PALLD              small FC
## CHUK               small FC
## GTF2F1             small FC
## LAMP5              small FC
## MSH2               small FC
## ADA2               small FC
## LHX6               small FC
## WDR76              small FC
## ZSCAN31             small FC

```

## CHD5	small FC
## DGKG	small FC
## ADAMTS9-AS1	small FC
## FAM167B	small FC
## CALCOCO2	small FC
## PDE4D	small FC
## HSPA1L	small FC
## PGM5P3-AS1	small FC
## ATP6AP2	small FC
## SH3BGRL3	small FC
## ARHGAP5-AS1	small FC
## HBP1	small FC
## ADAMTS7P4	small FC
## LINC02384	small FC
## CSPP1	small FC
## NPR3	small FC
## MAL	small FC
## NPHS2	small FC
## CAPSL	small FC
## TMEM132E	small FC
## TMEM127	small FC
## DNAJC25	small FC
## NOTCH2	small FC
## SEH1L	small FC
## LINC01020	small FC
## NPL	small FC
## IGBP1	small FC
## ZCCHC18	small FC
## TUBB2A	small FC
## LINC02006	small FC
## UBXN2A	small FC
## HPCA	small FC
## RASSF7	small FC
## BAAT	small FC
## TMEM39A	small FC
## RPL6	small FC
## FBXL22	small FC
## SETMAR	small FC
## FCHSD1	small FC
## HEPACAM	upregulated
## ZBTB21	small FC
## AIMP1	small FC
## LINC02220	upregulated
## KIAA0513	small FC
## TAF15	small FC
## MAP3K19	upregulated
## PPWD1	small FC
## SINHCAF	small FC
## FRRS1	small FC
## DCP2	small FC
## NTRK3	small FC
## TNFRSF10D	small FC
## RMC1	small FC
## HLF	small FC

```

## RASA1           small FC
## ZNF691          small FC
## MIR3131        downregulated
## RRP8            small FC
## CLEC4GP1        upregulated
## S1PR5           small FC
## PCDHA5          small FC
## ZNF547           small FC
## DMXL2           small FC
## DLG1             small FC
## TMEM44           small FC
## ARHGEF17         small FC
## ARFGAP2          small FC
## ZNF786           small FC
## ATRNL1           small FC
## WDFY2             small FC
## PLEKHA7          small FC
## GIMAP7           small FC
## BVES-AS1         upregulated
## LTB4R             small FC
## LEPROT            small FC
## FBXO44            small FC
## BMPR1B            small FC
## PLEKHA8           small FC
## COG7              small FC
## TMEM97             small FC
## AKTIP             small FC
## HNRNPL            small FC
## CENPK              small FC
## POLB              small FC
## QRSL1             small FC
## FUT1              small FC
## MTFP1              small FC
## TMEM201             small FC
## GPR15LG           downregulated
## NYX                small FC
## HSPD1P6           upregulated
## GPAT3              small FC
## FAM9C              upregulated
## CD274              small FC
## CLNS1A             small FC
## NUPR2              small FC
## UROS               small FC
## PPP5D1P            small FC
## DPH6               small FC
## TXNIP              small FC
## TMSB10             small FC
## EMX2               small FC
## B3GLCT             small FC
## MGAT5              small FC
## LINC00659          small FC
## SCNN1B             small FC
## SNHG8              small FC
## SERPINF2           small FC

```

```

## RPL28           small FC
## RDH14          small FC
## ZNF549          small FC
## ADAM32          small FC
## HSPA13          small FC
## CNGA3           upregulated
## EPHB4           small FC
## CDH8            upregulated
## CYB5RL          small FC
## NUSAP1          small FC
## TOMM20          small FC
## FUS              small FC
## GAL              upregulated
## HSP90B1          small FC
## TOP3A            small FC
## TRPM8            upregulated
## SH2D3A          small FC
## PDCD4            small FC
## GGT3P             downregulated
## BST2              small FC
## FYCO1            small FC
## CHST10           small FC
## APOA2            upregulated
## ASS1P3           small FC
## AKR1C3           small FC
## STIL              small FC
## RHBDD1           small FC
## UBP1              small FC
## KRT7              small FC
## FGFR1L1          small FC
## SHROOM3           small FC
## RHOF              small FC
## DSP               small FC
## MTOR              small FC
## LINC01108         small FC
## SELENOT           small FC
## GNPTAB            small FC
## TMEM272           upregulated
## MTM1              small FC
## GOSR2              small FC
## AMZ1              small FC
## SH3BGRL2          small FC
## NAMPT-AS1          small FC
## CD24P4            small FC
## TRAV26-2           upregulated
## NAV2              small FC
## ZNF346            small FC
## NTSR1            upregulated
## PHKA1              small FC
## CPOX              small FC
## ADGRF1            small FC
## REEP2              small FC
## CERS3-AS1          upregulated
## MTRR              small FC

```

```

## ORMDL2           small FC
## ADAP1           small FC
## LHFPL4          downregulated
## CACNA2D2         small FC
## HPGD            small FC
## BNIP5           upregulated
## SEMA3B-AS1      small FC
## GJC1            small FC
## ADGRE5          small FC
## TULP3            small FC
## SERTAD2         small FC
## SH3GL1          small FC
## HOXB-AS2         small FC
## PSMB8-AS1        small FC
## ATP5F1B          small FC
## ARHGEF38         small FC
## IGHJ5            upregulated
## RN7SL1          small FC
## CEP70            small FC
## GSDMA            small FC
## ZNF189           small FC
## IGLV1-47          upregulated
## PITPNM1          small FC
## LINC01637         small FC
## GNA11            small FC
## TRAV10          upregulated
## OR52K3P          upregulated
## LINC00475         small FC
## SMIM10L1          small FC
## EPHB3             small FC
## SLC22A31          downregulated
## CASTOR3P          small FC
## LIN9              small FC
## FRMPD1            small FC
## DIPK2A            small FC
## TMEM62            small FC
## STAR              upregulated
## WDR46             small FC
## WNT6              small FC
## SPAST             small FC
## SIDT2             small FC
## HOXA-AS2          small FC
## CYP24A1            small FC
## GSG1              downregulated
## PLA2G15          small FC
## ARV1              small FC
## MVP               small FC
## ZNF664            small FC
## CYS1              small FC
## PPP3CA            small FC
## B3GALNT1          small FC
## RAB18             small FC
## NIPAL4            upregulated
## MRAS              small FC

```

```

## RPL14P1                      small FC
## GALNT10                     small FC
## RGL3                         small FC
## NNMT                         small FC
## CCDC15                       small FC
## SYVN1                        small FC
## MTND1P11                     small FC
## LRRC25                       small FC
## ATP4B                         small FC
## ZC4H2                         small FC
## SCEL                          upregulated
## LSM14A                        small FC
## CNDP2                         small FC
## CEACAM16-AS1                  small FC
## NR2F6                         small FC
## DGCR11                        small FC
## PRDM14                        downregulated
## MON1B                         small FC
## TUBB4B                        small FC
## UBE2D1                        small FC
## PCDHA10                       small FC
## TENM4                          small FC
## PCNT                           small FC
## KCNS3                          small FC
## MSANTD7                       small FC
## PLD6                           small FC
## LINC01275                     upregulated
## ZNF354C                        small FC
## HNRNPAB                        small FC
## GINM1                          small FC
## ANKRD42                        small FC
## FAH                            small FC
## RPL13AP5                       small FC
## MINDY2-DT                      small FC
## C5orf47                        small FC
## IL3RA                          small FC
## HS1BP3-IT1                     small FC
## RPL23AP7                       small FC
## NKAPD1                         small FC
## LINC01758                      small FC
## SYT17                          small FC
## SDCBP2                         small FC
## MMGT1                          small FC
## RASD2                          small FC
## ASS1                           small FC
## IL17REL                        upregulated
## TBC1D4                         small FC
## GNPAT                          small FC
## RPS8                           small FC
## WNT5B                          small FC
## TVP23B                         small FC
## ATP2B4                         small FC
## NRGN                           small FC
## PLD3                           small FC

```

```

## TPM1-AS                      small FC
## NOTCH4                       small FC
## C5orf67                      small FC
## ZNF623                       small FC
## ECRG4                        small FC
## PRSS30P                      small FC
## PML                          small FC
## FKBP4                        small FC
## ABL1                         small FC
## ARL8B                        small FC
## H2BC21                       small FC
## PIGG                         small FC
## CD99L2                       small FC
## ATP11AUN                      small FC
## MAP2K5-DT                     small FC
## TGM5                         upregulated
## GIMAP6                       small FC
## GINS1                        small FC
## KCNJ10                       small FC
## FARS2-AS1                     small FC
## PPP2R5B                       small FC
## ENTPD1                        small FC
## SF3B2                         small FC
## SLC50A1                       small FC
## ISL2                          upregulated
## ALPL                         small FC
## WEE2                          small FC
## LINC01123                     small FC
## TFAP4                        small FC
## CLDN4                         small FC
## ADAMTS7P1                     upregulated
## DAO                           small FC
## DGKB                          small FC
## CGREF1                       small FC
## RNF150                        small FC
## LINC01106                     small FC
## RPL10                         small FC
## ZSCAN5A                       small FC
## ZNF239                        small FC
## PCDHGA5                       small FC
## ILVBL                         small FC
## FKBP1B                        small FC
## SYT16                         small FC
## TTC9-DT                       upregulated
## SIRPA                         small FC
## ZNF273                        small FC
## WNT16                         upregulated
## CFAP221                       small FC
## TOX2                          small FC
## LINC01278                     small FC
## SMIM18                        upregulated
## ITGB5                         small FC
## SLC29A2                       small FC
## OTUD7A                        small FC

```

```

## MTPAP           small FC
## CEP250-AS1      upregulated
## ATP10D          small FC
## ALDH3B2         small FC
## SRSF1           small FC
## RPL7A            small FC
## ACVR1C          small FC
## LINC00906       upregulated
## USF1             small FC
## DIRC1            upregulated
## PDCD6IP-DT      small FC
## ALAS1            small FC
## GNPDA2          small FC
## IL27RA           small FC
## GJC3             small FC
## CDK2AP2          small FC
## RPS15A           small FC
## GALNTL6          upregulated
## ARL15            small FC
## USP11            small FC
## TRPV6             small FC
## ATP6V0A4          small FC
## PIWIL2            small FC
## PRR32             upregulated
## HIVEP2           small FC
## CC2D1A           small FC
## DIPK1B            small FC
## DDHD1             small FC
## LINC03082        small FC
## ZNF710            small FC
## MUC13             upregulated
## LINC02919        upregulated
## RIN3              small FC
## PRORSD1P          small FC
## FBXO10            small FC
## ZNF667            small FC
## C4BPB             small FC
## SLC6A2            small FC
## MT3               small FC
## ARHGEF12          small FC
## PRKD1             small FC
## PTPRN2            small FC
## DEXI              small FC
## RPL12              small FC
## SARAF             small FC
## CDH13              small FC
## ZNF697             small FC
## DPP3               small FC
## ANXA7              small FC
## USH2A             upregulated
## HEATR6             small FC
## TMEM196            upregulated
## MT1JP              downregulated
## C19orf47           small FC

```

```

## NRK                     small FC
## CYP3A4                  upregulated
## MPZL2                   small FC
## ZNF581                   small FC
## CAPN11                  small FC
## SUPT6H                  small FC
## ADAM28                  small FC
## PCSK5                   small FC
## LINC00921                small FC
## SLC35D2                  small FC
## P2RX5-TAX1BP3            upregulated
## LMAN2                    small FC
## HSPA5                    small FC
## VPS37B                  small FC
## POC1B                    small FC
## HOXC6                    small FC
## LINC00398                small FC
## SSH3                     small FC
## ACOX2                    small FC
## LRRC28                  small FC
## YIPF1                    small FC
## MLXIPL                  small FC
## AMIGO2                  small FC
## HOXB7                    small FC
## CPEB3                     small FC
## RPRM                     small FC
## CRIPTO3                 downregulated
## MARCHF2                  small FC
## PEG3                     small FC
## RGR                      upregulated
## CALHM5                  small FC
## IMMT                     small FC
## PABPC1P4                 small FC
## RAB11FIP4                small FC
## NFKBIA                  small FC
## CCND1                    small FC
## PRKCD                    small FC
## INHA                     small FC
## FCGR2A                  small FC
## ARNT2                    small FC
## DDX25                    small FC
## REXO2                    small FC
## PLCL2                    small FC
## PRKD3                    small FC
## SOD2-OT1                 small FC
## PDIA5                    small FC
## STK25                    small FC
## NOMO2                    small FC
## HSD17B12                 small FC
## ADCY1                    small FC
## IZUMO4                   small FC
## PARVB                    small FC
## IGF2R                    small FC
## SLC9A6                   small FC

```

```

## SLC25A47           small FC
## LINC02889          small FC
## ARPP19             small FC
## WNK2               small FC
## EPM2A              small FC
## TDRD3              small FC
## LINC02450          upregulated
## SPMIP5              small FC
## IRS2               small FC
## LRP3               small FC
## LINC02325          upregulated
## ITGAV              small FC
## BVES               small FC
## ZKSCAN5            small FC
## PRSS3              small FC
## CDPF1              small FC
## FAT4               small FC
## PALD1              small FC
## LYST               small FC
## SLC15A2             small FC
## FBXL4              small FC
## RBP2               small FC
## LINC01645          upregulated
## STX1B              small FC
## WDR82              small FC
## MED6               small FC
## SUGT1P1             small FC
## MRPL35              small FC
## NCSTN              small FC
## MEI1               small FC
## ZNF687              small FC
## ZWINT              small FC
## COPS7B              small FC
## LINC01885          upregulated
## MPV17L2             small FC
## HECA               small FC
## RTN1               small FC
## LMTK2              small FC
## CACNA1H             small FC
## TRBJ1-3             upregulated
## RIMBP3              small FC
## SYNGR1              small FC
## ANKRD9              small FC
## ARF3               small FC
## CALU               small FC
## C4BPA              upregulated
## PGM5P4-AS1          small FC
## C5orf22             small FC
## WDR20              small FC
## CPLX1              small FC
## IFITM1              small FC
## ZNF333              small FC
## CLEC12B             upregulated
## COL4A1              small FC

```

```

## ST7L                      small FC
## ERICH4                     small FC
## COLGALT2                   small FC
## PROX1                      small FC
## PPP6C                      small FC
## PNPLA6                     small FC
## SBSN                       upregulated
## AKAP13                     small FC
## TMEM42                     small FC
## INSL3                      upregulated
## RPLP0P6                     small FC
## HLA-B                       small FC
## MILIP                      small FC
## EHF                         small FC
## SOCS2-AS1                   small FC
## UGT2B4                     upregulated
## ADIRF-AS1                  small FC
## BEX4                        small FC
## IGHJ6                      upregulated
## XPR1                        small FC
## TRAV1-1                     upregulated
## LINC03092                   small FC
## FCHO2                       small FC
## ENOX2                       small FC
## LYL1                         small FC
## GFUS                        small FC
## LYN                          small FC
## MEX3C                       small FC
## WDR6                         small FC
## GPR17                       small FC
## XRCC2                       small FC
## DNAJC3-DT                   small FC
## MEIS1                       small FC
## LINC02449                   small FC
## DYRK1B                      small FC
## STX12                       small FC
## VSTM4                       small FC
## P2RX4                       small FC
## RPL10A                      small FC
## CBLB                        small FC
## TGFBR3                      small FC
## CSF3                         upregulated
## C8B                          downregulated
## RPL35                       small FC
## HMG20A                      small FC
## RCL1                         small FC
## RNF135                      small FC
## SNN                          small FC
## FOXO3B                      small FC
## RAB14                       small FC
## RPL32                       small FC
## VPS33B                      small FC
## LINC01781                   small FC
## BTBD9                       small FC

```

```

## PPP1R11           small FC
## AQP5-AS1          small FC
## GPR19             small FC
## FAM162B            small FC
## BTG1P1            upregulated
## CIR1              small FC
## RPL30             small FC
## CACNG5            downregulated
## SAT1              small FC
## KIF26A            small FC
## S100A16            small FC
## LRRC8A             small FC
## NFATC4             small FC
## RPA2               small FC
## C2orf15            small FC
## CASZ1              small FC
## PACC1              small FC
## RPL18A              small FC
## LINC03049           small FC
## AHNAK              small FC
## LGALS9C             upregulated
## TPT1-AS1            small FC
## HSPG2              small FC
## PPP6R3              small FC
## URI1               small FC
## AMD1               small FC
## CDC42SE2            small FC
## LINC01485           small FC
## BNIPL              small FC
## ELOVL3              small FC
## BEX5                small FC
## TLR1                small FC
## TNFAIP8              small FC
## CES5A               downregulated
## SLC4A8              small FC
## RDH5                small FC
## WNK4                small FC
## CPA5               upregulated
## ZNF234              small FC
## IFT88              small FC
## STOM                small FC
## SNUPN              small FC
## KCNJ12              small FC
## BCOR                small FC
## AP3M2              small FC
## TM2D1              small FC
## CPTP                small FC
## FAM111A              small FC
## DTYMK              small FC
## ZCCHC2              small FC
## MLKL                small FC
## LINC01159           small FC
## TOMM40              small FC
## LINC01423            upregulated

```

## CD2BP2	small FC
## KDR	small FC
## SVIL-AS1	small FC
## PTPRG-AS1	small FC
## CD300E	small FC
## RNF130	small FC
## GANAB	small FC
## NECTIN3	small FC
## PIK3C2A	small FC
## TNFSF18	small FC
## DRD1	small FC
## ART4	small FC
## WBP11	small FC
## TBC1D9B	small FC
## SMIM12	small FC
## FCGRT	small FC
## ZNF225	small FC
## CAMLG	small FC
## ZDHHC21	small FC
## AGAP2-AS1	small FC
## PAQR9	upregulated
## HIF1AN	small FC
## CTSA	small FC
## NUP214	small FC
## MIR3142HG	small FC
## LINC00640	upregulated
## MMP27	upregulated
## PTPN4	small FC
## OSGIN1	small FC
## EPB42	upregulated
## CAVIN3	small FC
## NME8	upregulated
## DYRK1A	small FC
## PHLDA1	small FC
## FAAP100	small FC
## THTPA	small FC
## DDX1	small FC
## MMP1	small FC
## GMPR	small FC
## HCP5	small FC
## LINC00598	small FC
## CAPN1	small FC
## MYBPHL	upregulated
## PPIL3	small FC
## OSGEP	small FC
## ZNF295-AS1	small FC
## SST	downregulated
## KATNAL1	small FC
## RXFP2	upregulated
## HCG11	small FC
## MKLN1-AS	small FC
## GCOM1	small FC
## TLCD2	small FC
## ARMC2	small FC

```

## UNKL           small FC
## ATE1          small FC
## LYVE1         small FC
## C17orf113     small FC
## CDC37L1       small FC
## UBC           small FC
## GGTLC3        downregulated
## FEN1          small FC
## SEL1L          small FC
## BTBD10         small FC
## JAM3           small FC
## MTRF1L         small FC
## HLCS           small FC
## TMEM216        small FC
## NINJ1          small FC
## TPM3P5         small FC
## ZMPSTE24       small FC
## DIPK1A         small FC
## LINC02798      small FC
## SEC1P          small FC
## TBC1D22A       small FC
## NOTUM          upregulated
## SMAD5-AS1      small FC
## NKAIN1         upregulated
## PARPBP         small FC
## MIOX           small FC
## MTND5P19       small FC
## AP1S3          small FC
## CLN8-AS1       small FC
## NCMAP          small FC
## MICB-DT        small FC
## UNC119B        small FC
## WIPF2          small FC
## IL1RAPL1        small FC
## LRIG1          small FC
## RAB3A          small FC
## IL15RA          small FC
## LHFPL1         small FC
## HAO2            small FC
## SLC26A11        small FC
## PCYOX1L         small FC
## MYG1-AS1       small FC
## RBMS3          small FC
## RRS1-DT        small FC
## SFTP1D         small FC
## CATSPER1        upregulated
## SRGAP3-AS4     downregulated
## LYPD6          small FC
## AMHR2          upregulated
## SHROOM1         small FC
## PIWIL4          small FC
## SHB             small FC
## PTGES           small FC
## FOXN1          downregulated

```

```

## CZIB                      small FC
## AGPAT2                    small FC
## TBC1D9                    small FC
## GTF2H1                    small FC
## CCDC85B                   small FC
## PAG1                      small FC
## ACTN4                     small FC
## BCL2L12                   small FC
## SPRING1                   small FC
## ANKRD18B                  upregulated
## GHRHR                      small FC
## NR0B2                      small FC
## STXBP2                     small FC
## CBX4                       small FC
## LINC01624                  upregulated
## HEATR3                     small FC
## TTC21B                     small FC
## TRBJ1-5                   upregulated
## KCNC1                     upregulated
## CIP2A                      small FC
## LINC00664                  upregulated
## SLC35F4                   upregulated
## MCF2L-AS1                  small FC
## PCDHGC4                   small FC
## PDZD8                      small FC
## PDE7B-AS1                  small FC
## ALDH1A2                   small FC
## GLA                         small FC
## NFATC3                     small FC
## PCA3                        small FC
## SLC25A29                   small FC
## DACH2                      small FC
## MTND1P20                   small FC
## VANGL2                     small FC
## MDH1                        small FC
## EXOC8                      small FC
## GNG11                      small FC
## ABCB9                      small FC
## CRACR2B                    small FC
## FHIP1A                     small FC
## SMYD2                      small FC
## RHOG                        small FC
## N4BP1                      small FC
## ITGB7                      small FC
## LINC01235                  upregulated
## TARBP1                     small FC
## ELAVL3                     downregulated
## HRK                         small FC
## RANBP9                     small FC
## RHNO1                      small FC
## RPL11                      small FC
## C1GALT1C1L                 small FC
## OSGIN2                     small FC
## ZNF878                     small FC

```

## PGAP2	small FC
## PEA15	small FC
## CHP1	small FC
## ZNF365	small FC
## BDKRB2	small FC
## MESD	small FC
## LINC02875	small FC
## SLC25A25-AS1	small FC
## TTC9C	small FC
## LINC01145	small FC
## SLC1A5	small FC
## EPM2AIP1	small FC
## ADNP2	small FC
## GPR142	upregulated
## QSER1	small FC
## ALX4	upregulated
## THAP2	small FC
## COL19A1	small FC
## ARHGEF2-AS2	small FC
## TUT1	small FC
## TRAV36DV7	upregulated
## SLC4A3	small FC
## KRT5	upregulated
## CYP4B1	small FC
## TARS2	small FC
## RPL10AP6	small FC
## MFN2	small FC
## ANK3-DT	small FC
## UEVLD	small FC
## PGAP3	small FC
## TRIM50	small FC
## LINC01348	small FC
## BRD4	small FC
## CS	small FC
## PDE2A	small FC
## MAPK6	small FC
## RPL32P18	small FC
## KIF22	small FC
## NEK11	small FC
## SAMD4A-AS1	upregulated
## UBL4A	small FC
## CDH7	downregulated
## PTGR2	small FC
## GBA1	small FC
## ST6GALNAC2	small FC
## CCL14	small FC
## TSC22D4	small FC
## VPS4A	small FC
## TC2N	small FC
## FTLP15	upregulated
## LINC00891	upregulated
## NFIB-AS1	small FC
## DERL1	small FC
## BRI3	small FC

```

## RBBP8                      small FC
## DST                        small FC
## PTP4A2P2                   small FC
## COQ2                        small FC
## LRATD1                     small FC
## BNC2                        small FC
## LINC01036                   small FC
## LZTS1                       small FC
## LINC02635                   small FC
## SPINK13                     downregulated
## COL28A1                     small FC
## EFNB2                       small FC
## STAG3                        small FC
## WFIKKN1                     small FC
## ANKMY2                       small FC
## TSHR                         small FC
## FZD2                         small FC
## POF1B                        small FC
## MINDY3                       small FC
## AGBL4                         small FC
## UBL7-DT                      small FC
## HOXD9                         small FC
## ACER1                        upregulated
## SECISBP2L                    small FC
## PAX2                         small FC
## POU4F1                       upregulated
## CBX7                          small FC
## RIMS1                        upregulated
## KIFC3                         small FC
## RARRES1                      small FC
## PRDM7                         small FC
## NPPC                          downregulated
## TMEM219                      small FC
## DPH7                          small FC
## GFM1                          small FC
## GNL3                          small FC
## STRIP11                      small FC
## RAB3IL1                      small FC
## TGFA                          small FC
## SORBS1                       small FC
## BSCL2                         small FC
## APOM                          small FC
## TMEM121B                      small FC
## MRPL50                        small FC
## TMEM9B                         small FC
## CCDC138                       small FC
## ATP5MC3                       small FC
## TPTE2P2                       downregulated
## LINC02048                     downregulated
## VTN                           small FC
## KHDC1                         small FC
## RAB5C-AS1                     small FC
## LMO4                          small FC
## LINC02869                     upregulated

```

```

## KCNQ4                      small FC
## RORB                       small FC
## NEU1                        small FC
## ZNF536                      small FC
## ZNF200                      small FC
## INPP4A                      small FC
## LETM2                        small FC
## SAC3D1                      small FC
## FAAH                         small FC
## DKK1                         small FC
## FAM53A                      small FC
## TFAP2A                      small FC
## SVOPL                        small FC
## PCAT14                      downregulated
## CHD9NB                      small FC
## DPP10                        small FC
## LZIC                         small FC
## KIR2DL1                      upregulated
## AOX1                         small FC
## SCARNA5                      upregulated
## ZFAS1                        small FC
## ZNF628                        small FC
## AASDHPPPT                     small FC
## LINC02212                     small FC
## APIP                          small FC
## CFAP141                      upregulated
## CLDN14-AS1                   small FC
## SLC25A21-AS1                 small FC
## BAZ1B                         small FC
## CBS                           small FC
## ADCY3                         small FC
## PDE4DIPPP2                    small FC
## NT5C3AP2                      upregulated
## RAB11FIP1                     small FC
## PRSS22                        small FC
## OVGPI1                        small FC
## HLA-DQB1                       small FC
## GPR83                         small FC
## WDR70                          small FC
## COL6A2-DT                      upregulated
## CLEC9A                        small FC
## ELF2                           small FC
## RPL6P27                        small FC
## TMED8                         small FC
## FBXO45                        small FC
## ANGPTL7                      upregulated
## BHMT                          small FC
## PARP10                        small FC
## NT5DC3                        small FC
## C14orf39                      upregulated
## TRAK1                         small FC
## LINC00528                     small FC
## JAM2                           small FC
## GBA2                           small FC

```

```

## NCOA5                      small FC
## ARNT2-DT                   small FC
## ITIH1                      upregulated
## PCNP                        small FC
## TNFSF4                      small FC
## LINC00601                  upregulated
## ARK2N                        small FC
## TRIM36                      small FC
## TYMSOS                      small FC
## ELP4                         small FC
## KBTBD11-OT1                 small FC
## FTLIP2                      small FC
## FAM217A                     small FC
## EMC3-AS1                    small FC
## LINC01011                  small FC
## LRP8                         small FC
## GDF11                       small FC
## PPT1                         small FC
## PTK2                         small FC
## RNU6-287P                  downregulated
## LMBRD2                      small FC
## ZNF670                       small FC
## ALDH3A1                     small FC
## IL1RAPL2                    small FC
## WNT8B                        small FC
## SOX13                        small FC
## CLPB                         small FC
## HSPB8                        small FC
## ATP23                        small FC
## SPATA16                     small FC
## TKT                          small FC
## CCDC3                        small FC
## BTG1-DT                      small FC
## NBPF14                      small FC
## ERN2                         upregulated
## SRPK2                        small FC
## TRPC7-AS1                   small FC
## ARHGAP31                    small FC
## TMEM91                       small FC
## AASDH                        small FC
## TRMT10A                     small FC
## ADCY6                        small FC
## NDEL1                        small FC
## OR10AC1                     upregulated
## FAM181B                      small FC
## STK32A-AS1                  small FC
## IFT20                        small FC
## MIR3945HG                  upregulated
## SMAD7                        small FC
## TSPEAR                       small FC
## THBD                         small FC
## GTF2IRD1                    small FC
## PCNX2                        small FC
## NADSYN1                      small FC

```

```

## LINC00930      upregulated
## CDH12          small FC
## PRKAR1B-AS2   small FC
## MIR762HG      small FC
## SLC30A6        small FC
## BDH1           small FC
## ATP6V1E1       small FC
## PDE8A          small FC
## CLTRN          small FC
## PERM1          small FC
## ABCC12         upregulated
## GUSBP5         small FC
## KIF26B         small FC
## PPP1R16B       small FC
## HCFC1R1        small FC
## RPL21P125      downregulated
## CSMD3          small FC
## IGSF22         small FC
## CDC34          small FC
## EMX1           small FC
## USP24          small FC
## AGPAT5         small FC
## FBXO25         small FC
## CFAP52         small FC
## POM121         small FC
## IGLV3-19       upregulated
## LINC00933      small FC
## SLC12A6        small FC
## LIMCH1          small FC
## LINC02568      small FC
## TMSB15B-AS1    small FC
## RNF224          small FC
## UCA1            downregulated
## CRP             downregulated
## MACC1-AS1      downregulated
## EIF3G           small FC
## MED22          small FC
## MAGT1          small FC
## STT3B           small FC
## EPN3            small FC
## OPA3            small FC
## PITX1-AS1      small FC
## DIRC3           small FC
## SLC25A5-AS1    small FC
## P4HA2           small FC
## ENTPD7          small FC
## ABLIM1          small FC
## ERFL            upregulated
## FGFR1           small FC
## CCDC96          small FC
## BBS9            small FC
## RFT1            small FC
## LINC02274      small FC
## UBA52           small FC

```

## ELOVL1	small FC
## SERPINB9	small FC
## BARD1	small FC
## SLC31A2	small FC
## CDH26	small FC
## SIGLEC9	small FC
## SLC12A2-DT	small FC
## FAM72A	small FC
## MRAP2	small FC
## LINC01378	downregulated
## OR6E1P	small FC
## LNC-LBCS	small FC
## PKD1-AS1	small FC
## MIR4453HG	small FC
## ZCCHC17	small FC
## FAM83B	small FC
## RNF103	small FC
## HSPA8	small FC
## TRAM1	small FC
## HELLPAR	small FC
## TATDN2P3	upregulated
## NTN3	small FC
## CCPG1	small FC
## PRR3	small FC
## RNF14	small FC
## LMNA	small FC
## MSANTD4	small FC
## ZSCAN1	small FC
## ARRDC5	upregulated
## PYGB	small FC
## ITPKA	small FC
## FBXO48	small FC
## CNN3	small FC
## DZIP1	small FC
## CHAF1A	small FC
## SCAMP4	small FC
## BUD13P1	small FC
## RAB25	small FC
## DRAIC	small FC
## SMG1P7	small FC
## PRPF4	small FC
## FGF14	small FC
## FLCN	small FC
## CORO7	small FC
## FGL2	small FC
## C5	small FC
## ANKMY1	small FC
## FAHD2A	small FC
## LIF	small FC
## TPI1P2	small FC
## SLC2A4RG	small FC
## CCDC89	small FC
## TAF1	small FC
## PCDH10	small FC

```

## HTT           small FC
## NHS          small FC
## TMOD3         small FC
## UBE2QL1       small FC
## C2            small FC
## LINC02245    small FC
## TRBV13        upregulated
## ZNF174         small FC
## GPM6B          small FC
## HMOX2          small FC
## EDIL3          small FC
## HCCS           small FC
## RANBP3L        small FC
## PPFIA3         small FC
## DYNC1LI1       small FC
## PRSS57         upregulated
## AKAP14         upregulated
## LRRC70         small FC
## TNFRSF17       upregulated
## FUT11          small FC
## YJU2            small FC
## BRINP2          small FC
## PIK3C2B         small FC
## TMEM207         small FC
## CMAS            small FC
## CPNE5           small FC
## PAPLN-AS1       small FC
## GIMAP8          small FC
## EMILIN1         small FC
## TPT1P9          small FC
## MLH1            small FC
## STXBP6          small FC
## HOXC8           small FC
## NANOS3          small FC
## SCIN             small FC
## TFCP2L1          small FC
## LMF1             small FC
## RPS23P8          small FC
## CBX1             small FC
## ZMIZ1            small FC
## CD82             small FC
## ZNF449            small FC
## EMP1             small FC
## STT3A             small FC
## MRPL14            small FC
## TTC23             small FC
## TUSC1             small FC
## IGKV3-20          upregulated
## B4GALNT3          small FC
## PLEKHA3P1          small FC
## GREB1L             small FC
## MAML1             small FC
## BLOC1S3            small FC
## CCDC85C            small FC

```

## RPRD1A	small FC
## HOXA4	small FC
## PHF21A	small FC
## PCGF1	small FC
## GRAMD4	small FC
## POFUT1	small FC
## ZNF420	small FC
## LINC02937	small FC
## RCN1	small FC
## LINC02535	small FC
## WNK3	small FC
## GALNT12	small FC
## ADAM33	small FC
## TSPAN12	small FC
## NSG1	small FC
## NARF-AS2	small FC
## ATXN7L3B	small FC
## MEX3D	small FC
## TECTA	small FC
## PXN	small FC
## VAT1	small FC
## SLC7A10	small FC
## SCAP	small FC
## LCAL1	upregulated
## CABLES1	small FC
## SLC14A1	small FC
## GREB1	small FC
## SMAD9	small FC
## TCN1	downregulated
## KLHL4	small FC
## CCDC142	small FC
## GPAT2	small FC
## PRRG1	small FC
## NBEAP2	small FC
## SLC7A14-AS1	small FC
## ADGRE2	small FC
## SLC16A1	small FC
## SLC22A17	small FC
## VPS52	small FC
## CYP1B1-AS1	small FC
## CIAPIN1	small FC
## VPS26A	small FC
## C1QTNF1	small FC
## AK2	small FC
## SEPSECS-AS1	small FC
## HTR6	upregulated
## TSPYL2	small FC
## ZNF567-DT	small FC
## RPH3AL	small FC
## NUP210	small FC
## KYNU	small FC
## SHISA9	small FC
## TMEM132E-DT	small FC
## CCDC78	small FC

## LINC01119	small FC
## OXNAD1	small FC
## SNRNP40	small FC
## BHLHE40	small FC
## LINC00299	small FC
## CHFR	small FC
## PPP1R2	small FC
## BEND5	small FC
## ARHGEF26-AS1	small FC
## JAKMIP1	upregulated
## MARVELD3	small FC
## SRSF5	small FC
## ZNF616	small FC
## HMCES	small FC
## MDC1-AS1	upregulated
## TAF5	small FC
## FAM3B	small FC
## RWDD2B	small FC
## LINC03072	small FC
## ZSCAN12P1	small FC
## FKBP11	small FC
## DNMT1	small FC
## HORMAD1	upregulated
## R3HCC1L	small FC
## RPLP0	small FC
## CCNDBP1	small FC
## ITM2C	small FC
## G6PC2	downregulated
## NUP88	small FC
## KCNJ9	small FC
## THNSL1	small FC
## CCNI2	small FC
## ERICH2	small FC
## C10orf55	small FC
## TPM4P2	small FC
## ASXL3	small FC
## RAB38	small FC
## TET1	small FC
## UBE2F	small FC
## CNKSR3	small FC
## SPRYD7	small FC
## MTND5P6	small FC
## FDCSP	upregulated
## SNAPC3	small FC
## CPT1C	small FC
## PITPNA	small FC
## TRGV3	small FC
## PNMA8B	small FC
## COMM3D	small FC
## ST3GAL3	small FC
## SEMA3D	small FC
## HPSE	small FC
## PLCE1-AS1	downregulated
## DYDC2	small FC

```

## MANEA                      small FC
## LINC00869                  small FC
## S100A5                      small FC
## ZRANB3                      small FC
## BRK1                        small FC
## COL26A1                      small FC
## CCR12P                      upregulated
## LINC00840                  small FC
## RMDN3                        small FC
## NAT14                        small FC
## MLF1                          small FC
## HTATSF1P2                  small FC
## PHGDH                        small FC
## CASP1P2                      upregulated
## SLC6A16                      small FC
## LINC00939                  small FC
## IL10RB-DT                    small FC
## MCRIP1                      small FC
## ZNF561-AS1                    small FC
## PPT2                          small FC
## PPP1R26P1                  small FC
## ZC3H7A                        small FC
## TMC1                          small FC
## MTCO3P24                      small FC
## RAMP2-AS1                    small FC
## NAP1L5                        small FC
## GSKIP                         small FC
## THUMPD3                      small FC
## NUDCD3                      small FC
## CSDE1                         small FC
## VDAC1                         small FC
## A1BG-AS1                      small FC
## CKLF                          small FC
## MYO1B-AS1                      small FC
## PORCN                         small FC
## IDH2-DT                       small FC
## TTR                            small FC
## TNFRSF11A                     small FC
## AKAP1                         small FC
## EIF3H                          small FC
## LINC02520                      upregulated
## PES1P2                         downregulated
## TMEM177                        small FC
## LINC02292                      small FC
## MPV17L                         small FC
## PGM1                           small FC
## E2F5                           small FC
## ZNF512B                        small FC
## HOXB-AS3                      small FC
## HSF5                            upregulated
## RPL35A                         small FC
## GABRA2                         small FC
## CEPT1                          small FC
## RAMP1                          small FC

```

```

## BCL2L13           small FC
## LINC01522         upregulated
## PAWR              small FC
## CMTM2             upregulated
## PFKM               small FC
## IL20RA             small FC
## TRPM5              small FC
## FBXO21             small FC
## HAR1B              upregulated
## SCN3A              small FC
## PCP2               small FC
## CPVL               small FC
## DEPDC5             small FC
## CLIP4              small FC
## RNF43              small FC
## POLR3GL            small FC
## RALGPS2-AS1         small FC
## ZNF24TR             small FC
## ZDHHC20P1           upregulated
## ACOT13              small FC
## Clorf131            small FC
## SEZ6L2              small FC
## SPECC1              small FC
## TNFRSF10C            small FC
## MYO6               small FC
## HEXA-AS1             small FC
## TMEM241              small FC
## PLXNB2              small FC
## DPYSL4              small FC
## MARCHF8             small FC
## PDE9A-AS1             small FC
## LINC02861            small FC
## PDIK1L              small FC
## LINC02964            small FC
## THOC5               small FC
## PLEKHA1              small FC
## CX3CL1              small FC
## DEPDC1B              small FC
## NALF2               small FC
## LINC00519             upregulated
## RPL7AP45              small FC
## F5                  small FC
## EVX1                downregulated
## TMSB4XP8              small FC
## RASSF8              small FC
## MZT1                small FC
## LINC00163             upregulated
## YBX2               small FC
## MTERF1              small FC
## MIGA2               small FC
## SUSD3               small FC
## CHRM3               small FC
## RNGTT               small FC
## ALDH18A1             small FC

```

## PMFBP1	small FC
## PIP5K1A	small FC
## FBXL12	small FC
## PGA5	small FC
## TMEM72-AS1	small FC
## C1orf74	small FC
## KLHDC8B	small FC
## FAM241B	small FC
## SPAG9	small FC
## ATMIN	small FC
## SIGLEC15	small FC
## NTN5	small FC
## RNF152	small FC
## RHBDL2	small FC
## HNF1B	small FC
## LAD1	small FC
## ROBO3	small FC
## GANC	small FC
## NRG3	small FC
## BEND4	small FC
## ANKEF1	small FC
## EPB41L4B	small FC
## DBF4	small FC
## TMEM35A	small FC
## TXK	small FC
## MTND2P28	small FC
## RPL13AP25	small FC
## ZNF804A	small FC
## TAFA4	small FC
## TADA3	small FC
## TOP1P1	small FC
## CLDN24	small FC
## MTF1	small FC
## PAPSS2	small FC
## LINC00997	small FC
## REEP4	small FC
## LIMS2	small FC
## FUT4	small FC
## HSF2	small FC
## SNX32	small FC
## NBN	small FC
## VN1R51P	small FC
## EML4	small FC
## ATF7IP	small FC
## PRMT5	small FC
## PDIA4	small FC
## CLEC3A	downregulated
## SCARNA21	upregulated
## SIMC1	small FC
## PLLP	small FC
## FRZB	small FC
## B3GAT3	small FC
## MGAT5B	small FC
## MTCL1	small FC

```

## HMGB1P10 upregulated
## RPH3AL-AS1 small FC
## GCM1 small FC
## NCK1-DT small FC
## ACTN4P1 small FC
## CYP11A1 small FC
## RPL19 small FC
## WNT11 small FC
## HCG22 upregulated
## PPIAP78 downregulated
## SCT upregulated
## NCOA1 small FC
## F2RL1 small FC
## STMN3 small FC
## EED small FC
## DEGS1 small FC
## TMDD1 small FC
## AKR7A2 small FC
## CFAP157 small FC
## NMD3 small FC
## LINC02983 small FC
## MAPK6-DT small FC
## CNTFR small FC
## KLB small FC
## PTPRF small FC
## LYPLAL1-AS1 small FC
## PSEN1 small FC
## POU6F2 small FC
## PLVAP small FC
## FDFT1 small FC
## PON2 small FC
## SLC35F1 small FC
## DELEC1 small FC
## SAMSN1 small FC
## H6PD small FC
## MAGEE1 small FC
## NFYC small FC
## BCAN small FC
## NETO1 small FC
## LIMK2 small FC
## DIP2C-AS1 small FC
## LINC01909 small FC
## TMEM26-AS1 small FC
## FOXP3 small FC
## LINC02829 upregulated
## LINC02880 upregulated
## PODXL small FC
## PCDHA6 small FC
## NHLRC2 small FC
## BOLL upregulated
## LSM7 small FC
## LRFN4 small FC
## SLC5A2 small FC
## BMP6 small FC

```

```

## PWWP3A           small FC
## KRT8P46          small FC
## INVS            small FC
## GALK2            small FC
## FLT3LG           small FC
## DUS1L            small FC
## ATL1             small FC
## TFIP11-DT        small FC
## LINC02132        upregulated
## HFE              small FC
## ENKUR            small FC
## ZNF404            small FC
## CCDC190           upregulated
## ARMCX1           small FC
## GATA5             small FC
## SPATA6            small FC
## DAPL1             small FC
## MFHAS1            small FC
## MEIS1-AS2         small FC
## ASB18             upregulated
## IVNS1ABP          small FC
## CABP1             small FC
## MTMR2             small FC
## BRD3              small FC
## RNF217-AS1         small FC
## TMEM215           upregulated
## SMU1              small FC
## FBXW7             small FC
## MALL              small FC
## GJC2              small FC
## LINC02938          small FC
## GPBAR1            small FC
## CHI3L1             small FC
## LINC00539           upregulated
## PKDREJ            small FC
## OLFML2A           small FC
## CIRBP-AS1          small FC
## SECTM1            small FC
## B4GALNT1           small FC
## TRBV10-2           upregulated
## KLHL6-AS1          small FC
## KLHDC10            small FC
## FBLN5              small FC
## PPM1L-DT            small FC
## CDH18              downregulated
## NOMO3              small FC
## CDK5               small FC
## SLC30A7            small FC
## SLC39A2           upregulated
## DNAH2              small FC
## BCL11A             small FC
## COX5B              small FC
## RPL3               small FC
## CBX3               small FC

```

## ADGRG1	small FC
## XPOT	small FC
## MPZ	small FC
## WNT7A	small FC
## C14orf132	small FC
## LIME1	small FC
## UBR4	small FC
## SRCIN1	small FC
## HHEX	small FC
## LINC02453	small FC
## SLC16A13	small FC
## MRPL15	small FC
## NBAS	small FC
## LINC01505	small FC
## MELTF	small FC
## NALF1	small FC
## LINC01546	upregulated
## C2orf68	small FC
## STC1	small FC
## ZNF710-AS1	small FC
## ACADL	small FC
## SCARF2	small FC
## MT2A	small FC
## RPS18	small FC
## DENND2D	small FC
## ARID5B	small FC
## ACOD1	upregulated
## SH3BGRL	small FC
## FGL1	downregulated
## PIM2	small FC
## SNPH	small FC
## CEACAM16	upregulated
## PCBP4	small FC
## ZNF589	small FC
## SYNGR3	small FC
## TMEM67	small FC
## LY6E	small FC
## IGKJ1	upregulated
## SGIP1	small FC
## C8orf76	small FC
## KRT79	upregulated
## CRYGN	small FC
## ANKRD66	upregulated
## OR7A5	downregulated
## ZNF322	small FC
## C4orf3	small FC
## CNN2P4	small FC
## SMOX	small FC
## KRT8P3	small FC
## C2CD5-AS1	downregulated
## ETFRF1	small FC
## TLN2	small FC
## SNCB	upregulated
## DOCK7	small FC

```

## NEXMIF           small FC
## IL12B            upregulated
## GPR150           small FC
## STARD3           small FC
## CPNE1            small FC
## PCMTD1-DT        small FC
## CEBPG            small FC
## KLF17             upregulated
## AIDAP2           small FC
## CXADR            small FC
## EFCAB11          small FC
## ANKRD36C         small FC
## SLC18A1           upregulated
## CRHBP            small FC
## CCDC148           small FC
## CNN2              small FC
## XPA               small FC
## COPG1              small FC
## LIPC              small FC
## UGGT2              small FC
## MUC3A              small FC
## SLC9A3              small FC
## GAL3ST1           small FC
## MAGED1            small FC
## SETDB1            small FC
## CHST3              small FC
## BPHL              small FC
## ST6GALNAC1         small FC
## RPAP2              small FC
## PHPT1              small FC
## RACK1              small FC
## CDC27              small FC
## TRAV22             upregulated
## CHASERR           small FC
## LNPK               small FC
## POLD3              small FC
## LIG1               small FC
## ZNF510              small FC
## FICD              small FC
## C17orf100          small FC
## RNF13              small FC
## AOPEP              small FC
## MND1               small FC
## FES                small FC
## PPIP5K1            small FC
## NOD1               small FC
## LHPP               small FC
## PPM1K              small FC
## RNASEL             small FC
## IGLV3-25            upregulated
## EDNRA              small FC
## RDH13              small FC
## SMLR1              small FC
## PDE3B              small FC

```

## NDRG3	small FC
## EEF2	small FC
## EEF1AKMT1	small FC
## ARHGAP29	small FC
## MIEF2	small FC
## PANK4	small FC
## IRF2-DT	small FC
## PSMD12	small FC
## MOB3A	small FC
## SCHLAP1	small FC
## EIF3F	small FC
## OSBPL3	small FC
## ADGRG4	upregulated
## GRIK2	small FC
## TPBGL	small FC
## SALL4	small FC
## HLX-AS1	small FC
## PIK3CB	small FC
## NMI	small FC
## MIR29B2CHG	small FC
## SLC4A4	small FC
## RN7SL648P	upregulated
## SCARNA6	upregulated
## CDADC1	small FC
## KIF20B	small FC
## PRXL2C	small FC
## TMEM140	small FC
## ZNF860	small FC
## PPP2R5E	small FC
## POC1A	small FC
## DLGAP2-AS1	upregulated
## FAM169A	small FC
## PLA2G4A	small FC
## ADGRB3	small FC
## TMEM65	small FC
## TRAPPCL3	small FC
## ATXN3	small FC
## RALB	small FC
## SNHG5	small FC
## MDM2	small FC
## TRPM6	small FC
## TBX3	small FC
## SEMG1	downregulated
## STX4	small FC
## RRN3	small FC
## NTNG2	small FC
## RPRD1B	small FC
## HR	small FC
## C22orf46P	small FC
## EMC7	small FC
## CLDN16	small FC
## ZFR	small FC
## RPL7P9	small FC
## LINC02721	downregulated

```

## IRX4-AS1 upregulated
## SHISAL2A small FC
## CCDC159 small FC
## VRK1 small FC
## TMEM92-AS1 upregulated
## FCGBP small FC
## MFSD14A small FC
## LINC01780 small FC
## FIRRE small FC
## ZBTB2 small FC
## USP48 small FC
## AGA small FC
## PRKACA small FC
## TTC39B small FC
## NAGLU small FC
## ATN1 small FC
## HNRNPR small FC
## RYR2 small FC
## HSD11B1-AS1 small FC
## LINC00685 small FC
## EXOG small FC
## LRMDA small FC
## GJD3-AS1 small FC
## FAM110A small FC
## ATP5F1A small FC
## OR7E91P small FC
## HM13 small FC
## RHPN2P1 small FC
## UGT1A4 upregulated
## SLC30A5 small FC
## RTN4RL2 small FC
## LINC02009 small FC
## POLR2G small FC
## MIR126 small FC
## DHFR small FC
## TMEM115 small FC
## CCDC93 small FC
## MTND6P35 downregulated
## AMIGO1 small FC
## TMPRSS2 small FC
## SNX25 small FC
## ARSB small FC
## SKI small FC
## BRAF small FC
## IFT122 small FC
## B4GALT1-AS1 small FC
## FANCE small FC
## PAIP2B small FC
## DYNC2I2 small FC
## AIRIM small FC
## CAMK2G small FC
## TSPEAR-AS1 small FC
## NFE2L3 small FC
## PRKAR1A small FC

```

## PSORS1C3	small FC
## CDIN1	small FC
## ATOX1	small FC
## ASAP2	small FC
## PEDS1	small FC
## TFAP2E	small FC
## BLOC1S2	small FC
## PCSK7	small FC
## TMPRSS13	small FC
## EIF3D	small FC
## SNX11	small FC
## C2CD6	small FC
## GPBP1L1	small FC
## SEPTIN6	small FC
## MTLN	small FC
## ALAD	small FC
## PKN3	small FC
## CD2AP	small FC
## SMAP1	small FC
## VPS37D	small FC
## MOV10L1	small FC
## SMIM10L2B	small FC
## CEP57	small FC
## SPAG5	small FC
## STXBP4	small FC
## SERPINB2	upregulated
## CYB561	small FC
## TMEM44-AS2	small FC
## C1QTNF7	small FC
## B3GALT1	small FC
## ANO8	small FC
## BCL3	small FC
## MIR3189	downregulated
## LRRC61	small FC
## NEPRO	small FC
## TMEM131	small FC
## CCDC18	small FC
## ITM2B	small FC
## ADD3	small FC
## PRKAR1B-AS1	small FC
## KCTD12	small FC
## CYP46A1	small FC
## TRIP4	small FC
## MYEF2	small FC
## H1-10	small FC
## ZNF653	small FC
## TMEM128	small FC
## GNG12	small FC
## SYNPO	small FC
## COL9A1	small FC
## FPR2	small FC
## RDH10	small FC
## ASB15	small FC
## C11orf54	small FC

```

## PRPSAP1           small FC
## HOXD3            small FC
## LINC00920         small FC
## ZNF445            small FC
## FZD8              small FC
## MRT04             small FC
## CAB39L            small FC
## SCIRT              small FC
## MIR325HG          upregulated
## PAAF1              small FC
## RPL22L1            small FC
## TSSC2              small FC
## GPN3               small FC
## DRAXIN             small FC
## CRLF1              small FC
## STAM               small FC
## RMND1              small FC
## CKS1BP1             small FC
## YPEL3               small FC
## CLEC4A              small FC
## AADACP1            upregulated
## NEXN-AS1            small FC
## DUSP3              small FC
## DENND4A             small FC
## PSPH               small FC
## ZNF286A             small FC
## EIF4G2              small FC
## SLC20A1-DT          small FC
## FAM135A             small FC
## RFC4               small FC
## HARBI1              small FC
## Clorf202            downregulated
## GMFB               small FC
## LINC00235            small FC
## IQCA1-AS1            small FC
## LINC01975            downregulated
## GPER1               small FC
## LINC01687            downregulated
## WNT3A               small FC
## PRR15-DT             small FC
## DBF4B               small FC
## TECPR1              small FC
## UACA                small FC
## ERGIC2              small FC
## VEGFA               small FC
## MAP4K5              small FC
## SMIM20              small FC
## OST4                small FC
## ZNF830              small FC
## ARMC12              small FC
## TNR                 small FC
## HNMT                small FC
## OR7E47P              upregulated
## RGS6                small FC

```

## CNIH3-AS2	upregulated
## UBE4A	small FC
## ARL5C	upregulated
## SRRT	small FC
## ABCA2	small FC
## AP3B1	small FC
## TLE3	small FC
## PRKAA2	small FC
## ARPIN	small FC
## PCDHGB5	small FC
## SERPINB1	small FC
## SGPL1	small FC
## TTC19	small FC
## PIGV	small FC
## JUND	small FC
## STARD13-AS	small FC
## LINC02458	small FC
## SVIP	small FC
## VSIG10L2	upregulated
## LRRC37A9P	upregulated
## FBXL17	small FC
## HYKK	small FC
## RHBDL1	small FC
## KDM2B-DT	small FC
## CCDC187	small FC
## CLDN34	downregulated
## LINC01788	small FC
## SNX7	small FC
## POLR3B	small FC
## MIR4432HG	upregulated
## ANKRD63	downregulated
## CD58	small FC
## LINC02929	upregulated
## RPL13	small FC
## MAST3	small FC
## GRXCR2	upregulated
## RN7SL535P	small FC
## SMIM24	small FC
## ANTXRLP1	upregulated
## FOXA3	small FC
## CLPTM1	small FC
##AGO1	small FC
##CACNA2D1	small FC
##ADAT3	small FC
##VWA1	small FC
##TFR2	small FC
##ARFIP2	small FC
##NAPB	small FC
##DLGAP4	small FC
##UTS2B	small FC
##DACH1	small FC
##CRACD	small FC
##BLVRBP1	small FC
##BICD1	small FC

```

## MPG                         small FC
## SMURF1                      small FC
## NECAB1                      small FC
## VGLL1                       small FC
## CLDN14                      small FC
## PLCD4                       small FC
## GINS4                        small FC
## CSPG5                        small FC
## UBE2G1                      small FC
## RPL23                        small FC
## DHX32                        small FC
## S100A1                      small FC
## BOK                          small FC
## NELFA                        small FC
## NEURL2                       small FC
## WDR91                        small FC
## SMIM43                       upregulated
## GVQW3                        small FC
## NOL8                         small FC
## PARD6A                       small FC
## PSTPIP2                      small FC
## FAM24B                        small FC
## CYP20A1                      small FC
## CCDC162P                     small FC
## DDX55                        small FC
## PDE4DIPPP6                   small FC
## MYL10                        upregulated
## IQCA1                        small FC
## RPL15P3                      small FC
## NOL7                         small FC
## OTUD6B-AS1                   small FC
## PIAS1                        small FC
## ZYX                           small FC
## CHIC1                        small FC
## ODF2                          small FC
## CASP5                        small FC
## CCL25                        upregulated
## NEMP1                        small FC
## RETREG2                      small FC
## PPP2R5D                      small FC
## CTNNA1                       small FC
## TMCO1-AS1                    small FC
## ZNF24                         small FC
## SLC6A3                       small FC
## CABP4                         small FC
## LHFPL3-AS2                   small FC
## TM4SF4                       small FC
## BANF1                         small FC
## VEGFB                        small FC
## RALGAPB                      small FC
## DYNC1I1                       small FC
## SH3BP5                        small FC
## MIPOL1                        small FC
## CCDC71L                       small FC

```

## PRR22	small FC
## GFER	small FC
## GPR137C	small FC
## ITGB1-DT	small FC
## CYP2U1	small FC
## CHST4	upregulated
## P2RY6	small FC
## LINC02660	upregulated
## LINC00324	small FC
## FCGR1CP	small FC
## SLC45A3	small FC
## IL1B	small FC
## LINC01500	upregulated
## STRBP	small FC
## RBM22	small FC
## TBXAS1	small FC
## KCNQ3	small FC
## TMEM198B	small FC
## NOB1	small FC
## CRISP3	upregulated
## ATG2A	small FC
## UBE2I	small FC
## FAM81A	small FC
## FCRLB	small FC
## GORAB	small FC
## CKAP2-DT	small FC
## SNHG31	small FC
## SRRD	small FC
## BNC2-AS1	small FC
## GKAP1	small FC
## HLA-DOA	small FC
## CHKA-DT	small FC
## ZSCAN20	small FC
## WRN	small FC
## BMP4	small FC
## ANO9	small FC
## SOX6	small FC
## PTGIR	small FC
## MED21	small FC
## CCDC13	small FC
## BBIP1	small FC
## TMEM167B-DT	small FC
## NEK9	small FC
## NIPA2	small FC
## MKRN2	small FC
## HSPA9	small FC
## ANKRD13D	small FC
## CEP89	small FC
## WDR1	small FC
## PATL1	small FC
## ZNF879	small FC
## OAZ1	small FC
## RNF214	small FC
## ZNF281	small FC

```

## ACVR2B           small FC
## SPINT1-AS1       small FC
## EMC1             small FC
## NNT-AS1          small FC
## PSME3IP1         small FC
## INTS6L           small FC
## BABAM1           small FC
## RNF145           small FC
## COL4A2-AS2       upregulated
## NUP153-AS1       small FC
## HSPBP1            small FC
## LINC01152         small FC
## PSMD7             small FC
## TULP4              small FC
## RNF25             small FC
## LTF                downregulated
## NDUFS1            small FC
## LYNX1              small FC
## RAP1GAP2           small FC
## PRR36              small FC
## DYRK4              small FC
## TTC16              small FC
## KRT8P12            small FC
## ETF1               small FC
## FBRSL1             small FC
## C13orf46           small FC
## RBM15B             small FC
## SNX10-AS1          small FC
## ADAMTSL5           small FC
## AARS1              small FC
## ZFHX2              small FC
## CYP39A1             small FC
## FFAR3               upregulated
## MBTPS2             small FC
## EPM2A-DT            small FC
## TEP1               small FC
## SOAT1              small FC
## ZRANB2-AS1          small FC
## MMEL1              small FC
## PROSER1             small FC
## ATP2B1-AS1          small FC
## STPG2              small FC
## GPR137              small FC
## FMR1               small FC
## HSPH1              small FC
## ZNF780A             small FC
## RTRAF              small FC
## RAD23A              small FC
## BAHD1              small FC
## MYLIP              small FC
## ZXDA               small FC
## CKS1B              small FC
## KLK7               small FC
## PPP1R13L            small FC

```

## LRRIQ4	small FC
## NME1	small FC
## CASC2	small FC
## HECW2	small FC
## SET	small FC
## ECD	small FC
## APPBP2	small FC
## ZNF671	small FC
## SNAI1	small FC
## RAB3IP	small FC
## RIPPLY3	small FC
## SLC24A5	small FC
## DNAJB6	small FC
## TRIL	small FC
## XXYLT1-AS2	upregulated
## CCL8	small FC
## GFAP	small FC
## POLL	small FC
## SP3P	small FC
## CHKA	small FC
## TMED3	small FC
## B3GALT5-AS1	small FC
## MUSTN1	upregulated
## RCN2	small FC
## SEMA7A	small FC
## LBHD1	small FC
## CDC42	small FC
## RCAN2	small FC
## BHLHA15	small FC
## SCN3B	small FC
## FXYD2	small FC
## HAUS1	small FC
## RPL36	small FC
## GATAD2A	small FC
## LINC02128	small FC
## KDM4A	small FC
## DSCAML1	small FC
## SPRYD3	small FC
## SEC62	small FC
## NEK8	small FC
## QPCTL	small FC
## PKD1	small FC
## ZNF770	small FC
## PRRT1B	small FC
## ACER3	small FC
## PPM1H	small FC
## PHF21B	small FC
## RPL4P1	upregulated
## PARAL1	upregulated
## DNAJB5-DT	small FC
## ESR1	small FC
## LINC02899	upregulated
## CDH22	small FC
## SLCO4C1	small FC

```

## UGT2B17 upregulated
## KCNRG small FC
## NEURL4 small FC
## RBM14 small FC
## SAMD12 small FC
## ZNF321P small FC
## VEZF1 small FC
## LINC01176 small FC
## TACR2 small FC
## GSTA2 small FC
## CXCL6 small FC
## RPS11 small FC
## GLIPR1-AS1 small FC
## KRT23 small FC
## ZNF337 small FC
## TAC4 upregulated
## GATA1 upregulated
## EIF4E1B downregulated
## GUK1 small FC
## LETM1 small FC
## GALNT6 small FC
## EXOSC10 small FC
## ATCAY small FC
## C1orf162 small FC
## PAH small FC
## LINC01968 downregulated
## DNAJB1 small FC
## PSMA7 small FC
## FASTKD5 small FC
## DOLK small FC
## PRAG1 small FC
## CGGBP1 small FC
## PRDM16-DT small FC
## CXXC4 small FC
## PLPP5 small FC
## MMP8 upregulated
## ZNF624 small FC
## LINC01779 upregulated
## B3GALT9 small FC
## RIPOR3 small FC
## AP1AR small FC
## VAX2 small FC
## B3GNT9 small FC
## TRPV5 small FC
## BBS10 small FC
## LRRC52-AS1 small FC
## RNASEH2B-AS1 small FC
## CPPED1 small FC
## PIGQ small FC
## C13orf42 downregulated
## LRTM1 upregulated
## RNF7 small FC
## SMAD4 small FC
## STOX2 small FC

```

```

## TUBA1C           small FC
## ILK              small FC
## IGKJ5            upregulated
## LIN7B             small FC
## ENDOG             small FC
## DPYSL5            upregulated
## NSA2              small FC
## API5              small FC
## SLK               small FC
## CLEC18C           small FC
## NFIA-AS1          upregulated
## LINC02375         downregulated
## EIF5              small FC
## TAT              small FC
## SPACA9            small FC
## MBNL1             small FC
## JAK2              small FC
## TCL6              small FC
## UNC5C-AS1          small FC
## HABP4              small FC
## CUL4A              small FC
## TMEM176B           small FC
## ZKSCAN7            small FC
## PRKCI              small FC
## DUBR               small FC
## SMG1P4             small FC
## ABCA12             small FC
## MTND4P35           small FC
## MTCH1              small FC
## PRPS1              small FC
## EOGT               small FC
## MFSD2B              small FC
## AKR1B10P1          upregulated
## CCR6              upregulated
## PPP1R3D             small FC
## RNF112             small FC
## CD109              small FC
## RBM38              small FC
## RFX5               small FC
## FOXS1              small FC
## POU6F2-AS1          small FC
## LAMTOR2             small FC
## COX19              small FC
## MPPE1              small FC
## CIMAP1B             small FC
## STK17A              small FC
## FASTKD1             small FC
## ITGB1              small FC
## LETR1              small FC
## SHLD3              small FC
## CCN2               small FC
## ZNF566              small FC
## GUCY2C              small FC
## XPNPEP1             small FC

```

```

## RPL23A           small FC
## CACNB2          small FC
## ARHGAP5         small FC
## HMGCLL1         small FC
## USP30-AS1       small FC
## TMT1B           small FC
## RNF144A         small FC
## NCKAP5L          small FC
## CLDN12          small FC
## NUP85            small FC
## GSTO2            small FC
## TNIK              small FC
## LINC02200        small FC
## IPO13             small FC
## FEZF1-AS1        upregulated
## SPATA31F3        small FC
## ATF3              small FC
## CD300H            small FC
## ERI3-IT1          small FC
## WWC1              small FC
## TMEM255B          small FC
## CIMAP1D            small FC
## CACNA1C-AS2       small FC
## CR1L              small FC
## ALB                small FC
## UQCRHL            small FC
## RWDD1              small FC
## SYN3              small FC
## DIABLO            small FC
## SYNM-AS2          small FC
## PTPRA              small FC
## SELENON            small FC
## MAD1L1            small FC
## AKAP5              small FC
## KRT80              small FC
## HAMP                small FC
## ERVV-1             downregulated
## TTC33              small FC
## KRT27              upregulated
## SENP5              small FC
## TWF1                small FC
## ZNF197              small FC
## PRPF40B            small FC
## UTP25                small FC
## RMDN2              small FC
## SORL1              small FC
## RTL8B              small FC
## SOSTDC1            small FC
## AGAP3              small FC
## ASCC3              small FC
## FAM238C            small FC
## LINC00842          upregulated
## TMEM259            small FC
## DNMT3L              small FC

```

## LINC01625	small FC
## BSDC1	small FC
## ILF3-DT	small FC
## CD27-AS1	small FC
## CRB3	small FC
## C11orf91	small FC
## ZNF576	small FC
## KLK10	small FC
## ARHGEF35	small FC
## VDAC2	small FC
## TICAM2-AS1	small FC
## LCE1C	small FC
## DLGAP1	small FC
## EEF1A1	small FC
## LRCH4	small FC
## CHCHD2P7	small FC
## SMCHD1	small FC
## COX7A1	small FC
## DSTNP2	small FC
## MFSD6	small FC
## EEF1B2	small FC
## CREB3L2	small FC
## TBCC	small FC
## TMEM145	small FC
## LINC02694	small FC
## IGHAI1	small FC
## LINC00645	small FC
## DUSP15	small FC
## ZFTA	small FC
## UHMK1	small FC
## RGPD8	small FC
## THAP5	small FC
## ARL8A	small FC
## NOX4	small FC
## ZNF134	small FC
## EGLN2	small FC
## CDYL	small FC
## NMRK1	small FC
## C1R	small FC
## TPM4P3	small FC
## PMS1	small FC
## ANKRD33B	small FC
## TOM1	small FC
## BROX	small FC
## USP49	small FC
## IFT140	small FC
## LINC00612	small FC
## AP2B1	small FC
## PABPC3	small FC
## JUN-DT	small FC
## INO80D-AS1	small FC
## AAK1	small FC
## MRPL17	small FC
## HMSD	upregulated

## ZPBP	small FC
## ZIM2	small FC
## NXPH4	small FC
## NRCAM	small FC
## GLMN	small FC
## GC	downregulated
## ZBTB20-AS4	small FC
## AREG	small FC
## LINC01750	small FC
## C5AR1	small FC
## ZNF660	small FC
## ZNF843	small FC
## CCDC170	small FC
## DENND1B	small FC
## RBMX2	small FC
## LINC00520	upregulated
## GRB14	small FC
## RPL39L	small FC
## HOXB4	small FC
## VASN	small FC
## LILRA5	small FC
## VPS33A	small FC
## PGGT1B	small FC
## LINC01714	small FC
## SUDS3	small FC
## FOXN2	small FC
## ARK2C	small FC
## DIPK2B	small FC
## RNF38	small FC
## BCDIN3D-AS1	small FC
## CAPRIN2	small FC
## GPR61	upregulated
## RPL18	small FC
## WWOX	small FC
## MBD4	small FC
## ITGA9	small FC
## ARL1	small FC
## GBP2	small FC
## RPL14	small FC
## AR	small FC
## DNAJC16	small FC
## SIGLEC7	small FC
## IKZF4	small FC
## LINC00940	small FC
## IFI30	small FC
## C12orf42	small FC
## MED10	small FC
## RPS6	small FC
## IQSEC3	small FC
## SLC22A4	small FC
## BRD7	small FC
## AP5S1	small FC
## SLC1A2	small FC
## STAT6	small FC

```

## PDYN-AS1           small FC
## IFITM4P          upregulated
## SLC5A10          small FC
## CYP2B6            small FC
## THORLNC           small FC
## ACSBG1            small FC
## ITPR1-DT          small FC
## DDOST              small FC
## FOXD2              small FC
## MAP3K3              small FC
## MIR4307HG         upregulated
## PANTR1             small FC
## DDB1               small FC
## FRAS1              small FC
## LINC01612          small FC
## STRN               small FC
## CC2D2A              small FC
## FIBP               small FC
## SNX19               small FC
## NRIR               small FC
## TFAP2C              small FC
## MRPS9              small FC
## GPR153              small FC
## RAB4A-AS1          small FC
## RPGR               small FC
## SESN2              small FC
## MAP3K5              small FC
## LINC03007          small FC
## QKI                small FC
## GDF3               downregulated
## MSANTD3             small FC
## CFDP1               small FC
## CACNA2D4             small FC
## CCSER1              small FC
## ZMYND8              small FC
## NKX2-3               upregulated
## UBIAD1              small FC
## PARP12              small FC
## SIGLEC16             small FC
## CHD4               small FC
## PCDHB17P             small FC
## CPQ                 small FC
## C15orf39             small FC
## NUTF2               small FC
## RNF146              small FC
## FGF4                downregulated
## RPL7AP39             small FC
## TENT4A              small FC
## CEP83               small FC
## TOR1AIP1             small FC
## EDRF1               small FC
## CRBN                small FC
## CHMP4C              small FC
## CBY1               small FC

```

```

## PTPRK           small FC
## MIATNB          small FC
## SLC25A53         small FC
## EDN1            small FC
## PLD2             small FC
## ZNF696           small FC
## AADAT            small FC
## AIFM1            small FC
## LNX2             small FC
## NMB              small FC
## B4GALT7          small FC
## C5orf46          upregulated
## LIN7A             small FC
## DIMT1            small FC
## CETN3            small FC
## BANK1            small FC
## MAGI1            small FC
## UBL4B             upregulated
## ZNF578            small FC
## KLF6              small FC
## SHE               small FC
## GNPNAT1          small FC
## ZNF773            small FC
## SFMBT2            small FC
## C17orf114         small FC
## CUL3              small FC
## CSNK1E            small FC
## ZNF785            small FC
## CRB2              small FC
## LINC02182         small FC
## KHDRBS1          small FC
## ASB15-AS1         small FC
## MAP3K4            small FC
## PLXNA4            small FC
## CIDEB             small FC
## POU3F4            small FC
## RCBTB2            small FC
## RASSF9            small FC
## LINC01273         small FC
## MRPL47            small FC
## RIC3              small FC
## NEPRO-AS1          small FC
## CNTN2             small FC
## TOP6BL            small FC
## TMTC4             small FC
## FKBP2             small FC
## GRM3              downregulated
## IQSEC3-AS2          upregulated
## CHRM3-AS1          small FC
## ANXA5             small FC
## TP53TG1            small FC
## LINC02058          small FC
## PCID2             small FC
## PRDM15            small FC

```

```

## HSD17B7           small FC
## DPF2              small FC
## RN7SL689P          small FC
## SNORC              small FC
## PLA2G4E            upregulated
## LMX1B              small FC
## SYTL2              small FC
## GTF2H5              small FC
## KPNA4              small FC
## TMEM178A            small FC
## EGFR               small FC
## NQO2               small FC
## PTPN21              small FC
## USP32               small FC
## IGLV7-46            upregulated
## HDGF               small FC
## SPATA8              upregulated
## UBE2W              small FC
## RPL5               small FC
## KLHL18              small FC
## ZNF284              small FC
## ARHGAP28-AS1         small FC
## ARL14EP              small FC
## NR1H3               small FC
## ENTREP2              small FC
## ZBBX               small FC
## CYP51A1-AS1          small FC
## SBK2               upregulated
## LSG1               small FC
## CTU2               small FC
## LINC02381            small FC
## RAB1A               small FC
## HEY2               small FC
## IP6K1               small FC
## COA3               small FC
## NIPAL1              small FC
## HDAC5               small FC
## EIF4B               small FC
## SLC11A1              small FC
## FAF1               small FC
## LTBP4               small FC
## TRUB1               small FC
## SEC14L4              small FC
## Clorf210             small FC
## TOR3A               small FC
## VTI1A               small FC
## BMF                small FC
## CERS6               small FC
## NAP1L1P1              small FC
## OGDH               small FC
## SNAP25-AS1            small FC
## MRPL37              small FC
## ECHS1               small FC
## ERICH1              small FC

```

## SIPA1L2	small FC
## DPY19L2P1	small FC
## LINC02507	upregulated
## OR7E14P	small FC
## GFOD3P	small FC
## PELI2	small FC
## NACA	small FC
## PCDHA3	small FC
## ATP6V0A1	small FC
## COX17	small FC
## NANP	small FC
## HAL	small FC
## CPN2	small FC
## RFC5	small FC
## GNAQ	small FC
## HLA-DQA2	small FC
## SLC1A6	downregulated
## LINC03044	upregulated
## LINC01003	small FC
## LINC02754	small FC
## METTL8	small FC
## EMX2OS	small FC
## ACTR10	small FC
## DGCR5	small FC
## ADGRA3	small FC
## TIMP1	small FC
## BATF2	small FC
## FCGR1BP	small FC
## TAAR6	small FC
## GALNT7-DT	small FC
## GOLT1A	small FC
## GPR82	small FC
## FUT10	small FC
## LINC02648	upregulated
## MAN2A1	small FC
## MTO1	small FC
## NKIRAS2	small FC
## PRPSAP2	small FC
## TMPRSS12	small FC
## CLDN10-AS1	small FC
## CLDN6	small FC
## BCL9L	small FC
## TSPAN4	small FC
## MTCYBP22	small FC
## HERC1	small FC
## HDAC7	small FC
## UBE3A	small FC
## ABCB4	small FC
## HMGA2	small FC
## TANK	small FC
## AVPR1B	small FC
## SLC26A2	small FC
## TBC1D1	small FC
## ARF1	small FC

## TESK2	small FC
## XK	small FC
## EIF2AK4	small FC
## PNMT	small FC
## ZNF530	small FC
## SERPINB3	small FC
## RAB11B	small FC
## ISG20L2	small FC
## HINT3	small FC
## HYAL4	small FC
## DVL3	small FC
## RPA1	small FC
## S100A14	small FC
## LSAMP	small FC
## CARD17P	upregulated
## DNAH17	small FC
## RPS23	small FC
## RAB40C	small FC
## HOXA9	small FC
## EAF1	small FC
## GRHL2	small FC
## CASP6	small FC
## TNKS2	small FC
## CD47	small FC
## PTENP1-AS	small FC
## LBR	small FC
## SNHG18	small FC
## SPOCK3	small FC
## SPPL2B	small FC
## HAAO	small FC
## WDR86	small FC
## IL4I1	small FC
## NDUFAF2	small FC
## ZNF561	small FC
## DDX50	small FC
## PAK6	small FC
## PHACTR2	small FC
## FAM177A1	small FC
## TBC1D7	small FC
## IGHV5-78	upregulated
## ZNF804B	small FC
## UMAD1	small FC
## TMOD2	small FC
## SFT2D2	small FC
## GRIPAP1	small FC
## RPS3	small FC
## TRAV38-2DV8	small FC
## ZNF433-AS1	small FC
## MTND4P12	small FC
## ZNF350-AS1	small FC
## TPH1	small FC
## DDX6	small FC
## DHX58	small FC
## LINC00330	small FC

## H4C2	upregulated
## CNOT2	small FC
## EARS2	small FC
## TMEM156	small FC
## SERPINB10	upregulated
## UBE2D3	small FC
## MBLAC1	small FC
## RPS5	small FC
## HHIP-AS1	small FC
## HNRNPA1P70	upregulated
## LINC02941	small FC
## PCP4L1	small FC
## LINC02223	upregulated
## BAG3	small FC
## RPS15AP1	small FC
## MYO9A	small FC
## ADGRF3	small FC
## ZSCAN32	small FC
## STRADB	small FC
## MSH3	small FC
## KIAA2012-AS1	upregulated
## CD200	small FC
## TSPAN6	small FC
## MAPK10	small FC
## RPL15	small FC
## GAA	small FC
## RPL36AP37	small FC
## GFOD2	small FC
## NSMCE1-DT	small FC
## LINC03057	small FC
## WIPI1	small FC
## OSM	small FC
## RPTOR	small FC
## ZNF263	small FC
## ATPAF2	small FC
## NHSL1	small FC
## MBNL3	small FC
## RALGPS1	small FC
## THAP8	small FC
## TCF12	small FC
## HEG1	small FC
## XBP1	small FC
## C14orf93	small FC
## OGFRL1	small FC
## POGLUT3	small FC
## ZNF44	small FC
## TSPAN17	small FC
## BEX2	small FC
## APOOL	small FC
## ZNF446	small FC
## MYD88	small FC
## C10orf67	small FC
## SATL1	small FC
## FSHR	small FC

## MESP1	small FC
## HISLA	small FC
## SCYL3	small FC
## LINC01010	small FC
## PATZ1	small FC
## GADL1	small FC
## CNGA1	small FC
## VPS37C	small FC
## URGCP	small FC
## IGKC	small FC
## DISP3	small FC
## C19orf53	small FC
## CEP295NL	upregulated
## NPSR1-AS1	small FC
## PRMT1	small FC
## FKBP3	small FC
## STK38L	small FC
## UBXN4	small FC
## ZNHIT6	small FC
## RPS27L	small FC
## TRMT9B	small FC
## HTR3A	downregulated
## RPS2	small FC
## PBRM1	small FC
## SLC7A3	small FC
## LHX4	small FC
## MRPL46	small FC
## MUC20	small FC
## KEAP1	small FC
## LINC01703	small FC
## MOSPD2	small FC
## TMEM64	small FC
## CLN3	small FC
## PLCXD2	small FC
## TLCD4	small FC
## TMTC2	small FC
## ADSS2	small FC
## BLOC1S6	small FC
## HMGN3-AS1	small FC
## NUDT12	small FC
## TCEAL4	small FC
## SEMA3B	small FC
## NCDN	small FC
## ZNF80	upregulated
## CYP4A22	small FC
## MTCO1P53	small FC
## TRO	small FC
## LONRF3	small FC
## PRR29	small FC
## GMDS	small FC
## RNF223	small FC
## KLF15	small FC
## DLGAP3	small FC
## LNCTSI	small FC

```

## TCF15                      small FC
## TTC34                      small FC
## SEC11C                      small FC
## MALT1                      small FC
## USP44                      small FC
## TCOF1                      small FC
## MT1IP                      downregulated
## ANXA13                      small FC
## ZNF417                      small FC
## USO1                        small FC
## LINGO2                      small FC
## FOXE3                        small FC
## NUP58                        small FC
## MIR9-2HG                     small FC
## SMG7                        small FC
## PCAT18                      small FC
## OXTR                         small FC
## PITPNM3                      small FC
## MYMX                         small FC
## LINC01778                    upregulated
## CSKMT                         small FC
## GART                          small FC
## PRCP                          small FC
## PCDHB18P                     small FC
## ANO7                          small FC
## TAPT1                         small FC
## ZNF846                        small FC
## LINC02073                    upregulated
## ATRIP                         small FC
## PLCXD1                       small FC
## TICAM2                        small FC
## ZNF892                        small FC
## CDH24                         small FC
## MRPL2                         small FC
## GTF2A1-AS1                   small FC
## SEMA3F-AS1                   small FC
## DNNTIP1                       small FC
## GLS2                           small FC
## CFAP54                        small FC
## TMEM94                        small FC
## PNKD                           small FC
## CYB561D1                      small FC
## AQP4                           small FC
## ATF5                           small FC
## HEMGN                         upregulated
## GPR62                         small FC
## RPL10P16                      small FC
## ERICH3                        small FC
## PTK7                           small FC
## C9orf40                        small FC
## MYCBP2                        small FC
## CCDC112                        small FC
## GRTP1-AS1                      small FC
## ZC3H3                         small FC

```

```

## C6orf52           small FC
## TRDV2            upregulated
## CGNL1            small FC
## PPFIBP2          small FC
## SRRM3            small FC
## AKR1B1           small FC
## SENP1             small FC
## MIR6512          upregulated
## ASS1P13          small FC
## GDAP1             small FC
## IQSEC1            small FC
## SATB1             small FC
## RPS27             small FC
## APOO              small FC
## CTNNBIP1          small FC
## GABBR2            small FC
## KAT5              small FC
## TANGO2             small FC
## AMOT              small FC
## SRSF2              small FC
## PLP2              small FC
## TGOLN2             small FC
## FBRSL1P1          small FC
## CDH20              small FC
## HCG27              small FC
## CCDC169            small FC
## KRAS              small FC
## ZFYVE19            small FC
## MAML3              small FC
## PDE1B              small FC
## TTC7A              small FC
## ARHGAP18            small FC
## LINC01476          upregulated
## NWD2               upregulated
## PMPCA              small FC
## OBSCN-AS1          small FC
## CLDN1              small FC
## RB1                small FC
## CYB5R2              small FC
## CARD9              small FC
## SLC29A4             small FC
## VPS50              small FC
## LINC00410            small FC
## RPL35P5             small FC
## TWSG1              small FC
## PANK1-AS1           small FC
## ZNF221              small FC
## RPL21P80             small FC
## MIR4539             upregulated
## MST1L              small FC
## CACNB3              small FC
## DNAJC9              small FC
## ZFAND1              small FC
## OR7E13P             small FC

```

## VWA5A	small FC
## FAM32A	small FC
## WDR54	small FC
## PFKFB3	small FC
## BTN2A3P	small FC
## ECE1	small FC
## TMPPE	small FC
## CLEC7A	small FC
## HYAL3	small FC
## PTPN23	small FC
## PTCHD1	small FC
## SLIT1	small FC
## ORM1	upregulated
## CEP57L1	small FC
## SRSF4	small FC
## SYT3	small FC
## CBFB	small FC
## EFCAB14	small FC
## DRAP1	small FC
## EMSLR	small FC
## SEC24AP1	small FC
## CFLAR	small FC
## SLC26A3	small FC
## RAPGEF4	small FC
## ADGRB1	small FC
## APOL1	small FC
## SLC22A18AS	small FC
## ISCA1	small FC
## CCNG2	small FC
## DLL3	upregulated
## ZNF384	small FC
## TTF2	small FC
## NUAK1	small FC
## BIN3	small FC
## IGF2BP1	small FC
## ANXA2R-OT1	small FC
## SHANK2	small FC
## PRAP1	small FC
## UGT2B7	small FC
## MAMDC4	small FC
## CHORDC1P1	upregulated
## DCXR	small FC
## CCDC43	small FC
## DCTD	small FC
## RPL34	small FC
## UBA5	small FC
## PFKFB4	small FC
## SIMALR	upregulated
## FHIP2B	small FC
## NDUFAF8	small FC
## MDC1	small FC
## TBC1D10A	small FC
## ALG10	small FC
## DYNC1LI2	small FC

```

## ERI3                      small FC
## MATN3                     small FC
## OSTF1                     small FC
## POMT2                     small FC
## LINC02605                 small FC
## LINC01465                 small FC
## IPO8                      small FC
## MKLN1                     small FC
## FOXP1-IT1                 upregulated
## DHH                        small FC
## GTSF1                     upregulated
## LINC00623                 small FC
## DAAM1                     small FC
## DNAJA4                    small FC
## TMEM125                   small FC
## INTS13                    small FC
## SAV1                      small FC
## USP53                     small FC
## ACOT12                    small FC
## TBL1XR1                   small FC
## DUTP6                     small FC
## UHRF2                     small FC
## ENPP1                     small FC
## ZBED3-AS1                 small FC
## LINC00922                 upregulated
## H3-3B                      small FC
## LINC00092                 small FC
## IGFBP4                    small FC
## TRHDE                     small FC
## LDLRAD3                   small FC
## ZGLP1                     small FC
## RAD54L                     small FC
## NFKBID                     small FC
## UNC50                      small FC
## RASA4CP                   small FC
## GTF2IRD1P1                 small FC
## SV2A                       small FC
## PCLO                       small FC
## NIPBL-DT                   small FC
## MSN                        small FC
## TNFSF12                   small FC
## DIP2C                     small FC
## POLR2J                     small FC
## CYB561D2                  small FC
## PIK3IP1-DT                 small FC
## FAM193B-DT                 small FC
## CBX5                       small FC
## DNASE1L1                   small FC
## SLC66A2                   small FC
## FTO                        small FC
## LDLRAP1                   small FC
## KDM5A                      small FC
## DGKZ                       small FC
## SLC35G1                   small FC

```

## ZNF217	small FC
## DUSP5	small FC
## BRINP3	small FC
## SKAP1	small FC
## SLC12A7	small FC
## CADM4	small FC
## RPS15P4	small FC
## ABCA5	small FC
## ZBTB14	small FC
## SLC22A10	small FC
## PROSER3	small FC
## SLC39A7	small FC
## VMO1	small FC
## KLLN	small FC
## TTPAL	small FC
## FANCB	small FC
## ALDH1A2-AS1	small FC
## CSPG4P13	small FC
## FOXP4	small FC
## MYOM3	small FC
## C11orf68	small FC
## IGDCC3	small FC
## PLSCR2	small FC
## SGCE	small FC
## ARHGAP21	small FC
## LINC00635	small FC
## SLC13A3	small FC
## LGI4	small FC
## LRRC19	small FC
## GLIS2-AS1	small FC
## SPG7	small FC
## ZNF517	small FC
## SLC7A8	small FC
## CD34	small FC
## RPL31	small FC
## SEL1L2	small FC
## DLD	small FC
## RIOX1	small FC
## PRRT3	small FC
## UFL1	small FC
## NABP1	small FC
## FIP1L1	small FC
## LINC00844	small FC
## BCAS1	small FC
## PPP1R14C	small FC
## NOP10	small FC
## CEP126	small FC
## ZNF766	small FC
## LINC01285	small FC
## PCDHB5	small FC
## COL4A4	small FC
## GJA8	small FC
## NSF	small FC
## TDRD5	small FC

```

## KAZN           small FC
## KAT8           small FC
## PRIM2          small FC
## FAM120A        small FC
## RERG           small FC
## HAO1           small FC
## SPINK6         upregulated
## OBI1           small FC
## TOPBP1         small FC
## LINC01366      small FC
## NAT16          downregulated
## STEAP4         small FC
## LINC03058      small FC
## MCOLN2         small FC
## NHLRC1         small FC
## RBM5            small FC
## ATP13A3         small FC
## TP53I11        small FC
## KIF12           small FC
## ZNF792          small FC
## MAPKAP1         small FC
## RIPK3           small FC
## YWHAQ           small FC
## RNF138          small FC
## CDRT15P4        small FC
## CRLF2          upregulated
## LRRC74B         upregulated
## SLC35F3         small FC
## DTNB-AS1        upregulated
## CAPN12          small FC
## RLN1            small FC
## ADCK2           small FC
## TM7SF3          small FC
## LINC01139        small FC
## LCE2D           small FC
## SYT10           small FC
## VAMP3            small FC
## CHRNA3          small FC
## HOMER1          small FC
## PAK1             small FC
## CCL21           small FC
## GBE1             small FC
## LINC02015        small FC
## TMEM17          small FC
## TMCO1           small FC
## SEC24C          small FC
## RIC8A           small FC
## MCL1             small FC
## NMNAT3          small FC
## HSPA12A-AS1      downregulated
## ZNF16           small FC
## RNF32           small FC
## ERCC3            small FC
## TRIM8-DT         small FC

```

## DUOXA1	small FC
## SERPINI2	small FC
## MRPS18B	small FC
## RCHY1	small FC
## GSTM4	small FC
## EMC1-AS1	small FC
## PIGH	small FC
## ZP1	upregulated
## DHX33	small FC
## POLR2E	small FC
## PDE4DIPPI1	upregulated
## DHRS3	small FC
## PTprm	small FC
## SWT1	small FC
## GEMIN7-AS1	small FC
## EYA2	small FC
## ETFA	small FC
## LINC02409	small FC
## GJA4	small FC
## C15orf48	small FC
## TMEM39B	small FC
## CHROMR	small FC
## NEFH	small FC
## CALML3-AS1	small FC
## MIR4537	upregulated
## SLC27A5	small FC
## PYROXD2	small FC
## ZMYM6	small FC
## ASB8	small FC
## CTTN	small FC
## CCDC97	small FC
## KATNA1	small FC
## RPF2	small FC
## DIXDC1	small FC
## AGTR2	small FC
## KICS2	small FC
## LCN12	small FC
## VNN3P	small FC
## PYCR2	small FC
## CYSLTR2	small FC
## ZNF790	small FC
## LINC00639	small FC
## HOXC9	small FC
## FAM91A1	small FC
## TRAF4	small FC
## MACROH2A1	small FC
## TMEM150B	small FC
## KRTAP5-AS1	small FC
## IYD	small FC
## RPS27P4	small FC
## LINC02532	small FC
## ADPRM	small FC
## TTC8	small FC
## GFI1B	small FC

## LINC03110	upregulated
## LYSMD2	small FC
## SARDH	small FC
## SHROOM2	small FC
## SF3A1	small FC
## MS4A3	upregulated
## PLEKHD1	small FC
## TEKT4	small FC
## ICAM4	small FC
## LSM3	small FC
## YARS2	small FC
## OR2S1P	small FC
## TMED10	small FC
## ELOA-AS1	small FC
## GDI2	small FC
## FAM118A	small FC
## RAB13	small FC
## GRIP2	small FC
## SP140L	small FC
## TSEN15	small FC
## AVPR1B-DT	small FC
## SLC35B3	small FC
## ARL16	small FC
## RNPEPL1	small FC
## PSD4	small FC
## BLACAT1	small FC
## LRRC66	small FC
## SAFB	small FC
## SMIM15	small FC
## LINC01962	small FC
## ZBTB12	small FC
## LINC02427	small FC
## LRIG3	small FC
## SORCS3	small FC
## TRIM58	small FC
## RPL27	small FC
## LINC01954	small FC
## GTSE1-DT	small FC
## SYS1	small FC
## GJB6	small FC
## CLDN20	small FC
## CHCHD3	small FC
## KMT5C	small FC
## GAS2L1P2	small FC
## CNN1	small FC
## GEMIN8P4	small FC
## KIF1C-AS1	small FC
## RPS18P5	small FC
## LINC01088	small FC
## TMEM106C	small FC
## KDM4B	small FC
## NSD3	small FC
## KRTAP17-1	downregulated
## SRP54-AS1	small FC

```

## OR2A7           small FC
## ZNF254          small FC
## HS6ST3          small FC
## H2BC26          small FC
## SERF2           small FC
## KANSL3           small FC
## CATIP            small FC
## MEGF8            small FC
## HDHD5            small FC
## FGF12             small FC
## LINC02794        small FC
## ZNF426            small FC
## SCTR              small FC
## GARS1-DT          small FC
## GAPDH             small FC
## ZFAND4            small FC
## UMODL1-AS1        downregulated
## OSTM1              small FC
## COL20A1            downregulated
## DPF3               small FC
## PRMT7              small FC
## ELMO2              small FC
## ZBTB22             small FC
## CDH9               small FC
## ABITRAM            small FC
## DGKK               small FC
## N4BP2L1            small FC
## ZFP14               small FC
## SIK1                downregulated
## EEIG1               small FC
## WDR53               small FC
## PITHD1              small FC
## RARRES2             small FC
## RTP5                upregulated
## LINC00294           small FC
## MSH6               small FC
## LACTB2              small FC
## RPL21               small FC
## C11orf71            small FC
## OSBPL7              small FC
## SERTAD4-AS1          small FC
## PEX13               small FC
## GPRC5B              small FC
## POP5               small FC
## RPL27A              small FC
## MPC2               small FC
## COPS3              small FC
## CHL1               small FC
## PDGFB              small FC
## FNDC1-IT1            upregulated
## MTND4P24           small FC
## RAB15               small FC
## GPR146              small FC
## DPY19L4             small FC

```

```

## TIMM13           small FC
## PSMD6           small FC
## USF2            small FC
## FSCN1P1          upregulated
## SLC25A10         small FC
## GUCA1B           small FC
## ALDOB            small FC
## HAS3             small FC
## LONP2             small FC
## LINC01678        small FC
## G6PC3            small FC
## KLF3              small FC
## CYP7B1            small FC
## CRYZ              small FC
## LRWD1            small FC
## MYORG            small FC
## DCC               small FC
## ADAMTSL3          small FC
## TRAV8-2           small FC
## CYP4F26P          upregulated
## ARHGEF10L         small FC
## RANBP1P1          small FC
## LAMA3             small FC
## SYNM-AS1          upregulated
## FZD6              small FC
## EIF2B1             small FC
## HLA-DRA            small FC
## RPL37P23           small FC
## PPM1K-DT            small FC
## RASGEF1B            small FC
## SEMA6B             small FC
## H2AJ               small FC
## DUS4L              small FC
## PTPN2              small FC
## CUEDC2             small FC
## GPC3               small FC
## TET2-AS1           upregulated
## C12orf4            small FC
## SMIM29             small FC
## AKR7L              small FC
## MAN1C1             small FC
## NABP2              small FC
## TTLL3              small FC
## CRTC1              small FC
## MOSMO              small FC
## DHRS7B              small FC
## FOXA2              downregulated
## DGCR2              small FC
## SH2B2              small FC
## ZNF583              small FC
## CACNA1E             small FC
## PRMT5-DT            small FC
## RBM27              small FC
## TRDV3              upregulated

```

```

## PPP6R2                      small FC
## UBR7                         small FC
## TAS2R30                      upregulated
## ZNF546                         small FC
## MROH8                         small FC
## RASGRF2-AS1                   small FC
## NEK7                           small FC
## PTPN20                         small FC
## NDUFB1P2                      downregulated
## CCDC24                         small FC
## KCNE3                          small FC
## ACP2                           small FC
## ZNF491                         small FC
## SNAP23                         small FC
## LRRC23                         small FC
## MICE                            small FC
## HMGN2                           small FC
## KLK5                            small FC
## EIF2AK3                         small FC
## TADA1                           small FC
## LMO7DN                         upregulated
## PKN2-AS1                        small FC
## HOXC-AS1                        small FC
## HS3ST6                         downregulated
## ERG28                           small FC
## STX1A                           small FC
## LINC02913                       small FC
## FOCAD                           small FC
## LINC01565                       upregulated
## FANCL                           small FC
## LAGE3                           small FC
## ZNF98                           small FC
## SLC25A48                         small FC
## RND3                            small FC
## EFCAB7                           small FC
## APH1B                           small FC
## GSTP1                           small FC
## LRRC55                           small FC
## RAB19                           small FC
## SIX3                            small FC
## STK19B                           small FC
## PITPNA-AS1                       small FC
## LINC03021                       small FC
## RAB36                           small FC
## LINC00924                       small FC
## DDX28                           small FC
## KLHDC7B                         small FC
## BRSK1                           small FC
## KRT17P7                         upregulated
## TCEAL6                           small FC
## ATP6V1C2                         small FC
## CRYGS                           small FC
## FILNC1                           small FC
## ZCRB1                           small FC

```

## HADH	small FC
## GCNT4	small FC
## APMAP	small FC
## HMGN2P15	small FC
## HSBP1L1	small FC
## FAM167A-AS1	small FC
## LINC02920	small FC
## MIIP	small FC
## HERC2P10	small FC
## SNAP91	small FC
## AMN1	small FC
## TRBJ2-2P	upregulated
## TNRC6C	small FC
## RTN3	small FC
## TOMM5	small FC
## LINC02857	small FC
## SHC3	small FC
## FAM184A	small FC
## MIR4664	small FC
## ATP6V0E2	small FC
## NETO2	small FC
## KCTD11	small FC
## MATCAP2	small FC
## ZNF584-DT	small FC
## COX7CP1	small FC
## GABRD	small FC
## KRT81	upregulated
## SHCBP1	small FC
## OR7E7P	small FC
## NBPF10	small FC
## ST3GAL6	small FC
## ZNF57	small FC
## TCF25	small FC
## CBR3-AS1	small FC
## AAGAB	small FC
## RPL36P7	small FC
## GACAT2	small FC
## FOXP1	small FC
## LINC02898	upregulated
## ZRANB2-DT	small FC
## NHLH2	upregulated
## ZDHHC14	small FC
## ATM	small FC
## CYP27B1	small FC
## SCAMP2	small FC
## SETD5	small FC
## NAP1L2	small FC
## NUFIP1	small FC
## ZNF283	small FC
## ATP11C	small FC
## H2AC25	small FC
## IGHJ4	upregulated
## PTER	small FC
## TMEM26	small FC

```

## TAGLN2                      small FC
## OBSL1                       small FC
## JAKMIP2                      small FC
## LNCOC1                      small FC
## CLLU1-AS1                   upregulated
## DYNLL2                       small FC
## URAHP                        small FC
## CXorf38                      small FC
## LINC01879                    downregulated
## HACL1                        small FC
## PTPRN                         small FC
## JARID2-DT                     small FC
## PLOD3                         small FC
## TCEA1                         small FC
## RNF212B                      small FC
## HECW1                         small FC
## HOPX                          small FC
## SNX29                         small FC
## PPIE                          small FC
## TFIP11                        small FC
## TUBB                           small FC
## EXOSC1                        small FC
## IRAK3                         small FC
## TUBA5P                        small FC
## FAM8A11                       small FC
## OSCP1                         small FC
## GPD2                           small FC
## LUC7L2                         small FC
## PTX4                           upregulated
## LINC01443                     small FC
## HEYL                          small FC
## ATAD3C                        small FC
## RAB27A                         small FC
## ARL6IP1                       small FC
## COMMD5                        small FC
## A2M                            small FC
## MIR93                         upregulated
## GHRLOS                        small FC
## RASL12                         small FC
## GEM                            small FC
## SLC5A5                        upregulated
## SPIN4                          small FC
## FBXO33                         small FC
## HOMER2                         small FC
## SLC01A2                       small FC
## FGFBP3                         small FC
## FBXO43                         small FC
## SLC3A1                         small FC
## EIF4A2P1                       small FC
## ABCC3                          small FC
## YTHDC2                         small FC
## RNF126P1                       small FC
## NXF3                           small FC
## TIPARP                         small FC

```

## GCA	small FC
## SHOC2	small FC
## TNKS2-DT	small FC
## LSM4	small FC
## FER1L4	small FC
## GAK	small FC
## RFTN2	small FC
## AP2S1	small FC
## ALDH3A2	small FC
## C2orf69	small FC
## MVP-DT	small FC
## PPME1	small FC
## KMT5A	small FC
## TPCN2	small FC
## ALOXE3	downregulated
## USP3	small FC
## LIMS1	small FC
## TMEM104	small FC
## TEKT4P2	small FC
## HIGD1AP1	small FC
## RNF115	small FC
## NQO2-AS1	small FC
## RPS9	small FC
## MORN1	small FC
## MARCHF4	small FC
## BMS1P10	small FC
## ZNF800	small FC
## CCDC92B	small FC
## OPCML	small FC
## THAP10	small FC
## LINC02037	small FC
## ADCY9	small FC
## HEBP2	small FC
## BCAP31P1	upregulated
## PICSAR	upregulated
## SIGLEC5	upregulated
## GDA	small FC
## GTF2IP7	small FC
## HMGN1P13	upregulated
## SLC9B1	small FC
## TMEM202-AS1	small FC
## RPL22	small FC
## SLC5A12	small FC
## ZNF133	small FC
## ZNF45	small FC
## REN	small FC
## HSPB2	small FC
## BRAP	small FC
## PLA2R1	small FC
## RHEBP2	small FC
## PKMP3	small FC
## ADM2	small FC
## ANKFN1	small FC
## PROK2	small FC

```

## ARID1A           small FC
## KLRG2            small FC
## NDUFB9           small FC
## PPP1R26           small FC
## HOXD13           upregulated
## SPMIP6            small FC
## CYRIB             small FC
## CNTN6              small FC
## SPRY1              small FC
## NCOA6              small FC
## COPS4              small FC
## GVINP2           upregulated
## ERCC5              small FC
## OAZ2               small FC
## CHRNA2             small FC
## HOXC-AS2           small FC
## NUDT9              small FC
## SNORD17             small FC
## SRPRB              small FC
## LINC00513           small FC
## IL21-AS1           upregulated
## EPCAM-DT            small FC
## KNTC1              small FC
## SNX6               small FC
## ZNHIT1             small FC
## MT2P1              small FC
## RIPK2              small FC
## SH3PXD2A-AS1         small FC
## KLRF1              small FC
## BMS1               small FC
## EBF4               small FC
## NTPCR              small FC
## SEPTIN8             small FC
## PRRT2              small FC
## HERPUD1             small FC
## LINC02936           small FC
## VAV3               small FC
## TMEM114           upregulated
## PDCD7              small FC
## MED12L              small FC
## RPA4               upregulated
## AGMAT              small FC
## POU3F1             small FC
## RPL7AP6             small FC
## EHMT2              small FC
## ZNF629              small FC
## CYP8B1              small FC
## CCDC183             small FC
## PRKY               small FC
## MDS2               small FC
## MTMR14             small FC
## LINC00621           small FC
## ZMYND11             small FC
## TNXA               upregulated

```

```

## CENPN           small FC
## SMOC1          small FC
## PLCB4          small FC
## DNAJB14         small FC
## AFG1L          small FC
## KRT86          small FC
## PCGF2          small FC
## ICMT-DT         small FC
## LINC00706      downregulated
## ZNF470          small FC
## PGPEP1          small FC
## XKR4            small FC
## TRIM6           small FC
## RABEP2          small FC
## MIR3671         small FC
## RSRP1           small FC
## CASK             small FC
## DDO              small FC
## ZNF232           small FC
## MEIOC            small FC
## KCTD5            small FC
## MMUT              small FC
## FAM135B          small FC
## NUDT16-DT        small FC
## RAB17-DT         small FC
## MTMR12          small FC
## SPART            small FC
## TSTD2            small FC
## GRAP              small FC
## ANO4              small FC
## CAMK2N1          small FC
## XKR3              upregulated
## NOL9             small FC
## PNLDCC1          small FC
## LINC00380         small FC
## IL9R              small FC
## MIGA1             small FC
## FAM53B            small FC
## LINC01538         upregulated
## AP1B1            small FC
## GPC1-AS1          small FC
## GALNT9-AS1         small FC
## POMK              small FC
## H4C3              small FC
## MIR1244-2         small FC
## C3orf62           small FC
## FAM221A           small FC
## METTL21EP          small FC
## DFFA              small FC
## ZKSCAN3           small FC
## RPL24              small FC
## ABCD4              small FC
## SYTL3              small FC
## HOXA10            small FC

```

```

## LINC01128           small FC
## SULF2               small FC
## ABTB1               small FC
## EIF4EP2             small FC
## ODAD4               small FC
## STAT1               small FC
## GPRC5A              small FC
## ZFAND3              small FC
## CCM2L               small FC
## MAPK1               small FC
## LINC01170            upregulated
## C4orf46P2            small FC
## CRTAC1              small FC
## NR2F1-AS1            small FC
## TMEM220              small FC
## ZSCAN2-AS1            small FC
## CNIH1               small FC
## DNM1P47              small FC
## NIPSNAP3B            small FC
## GPD1                small FC
## ZNF226              small FC
## PAQR3               small FC
## HACE1               small FC
## LYRM1               small FC
## NOC2LP1              small FC
## OSTC                small FC
## ABCF3               small FC
## RPS15               small FC
## UCK1                small FC
## PCAT6               small FC
## C3orf70              small FC
## SERPINA7             small FC
## SLC25A37              small FC
## SH2D5               small FC
## DOCK9-DT              small FC
## ECEL1               small FC
## TNK2-AS1              small FC
## NPC1L1              small FC
## RRP12               small FC
## HINFP               small FC
## DPH5-DT              small FC
## C17orf80              small FC
## SPIN2B              small FC
## TACR3               small FC
## SLC2A7               downregulated
## MAP3K21              small FC
## CTXN2               small FC
## TLCD5               small FC
## GGCTP1              small FC
## CRYAB               small FC
## PHYH                small FC
## PART1               small FC
## CACNA1C              small FC
## PGLYRP2              upregulated

```

```

## GMPPB           small FC
## TRIM46          small FC
## EPB41          small FC
## RAB3D          small FC
## PMCH          upregulated
## ARID5A          small FC
## KCNJ8          small FC
## ZNF586          small FC
## OR7E102P        small FC
## RORB-AS1        small FC
## SLC7A2          small FC
## SLC22A9        small FC
## UBBP2          small FC
## ZNF622          small FC
## EIF4EBP1        small FC
## SDAD1P1        small FC
## BCAP29          small FC
## SSRP1          small FC
## DDX49          small FC
## PFN1            small FC
## MMAB            small FC
## CFAP77          small FC
## TBXA2R          small FC
## PCTP            small FC
## EIF1AX          small FC
## BMP2            small FC
## MYL12B          small FC
## RCC1L            small FC
## RPLP1            small FC
## GCSHP5          small FC
## HLA-DMA          small FC
## SLC28A1          small FC
## TMC7            small FC
## RANBP1          small FC
## PARP11-AS1      upregulated
## MIPEP            small FC
## CABP1-DT          small FC
## RNF213-AS1        small FC
## MFSD9            small FC
## C3orf52          small FC
## LINC01412        small FC
## TAF6L            small FC
## ZNF385C          small FC
## RSBN1            small FC
## CRIP2            small FC
## PSMA3            small FC
## TSR1            small FC
## ARHGAP27          small FC
## MRPS30-DT          small FC
## CPVL-AS2          small FC
## POM121C          small FC
## TRIM35            small FC
## DUSP16            small FC
## TMEM150A          small FC

```

```

## CAPZB           small FC
## ZNF724          small FC
## MOSPD1          small FC
## PGM5-AS1         small FC
## WRAP73          small FC
## CYP4F24P         small FC
## EIF2AK2          small FC
## PLS1             small FC
## LINC01622        small FC
## GALM             small FC
## LINC01748        upregulated
## ADGRL3            small FC
## FALEC             small FC
## ADAMTS16-DT       small FC
## CHRNA6            upregulated
## RPL23AP49          small FC
## RPL23AP53          small FC
## ZNF436-AS1          small FC
## GALE              small FC
## MSRB2             small FC
## ZBTB11             small FC
## ALDH1L1-AS2         small FC
## GSG1L              small FC
## PPP1R14B            small FC
## CRTAP              small FC
## UBA6-DT             small FC
## TTPA               small FC
## DNAJC19P9            small FC
## P4HA1              small FC
## CAMP                upregulated
## BDNF               small FC
## H1-9P               small FC
## TAPBP              small FC
## ZMIZ2               small FC
## NPHS1               small FC
## EID2               small FC
## SNX18P12            small FC
## ENPP5               small FC
## PARTICL             small FC
## HADHB              small FC
## CHM                 small FC
## TTC13               small FC
## FBN3                 small FC
## VEGFC               small FC
## DNAJA2              small FC
## CDC42EP1             small FC
## TMEM250              small FC
## VSTM5               small FC
## CNNM1               small FC
## ZNF582-DT             small FC
## KRT17               small FC
## METRNL              small FC
## RNU6-574P             small FC
## IL17B               small FC

```

```

## CFAP100           small FC
## PRC1             small FC
## NACAP8           small FC
## ZNF783           small FC
## LINC02004        small FC
## ZNF761           small FC
## SLC49A3          small FC
## SYNE4            small FC
## RBM12            small FC
## RAD21            small FC
## NR0B1            upregulated
## MIR200CHG        small FC
## RIMOC1           small FC
## NOL12            small FC
## NAV2-AS3          small FC
## CAMTA2           small FC
## CASC16           small FC
## PTDSS2           small FC
## SOX10            small FC
## SLC38A11          small FC
## WBP1              small FC
## GTF3C2           small FC
## DDAH2             small FC
## ZNF597            small FC
## SULT1E1           small FC
## TPT1              small FC
## HOMER3            small FC
## IRS4              small FC
## EFCAB8            small FC
## LNCAROD           upregulated
## CIMIP2C           small FC
## XKRX              small FC
## ITPKC              small FC
## CHST14            small FC
## SEPTIN7           small FC
## NSUN3              small FC
## NAA10              small FC
## ATP5F1C           small FC
## TPM3P9            small FC
## SUFU              small FC
## FGFR3              small FC
## CRYBB2P1           small FC
## SHC1              small FC
## GPC6              small FC
## PPP3CB-AS1         small FC
## USP33              small FC
## ADD3-AS1           small FC
## KIAA1755          small FC
## ACACB              small FC
## GUCY1A1           small FC
## VASH1-DT           small FC
## CCDC74A            small FC
## DEFB124            small FC
## C1DP5              upregulated

```

```

## LINC01928           small FC
## AQR                small FC
## YTHDC1             small FC
## SLITRK6             small FC
## NDUFA9              small FC
## PIEZO1              small FC
## CEP83-DT             small FC
## C10orf88B            small FC
## TIRAP-AS1             small FC
## LNCOG               upregulated
## EIF4G3              small FC
## TMEM30A-DT             small FC
## RPL31P34             small FC
## MRNIP               small FC
## ZSCAN18              small FC
## BZW2                 small FC
## INO80C               small FC
## AXIN1                small FC
## IGKV1-9              upregulated
## RPL35AP26             small FC
## ZNF841               small FC
## SIVA1                small FC
## MIR3659HG             upregulated
## POLG2                small FC
## ABRAXAS2             small FC
## MGST1                small FC
## PRKAG2-AS1             small FC
## CTDSPL               small FC
## PARD6B               small FC
## PCDHGB1              small FC
## BCL6B                 small FC
## SATB1-AS1              small FC
## AMMECR1L              small FC
## PRNP                  small FC
## GMPS                  small FC
## KCNA4                 small FC
## EDN2                  small FC
## ZNF235                small FC
## CEACAM8               upregulated
## ASS1P10              small FC
## RPL24P8               small FC
## PRR5                  small FC
## RHCE                  small FC
## CCN6                  small FC
## PRKACB               small FC
## SLC9A5                small FC
## AUH                  small FC
## TEX55                  small FC
## FARP2                  small FC
## YBX1                  small FC
## CABIN1                small FC
## PCDHB1               small FC
## PPEF2                  small FC
## ALG1                  small FC

```

## PARD3-DT	small FC
## DGCR6	small FC
## MTAPP2	small FC
## SLC22A8	small FC
## KCNJ5	small FC
## SRP9	small FC
## RPL29P4	small FC
## CCL15-CCL14	small FC
## TCEAL1	small FC
## SLC22A16	small FC
## NR2F2	small FC
## ZDHHC23	small FC
## LINC01237	small FC
## DBI	small FC
## RDM1P5	small FC
## GLIPR1L2	small FC
## LRRC77P	small FC
## BIRC2	small FC
## TNFRSF14	small FC
## BACE1	small FC
## FBRS	small FC
## LZTFL1	small FC
## RPL37	small FC
## NPR2	small FC
## TIGD2	small FC
## NBPF9	small FC
## SPC24	small FC
## MAMDC2-AS1	small FC
## DNPEP	small FC
## NPM1P18	small FC
## ZKSCAN8P1	small FC
## MTIF2	small FC
## LY86-AS1	small FC
## ALDOA	small FC
## CCL7	upregulated
## MRPL20-AS1	small FC
## ANKRD22	small FC
## LINC00967	upregulated
## RPL23AP97	small FC
## GGTLC5P	downregulated
## SMG8	small FC
## CYC1	small FC
## EHMT1	small FC
## STON2	small FC
## RAVER1	small FC
## TRIM44	small FC
## ANKRD28	small FC
## SLC38A1	small FC
## ERO1A	small FC
## LINC02585	upregulated
## LRRC40	small FC
## NBDY	small FC
## RPP30	small FC
## ANAPC15	small FC

```

## PLXNB3-AS1 upregulated
## SSR1 small FC
## HNRNPC small FC
## HACD1 small FC
## C22orf15 small FC
## HMGCL small FC
## MTBP small FC
## DDIT4L small FC
## LNMIICC small FC
## SAT2 small FC
## GCAT small FC
## TMEM43 small FC
## PPM1J small FC
## CEMP1 small FC
## CFAP97D1 small FC
## RBMXP4 small FC
## MINDY4 small FC
## LINC02505 upregulated
## PPP2R2A small FC
## SPACA6 small FC
## MITF small FC
## MEP1A upregulated
## MYCBP small FC
## PEX14 small FC
## ZNF140 small FC
## ECI2 small FC
## HNF4G small FC
## MTR small FC
## ACSM3 small FC
## PSORS1C1 small FC
## ZNF25 small FC
## PIK3CD-AS1 upregulated
## ELL2 small FC
## IPO9-AS1 small FC
## PRDM1 small FC
## NLK small FC
## GPR179 small FC
## CCDC77 small FC
## INTS8 small FC
## MBOAT7 small FC
## NPTN-IT1 small FC
## CHMP2B small FC
## HOXD-AS2 small FC
## ZNF20 small FC
## GALNT2 small FC
## SIL1 small FC
## CLDN10 small FC
## RANBP6 small FC
## SLC44A3-AS1 small FC
## UNC5D small FC
## RHPN1-AS1 small FC
## HKDC1 small FC
## ZNF668 small FC
## FOXP1-DT small FC

```

```

## SMPDL3B           small FC
## MYCL-AS1          upregulated
## ATP10B           small FC
## TCL1B            upregulated
## PANK2-AS1          small FC
## PLCH1             small FC
## BRD10             small FC
## SOCS5             small FC
## ZNF829             small FC
## LINC01114          small FC
## ZNF250             small FC
## CXCL5              small FC
## RNF44              small FC
## PAXIP1-DT          small FC
## PXDNL              small FC
## USP6               small FC
## PRR13P5            small FC
## ACSBG2             small FC
## LINC02294          small FC
## DPEP3              small FC
## ISL1-DT            upregulated
## KLK14              small FC
## WFIKKN2            small FC
## MPI                small FC
## PCDHB2             small FC
## MIEF1              small FC
## NUDCD2             small FC
## TUBD1              small FC
## PCED1A             small FC
## TMEM258             small FC
## DLG3-AS1            small FC
## LINC00501          small FC
## DNMBP-AS1            small FC
## FAM174C             small FC
## IGKV1-17              small FC
## CNOT6L              small FC
## SNRK-AS1             small FC
## CKS2                small FC
## ATP1A1-AS1          small FC
## SELP                small FC
## PYCR1-AS1            upregulated
## TRAPPC3L             small FC
## TMEM176A             small FC
## FLVCR2              small FC
## GATA6                small FC
## TCEA2                small FC
## WIPI2                small FC
## TMC3                upregulated
## MTHFSD              small FC
## MDFIC                small FC
## UGGT1                small FC
## SLC5A7                small FC
## NOSTRIN              small FC
## ADRA1B              small FC

```

```

## KANK1           small FC
## C9orf50        small FC
## PRDM6          small FC
## PITPNC1        small FC
## TTC27          small FC
## RPL7           small FC
## SLC25A28       small FC
## NOS2           small FC
## KLHL2          small FC
## LMOD1          small FC
## FKBP1A          small FC
## RAB11B-AS1     small FC
## CYB5R1          small FC
## CHORDC1        small FC
## CCNA1          small FC
## CXCL1          small FC
## SDF2L1          small FC
## CEP72           small FC
## RP9            small FC
## FRG2C          downregulated
## DNAJC13         small FC
## JAG1           small FC
## PARK7          small FC
## TTYH1          small FC
## LAT             small FC
## MTNR1A         small FC
## DNAJA1          small FC
## PLAA            small FC
## KCTD9           small FC
## NOL4            small FC
## FAM50B          small FC
## MECR            small FC
## GGA3            small FC
## PCK2            small FC
## GGCT            small FC
## TMPRSS9         upregulated
## BICRA-AS1      downregulated
## NDUFA6-DT      small FC
## ZNF815P          small FC
## LINC00605       small FC
## GCHFR           small FC
## TBPL1           small FC
## ZBTB7B          small FC
## DOCK8           small FC
## NFE2L1-DT      small FC
## BIN1            small FC
## AK9             small FC
## WDPCP           small FC
## SOCAR           small FC
## CEP170B          small FC
## COL6A4P1        small FC
## RP9P            small FC
## CCR5AS          small FC
## LDHB            small FC

```

```

## GPR20           small FC
## TGFB1          small FC
## SCAF1          small FC
## ACIN1          small FC
## C11orf86        small FC
## LINC00265       small FC
## LINC01142       upregulated
## SLC35G2         small FC
## UPF2            small FC
## CES3            small FC
## GRIK4            small FC
## OTUD7B          small FC
## ITCH             small FC
## ADAMTSL1         small FC
## IPO4             small FC
## TTBK1            small FC
## ZNF726           small FC
## NAV2-AS2          upregulated
## CPXM2            small FC
## ARFGAP1          small FC
## SHMT1            small FC
## AK3              small FC
## LEAP2             small FC
## ECSCR             small FC
## MAN1B1           small FC
## BLNK              small FC
## CDH5              small FC
## RNF167            small FC
## PSD               small FC
## TGIF2             small FC
## DEF8              small FC
## UQCRC1           small FC
## WBP4              small FC
## LPGAT1            small FC
## STX8              small FC
## YWHAZ             small FC
## SIRT5             small FC
## STOX1             small FC
## PLEKHG2           small FC
## YKT6              small FC
## ZNF81              small FC
## CAMK4             small FC
## IGHV1-46           small FC
## MRGPRF            small FC
## RSPH3              small FC
## MPND              small FC
## NSUN6              small FC
## RPS24              small FC
## PKMP1              small FC
## LINC02884          small FC
## SCAT1             upregulated
## WDR48              small FC
## KIF17              small FC
## MAP3K7              small FC

```

```

## ZBED1                      small FC
## KIF28P                     small FC
## HP1BP3                     small FC
## SNORD62B                    small FC
## TNFRSF1A                    small FC
## NSRP1                       small FC
## OLIG2                       downregulated
## SEC61A2                     small FC
## USP22                       small FC
## STRA8                       small FC
## RBM25-AS1                    small FC
## GPRIN2                      small FC
## TMEM220-AS1                  small FC
## RENO1                        small FC
## SCGB2A1                      small FC
## CMSS1                        small FC
## ATP6V1G1                     small FC
## SRPRA                         small FC
## LINC03036                     small FC
## PRR7                          small FC
## LINC01559                     downregulated
## PRK RIP1                      small FC
## CRISPLD2                     small FC
## GTF2A1                       small FC
## ITPKB-IT1                     upregulated
## ZNF155                        small FC
## CHMP3                         small FC
## HOOK2                         small FC
## ZNF702P                       small FC
## SVBP                          small FC
## ADGRE1                        small FC
## RAI1                           small FC
## NDUFA4P1                      small FC
## RPL13AP26                     small FC
## PIPOX                         small FC
## MED25                         small FC
## NFE2L2                        small FC
## CYREN                         small FC
## ALKBH2                        small FC
## C8orf88                       small FC
## MMP7                          small FC
## LRCH3                         small FC
## SLC14A2-AS1                   small FC
## AFF1                           small FC
## CEP15                         small FC
## LYPD8                         small FC
## RPS3A                         small FC
## CAPS                          small FC
## TMSB15C                       small FC
## PSMB8                         small FC
## MSH4                           small FC
## LYSMD3                        small FC
## PFDN4                         small FC
## MYRIP                         small FC

```

```

## SORBS2-AS1 upregulated
## ALDH16A1 small FC
## FAM89A small FC
## AVP small FC
## IL17RE small FC
## CDHR1 small FC
## IL6R-AS1 small FC
## ZNF296 small FC
## FAM133A small FC
## DHRS4L2 small FC
## XXYLT1-AS1 small FC
## GEN1 small FC
## POM121L1P small FC
## TTN-AS1 small FC
## SPMIP8 small FC
## RPL18AP3 small FC
## FRK small FC
## ZNF566-AS1 small FC
## TMA16 small FC
## SUGCT small FC
## LINC01829 small FC
## TMEM178B small FC
## KCNH6 small FC
## C3orf20 small FC
## BTN1A1 upregulated
## DRC1 small FC
## METTL6 small FC
## RASGRP2 small FC
## AADACL2 upregulated
## SPATA20 small FC
## AGFG1 small FC
## POLE2 small FC
## CUL7 small FC
## PROK1 small FC
## IRF2BP1 small FC
## TMEM158 small FC
## MAF1 small FC
## SNX3 small FC
## EMID1 small FC
## CCDC194 small FC
## ABCG4 small FC
## LINC01186 small FC
## SULT1B1 small FC
## NET1 small FC
## NAAA small FC
## BBLN small FC
## RNU4-62P upregulated
## SPACA6-AS1 small FC
## FASTKD2 small FC
## SNCG small FC
## EEF1D small FC
## CCNJ small FC
## UGT2B11 upregulated
## GATA2 small FC

```

## SLC26A4	small FC
## FRRS1L	small FC
## SUPT5H	small FC
## CPNE2	small FC
## ISL1	upregulated
## MTHFD2P1	small FC
## AZIN1	small FC
## FRG2B	downregulated
## TGFBR3L	small FC
## TMEM80	small FC
## ENPP7P8	small FC
## ANKLE1	small FC
## ATP6V1C1	small FC
## RHBDD2	small FC
## PDE3A	small FC
## CUL2	small FC
## AGL	small FC
## UBE2B	small FC
## EMC2	small FC
## CDC123	small FC
## ERCC1	small FC
## S100Z	small FC
## RAB9A	small FC
## SLC5A8	small FC
## MIR23AHG	small FC
## TFPI	small FC
## ODAD2P1	small FC
## BCAR3	small FC
## UGT2A1	small FC
## SYBU	small FC
## NLRP7	upregulated
## CRPPA	small FC
## FENDRR	small FC
## PRKCQ-AS1	small FC
## ACRBP	small FC
## COX20	small FC
## TOGARAM1	small FC
## FAM157D	small FC
## LINC03000	small FC
## ARHGAP23	small FC
## TPP2	small FC
## GPR12	upregulated
## OTUD4	small FC
## AKR1C2	small FC
## METTL15	small FC
## OCIAD2	small FC
## LINC01934	small FC
## SPATA25	small FC
## CNNM3	small FC
## SLC26A5-AS1	small FC
## EWSAT1	small FC
## CSRPI-AS1	small FC
## LINC02683	small FC
## NHP2	small FC

```

## PVALB           small FC
## CALCRL-AS1     small FC
## NIPAL2          small FC
## RPS16           small FC
## DCAF12          small FC
## SMARCC1         small FC
## TRAPPC8         small FC
## ZZZ3            small FC
## RPS20           small FC
## RPL7AP50        small FC
## CRELD1          small FC
## MTX2            small FC
## TRAF7           small FC
## GASAL1          small FC
## BMP2K           small FC
## NPRL2           small FC
## LINC01230       small FC
## PRSS2           upregulated
## TRIM3           small FC
## EEF1A1P30       small FC
## DDX5            small FC
## MRPL20-DT       small FC
## AQP11           small FC
## HNRNPUL2        small FC
## CSTB            small FC
## ZNF32            small FC
## ELF2P1          upregulated
## FGD5             small FC
## POLRMT          small FC
## ZNF557          small FC
## MR1              small FC
## DENND5B          small FC
## POLR2L           small FC
## MOXD1            small FC
## LINC02404        small FC
## CCR10            small FC
## SLC35D1          small FC
## C19orf12         small FC
## HSD11B2          small FC
## LINC03041        small FC
## CPN1             small FC
## BMPR1B-DT        small FC
## DNAJA3           small FC
## EFR3A            small FC
## EPB41L1-AS1      small FC
## SLC25A22          small FC
## DCDC2B           upregulated
## FUBP3            small FC
## MIR106B          small FC
## YIPF2            small FC
## THEM6            small FC
## FBXL21P          small FC
## MMP28            small FC
## SLC17A4          small FC

```

```

## SCOC-AS1           small FC
## LYPLAL1            small FC
## NUDT3              small FC
## KIF9-AS1            small FC
## PRSS27              small FC
## PWWP2B              small FC
## DNM1P46              small FC
## LRRN4              small FC
## RPL37A              small FC
## SCGB3A1              small FC
## MYBPC3              small FC
## RIOX2              small FC
## GUCA2B              small FC
## B3GALT5              small FC
## SYBU-AS1           downregulated
## BLOC1S1              small FC
## ZNF14              small FC
## CDK2AP1              small FC
## DCAF8              small FC
## DYM-AS1              small FC
## NSL1              small FC
## ADARB1              small FC
## KCNJ3              small FC
## FGGY              small FC
## TBL3              small FC
## MIR3677HG            small FC
## PPP2R5A              small FC
## ZNF747              small FC
## MAPRE3-AS1            small FC
## SORCS1              small FC
## TIMM8B              small FC
## RPS2P46              small FC
## GJB3              small FC
## ZNF580              small FC
## LDHAP7              small FC
## SUSD6              small FC
## COA8              small FC
## TOMM70              small FC
## NEK2-DT              small FC
## CYP27A1              small FC
## PPHLN1              small FC
## FAM111A-DT            small FC
## DCLRE1C              small FC
## SSBP4              small FC
## BTF3              small FC
## KRBOX4              small FC
## GRAMD1A-AS1            small FC
## SCPPPQ1           downregulated
## SERPINB12            upregulated
## LINC00680            small FC
## IFT70B              small FC
## ZFP37              small FC
## LINC01917            small FC
## CDH6              small FC

```

## CIAO2A	small FC
## ZNHIT3	small FC
## GSDMD	small FC
## SYCE1	small FC
## LINC02805	small FC
## LINC00938	small FC
## ASAP1-IT2	small FC
## ARPC1A	small FC
## RPL26P19	small FC
## MPL	small FC
## ALG10B	small FC
## PDE4A	small FC
## PXMP4	small FC
## ITIH4	small FC
## KDSR-DT	small FC
## MORC3	small FC
## MED17	small FC
## TRBV7-4	upregulated
## FOLH1B	small FC
## PINK1	small FC
## LLCFC1	downregulated
## LINC00638	small FC
## NAIPPP3	small FC
## NOP16	small FC
## DBX2	small FC
## CTPS1	small FC
## ORC3	small FC
## CNOT4	small FC
## CYP2W1	small FC
## ADI1	small FC
## TLE4	small FC
## DEFA3	upregulated
## APOA1	small FC
## MGAM2	small FC
## CRELD2	small FC
## IGLC7	upregulated
## CDKL5	small FC
## EXOSC10-AS1	small FC
## MIF4GD-DT	small FC
## AMBP	small FC
## RBL1	small FC
## GTF3C6P2	small FC
## CD8B2	small FC
## UAP1L1	small FC
## LINC00641	small FC
## UBA6	small FC
## ATAD5	small FC
## RALY-AS1	small FC
## BCAS3-AS1	small FC
## BCAR1	small FC
## ERP27	small FC
## THUMPD3-AS1	small FC
## TSKU	small FC
## UNK	small FC

```

## H2AC11           small FC
## UBE2D3-AS1      small FC
## NUDT5           small FC
## UGT1A7           small FC
## PDGFRA          small FC
## RSPH4A           small FC
## SCAPER          small FC
## KLRC4-KLRK1     upregulated
## LINC02341        small FC
## UBE2N           small FC
## HORMAD2          small FC
## CD14            small FC
## SNAPIN          small FC
## DARS2            small FC
## SNHG3            small FC
## RPS14            small FC
## KIF16B           small FC
## ZFP62            small FC
## IMMP2L           small FC
## GSTK1            small FC
## CHRNA5           small FC
## LANCL1           small FC
## MRPS11           small FC
## PFDN6            small FC
## LRRC24           small FC
## CFHR3            small FC
## CFAP20           small FC
## SYT8             small FC
## HMGCS2           small FC
## SENP8            small FC
## KIDINS220        small FC
## HAUS2            small FC
## HMGN2P40          small FC
## ZW10              small FC
## RPL17P7           small FC
## ATG14            small FC
## FMO3              small FC
## SNAI3-AS1         small FC
## ARHGEF34P         small FC
## PRLR              small FC
## IER3-AS1          small FC
## GATD1            small FC
## ATP5MC1           small FC
## RIMKLA           small FC
## IRAK1            small FC
## CBX2              small FC
## RPL10P6           small FC
## ADAM9             small FC
## UST               small FC
## DFFB              small FC
## CLEC4OP           upregulated
## AHSA1             small FC
## PLEKHG4B          small FC
## S100A13           small FC

```

## EPHB1	small FC
## ITIH5	small FC
## ZNF212	small FC
## PLAC4	small FC
## RXYLT1	small FC
## DDX4	small FC
## EPHA1-AS1	small FC
## PFDN5	small FC
## TMEM123	small FC
## PELI1	small FC
## LINC00839	small FC
## TUBG2	small FC
## BAP1	small FC
## RPL23AP42	small FC
## FCGR1A	small FC
## SMC1A	small FC
## LINC03002	small FC
## EFCAB12	small FC
## MED18	small FC
## NMRAL2P	small FC
## SLC35A3	small FC
## MFSD8	small FC
## TRPM7	small FC
## CUL4B	small FC
## ASPH	small FC
## FAM149A	small FC
## CEP104	small FC
## MOGAT2	small FC
## PCDHB16	small FC
## STEAP3	small FC
## G2E3P1	small FC
## MON2	small FC
## POLR3F	small FC
## REEP1	small FC
## EIF3KP1	small FC
## SCAMP3	small FC
## CTH	small FC
## SERBP1	small FC
## CDYL2	small FC
## FBXO36	small FC
## N4BP3	small FC
## USP19	small FC
## SLC39A6	small FC
## ZNF837	small FC
## LINC01322	small FC
## RPP14	small FC
## GAREM1	small FC
## CEBPE	small FC
## PHKB	small FC
## PSKH1	small FC
## ERN1	small FC
## PCDHB3	small FC
## TMEM248	small FC
## VWA3A	small FC

```

## MIR133B upregulated
## TBX6 small FC
## PTPN3 small FC
## TRBJ2-7 upregulated
## LINC02518 upregulated
## EBP small FC
## POLE4 small FC
## COX11 small FC
## PHF5A small FC
## LRRC4B small FC
## TSPAN5-DT small FC
## POMT1 small FC
## TOP1MT small FC
## RSRC1 small FC
## STYX small FC
## PRKCZ-AS1 small FC
## TXNDC9 small FC
## PDXDC1 small FC
## MRPL28 small FC
## C8orf48 small FC
## CCDC9B small FC
## FLII small FC
## ANKRD13A small FC
## BTG1 small FC
## NQO1-DT small FC
## LINC00989 small FC
## C1QL3 small FC
## GNG3 small FC
## ATP10A small FC
## ANKRD36 small FC
## CT75 small FC
## ADAMTS19 small FC
## ILVBL-AS1 small FC
## PARLP2 small FC
## RNU1-72P downregulated
## EPB41L4A small FC
## LIPH small FC
## PNMA3 small FC
## FAF2 small FC
## PKD1P1 upregulated
## DST-AS1 small FC
## LINC01963 small FC
## RAB30-DT small FC
## TCF24 small FC
## CWC22 small FC
## TRAPPC9 small FC
## EOLA2 small FC
## LINC01515 small FC
## ABHD17B small FC
## WASHC5 small FC
## FLVCR1-DT small FC
## DMKN small FC
## MAGI3 small FC
## AP1S1 small FC

```

```

## ZSCAN29           small FC
## ADAM10          small FC
## U2AF2           small FC
## AIFM3           small FC
## COL6A4P2        small FC
## THAP11          small FC
## MTCO1P42        small FC
## LRP2            small FC
## RNF157-AS1      small FC
## RYR3-DT         small FC
## GABRA4          small FC
## MAP2             small FC
## REL              small FC
## ITPR3            small FC
## GRB10            small FC
## HOXA2            small FC
## RASA4DP          small FC
## TOX3             small FC
## KIN              small FC
## LRCH1            small FC
## OS9              small FC
## SCAND3          small FC
## AHSP             upregulated
## FBXO4            small FC
## UTP6             small FC
## FARSA            small FC
## RPL31P49         small FC
## GLIS3-AS1        small FC
## LINC01960        small FC
## B9D1             small FC
## LRFN3            small FC
## TSPEAR-AS2       small FC
## DNAJB12          small FC
## C1orf21-DT       small FC
## LINC02324        upregulated
## COPA             small FC
## IQCD             small FC
## LIX1              small FC
## RBMLXL2          small FC
## ZNF83             small FC
## TRAPPC2L          small FC
## CCNG1            small FC
## RNF141            small FC
## CASTOR2          small FC
## C11orf58          small FC
## LINC02828         upregulated
## IL12A-AS1         upregulated
## HLA-DQB2          small FC
## SFPQ             small FC
## DMRT2            small FC
## STX7              small FC
## CECR2             small FC
## BBS5              small FC
## RYK               small FC

```

## LINC02846	small FC
## PSMD8	small FC
## ASB9P1	small FC
## SMIM32	small FC
## ARHGAP24	small FC
## SLC5A1	small FC
## AHI1-DT	small FC
## ZNF740	small FC
## CLEC4D	small FC
## PTP4A3	small FC
## HGH1	small FC
## CELF1	small FC
## SS18L2	small FC
## CCL26	small FC
## RACGAP1	small FC
## REPIN1	small FC
## SETX	small FC
## BARX1	upregulated
## LRRKIP1	small FC
## IGF2BP2	small FC
## SCCPDH	small FC
## RPSA	small FC
## CACNA1C-AS1	small FC
## USP10	small FC
## LY75	small FC
## FRG2EP	downregulated
## SYT5	upregulated
## TMEM117	small FC
## DCTN6-DT	small FC
## DNAAF10	small FC
## RSPRY1	small FC
## PAQR8	small FC
## SH3D21	small FC
## SETBP1	small FC
## PEX12	small FC
## ATXN7L3	small FC
## TOB2P1	small FC
## AP2M1	small FC
## LINC02288	small FC
## JDP2-AS1	small FC
## SH3GLB2	small FC
## TMEM161A	small FC
## CNTNAP2	small FC
## MESTIT1	small FC
## WBP1LP2	small FC
## ZGRF1	small FC
## ZC3H8	small FC
## RPSAP70	small FC
## IGLV3-16	upregulated
## GPN1	small FC
## EBI3	small FC
## ST8SIA6	small FC
## SH3RF3	small FC
## RETN	small FC

## TYRO3P	small FC
## RPL3P2	small FC
## KITLG	small FC
## DDC	small FC
## LINC00847	small FC
## MCRS1	small FC
## GRK6P1	small FC
## LINC03099	small FC
## COMT	small FC
## LINC02484	small FC
## ZNF441	small FC
## DPY19L2P2	small FC
## C4orf50	small FC
## ZCCHC10	small FC
## LINC02207	small FC
## ASB16-AS1	small FC
## SNAPC2	small FC
## GSTA7P	small FC
## MXI1	small FC
## RAB2A	small FC
## NUP50-DT	small FC
## SNX22	small FC
## LINC02352	small FC
## RAB33A	small FC
## EGLN1	small FC
## TLR9	small FC
## SORL1-AS1	small FC
## ASAH2B	small FC
## INAFM2	small FC
## CXorf58	small FC
## CASP10	small FC
## ZNF541	small FC
## RABL6	small FC
## LRRC8E	small FC
## DANCR	small FC
## TMEM238	small FC
## SFTPC	downregulated
## ODR4	small FC
## NKPD1	small FC
## PAFAH1B3	small FC
## APOC2	small FC
## TAT-AS1	small FC
## LINC01111	small FC
## ATP2A2	small FC
## RHPN1	small FC
## GPR52	upregulated
## ZBTB33	small FC
## EIF2B5	small FC
## NCLN	small FC
## FAM86B1	small FC
## KIF3B	small FC
## LINC01031	small FC
## TMEM11	small FC
## DTWD2	small FC

## MAP4K3	small FC
## NUCKS1	small FC
## UQCRH	small FC
## LINC00323	small FC
## SELENOO-AS1	small FC
## TMC5	small FC
## FMO1	small FC
## LINC02419	small FC
## INSYN2B	small FC
## MRPS36	small FC
## LYPLA2	small FC
## JAK1	small FC
## PARK7P1	small FC
## DDX31	small FC
## NCKAP5	small FC
## MMP21	small FC
## EPHX4	small FC
## TSPAN19	small FC
## ZYG11A	small FC
## MKNK1-AS1	small FC
## LINC02019	small FC
## DCAF17	small FC
## NSD1	small FC
## RPL38	small FC
## TMT1A	small FC
## PRDM2	small FC
## ZNF579	small FC
## TRGV5	small FC
## RBM33-DT	small FC
## LPCAT1	small FC
## PNKP	small FC
## SLFN13	small FC
## CFAP57	small FC
## ZNF7	small FC
## COL22A1	small FC
## TERF2IP	small FC
## USP46	small FC
## DPY19L2P3	small FC
## OXR1-AS1	small FC
## SH3GL1P1	small FC
## ABALON	small FC
## UGT2A3P7	upregulated
## ABHD17AP5	upregulated
## TEX38	small FC
## DBT	small FC
## CDKN2AIP	small FC
## WWC2	small FC
## PRKCE	small FC
## PSMD2	small FC
## DMRTA1	small FC
## NDUFS2	small FC
## CLIC6	small FC
## LINC00862	small FC
## SLC25A38	small FC

## FAM133B	small FC
## XAB2	small FC
## GOLGA7	small FC
## LINC02870	small FC
## ASS1P11	small FC
## ENTPD1-AS1	small FC
## COX7B	small FC
## ABCC6P2	small FC
## RPS19BP1	small FC
## RBPMS2	small FC
## CINP	small FC
## PARAIL	small FC
## LINC02709	small FC
## NCBP2-AS1	small FC
## PUS10	small FC
## NDUFB1P1	small FC
## MARK4	small FC
## ID2	small FC
## RTF1	small FC
## ZNF816	small FC
## WDR89	small FC
## HEATR1	small FC
## GNB3	small FC
## HEXA	small FC
## CTDP1	small FC
## FBXO28	small FC
## RNF217	small FC
## TYMP	small FC
## KRT18P31	small FC
## CNP	small FC
## VDR	small FC
## THSD4	small FC
## DEDD	small FC
## LINC02149	small FC
## ELOF1	small FC
## CSDC2	small FC
## DISP2	small FC
## PPP3R1	small FC
## POLR3G	small FC
## CDIPTOSP	small FC
## SNORA3B	small FC
## TBC1D16	small FC
## NBPF19	small FC
## TSPAN31	small FC
## MIR181A1HG	upregulated
## LINC02061	small FC
## SLITRK2	small FC
## TAFA5	small FC
## ERMN	small FC
## PKIB	small FC
## LINC02538	small FC
## NRP1	small FC
## COBL	small FC
## TULP3P1	small FC

## CDC7	small FC
## LINC00649	small FC
## CLXN	small FC
## SENP2	small FC
## NFYA	small FC
## CMTM6	small FC
## TRIM73	small FC
## PEX11A	small FC
## ATP5MG	small FC
## PAM16	small FC
## TMEM204	small FC
## CDH17	small FC
## PUS1-AS1	small FC
## H3-3A-DT	small FC
## MKKS	small FC
## NIPSNAP1	small FC
## MSLN	small FC
## ZNF852	small FC
## MAPK8IP3-AS1	small FC
## EN2	small FC
## POU2F1	small FC
## LGALS4	small FC
## AIRE	small FC
## MOGS	small FC
## DSC1	small FC
## PRDM11	small FC
## PTGS2	small FC
## HFM1	small FC
## ANGPT4	small FC
## ABCB11	small FC
## CFL1P1	small FC
## SPRY3	small FC
## GLRB	small FC
## M1AP	small FC
## JHY	small FC
## FRMD1	small FC
## CD99P1	small FC
## RAMP3	small FC
## GRM2	small FC
## CNGB1	small FC
## CCDC9	small FC
## MRFAP1	small FC
## MCAM	small FC
## STX3	small FC
## CYP2B7P	small FC
## COMMD7	small FC
## HHIPL2	small FC
## KCNQ1OT1	small FC
## ARHGAP42	small FC
## DLGAP1-AS1	small FC
## DDX27	small FC
## ZNF575	small FC
## POU2AF3	small FC
## LINC02897	small FC

## PTK2B	small FC
## SRD5A1	small FC
## ABCC2	small FC
## GHRL	small FC
## U2AF1L4	small FC
## RMST	small FC
## UBE2M	small FC
## MOB1B	small FC
## RICTOR	small FC
## ACTA2-AS1	small FC
## KLF1	upregulated
## NPIPBP1	small FC
## SAMD14	small FC
## BTNL9	small FC
## TNFRSF19	small FC
## OXA1L	small FC
## PHF2	small FC
## LIPE-AS1	small FC
## FRS3	small FC
## ASS1P9	small FC
## LINC01956	upregulated
## USP6NL	small FC
## CARMIL3	small FC
## SMIM10L2A	small FC
## HHIP	small FC
## RPL23AP32	small FC
## PPFIA1	small FC
## SDR42E1	small FC
## SMARCD1	small FC
## SCRN1	small FC
## PCGF3	small FC
## LAMTOR3	small FC
## PCDHA4	small FC
## GGT5	small FC
## PPCDC	small FC
## PLAG1	small FC
## ZNF502	small FC
## LINC01239	small FC
## GPC4	small FC
## EFNB3	small FC
## ZNF607	small FC
## TUBBP9	small FC
## RNF32-AS1	small FC
## AATF	small FC
## CEP170P1	upregulated
## EMP2	small FC
## WT1	small FC
## CD44-DT	small FC
## MTMR9LP	small FC
## PLEKHM1	small FC
## FGF10-AS1	small FC
## RPL39P5	downregulated
## UBXN2B	small FC
## FTCD	small FC

## TOMM40L	small FC
## MGAT4C	small FC
## SCAF4	small FC
## DEFB132	small FC
## NUP107	small FC
## TMEM246-AS1	small FC
## PDE4DIPP7	small FC
## PFKP-DT	small FC
## CMC1	small FC
## TFF1	downregulated
## MTHFS	small FC
## ZBTB8B	small FC
## ZFP1	small FC
## SCN8A	small FC
## GJB2	small FC
## F10	small FC
## GOS2	small FC
## FREM2	small FC
## LINC02732	small FC
## AATBC	small FC
## RABL3	small FC
## OTUD6B	small FC
## MORF4L1P1	small FC
## TIFA	small FC
## RPS3AP47	small FC
## BRIX1	small FC
## GATD1-DT	small FC
## TTC36-AS1	small FC
## LAMTOR5	small FC
## LINC01765	small FC
## PCSK4	small FC
## NRL	small FC
## VPS9D1	small FC
## AGMO	small FC
## KRT12	upregulated
## MTND5P13	small FC
## LINC01151	downregulated
## SNX4	small FC
## CYP4F22	small FC
## COCH	small FC
## MATN2	small FC
## DAW1	small FC
## CALCB	small FC
## SPAG1	small FC
## GPR88	small FC
## MAMLD1	small FC
## LINC00342	small FC
## NTN1	small FC
## KLHDC9	small FC
## RGS1	small FC
## GNAS-AS1	small FC
## FAM157C	small FC
## LRP11	small FC
## DRD2	small FC

## LINC01948	small FC
## SERINC3	small FC
## COP1	small FC
## XPO7	small FC
## GPATCH4	small FC
## IL9RP3	small FC
## PDCD10	small FC
## PHYKPL	small FC
## MIRLET7A1HG	small FC
## AGXT	small FC
## ARRDC3-AS1	small FC
## PAK1IP1	small FC
## LINC02715	upregulated
## CFAP95	small FC
## RNF148	small FC
## CSNK2A2	small FC
## RHEX	small FC
## LITATS1	small FC
## PPIH	small FC
## MAP4K1-AS1	upregulated
## DAGLB	small FC
## BCL10	small FC
## GJA3	small FC
## LINC00668	small FC
## MMP25-AS1	small FC
## MTCO3P11	small FC
## NMUR2	downregulated
## GAPDHP1	small FC
## LSM14B	small FC
## CPEB1	small FC
## DUSP2	small FC
## SUCLA2	small FC
## UCN3	small FC
## SNRPD2	small FC
## YEATS4	small FC
## MEPCE	small FC
## EIF3J-DT	small FC
## HOXD11	small FC
## WNT5A	small FC
## SRSF8CP	small FC
## LINC02809	small FC
## IER3IP1	small FC
## AMPH	small FC
## RPL12P4	small FC
## UNC79	small FC
## LINC00628	small FC
## BMS1P23	small FC
## SLC35A4	small FC
## IFT46	small FC
## LINC02963	small FC
## SLU7	small FC
## SHPK	small FC
## AGR3	small FC
## PEX19	small FC

## BMI1	small FC
## HEXB	small FC
## MIRLET7G	small FC
## RFPL4A	small FC
## BTBD7P1	small FC
## CDC20	small FC
## FBXL9P	small FC
## VPS36	small FC
## COMMD6	small FC
## CCDC192	small FC
## PREX2	small FC
## ULBP1	small FC
## PHYHIP	small FC
## GPAT4-AS1	small FC
## ENKD1	small FC
## LINC01825	upregulated
## SGSH	small FC
## HSD3B7	small FC
## KIF23	small FC
## FRMD6-AS2	upregulated
## CCDC92	small FC
## FAM83C	small FC
## C3P1	downregulated
## ALOX15P1	small FC
## RRP7BP	small FC
## HM13-IT1	small FC
## MTND5P24	small FC
## ERC2	small FC
## ASPDH	small FC
## PDLIM4	small FC
## ARHGAP1	small FC
## KYAT3	small FC
## BCL2L10	small FC
## SLC39A1	small FC
## ZNF813	small FC
## PPP2R1A	small FC
## GABPB1	small FC
## TMEM40	small FC
## DEAF1	small FC
## MELTF-AS1	small FC
## RAP1A	small FC
## CRHR2	small FC
## BUD13	small FC
## TLR5	small FC
## GPAT2P1	small FC
## HERC4	small FC
## CACUL1	small FC
## DCLRE1CP1	upregulated
## ITPRID2-DT	small FC
## CTSL	small FC
## PDZK1P1	small FC
## DAP3	small FC
## MOCOS	small FC
## IGHV3-43	small FC

## OLFM5P	small FC
## OXSM	small FC
## ZKSCAN7-AS1	small FC
## CCDC160	small FC
## FIS1	small FC
## LINC02614	small FC
## MRPS16	small FC
## HERPUD2-AS1	small FC
## CASC11	small FC
## RAB28	small FC
## RIN2	small FC
## UQCRRFS1	small FC
## SLC37A4	small FC
## CKAP5	small FC
## STAT5A	small FC
## UBAC1	small FC
## EDDM3A	small FC
## TMEM175	small FC
## TIMM10B	small FC
## NPM1P6	small FC
## ASAHI	small FC
## FAM98A	small FC
## ARL2BP	small FC
## KRT2	small FC
## ZNF248	small FC
## TMUB2	small FC
## SLX4	small FC
## ZMYM3	small FC
## ARHGDIA	small FC
## MIR4477B	upregulated
## CNTNAP5	small FC
## RGL2	small FC
## LINC01012	small FC
## CLEC18B	small FC
## PRDM5	small FC
## CRTIC2	small FC
## PRKACB-DT	small FC
## GLDCP1	small FC
## LINC02554	small FC
## LINC02871	small FC
## PRODH2	small FC
## UTP18	small FC
## XXYL1	small FC
## TTC14-DT	small FC
## FAM153A	small FC
## NME4	small FC
## HDHD2	small FC
## HSPA8P7	small FC
## MINDY2	small FC
## ENTPD4-DT	small FC
## PTPRO	small FC
## MAGOHB	small FC
## LGALS8-AS1	small FC
## ABCA11P	small FC

```

## TOMM7                     small FC
## BTBD6P1                  upregulated
## TCIRG1                     small FC
## MRPL51                     small FC
## SUCLG2                     small FC
## UFSP2                      small FC
## LINC02712                 downregulated
## LINC01747                 small FC
## CERS6-AS1                  small FC
## FUOM                       small FC
## AATK                        small FC
## ANAPC11                     small FC
## MTUS2                       small FC
## TTC23L-AS1                  small FC
## WASF1                       small FC
## IARS1                       small FC
## ICAM1                       small FC
## MPO                         small FC
## ZSWIM9                      small FC
## TSPY26P                     small FC
## FAM86JP                     small FC
## SYPL1P2                     small FC
## MSRA                        small FC
## IER5L-AS1                  small FC
## DOCK9-AS1                  small FC
## NSDHL                       small FC
## RBBP8NL                     small FC
## CENPQ                       small FC
## PRNCR1                     small FC
## MYH16                       upregulated
## DENND11                     small FC
## MISFA                        small FC
## OCIAD1                      small FC
## KCNJ4                        small FC
## MTATP6P1                    small FC
## PLCE1                        small FC
## PRXL2A                      small FC
## RAF1                         small FC
## SNORA28                     small FC
## PTPN5                        small FC
## ZC2HC1A                     small FC
## TBX4                         small FC
## H1-3                         downregulated
## ADNP-AS1                    small FC
## MYO5C                        small FC
## RAP1B                        small FC
## PMM1                         small FC
## TMEM86B                      small FC
## ERCC6                        small FC
## HSP90AB3P                   small FC
## OLFM3                        small FC
## PTPRZ1                      small FC
## ADORA2BP1                   small FC
## HMGXB4                      small FC

```

## LINC01473	small FC
## LYPD1	small FC
## MPC1-DT	small FC
## PKD2L1	small FC
## MAFTRR	small FC
## DHX40	small FC
## UBE2U	small FC
## BRINP1	small FC
## WARS1	small FC
## STUB1	small FC
## MACROD2	small FC
## COPB1	small FC
## ACVR1	small FC
## NIPSNAP3A	small FC
## YDJC	small FC
## KDM4A-AS1	small FC
## OR7E29P	small FC
## NAT9	small FC
## EDAR	small FC
## CDC42BPB	small FC
## CHST12	small FC
## SMIM8	small FC
## ZXDB	small FC
## ZC3HAV1L	small FC
## ZNF500	small FC
## NDUFV2-AS1	small FC
## SNRPB2	small FC
## MRFAP1L1	small FC
## ZNF592	small FC
## RPS4X	small FC
## MIDEAS-AS1	small FC
## TGFBR2	small FC
## ITSN2	small FC
## HSPE1P18	upregulated
## CLDN8	small FC
## UQCR11	small FC
## GEMIN6	small FC
## LINC02701	small FC
## ZNF573	small FC
## FMO5	small FC
## MTND5P3	small FC
## RN7SKP160	small FC
## EPHB6	small FC
## EEF1A1P12	small FC
## CDKAL1	small FC
## PEAK3	small FC
## E2F4	small FC
## NUDT2	small FC
## LINC02999	downregulated
## NOM1	small FC
## SLITRK5	small FC
## LASP1	small FC
## EEF1A1P9	small FC
## TSPO	small FC

## GPHN	small FC
## RNF113A	small FC
## CBLN2	small FC
## WFDC3	small FC
## SLC38A10	small FC
## ACAP3	small FC
## GRHL1	small FC
## EFNA4	small FC
## CLCN7	small FC
## SLC7A13	small FC
## RNF40	small FC
## SOCS6	small FC
## CREB3L3	small FC
## FER1L6	small FC
## NPFFR1	small FC
## DEDD2	small FC
## IGHV1-58	upregulated
## ZNF230-DT	small FC
## TMEM102	small FC
## TRAV18	upregulated
## TMEM231	small FC
## CEP135	small FC
## EPC2	small FC
## RPL31P17	small FC
## SFXN5	small FC
## LINC03064	small FC
## GNA13	small FC
## GPR22	downregulated
## COPS5	small FC
## UGT1A6	small FC
## DLL4	small FC
## RSAD1	small FC
## AQP10	upregulated
## MYO15B	small FC
## ITIH2	small FC
## KNSTRN	small FC
## ABCC5	small FC
## ZNF319	small FC
## DDX52	small FC
## ZFP69	small FC
## PREPL	small FC
## NR6A1	small FC
## ZBTB25	small FC
## SSR2	small FC
## CTBP1-DT	small FC
## CCDC144NL	upregulated
## OR5B2	small FC
## HSPD1P11	small FC
## UBTFL10	small FC
## TOP1	small FC
## LINC01214	small FC
## AP1M2	small FC
## FETUB	small FC
## ELANE	small FC

## ZNF562	small FC
## FRMD7	small FC
## KIAA1143	small FC
## MROH2A	small FC
## LINC02363	small FC
## TANGO6	small FC
## MGAT1	small FC
## PET117	small FC
## CCDC71	small FC
## APLN	small FC
## SBF2-AS1	small FC
## OTUD1	small FC
## TEX14	small FC
## MARCHF7	small FC
## TRMT11	small FC
## LSM2	small FC
## SNHG7	small FC
## DCT	small FC
## STARD13	small FC
## MED16	small FC
## HARS1	small FC
## NADK	small FC
## TMC6	small FC
## SGSM2	small FC
## NLRP2B	small FC
## SNORA79B	small FC
## PDIA2	small FC
## AVIL	small FC
## ABCA10	small FC
## PCDHB15	small FC
## BTBD1	small FC
## CPSF1	small FC
## PCDHGA2	small FC
## BRME1	small FC
## ACOT9	small FC
## GABRG3	small FC
## BORCS8	small FC
## TLK2P1	small FC
## BTNL8	small FC
## GAS2L1	small FC
## F10-AS1	small FC
## SPIN3	small FC
## ITGB8	small FC
## PEX1	small FC
## ZFC3H1	small FC
## CCDC81	small FC
## PRDM10-DT	small FC
## OR51B4	small FC
## LINC03108	small FC
## CHADL	small FC
## SHROOM4	small FC
## EIF4A2	small FC
## CD1D	small FC
## PGF	small FC

## PRR18	small FC
## VTRNA1-3	downregulated
## ANK3	small FC
## LINC01555	small FC
## PRIM1	small FC
## SLC25A23	small FC
## ADPRS	small FC
## HYDIN2	small FC
## PPP1R14A	small FC
## TMEM213	small FC
## PSMA4	small FC
## CTF1	small FC
## CSN1S1	upregulated
## LINC01588	small FC
## LINC02026	small FC
## RPS13	small FC
## CISD1	small FC
## PANK3	small FC
## GK3	small FC
## NKAIN2	small FC
## EOGT-DT	small FC
## EPB41L1	small FC
## CLVS2	upregulated
## GRM4	small FC
## KCTD21-AS1	small FC
## VSTM1	small FC
## LINC02575	small FC
## PDLM2	small FC
## MTMR11	small FC
## B4GALNT2	small FC
## MTA1	small FC
## CEP76	small FC
## EIF1AD	small FC
## C7orf57	small FC
## RPL32P1	small FC
## CREB1	small FC
## FZD7	small FC
## AFF4	small FC
## NRAV	small FC
## EIF4H	small FC
## TAPBPL	small FC
## RNF208	small FC
## DYNLL1	small FC
## CHMP4BP1	small FC
## C18orf21	small FC
## PPP4C	small FC
## LINC00973	small FC
## NEMP2-DT	small FC
## MACORIS	small FC
## KDM1A	small FC
## NGF	small FC
## TRNAU1AP	small FC
## CCSER2	small FC
## NAA80	small FC

## OACYLP	small FC
## DYRK3	small FC
## LINC00899	small FC
## OSMR	small FC
## SOD3	small FC
## OR2A9P	small FC
## GRB7	small FC
## THRB-IT1	small FC
## SLC25A30	small FC
## PSMC1	small FC
## FOXD4L1	small FC
## PLCD1	small FC
## DCTN6	small FC
## HID1-AS1	small FC
## RNF6	small FC
## FUCA2	small FC
## RPL7AP43	small FC
## CTSV	small FC
## NONO	small FC
## UFD1-AS1	small FC
## SLC10A6	small FC
## ZNF280C	small FC
## PAF1	small FC
## PPIL1	small FC
## ZBTB24	small FC
## NXPE2	small FC
## TEX14BP	small FC
## ZNF550	small FC
## RPL35P2	small FC
## DAPK3	small FC
## RP1L1	small FC
## OR2A20P	small FC
## ZNF236-DT	small FC
## RCAN2-DT	small FC
## KCTD6	small FC
## CHMP5	small FC
## GATA3-AS1	small FC
## GLRXP3	small FC
## HINT2	small FC
## RRAGC	small FC
## ATP6V0C	small FC
## HNF1A-AS1	small FC
## SNX5	small FC
## TEKT5	small FC
## HCRTR1	small FC
## DPH1-AS1	small FC
## LINC00896	small FC
## SNORA77	small FC
## PIK3AP1	small FC
## FAM136A	small FC
## RPLP2	small FC
## TRMT61A-DT	small FC
## PDHB	small FC
## RTP2	upregulated

```

## CTNNAL1           small FC
## RN7SKP80          small FC
## CDC26            small FC
## KCNN3             small FC
## PLCB3             small FC
## MIR31HG          small FC
## H1-2              small FC
## MTCYBP18          small FC
## MIR4538           upregulated
## RPS29             small FC
## SPSB1             small FC
## DDX56             small FC
## HIKESHI           small FC
## ZNF776             small FC
## CNN3-DT            small FC
## ZNF461             small FC
## PARVA             small FC
## RPL7AP34           small FC
## CCDC39             small FC
## MIXL1              small FC
## OTULINL            small FC
## IL17RD             small FC
## GTPBP2             small FC
## HAUS4              small FC
## LINC02932          small FC
## LINC01213          small FC
## MRTFB              small FC
## TOMM20L             small FC
## TMEM167B            small FC
## LGALS9B             upregulated
## LINC00648           small FC
## TOB1-AS1             small FC
## EIF4A3              small FC
## PLN                 small FC
## WWP1P1              small FC
## CIAO1               small FC
## MRPS17              small FC
## GLO1                 small FC
## LRRTM2              small FC
## SRSF3               small FC
## C10orf90             small FC
## PNMA6A              small FC
## ERLEC1              small FC
## APLP1                small FC
## GGT8P                small FC
## MIR5690              small FC
## PTCD1                small FC
## COPS8                small FC
## CLOCK                small FC
## ADAD2                small FC
## RASA2                small FC
## RRAGB                small FC
## DPY19L1              small FC
## CUL5                 small FC

```

## CRNKL1	small FC
## SLC35C1	small FC
## PIGO-AS1	small FC
## KIF1C	small FC
## XRCC1	small FC
## ST20-MTHFS	small FC
## SYNGR2	small FC
## ABCB10	small FC
## REV1	small FC
## RPS6KA3	small FC
## RHOG2P	small FC
## MCHR1	small FC
## KCNE2	small FC
## DLG2	small FC
## MSANTD3P1	small FC
## MXRA7	small FC
## PPP1R3E	small FC
## DNAJC5	small FC
## THRB	small FC
## DNAI4	small FC
## MRPS35	small FC
## RUSF1	small FC
## SPINK4	downregulated
## ZNF382	small FC
## TAF1C	small FC
## TYW1	small FC
## VAC14	small FC
## CENPX	small FC
## ACBD5	small FC
## RPS6KA4	small FC
## NTMT1	small FC
## PLXNA3	small FC
## LTBP3	small FC
## PDE10A	small FC
## GATA4	upregulated
## LINC03051	small FC
## GULP1	small FC
## VOPP1	small FC
## CYP1B1	small FC
## TNFRSF10B	small FC
## ZFPM1	small FC
## SLC1A1	small FC
## LINC03033	small FC
## RTL8A	small FC
## DNAAF2	small FC
## DBH-AS1	small FC
## KLHL22	small FC
## BLOC1S5	small FC
## MRPL16	small FC
## TIMM9	small FC
## REC8	small FC
## CARD6	small FC
## MLLT6	small FC
## GPC5	small FC

## EPOP	small FC
## MOCS2	small FC
## SPMAP1	small FC
## DNAJB11	small FC
## AQP5	small FC
## VEZT	small FC
## THRA	small FC
## GNRH1	small FC
## ANKRD65	small FC
## ZNF454	small FC
## SEMA4G	small FC
## GGTA2P	small FC
## ZNF230	small FC
## CWC15	small FC
## KIF1B	small FC
## TLE6	small FC
## LINC02817	small FC
## PGRMC2	small FC
## SHISA6	small FC
## MTCO2P12	small FC
## RPAP3-DT	small FC
## FLAD1	small FC
## PDZD11	small FC
## RNVU1-1	small FC
## MRPL24	small FC
## PLEKHG7	small FC
## NTS	small FC
## STXBP1	small FC
## AFG3L2	small FC
## FBXW10B	small FC
## ZPR1	small FC
## SLC25A3	small FC
## ZSWIM1	small FC
## ITPR2	small FC
## PRKCSH	small FC
## RPS6KB1	small FC
## HAGLR	small FC
## ZSWIM7	small FC
## BAZ1A-AS1	small FC
## OPN3	small FC
## RPS12	small FC
## NPY2R-AS1	small FC
## DNM3	small FC
## DPAGT1	small FC
## ZFX-AS1	small FC
## SAMD13	small FC
## TKTL1	small FC
## CLUHP3	small FC
## RNF5	small FC
## KALRN	small FC
## ALKBH1	small FC
## PEG10	small FC
## PMM2	small FC
## STARD6	small FC

```

## LGALSL           small FC
## LINC02499       small FC
## CYSTM1          small FC
## MT1F            small FC
## TIMM29          small FC
## MCPH1           small FC
## XNDC1N          small FC
## BEST4           small FC
## NACC2           small FC
## PAPPA2          small FC
## IFI27L2         small FC
## IRF2BP2         small FC
## RPS2P5          small FC
## QTRT2           small FC
## ZNF600          small FC
## EIF5B           small FC
## ZP3              small FC
## LINC01204        upregulated
## BTG2-DT          small FC
## EEF1A1P6         small FC
## CIC              small FC
## CUL1             small FC
## DAPK1            small FC
## CHST11          small FC
## CNR1             small FC
## CAMTA1-DT        small FC
## LINC02943        small FC
## MGRN1            small FC
## ARHGAP10         small FC
## IRS4-AS1          small FC
## TUSC2            small FC
## CCHCR1          small FC
## STAG2             small FC
## OAF               small FC
## ATP5PB            small FC
## CHST2            small FC
## HPS5              small FC
## KCNJ11           small FC
## ACP5              small FC
## PMAIP1           small FC
## GTPBP1            small FC
## H2BC8             small FC
## RSRC2             small FC
## ISY1              small FC
## ITPK1             small FC
## TMEM277P          small FC
## DDX42             small FC
## ANKDD1A           small FC
## KCTD3             small FC
## RASSF8-AS1        small FC
## FAU               small FC
## HMGA1             small FC
## TJP2              small FC
## CHD3              small FC

```

## CFAP91	small FC
## ANO7L1	small FC
## NSUN4	small FC
## FAM131B-AS2	small FC
## FAM110D	small FC
## SMG1P6	small FC
## CFAP96	small FC
## NPLOC4	small FC
## S1PR1	small FC
## RAB22A	small FC
## DOHH	small FC
## CHRM4	small FC
## IGSF9B	small FC
## SLC2A12	small FC
## LGSN	small FC
## TEAD3	small FC
## CWF19L1	small FC
## ALPK3	small FC
## KHDRBS3	small FC
## SDHD	small FC
## GOT1-DT	small FC
## SLFN11-AS1	small FC
## ST7	small FC
## FOXD4	small FC
## CNPY3	small FC
## GMNC	small FC
## DENND1A	small FC
## ALG5	small FC
## CYP3A43	small FC
## CFAP61-AS1	small FC
## LINC02406	small FC
## CDIP1	small FC
## CXCL16	small FC
## TDH-AS1	small FC
## HOXA1	small FC
## FAM193A	small FC
## KRT17P5	upregulated
## BAIAP2	small FC
## CNOT6LP1	small FC
## CST9	small FC
## ADRB3	upregulated
## TBC1D2	small FC
## RORA-AS1	small FC
## CCDC181	small FC
## NSMCE4A	small FC
## GIMAP1	small FC
## AVPR2	small FC
## ZNF471	small FC
## TRMT44	small FC
## UBAP1L	small FC
## PRKCH-AS1	small FC
## PXMP2	small FC
## DACT3	small FC
## EML2-AS1	small FC

```

## ZBED2           small FC
## LINC01436      small FC
## RELCH          small FC
## LINC02672      small FC
## AIMP2          small FC
## DHFR2          small FC
## GP6-AS1        small FC
## SNHG30         small FC
## C18orf54       small FC
## IGLV3-24       small FC
## SMIM27         small FC
## EIF3I          small FC
## JMY            small FC
## MXD4           small FC
## PSMD5          small FC
## USP2           small FC
## ORC4           small FC
## MIR194-2HG     small FC
## GYG2           small FC
## COP1-DT        small FC
## NOCT           small FC
## UNC5B-AS1      small FC
## ZNF513          small FC
## GPRIN3          small FC
## MAML2           small FC
## KRT13          small FC
## FAM210A         small FC
## LIPT2          small FC
## ADAT2          small FC
## IFNGR1          small FC
## LMO2           small FC
## SKOR1          small FC
## IGSF3P2         small FC
## ATP5MF          small FC
## IL23A           small FC
## MTCO1P25        small FC
## ZBTB49          small FC
## NBPF11          small FC
## TRBJ1-2         upregulated
## GPATCH11        small FC
## ZNF672          small FC
## PLCG2           small FC
## LAGE3P1         small FC
## HSD17B2         small FC
## UNGP3           small FC
## AKR1A1          small FC
## SKIDA1          small FC
## ADCK1           small FC
## CHST9           small FC
## ALDH1L1         small FC
## NFILZ           upregulated
## TMUB1           small FC
## LINC02952        small FC
## NMNAT1          small FC

```

```

## SPHK2           small FC
## ASS1P2          small FC
## EPN1            small FC
## PTGDS           small FC
## WDR44           small FC
## HPS4            small FC
## CPNE6           small FC
## HERC6           small FC
## TCEAL9          small FC
## PARP6           small FC
## IGSF1           small FC
## TRBV23-1        upregulated
## HUS1B           small FC
## HELB            small FC
## DENND6A-AS1     small FC
## LAMA1           small FC
## HCFC1-AS1       upregulated
## TRIM74          small FC
## PPP4R3B         small FC
## BCAS2P2         small FC
## C12orf75-AS1    small FC
## POLR2I          small FC
## FCSK            small FC
## ZNF662          small FC
## FSTL4           small FC
## IGHV6-1         small FC
## C2CD4A          small FC
## XRCC5           small FC
## MAP3K9          small FC
## MIR25           small FC
## ATP13A5-AS1     upregulated
## HGS              small FC
## KCNIP2-AS1       small FC
## CLUL1           small FC
## FAM170B          small FC
## AAMDC            small FC
## USP45            small FC
## HSD17B1-AS1      small FC
## N4BP2            small FC
## VAMP8            small FC
## ASPSCR1          small FC
## ELOB             small FC
## SCUBE3           small FC
## UBE2E2           small FC
## ZNF426-DT        small FC
## SLC12A5-AS1      upregulated
## NDUFB4P11        small FC
## MKRN1            small FC
## EPS8             small FC
## FAM168B          small FC
## ATP1A3           small FC
## WFS1              small FC
## EQTN              small FC
## PICART1          small FC

```

## MTND1P23	small FC
## PPOX	small FC
## C1QTNF12	small FC
## FBF1	small FC
## AJAP1	small FC
## ZNF302	small FC
## FCRL5	small FC
## C17orf78	small FC
## MROH7	small FC
## FDXR	small FC
## OSBPL1A	small FC
## CCDC73	small FC
## GAL3ST2	small FC
## SEC63	small FC
## GATAD1	small FC
## LINC01606	small FC
## ATP6V0D1-DT	small FC
## PIR	small FC
## TIMP4	small FC
## NLRP14	small FC
## TMEM163	small FC
## SDAD1	small FC
## LINC02240	upregulated
## LINC02417	small FC
## CAMKK2	small FC
## GPANK1	small FC
## THAP9-AS1	small FC
## DHRS2	small FC
## TIMM17A	small FC
## DSCR8	small FC
## TAS2R19	small FC
## LAMP1	small FC
## STK16	small FC
## ZCCHC9	small FC
## LIN37	small FC
## D2HGDH	small FC
## TRBV21-1	upregulated
## RASEF	small FC
## IMPG2	small FC
## DIS3	small FC
## DOCK8-AS1	small FC
## IGHV3-66	small FC
## GON4L	small FC
## UBE2E4P	small FC
## SLC22A1	small FC
## SPTY2D1	small FC
## MED20	small FC
## TSPAN13	small FC
## LINC01446	small FC
## NPDC1	small FC
## TRAV33	small FC
## SPATA9	small FC
## C1orf52	small FC
## C14orf119	small FC

## ZNF84	small FC
## ADPGK-AS1	small FC
## MMADHC	small FC
## RRN3P1	small FC
## RUSC1-AS1	small FC
## PTENP1	small FC
## CENPT	small FC
## GALR2	small FC
## MKRN2OS	small FC
## IKBKB	small FC
## TTYH3	small FC
## ZNF253	small FC
## PBDC1	small FC
## HES4	small FC
## KMT2B	small FC
## GMPPA	small FC
## CLCN2	small FC
## CNOT1	small FC
## ZNF646	small FC
## UBE4B	small FC
## EIF3FP3	small FC
## CARM1	small FC
## ACAD8	small FC
## C2orf74-DT	small FC
## ZFAND2A	small FC
## DLEC1	small FC
## LINC01940	upregulated
## TMEM260	small FC
## EXOSC2	small FC
## LINC01594	small FC
## MCM2	small FC
## EEF1AKMT3	small FC
## NDUFB6	small FC
## SS18L1	small FC
## SMAD2	small FC
## ZSCAN2	small FC
## MTND4LP5	small FC
## ZSWIM8	small FC
## FRMD3-AS1	small FC
## SND1	small FC
## CDIPT	small FC
## TAC1	small FC
## SAR1A	small FC
## WDR17	small FC
## LINC03046	small FC
## SPATA7	small FC
## TNRC6A	small FC
## SOCS7	small FC
## CFAP418	small FC
## BICRA	small FC
## EML5	small FC
## C8orf58	small FC
## TBCK	small FC
## GGN	small FC

```

## RAPGEF1           small FC
## ZNF777           small FC
## RNASET2          small FC
## ADORA2A-AS1     small FC
## MMADHCP2         small FC
## MFSD5            small FC
## SOCS5P4          small FC
## CXCL8            small FC
## POLR2A           small FC
## CHML              small FC
## ZCCHC7            small FC
## RPL32P20          small FC
## GPR107            small FC
## TNRC6B-DT         small FC
## SNAPC1            small FC
## GGNBP2            small FC
## GIRGL              small FC
## SLC25A46          small FC
## RNPS1              small FC
## WFDC5              small FC
## UNC5C              small FC
## ARMC1              small FC
## WDR3                small FC
## TACC2              small FC
## TMEM52B            small FC
## APRT               small FC
## SLC2A4              small FC
## BYSL               small FC
## LMCDD1-AS1         small FC
## PLD5               small FC
## NOG                small FC
## SLC16A14P1         downregulated
## PMS2P12            small FC
## DIP2B              small FC
## ZNF599              small FC
## FBXL15             small FC
## CALM1               small FC
## LMNTD2             small FC
## SERPINA4            small FC
## SERPINA10           small FC
## CIRBP              small FC
## MIR503              small FC
## NOP53               small FC
## MYC                 small FC
## HEATR5A-DT          small FC
## LAP3                small FC
## FOXL1               small FC
## TAAR1               small FC
## LINC02336           small FC
## C1orf35             small FC
## LINC01018           small FC
## KLF2                small FC
## RPL21P94             small FC
## ALOX12B             small FC

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```

## MT1H                      small FC
## GPRASP1                   small FC
## DNAJC15                    small FC
## RPL12P10                  upregulated
## LINC01069                   small FC
## RELL2                      small FC
## C11orf97                   small FC
## ATP5F1AP3                  small FC
## FMO2                        small FC
## SNRNP35                     small FC
## OXT                         small FC
## GLOD5                       small FC
## FER1L5                      small FC
## MUC20P1                     small FC
## SEC16A                      small FC
## MCFD2                       small FC
## NDNF                         small FC
## UTP3                         small FC
## ZDHHC16                     small FC
## ELP3                         small FC
## REXO1                        small FC
## TMX1                         small FC
## ZFAND2A-DT                  small FC
## MIR762                      small FC
## PIK3R4                       small FC
## TMEM181                     small FC
## IQANK1                      small FC
## ZSCAN16-AS1                  small FC
## BLVRB                        small FC
## GATAD2B                     small FC
## RAPGEF2                     small FC
## LINC00239                   small FC
## SSBP2                        small FC
## LINC02348                   small FC
## CD68                         small FC
## NAB1                         small FC
## TMF1                         small FC
## FABP1                        small FC
## GOLM2                        small FC
## SLC35B1                      small FC
## LINC01831                  downregulated
## OSER1-DT                     small FC
## PCBP2P1                     small FC
## SERF1A                       small FC
## CHCHD10                     small FC
## CUX1                         small FC
## MFSD12                      small FC
## CFAP97                      small FC
## ENO1-AS1                     small FC
## SNX13                        small FC
## RPL39                        small FC
## LCMT1                        small FC
## TEDC1                        small FC
## FAM215A                      small FC

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## SPG21           small FC
## LINC01607      small FC
## H3P16          small FC
## SHQ1           small FC
## SNIP1          small FC
## MTMR3          small FC
## MIF4GD         small FC
## ARHGAP42-AS1   small FC
## EEF1A1P5        small FC
## MRPS9-AS2       small FC
## LINC02705       upregulated
## CCDC107         small FC
## HRAS            small FC
## FRMD4B          small FC
## UBAP1           small FC
## DHRS7           small FC
## LINC02988       small FC
## GNB1L           small FC
## ATAT1           small FC
## KDELR1          small FC
## QRICH1          small FC
## CEP63           small FC
## CFAP92          small FC
## HAND1           upregulated
## AKAP3            small FC
## GPAT4            small FC
## DNAAF11          small FC
## DERL2            small FC
## GLB1L3           small FC
## C1D              small FC
## CALY             small FC
## SOX4              small FC
## EOLA1             small FC
## C15orf61          small FC
## LINC00626         small FC
## IGHV3-69-1        small FC
## FGD6              small FC
## FBXW8             small FC
## ITGA8             small FC
## OGFOD1            small FC
## OGFR-AS1          small FC
## CACFD1            small FC
## LINC00113          small FC
## RBM45              small FC
## FRGCA             downregulated
## ANKRD45            small FC
## NHSL1-AS1          small FC
## KIAA1614-AS1        small FC
## MARCHF11           small FC
## TTC5              small FC
## AJUBA-DT            small FC
## CDC20-DT            small FC
## CCDC42             small FC
## CERNA1             small FC

```

```

## GIPC1           small FC
## RNF216          small FC
## LIPT2-AS1        small FC
## MID1            small FC
## MAP6             small FC
## LINC01942        small FC
## UNC45A           small FC
## CABP7            small FC
## IL12RB2          small FC
## CADPS            small FC
## ANAPC16          small FC
## PISD              small FC
## TAL2              small FC
## CEP164            small FC
## SQOR              small FC
## GPR89B            small FC
## TAF9              small FC
## LINC02985        small FC
## TSPAN18           small FC
## IGHD              small FC
## COX7A2            small FC
## PGM5              small FC
## CSTF2            small FC
## LINC02981        small FC
## UBE2A            small FC
## LINC01725        small FC
## GALT              small FC
## VENTX            small FC
## SUOX              small FC
## MEAF6             small FC
## GRB2              small FC
## ID2-AS1           small FC
## NR2C2AP           small FC
## ANAPC13            small FC
## LRRC3B            small FC
## IZUMO1            small FC
## SELENOF           small FC
## BMS1P7            small FC
## ZNF211            small FC
## PRKAG1            small FC
## ACACA              small FC
## LINC00964        small FC
## SLC52A2           small FC
## ZNF678            small FC
## FBL               small FC
## NPY6R              small FC
## EIF2B3            small FC
## COX5A              small FC
## HAR1A              small FC
## IGKV1-27           small FC
## ZNF204P            small FC
## IGHV3-23           small FC
## RPS4XP11           small FC
## JAGN1              small FC

```

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## AUP1                      small FC
## UGT1A2P                   small FC
## TESC-AS1                  downregulated
## RPS17                      small FC
## LINC01081                 small FC
## NYAP1                      small FC
## NSMCE1                     small FC
## MTHFR                      small FC
## MMACHC                     small FC
## TNFSF15                    small FC
## ANKIB1                     small FC
## TUT7                        small FC
## TNFRSF14-AS1               small FC
## WIPF3                       small FC
## PRKCG                      upregulated
## CDK17                      small FC
## USPL1                      small FC
## KRT16                      small FC
## SLC22A2                    small FC
## SAP30-DT                   small FC
## PIH1D2                     small FC
## ZNF774                      small FC
## MIR4645                    small FC
## KLK6                        small FC
## ETFB                         small FC
## ADAMTS9                    small FC
## ENPEP                        small FC
## LINC02577                  upregulated
## DNAH1                      small FC
## OSBPL9                     small FC
## RPLP0P9                    small FC
## LINC01670                  small FC
## ERI2                         small FC
## DAP                          small FC
## HILPDA                      small FC
## CCDC17                     small FC
## RPS15AP17                  small FC
## ATP5F1CP1                  small FC
## RAD9B                        small FC
## MST1P2                      small FC
## PAM                          small FC
## ZBTB48                      small FC
## HSD3B1                      upregulated
## RPL18P10                   small FC
## ADCY6-DT                    small FC
## GPR137B                     small FC
## RBBP4                        small FC
## RPL24P2                     small FC
## SLC2A2                      small FC
## TAF3                         small FC
## SYNE1-AS1                   small FC
## RPL4P5                      small FC
## CCDC146                     small FC
## LINC02065                  upregulated

```

## DDX12P	small FC
## HCG15	small FC
## PSMD6-AS2	small FC
## C1QTNF1-AS1	small FC
## LINC01842	small FC
## CCL3L3	small FC
## PCDHA11	small FC
## ZBTB20	small FC
## NACC1	small FC
## BICDL2	small FC
## UBQLN4	small FC
## FBXL20	small FC
## EIF2AK1	small FC
## CTDNEP1	small FC
## HMOX1	small FC
## LINC01507	small FC
## ATG4D	small FC
## GPR180	small FC
## ARL13B	small FC
## NMUR1	small FC
## DCUN1D2	small FC
## KDM4D	small FC
## LGALS8	small FC
## FTSJ3	small FC
## ARHGEF39	small FC
## GRK2	small FC
## TMPO-AS1	small FC
## DCAF11	small FC
## TEX9	small FC
## PTGR3	small FC
## ZNF621	small FC
## ITGA2B	small FC
## CACNA1A	small FC
## LINC01085	small FC
## KISS1	small FC
## ZNF652	small FC
## COMMD1	small FC
## TBC1D13	small FC
## SNURF	small FC
## OR51E2	small FC
## ARHGEF1	small FC
## CMAHP	small FC
## NPAS4	small FC
## LINC01374	small FC
## TFAP2A-AS1	small FC
## SPRY4-AS1	small FC
## MTCO3P12	small FC
## ILRUN	small FC
## BCKDHA	small FC
## COG8	small FC
## WAPL	small FC
## LINC00311	small FC
## CES5AP1	downregulated
## KCNK15	small FC

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## RNU6-418P           small FC
## GMCL1               small FC
## CLEC4M              small FC
## SLC25A41             small FC
## RAD51AP2             small FC
## RPL7AP16             small FC
## FLRT3               small FC
## ARB2A               small FC
## KLF8                small FC
## SLC39A3              small FC
## FAM110B              small FC
## ANTXRL              small FC
## ANKRD30B             small FC
## TSPAN5               small FC
## RAB11FIP2             small FC
## NR2C2               small FC
## CMTR1               small FC
## ARHGAP12              small FC
## IGHV3-30              small FC
## RBM4                small FC
## AP2A2               small FC
## CHPF2               small FC
## MTCYBP16             small FC
## FBXO6               small FC
## FKBP9                small FC
## SPATS2L              small FC
## RNA5SP40             downregulated
## ANKRD40              small FC
## MTIF3               small FC
## PTOV1-AS1             small FC
## PLGLA               small FC
## EFCAB2              small FC
## WDR7                small FC
## ZNF749               small FC
## PROKR1               small FC
## OGG1                small FC
## ZNF676               small FC
## ARMT1               small FC
## B3GALT4              small FC
## SPCS2P4              small FC
## TP53BP1              small FC
## LUZP2               small FC
## RPS15AP11             small FC
## GRIA3               small FC
## DCUN1D2-AS            downregulated
## KLKB1               small FC
## KLC1                small FC
## PTPN14               small FC
## DDX43               small FC
## CTDSP1              small FC
## DBR1                small FC
## TAF8                small FC
## IST1                small FC
## SLC35C2              small FC

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## H2BC11           small FC
## KLHDC7A          small FC
## C16orf95          small FC
## SDHA              small FC
## SBDSP1             small FC
## MICALL2-DT         small FC
## IPO5P1             small FC
## TPR                small FC
## ZFYVE1             small FC
## RAB5IF              small FC
## TIMMDC1             small FC
## STAU2-AS1            small FC
## CLMAT3             upregulated
## SLC25A15            small FC
## SLC30A2             small FC
## INSIG2              small FC
## LIMD1               small FC
## ISCU                small FC
## ETS1                 small FC
## TRAV8-5             upregulated
## IGLV3-12             upregulated
## THRAP3P1            small FC
## CRK                 small FC
## ZNF605              small FC
## RPL10P3              small FC
## TRPC4AP              small FC
## RITA1               small FC
## TUBB8                small FC
## CCDC174              small FC
## SLC10A5              small FC
## TMEM19               small FC
## IGLC3                small FC
## MAD2L1-DT             small FC
## CYB5R4               small FC
## RALGAPA2             small FC
## RRAS                small FC
## ALPI                 small FC
## VCAM1                small FC
## DPH3                  small FC
## ARF4                  small FC
## URM1                  small FC
## DNER                  small FC
## SIMC1P1              small FC
## LINC02198             small FC
## HTR7P1               small FC
## RIMS2                 small FC
## EPC1                  small FC
## AMDHD2               small FC
## SOCS4                 small FC
## LINC02454             small FC
## ADAM7-AS1              small FC
## VN2R19P               small FC
## DCBLD2               small FC
## WDR33                 small FC

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## PSIP1	small FC
## DDX54	small FC
## ABCA1	small FC
## LINC00379	small FC
## ARL6IP5	small FC
## ZNF654	small FC
## SFTPB	small FC
## NAIPP1	small FC
## SLC9A4	small FC
## PDCD5	small FC
## CAPN14	small FC
## RPS6KA1	small FC
## ELF5	small FC
## TSC22D3	small FC
## ZNF641	small FC
## KCNS1	small FC
## PARD6G	small FC
## ZNF569	small FC
## VWA8	small FC
## PAXIP1-AS2	small FC
## CA3-AS1	small FC
## RAP1BL	small FC
## SART1	small FC
## LINC02436	small FC
## TNKS	small FC
## DCLK2	small FC
## SAXO3	small FC
## PM20D2	small FC
## TRH	small FC
## MRPL18	small FC
## CCT8P1	small FC
## PROKR2	upregulated
## CREBZF	small FC
## KIF23-AS1	small FC
## ACTMAP	small FC
## RBBP9	small FC
## SBF2	small FC
## PTPRT	small FC
## ROBO2	small FC
## GLRX3	small FC
## KCNF1	small FC
## CCDC8	small FC
## CLIC5	small FC
## YPEL2	small FC
## HEPACAM2	small FC
## HECTD3	small FC
## KRT19	small FC
## GUSB	small FC
## STXBP5-AS1	small FC
## PARP16	small FC
## GUSBP11	small FC
## MIR22HG	small FC
## HNRNPUP1	small FC
## PFN4	small FC

## FKBP9P1	small FC
## ARIH2	small FC
## USP54	small FC
## ERI1	small FC
## TOR1AIP2	small FC
## LINC02016	upregulated
## KLK3	small FC
## RAPH1	small FC
## EEF1B2P3	small FC
## TRPC2	small FC
## NOA1	small FC
## TENM1	small FC
## SPINK7	small FC
## CYCSP45	small FC
## JPT1	small FC
## HOTAIR	small FC
## UBE3C	small FC
## HBQ1	upregulated
## GDE1	small FC
## SAMD12-AS1	small FC
## SLC43A2	small FC
## RELA-DT	small FC
## GMEB2	small FC
## SNORD59A	small FC
## NSA2P2	small FC
## MNX1	small FC
## LINC02801	upregulated
## GCATP1	small FC
## FAM13A	small FC
## LINC00184	small FC
## C5orf15	small FC
## NUP42	small FC
## LINC00310	small FC
## SLC9A7P1	small FC
## BST1	small FC
## SLC37A3	small FC
## IRGQ	small FC
## KIAA1614	small FC
## DSTNP3	small FC
## TRMT112	small FC
## HNRNPF	small FC
## SCRN3	small FC
## SPATC1	small FC
## FAM180A	small FC
## NFIB	small FC
## KLHL28	small FC
## POLR1H	small FC
## SCG3	small FC
## WDR37	small FC
## METTL26	small FC
## MCOLN3	small FC
## C8orf34-AS1	small FC
## OLFM2	small FC
## PARM1	small FC

## CYYR1-AS1	small FC
## IRAG1	small FC
## RPL3P4	small FC
## CFAP300	small FC
## ZNF787	small FC
## SKOR1-AS1	small FC
## DEK	small FC
## LTA4H	small FC
## ARHGEF7	small FC
## CTSE	small FC
## SNORD104	small FC
## C2orf49-DT	small FC
## CEP350	small FC
## LINC02773	small FC
## RBM20	small FC
## GPR33	upregulated
## FLT1P1	small FC
## TRPC7-AS2	small FC
## NRIP3	small FC
## CBL	small FC
## RPS11P5	small FC
## LINC01983	small FC
## TRAF3IP1	small FC
## RPL32P3	small FC
## SULT1C4	small FC
## RFXAP	small FC
## GLTP	small FC
## IRAIN	small FC
## PRADC1	small FC
## SYT15B	small FC
## ADAM21	small FC
## ING3	small FC
## GRID2	small FC
## ANKRD52	small FC
## C1orf122	small FC
## ZNF648	small FC
## OGFRP1	small FC
## SNHG14	small FC
## XPO1	small FC
## MPDU1	small FC
## CATSPER2P1	small FC
## IGKV3D-20	small FC
## RN7SKP276	upregulated
## ENGASE	small FC
## LYPD3	small FC
## SERTM2	small FC
## PPIAP31	small FC
## TMEM174	small FC
## ZNF271P	small FC
## PHACTR4	small FC
## IGFBPL1	small FC
## MEF2B	small FC
## UBXN1	small FC
## ERLIN1	small FC

## LINC02883	small FC
## RAD17	small FC
## PRR34	small FC
## PKD1P4	small FC
## ZNF609	small FC
## NDUFA8	small FC
## UPP1	small FC
## DACT3-AS1	small FC
## COPS9	small FC
## HEXD	small FC
## DNMT3A	small FC
## DGAT1	small FC
## SMC5-DT	small FC
## LINC02596	small FC
## SYK	small FC
## RGS12	small FC
## DNMT3B	small FC
## PDGFA-DT	small FC
## C17orf49	small FC
## BLMH	small FC
## LUNAR1	small FC
## LINC02487	small FC
## RN7SKP16	small FC
## PFDN1	small FC
## ATXN2	small FC
## FOLR1	small FC
## RFNG	small FC
## WTIP	small FC
## HS2ST1	small FC
## ZNF568	small FC
## SEMA6A-AS2	small FC
## SF3B1	small FC
## FAM216A	small FC
## FBXL8	small FC
## MIEN1	small FC
## HECTD2	small FC
## CCDC15-DT	small FC
## INTS7	small FC
## LINC01736	small FC
## LINC03032	upregulated
## SLC13A4	small FC
## ALMS1	small FC
## MRPL48	small FC
## FABP6	small FC
## CFAP298	small FC
## UBAP2L	small FC
## NRAS	small FC
## GALNS	small FC
## LINC03034	small FC
## ZNF793-AS1	small FC
## SMIM3	small FC
## SMPD2	small FC
## GPATCH1	small FC
## CA14	small FC

## RPS6KB2	small FC
## MAOB	small FC
## PHB2	small FC
## NRDE2	small FC
## NBPF26	small FC
## ZNF34	small FC
## PEX7	small FC
## LPIN2	small FC
## ADH6	small FC
## HPS3	small FC
## NBPF3	small FC
## DNAJB9	small FC
## KHDC4	small FC
## GRM5	small FC
## PAICS	small FC
## CBLL1-AS1	small FC
## NFKBIB	small FC
## LINC01839	upregulated
## LIN54	small FC
## SMIM44	small FC
## MSRA-DT	small FC
## ESS2	small FC
## SEM1P1	downregulated
## ATG2B	small FC
## TMEM187	small FC
## DGCR6L	small FC
## KRT17P8	small FC
## HAUS6	small FC
## GOLGA8K	small FC
## WDR5-DT	small FC
## GLP2R	small FC
## CRYZL1	small FC
## MCTP2	small FC
## BCO2	small FC
## POLG-DT	small FC
## FGF14-AS2	small FC
## SYNGAP1	small FC
## LINC02028	small FC
## RASIP1	small FC
## MARF1	small FC
## ADGRL2	small FC
## RIMBP3B	small FC
## NRAD1	small FC
## SAR1B	small FC
## MAPRE3	small FC
## SOWAHD	small FC
## YBEY	small FC
## BCL10-AS1	small FC
## RAP2C-AS1	small FC
## GPC5-AS1	small FC
## LGR4-AS1	small FC
## APOH	n.s.
## RNF122	n.s.
## SNORD6	n.s.

## PEF1	n.s.
## DSP-AS1	n.s.
## PALS1	n.s.
## RAB10	n.s.
## CER1	n.s.
## ATXN2L	n.s.
## PCARE	n.s.
## PCCA-DT	n.s.
## HEPFAL	n.s.
## MRFAP1L2	n.s.
## C19orf73	n.s.
## SLC25A24	n.s.
## SLC25A44	n.s.
## LEMD2	n.s.
## SYNJ2	n.s.
## HSPE1P3	n.s.
## LAMB3	n.s.
## MCUR1	n.s.
## IL17F	n.s.
## NPHP1	n.s.
## RERE-AS1	n.s.
## ROCK2	n.s.
## ENDOV	n.s.
## HEIH	n.s.
## MLF2	n.s.
## PANCR	n.s.
## DUS2	n.s.
## OCEL1	n.s.
## KIF24	n.s.
## RIMBP3C	n.s.
## SERPIND1	n.s.
## OR1L8	n.s.
## GNPTG	n.s.
## RN7SL3	n.s.
## CASC19	n.s.
## NDUFAF2P1	n.s.
## RWDD3-DT	n.s.
## NUP37	n.s.
## SEL1L3	n.s.
## GRPEL2	n.s.
## SIPA1L1	n.s.
## MRPL49	n.s.
## CRTC3	n.s.
## CSF2	n.s.
## NAPA-AS1	n.s.
## ZNF184	n.s.
## PARD6G-AS1	n.s.
## GRIN2B	n.s.
## LINC02973	n.s.
## SMO	n.s.
## RIPPLY1	n.s.
## NCOA2	n.s.
## CFAP73	n.s.
## ZNF280D	n.s.

## TSG101	n.s.
## S100A9	n.s.
## ZNF709	n.s.
## HBS1L	n.s.
## MACO1	n.s.
## TMEM87A	n.s.
## PEX6	n.s.
## CORO2A	n.s.
## NECAB2	n.s.
## NOP14	n.s.
## ZNF555	n.s.
## EDC4	n.s.
## XPC	n.s.
## SAP30L-AS1	n.s.
## PCDHB6	n.s.
## TMPRSS6	n.s.
## GGT2P	n.s.
## KMT2A	n.s.
## ASCC2	n.s.
## ZXDC	n.s.
## CSAG3	n.s.
## MIR222HG	n.s.
## TM2D3	n.s.
## TMTC3	n.s.
## LRRC8C-DT	n.s.
## XPC-AS1	n.s.
## NINL	n.s.
## IGLV2-11	n.s.
## IGKV6-21	n.s.
## RAP1GDS1	n.s.
## ASS1P14	n.s.
## CTNNBL1	n.s.
## COX10-DT	n.s.
## MFSD13A	n.s.
## SON	n.s.
## UBQLNL	n.s.
## TMEM51-AS1	n.s.
## RN7SKP97	n.s.
## TCTE1	n.s.
## FAM20C	n.s.
## GPATCH2L	n.s.
## IL15	n.s.
## TRPV4	n.s.
## C14orf28	n.s.
## SETD1A	n.s.
## SURF4	n.s.
## MYT1L	n.s.
## NCBP1	n.s.
## TMEM109	n.s.
## SNORA74B	n.s.
## APP-DT	n.s.
## APPL1	n.s.
## DCK	n.s.
## LMBR1L	n.s.

## ABHD5	n.s.
## PDXP-DT	n.s.
## ERMAP	n.s.
## DGUOK-AS1	n.s.
## SCRIB	n.s.
## PTCD2	n.s.
## CASP2	n.s.
## HPSE2	n.s.
## COPG2	n.s.
## HRH4	n.s.
## TLE1-DT	n.s.
## VAMP7	n.s.
## CEP192	n.s.
## RTN4RL1	n.s.
## URB2	n.s.
## MRPS7	n.s.
## SMARCA5	n.s.
## RNF181	n.s.
## E2F3	n.s.
## GSN-AS1	n.s.
## MAP2K4P1	n.s.
## HIBCH	n.s.
## ATOH8	n.s.
## NR2F1	n.s.
## UROD	n.s.
## MEF2D	n.s.
## PRAL	n.s.
## MRPS25	n.s.
## DMGDH	n.s.
## RPLP1P6	n.s.
## PGBD4	n.s.
## RPL9	n.s.
## KRI1	n.s.
## CAPN15	n.s.
## ENSA	n.s.
## CYTH2	n.s.
## NGLY1	n.s.
## HTRA2	n.s.
## AGPAT1	n.s.
## SURF2	n.s.
## HOXC10	n.s.
## RPS6KA5	n.s.
## UQCC2	n.s.
## SAMD4B	n.s.
## CTXN3	n.s.
## PDE11A	n.s.
## INSR	n.s.
## RPS25	n.s.
## MCCC1	n.s.
## SIRPD	n.s.
## MTERF3	n.s.
## B3GAT1-DT	n.s.
## INTS9	n.s.
## NOC4L	n.s.

## SERF1B	n.s.
## DLX4	n.s.
## NEMF	n.s.
## WASH6P	n.s.
## UNG	n.s.
## S100A10	n.s.
## ARCN1	n.s.
## ALPK2	n.s.
## RELL1	n.s.
## NR1I2	n.s.
## NDUFA1	n.s.
## NKAPL	n.s.
## HMGN1P17	n.s.
## LINC02752	n.s.
## SERPINC1	n.s.
## ECT2	n.s.
## FAM218A	n.s.
## CARNMT1	n.s.
## GLI4	n.s.
## TMEM63C	n.s.
## MID2	n.s.
## PRDX5	n.s.
## TDRD7	n.s.
## LCA5	n.s.
## AFAP1L2	n.s.
## HELZ2	n.s.
## GTF2H3	n.s.
## ZNF730	n.s.
## SLC51A	n.s.
## DHRS11	n.s.
## KIAA1217	n.s.
## OCM	n.s.
## DNPEP-AS1	n.s.
## ARG2	n.s.
## USP37	n.s.
## UBTD1	n.s.
## HDDC3	n.s.
## JARID2	n.s.
## PF4V1	n.s.
## TRAM2-AS1	n.s.
## NDUFB4	n.s.
## P2RY8	n.s.
## SRP68	n.s.
## COLEC11	n.s.
## RPL26	n.s.
## MPPED2-AS1	n.s.
## SND1-IT1	n.s.
## LBHD2	n.s.
## ARL6	n.s.
## KBTBD11-AS1	n.s.
## VPS53	n.s.
## RPAP3	n.s.
## RNF212	n.s.
## TGM7	n.s.

## SARS2	n.s.
## HK1	n.s.
## LCAT	n.s.
## H2BC6-AS1	n.s.
## PIPSL	n.s.
## REL-DT	n.s.
## LINC02631	n.s.
## FAM83D	n.s.
## MIS18A-AS1	n.s.
## CMBL	n.s.
## H2BC12	n.s.
## PHLDA1-DT	n.s.
## AKAP8L	n.s.
## ABHD1	n.s.
## TMEM54	n.s.
## PPARG	n.s.
## HYPK	n.s.
## LINC02036	n.s.
## USHBP1	n.s.
## SOX3	n.s.
## LPP-AS2	n.s.
## TACR1	n.s.
## ATL2	n.s.
## SYCE2	n.s.
## STOML2	n.s.
## DOCK8-AS2	n.s.
## RPL32P16	n.s.
## PRR5-ARHGAP8	n.s.
## RNF133	n.s.
## CST1	n.s.
## CCDC168	n.s.
## FOSL2-AS1	n.s.
## WT1-AS	n.s.
## PPIAP3	n.s.
## RNU4-23P	n.s.
## TBP	n.s.
## IRAK4	n.s.
## HSD17B6	n.s.
## TSPOAP1	n.s.
## IFNAR2	n.s.
## PDE1C	n.s.
## CHAMP1	n.s.
## DAB1	n.s.
## MIR573	n.s.
## BEX1	n.s.
## MGA	n.s.
## NDUFA6	n.s.
## FTH1P2	n.s.
## FOXF1	n.s.
## CHCHD5	n.s.
## MANEAL	n.s.
## DEFB1	n.s.
## LINC01205	n.s.
## RNF144B	n.s.

## USP47	n.s.
## RNASEH2CP1	n.s.
## SMC03	n.s.
## ADAM11	n.s.
## PDS5A	n.s.
## CLASP1	n.s.
## LTO1	n.s.
## PIANP	n.s.
## RANBP2	n.s.
## NLGN1	n.s.
## EPHA10	n.s.
## TRAV39	n.s.
## NUB1	n.s.
## LINC00707	n.s.
## ATXN2-AS	n.s.
## EMSY	n.s.
## GPR89A	n.s.
## PCBD2	n.s.
## HOXA13	n.s.
## FRG1BP	n.s.
## ATAD3A	n.s.
## CD101-AS1	n.s.
## P2RX2	n.s.
## SYT9-AS1	n.s.
## LINC01754	n.s.
## FSIP1	n.s.
## MANEA-DT	n.s.
## SMIM35	n.s.
## GPIHBP1	n.s.
## PCNX3	n.s.
## FCHO2-DT	n.s.
## COA4	n.s.
## PTGES3P4	n.s.
## PINX1	n.s.
## DBTP1	n.s.
## IL18	n.s.
## CPSF7	n.s.
## LINC01277	n.s.
## PMS2CL	n.s.
## MAPK15	n.s.
## THAP7-AS1	n.s.
## ZNF224	n.s.
## XPO4	n.s.
## ACOT6	n.s.
## CREG1	n.s.
## BFAR	n.s.
## LINC01234	n.s.
## SOX7	n.s.
## GCDH	n.s.
## MPST	n.s.
## MEP1B	n.s.
## MRPS31	n.s.
## SLC35B2	n.s.
## SPOPL-DT	n.s.

## SPINK5	n.s.
## RNF20	n.s.
## RBM48	n.s.
## DENND2B	n.s.
## CFAP119	n.s.
## NRIP1	n.s.
## LUC7L3	n.s.
## CTDNEP1P1	n.s.
## ZC3H6	n.s.
## PI4K2A	n.s.
## MTCO1P12	n.s.
## BANCR	n.s.
## GIT1	n.s.
## SEPTIN7-DT	n.s.
## GOLGA8M	n.s.
## KRT18P5	n.s.
## PSORS1C2	n.s.
## STX6	n.s.
## RYBP	n.s.
## TRIM10	n.s.
## API5P1	n.s.
## TCTN3	n.s.
## DUOXA2	n.s.
## SCARF1	n.s.
## MEIOB	n.s.
## RBMS3-AS2	n.s.
## AMELY	n.s.
## IPO7P2	n.s.
## PDK1	n.s.
## SLC38A9	n.s.
## BAK1	n.s.
## PPP1R15B-AS1	n.s.
## RN7SL258P	n.s.
## PSMG4	n.s.
## CAPN5	n.s.
## BTF3P16	n.s.
## TDRKH	n.s.
## SCP2	n.s.
## NPAP1	n.s.
## NDUFAF4P3	n.s.
## ADCY4	n.s.
## FUNDC1	n.s.
## TRIM67	n.s.
## INSL5	n.s.
## TAF9P3	n.s.
## HEATR9	n.s.
## WDR47	n.s.
## SSTR3	n.s.
## F11	n.s.
## LRRC37A	n.s.
## HEPHL1	n.s.
## PIK3C2G	n.s.
## TNFSF10	n.s.
## CHCHD2P6	n.s.

## ZFP36L2	n.s.
## MAVS	n.s.
## CASD1	n.s.
## RREB1	n.s.
## BUD31	n.s.
## HLA-A	n.s.
## CCDC65	n.s.
## PTGES2	n.s.
## CEBPB-AS1	n.s.
## ZNF324	n.s.
## ENTPD3	n.s.
## HPYR1	n.s.
## HCG4	n.s.
## CDK3	n.s.
## STAM-DT	n.s.
## COX16	n.s.
## FAIM2	n.s.
## TAL1	n.s.
## C1QBP	n.s.
## UBE2J1	n.s.
## CASP8AP2	n.s.
## IFIH1	n.s.
## ZNF890P	n.s.
## SLC22A11	n.s.
## PEX16	n.s.
## LINC00377	n.s.
## ALG1L10P	n.s.
## NEK4	n.s.
## PCDHGB3	n.s.
## CROCCP3	n.s.
## AJUBA	n.s.
## SNORA66	n.s.
## FOXO6	n.s.
## H3C3	n.s.
## TNNI3K	n.s.
## THADA	n.s.
## RECQL5	n.s.
## PLPP1	n.s.
## IRS1	n.s.
## FAM87B	n.s.
## DERA	n.s.
## ENPP7P12	n.s.
## PUSL1	n.s.
## GPR155	n.s.
## ZNF652-AS1	n.s.
## EMSY-DT	n.s.
## PTBP3	n.s.
## STPG1	n.s.
## C11orf52	n.s.
## BRPF3-AS1	n.s.
## LINC02516	n.s.
## ERCC8	n.s.
## MIR4458HG	n.s.
## SNRPC	n.s.

## PCCB	n.s.
## MPHOSPH6	n.s.
## RHBTL3	n.s.
## WRNIP1	n.s.
## PCDHB9	n.s.
## CCNL1	n.s.
## WDFY1	n.s.
## LINC02416	n.s.
## ZNF112	n.s.
## POMP	n.s.
## RAG2	n.s.
## ZNF282	n.s.
## VWC2L	n.s.
## HEXIM2-AS1	n.s.
## AZU1	n.s.
## PCM1	n.s.
## GCSH	n.s.
## REELD1	n.s.
## RANBP10	n.s.
## RASA4	n.s.
## NKAIN3	n.s.
## FUT2	n.s.
## KIF5B	n.s.
## LINC00663	n.s.
## MRPS9-AS1	n.s.
## METTL9	n.s.
## DDX46	n.s.
## LARS2	n.s.
## TSSK3	n.s.
## C10orf67-AS1	n.s.
## ALG13	n.s.
## METTL21A	n.s.
## HES5	n.s.
## ADH1C	n.s.
## EEF1DP1	n.s.
## RLIM	n.s.
## ABCA15P	n.s.
## EEF1A1P4	n.s.
## TIRAP	n.s.
## PDE7A-DT	n.s.
## TARS1-DT	n.s.
## MRNIP-DT	n.s.
## TBC1D10B	n.s.
## VAMP4	n.s.
## KCTD19	n.s.
## UBE2L3	n.s.
## ATP5PD	n.s.
## EEF1DP2	n.s.
## LINC02234	n.s.
## MIR6753	n.s.
## SLC13A2	n.s.
## CDK8	n.s.
## LRRC37A2	n.s.
## HSCB	n.s.

## EXOSC6	n.s.
## SLC25A4	n.s.
## DVL2	n.s.
## FXR2	n.s.
## NHERF4	n.s.
## TACO1	n.s.
## PPM1E	n.s.
## PDCD6-DT	n.s.
## C3orf85	n.s.
## UBE3B	n.s.
## AFG2B	n.s.
## RNA5SP470	n.s.
## CEP78	n.s.
## LINC02011	n.s.
## MFSD12-AS1	n.s.
## RHCG	n.s.
## RPSAP19	n.s.
## SRD5A3-AS1	n.s.
## ERP29	n.s.
## CABCOCO1	n.s.
## WBP1L	n.s.
## MTFR1	n.s.
## DFFBP1	n.s.
## NPIPA5	n.s.
## GNL1	n.s.
## TSHZ1	n.s.
## ZSCAN5A-AS1	n.s.
## GRN	n.s.
## RAB8A	n.s.
## SCYL2	n.s.
## IRF5	n.s.
## DAZL	n.s.
## TROAP-AS1	n.s.
## DCAF8-DT	n.s.
## MMAA	n.s.
## ERAP2	n.s.
## HSPE1P2	n.s.
## GRIA4	n.s.
## LINC01028	n.s.
## RPL7AP22	n.s.
## TRBV6-4	n.s.
## RGCC	n.s.
## TIAL1	n.s.
## PHLDB3	n.s.
## FHP2	n.s.
## RASGRF2	n.s.
## LINC01220	n.s.
## LINC01341	n.s.
## SH2D4A	n.s.
## TMA7B	n.s.
## VIPR1	n.s.
## GEMIN7	n.s.
## LRRC1	n.s.
## LINC02569	n.s.

## LINC03014	n.s.
## RCAN3AS	n.s.
## NCMAP-DT	n.s.
## GNA15-DT	n.s.
## PLEKHN1	n.s.
## YBX3P1	n.s.
## LHFPL3	n.s.
## GAPDHP72	n.s.
## LINC02558	n.s.
## TMEM89	n.s.
## CRKL	n.s.
## APTR	n.s.
## INTS14	n.s.
## CFAP161	n.s.
## DTNB	n.s.
## GPSM1	n.s.
## KIAA0232	n.s.
## EFR3B	n.s.
## LINC01226	n.s.
## ASB13	n.s.
## KLK1	n.s.
## RNASEH2C	n.s.
## NPM1P39	n.s.
## WAC-AS1	n.s.
## STYK1	n.s.
## ADORA2A	n.s.
## NDC1	n.s.
## ANKRD17-DT	n.s.
## BBX	n.s.
## YES1	n.s.
## MRE11	n.s.
## FAM53B-AS1	n.s.
## COQ3	n.s.
## CTTNBP2NL	n.s.
## CNOT3	n.s.
## TREH	n.s.
## SMARCA5-AS1	n.s.
## VPS41	n.s.
## TPRG1L	n.s.
## TMEM100	n.s.
## ANKK1	n.s.
## RPL10P7	n.s.
## EXTL3	n.s.
## TRIB2	n.s.
## FDXACB1	n.s.
## EDC3	n.s.
## RAD23B	n.s.
## DENND4B	n.s.
## MCM3	n.s.
## LMO7	n.s.
## LNX1-AS2	n.s.
## MOBP	n.s.
## RNF168	n.s.
## RC3H2	n.s.

## UNC13A	n.s.
## RGS9	n.s.
## MBLAC2	n.s.
## SLC12A8	n.s.
## ATG16L2	n.s.
## NUP155	n.s.
## EPN2	n.s.
## ANXA4	n.s.
## ZNF10	n.s.
## Clorf141	n.s.
## RGS9BP	n.s.
## NR1H2	n.s.
## CGRRF1	n.s.
## ARHGEF10	n.s.
## PHAF1	n.s.
## TTTY14	n.s.
## GCNA	n.s.
## ZNF443	n.s.
## SCO1	n.s.
## IQCN	n.s.
## MIR181A2HG	n.s.
## MEA1	n.s.
## NAF1	n.s.
## GBP7	n.s.
## TOMM20L-DT	n.s.
## ACO2	n.s.
## SAP18	n.s.
## CHCHD1	n.s.
## PIGAP1	n.s.
## SIAH3	n.s.
## HSPA2-AS1	n.s.
## INO80E	n.s.
## NPY2R	n.s.
## LINC00189	n.s.
## EEF1A1P23	n.s.
## FTCDNL1	n.s.
## CDK13	n.s.
## TMEM256	n.s.
## ZSWIM5	n.s.
## MYDGF	n.s.
## MIR499B	n.s.
## FOXO6-AS1	n.s.
## CFAP53	n.s.
## ASB6	n.s.
## EIF4BP6	n.s.
## SNX9	n.s.
## ZNF266	n.s.
## TPGS1	n.s.
## NUDT19-DT	n.s.
## WASHC3	n.s.
## LINC02816	n.s.
## MYO3A	n.s.
## ARPC3	n.s.
## SMAD3	n.s.

## ZNF544	n.s.
## SMIM14-DT	n.s.
## DHRS1	n.s.
## SNF8	n.s.
## ZNF596	n.s.
## FCAMR	n.s.
## PEMT	n.s.
## DDI2	n.s.
## LAMTOR4	n.s.
## TENT4B	n.s.
## LRPAP1	n.s.
## LINC01828	n.s.
## FRG1HP	n.s.
## RRN3P2	n.s.
## ARHGEF26	n.s.
## SNHG20	n.s.
## RPSAP36	n.s.
## CNTNAP4	n.s.
## OGFOD1P1	n.s.
## SLC35E4	n.s.
## EPHA4	n.s.
## TPTEP2	n.s.
## DNAJC7	n.s.
## VSTM2B	n.s.
## IMPA1P1	n.s.
## WDR59	n.s.
## ACTG1P1	n.s.
## PARGP1	n.s.
## MUC4	n.s.
## ANKRA2	n.s.
## RBM8A	n.s.
## LINC02351	n.s.
## LINC02196	n.s.
## SMKR1	n.s.
## XBP1P1	n.s.
## LMF1-AS1	n.s.
## ERVE-1	n.s.
## RPL39P16	n.s.
## SMG1P5	n.s.
## SCNN1G	n.s.
## OR7E128P	n.s.
## OTUB1	n.s.
## NUAK2	n.s.
## ALG3	n.s.
## PJA2	n.s.
## VCPIP1	n.s.
## GINS3	n.s.
## LINC01752	n.s.
## DNAJC21	n.s.
## DDX41	n.s.
## CEP85	n.s.
## CTC1	n.s.
## CPP	n.s.
## ASCC1	n.s.

## YES1P1	n.s.
## ASCL1	n.s.
## DUS3L	n.s.
## EDN3	n.s.
## MIR10B	n.s.
## IRX6	n.s.
## BAIAP2L2	n.s.
## IQCE	n.s.
## HSPA8P5	n.s.
## MIR635	n.s.
## TFEC	n.s.
## FEM1B	n.s.
## MTATP6P2	n.s.
## LINC03018	n.s.
## MALT1-AS1	n.s.
## ZNF252P-AS1	n.s.
## MRPS27	n.s.
## TENM2	n.s.
## STH	n.s.
## ADGRG7	n.s.
## NTAQ1	n.s.
## EEF2KMT	n.s.
## PSMA8	n.s.
## LEPR	n.s.
## RPL29P19	n.s.
## TOPORS	n.s.
## CALM2P2	n.s.
## H4C5	n.s.
## IDH1-AS1	n.s.
## UBTF	n.s.
## KAAG1	n.s.
## SH2D6	n.s.
## YY1AP1	n.s.
## MAN1A2	n.s.
## FAM242F	n.s.
## HSP90AB1	n.s.
## TMEM252-DT	n.s.
## SPIRE1	n.s.
## ZNF341	n.s.
## BCAR3-AS1	n.s.
## ANKRD61	n.s.
## IGH-A2	n.s.
## DLG1-AS1	n.s.
## GPT2	n.s.
## KCNMB2-AS1	n.s.
## UBE2O	n.s.
## SLC18A2-AS1	n.s.
## KIAA0753	n.s.
## TIMM23B-AGAP6	n.s.
## BRPF3	n.s.
## STAG3L4	n.s.
## BCLAF1	n.s.
## CYB5D2	n.s.
## AP1G2	n.s.

## ARHGAP39	n.s.
## UAP1	n.s.
## LSM6	n.s.
## GPR25	n.s.
## CTXND1	n.s.
## LPAR2	n.s.
## EIF4A1P2	n.s.
## CENPO	n.s.
## PDLIM5	n.s.
## CDC14A	n.s.
## DHCR24	n.s.
## FAM193B	n.s.
## RHOQP2	n.s.
## UQCRFS1-DT	n.s.
## DCAF13	n.s.
## AGPAT3	n.s.
## ABCC8	n.s.
## ATP5MGP2	n.s.
## CLEC1A	n.s.
## OXER1	n.s.
## RPS24P9	n.s.
## GIN1	n.s.
## TCAF1P1	n.s.
## HMGB1P31	n.s.
## NFYC-AS1	n.s.
## MIR190A	n.s.
## YWHAZP4	n.s.
## FBXO3	n.s.
## ENPP2	n.s.
## ARRDC1	n.s.
## TMED6	n.s.
## H2AC20	n.s.
## TRBV7-7	n.s.
## ABT1	n.s.
## GJD2-DT	n.s.
## RNU6-117P	n.s.
## EIF4HP2	n.s.
## ANO10	n.s.
## LINC02679	n.s.
## SPAM1	n.s.
## SUMF2	n.s.
## NAP1L3	n.s.
## CYP2C18	n.s.
## ARID3A	n.s.
## CCP110	n.s.
## CYP51A1P1	n.s.
## TBC1D12	n.s.
## HSPA5P1	n.s.
## FOLH1	n.s.
## MAF	n.s.
## CHGA	n.s.
## IGHV2-26	n.s.
## ZNF814	n.s.
## RPS27A	n.s.

## DUT-AS1	n.s.
## GGA1	n.s.
## PADI3	n.s.
## BNIP3	n.s.
## SIX5	n.s.
## RAB40B	n.s.
## NAXE	n.s.
## ZNF707	n.s.
## NSA2P7	n.s.
## SPINK1	n.s.
## LINC03052	n.s.
## TREX2	n.s.
## KCNQ2	n.s.
## FSD1L	n.s.
## TXNDC17	n.s.
## GAN	n.s.
## LINC02621	n.s.
## BRCC3P1	n.s.
## ATF7	n.s.
## TCEA3	n.s.
## IMPDH1P5	n.s.
## ZNF883	n.s.
## ABCB8	n.s.
## CCDC74B	n.s.
## KLF2P1	n.s.
## TCAF2P1	n.s.
## LINC01315	n.s.
## HUS1	n.s.
## IFIT1B	n.s.
## SERPINB4	n.s.
## PRKXP1	n.s.
## TTBK2	n.s.
## ZNF444	n.s.
## RNF182	n.s.
## IGHV30R16-9	n.s.
## MTRFR	n.s.
## DYNC1H1	n.s.
## STIM2	n.s.
## MYO1D	n.s.
## JADE3	n.s.
## PAQR6	n.s.
## SMIM13	n.s.
## TOX-DT	n.s.
## DNAH14	n.s.
## PTPRVP	n.s.
## MRPL42P1	n.s.
## TRBV12-5	n.s.
## MIR450A1	n.s.
## KIAA1958	n.s.
## GNB1	n.s.
## BCORP1	n.s.
## LINC02018	n.s.
## RPRD2	n.s.
## NEK1	n.s.

## FAM72C	n.s.
## TGFB1I1	n.s.
## AZI2	n.s.
## MOB2	n.s.
## DНАH6	n.s.
## CKLF-CMTM1	n.s.
## UBE2E3-DT	n.s.
## NUDT16L2P	n.s.
## INCA1	n.s.
## MIR4668	n.s.
## RNU6-945P	n.s.
## RPP25	n.s.
## P3H4	n.s.
## ZNF182	n.s.
## RPP38-DT	n.s.
## DINOL	n.s.
## DLGAP1-AS2	n.s.
## DHDH	n.s.
## PRPF3	n.s.
## ZNF627	n.s.
## ZSCAN23	n.s.
## BCAP31	n.s.
## RNU6-46P	n.s.
## RPL39P36	n.s.
## POLA1	n.s.
## SUPT3H	n.s.
## EXOC5P1	n.s.
## ZNF711	n.s.
## ESR2	n.s.
## PIGX	n.s.
## ST3GAL6-AS1	n.s.
## TRMT1L	n.s.
## TMEM130	n.s.
## UBALD2	n.s.
## ATP6V1D	n.s.
## ZNF483	n.s.
## FNDC11	n.s.
## ULBP3	n.s.
## RPL10P15	n.s.
## THY1-AS1	n.s.
## LRATD2	n.s.
## GK5	n.s.
## GUCY2D	n.s.
## ALDH4A1	n.s.
## BANF1P2	n.s.
## SMARCD2	n.s.
## PCDHGA6	n.s.
## SWAP70	n.s.
## SSBP3P1	n.s.
## RNA5SP111	n.s.
## RORA	n.s.
## MSRB1	n.s.
## NBPF12	n.s.
## THBS1-IT1	n.s.

## TMEM253	n.s.
## ACTN1-DT	n.s.
## GPR173	n.s.
## LRRC4C	n.s.
## MTDH	n.s.
## KIFC2	n.s.
## LINC03020	n.s.
## MIR106AHG	n.s.
## LINC01451	n.s.
## CTAGE1	n.s.
## ZNF675	n.s.
## ELOVL2	n.s.
## TJP1	n.s.
## LRPPRC	n.s.
## NPW	n.s.
## STOML1	n.s.
## BEND3P2	n.s.
## SMARCA1	n.s.
## TXNRD3	n.s.
## TSPAN15	n.s.
## GLP1R	n.s.
## TGIF1	n.s.
## TIGD4	n.s.
## PANK1	n.s.
## DPP10-AS1	n.s.
## LINC00622	n.s.
## ABHD14A	n.s.
## UBAP2	n.s.
## DPH2	n.s.
## CERS3	n.s.
## LINC02076	n.s.
## KDM4C	n.s.
## NDUFA2	n.s.
## LINC02725	n.s.
## FBXW11P1	n.s.
## VPS13D	n.s.
## ZNF366	n.s.
## ZNF169	n.s.
## LINC02664	n.s.
## KCNN2	n.s.
## ESPN	n.s.
## CT45A11P	n.s.
## NOL4L	n.s.
## SDSL	n.s.
## ACTR5	n.s.
## DDN	n.s.
## CFHR4	n.s.
## SMPD4BP	n.s.
## EIF1B	n.s.
## AKAP17A	n.s.
## UNC13C	n.s.
## RNU7-45P	n.s.
## COPS7A	n.s.
## NRG4	n.s.

## TSC1	n.s.
## ZNF276	n.s.
## ZFP91	n.s.
## ZNF56P	n.s.
## ZNF704	n.s.
## PRAF2	n.s.
## CLK1	n.s.
## LINC-PINT	n.s.
## ASAHI2	n.s.
## UICLM	n.s.
## AQP7P2	n.s.
## NSFL1C	n.s.
## FABP3	n.s.
## CAMTA2-AS1	n.s.
## RAB43	n.s.
## ZC3H11A	n.s.
## RWDD3	n.s.
## DLEU2L	n.s.
## SLC5A4-AS1	n.s.
## FAM20B	n.s.
## GSTA1	n.s.
## IVL	n.s.
## CT69	n.s.
## UXI	n.s.
## SRGAP3-AS2	n.s.
## MINK1	n.s.
## RAB5C	n.s.
## PNPLA2	n.s.
## FDPS	n.s.
## GSTO1	n.s.
## CSRNP3	n.s.
## SAMD11	n.s.
## ZDHHC22	n.s.
## TTC39C-AS1	n.s.
## ANGEL1	n.s.
## EPX	n.s.
## INHBA-AS1	n.s.
## RPS28P7	n.s.
## THOC1	n.s.
## PFN2-AS1	n.s.
## IKZF2	n.s.
## PRR19	n.s.
## KRT16P6	n.s.
## LINC02728	n.s.
## SERBP1P6	n.s.
## TBKBP1	n.s.
## SYT4	n.s.
## SOS1-IT1	n.s.
## POU2F3	n.s.
## CLEC4E	n.s.
## LRP5	n.s.
## ZBTB39	n.s.
## SLC13A5	n.s.
## BRD7P2	n.s.

## TRIM41	n.s.
## C8A	n.s.
## LINC02482	n.s.
## RTTN	n.s.
## OTOP2	n.s.
## GPATCH3	n.s.
## CRYBB3	n.s.
## MCM5	n.s.
## MAP7D2	n.s.
## DCAF7	n.s.
## CEP112	n.s.
## CEMIP2	n.s.
## FUT8-AS1	n.s.
## AURKA	n.s.
## RCN1P2	n.s.
## ZFAND3-DT	n.s.
## GLIS2	n.s.
## PAEP	n.s.
## GABRR2	n.s.
## ODC1-DT	n.s.
## RBMLX1	n.s.
## RPTN	n.s.
## CLCN6	n.s.
## SBNO1-AS1	n.s.
## TESK1	n.s.
## ANXA3	n.s.
## LINC02731	n.s.
## GPR87	n.s.
## ARB2BP	n.s.
## DIO3OS	n.s.
## IKBKG	n.s.
## PITX3	n.s.
## RPL8	n.s.
## INTS15	n.s.
## ADGRG3	n.s.
## MPP4	n.s.
## LINC02284	n.s.
## CDK19	n.s.
## RPS21-DT	n.s.
## FZD4	n.s.
## VPS28	n.s.
## CACYBP	n.s.
## GTPBP10	n.s.
## TRIM24	n.s.
## DENND6A	n.s.
## QTRT1	n.s.
## IGHV3-72	n.s.
## UROC1	n.s.
## PNPLA3	n.s.
## LINC01558	n.s.
## SIRT7	n.s.
## LINC01987	n.s.
## PLD1	n.s.
## LINC01118	n.s.

## NUFIP2	n.s.
## RC3H1-DT	n.s.
## BABAM2	n.s.
## ECI1	n.s.
## MTND3P24	n.s.
## MTCH2P1	n.s.
## PPIAP45	n.s.
## SHARPIN	n.s.
## RPL36P14	n.s.
## ZIK1	n.s.
## TMEM221	n.s.
## RRM2P3	n.s.
## TTC38	n.s.
## IL7	n.s.
## SENP3	n.s.
## NBEAL2	n.s.
## MAILR	n.s.
## KRT18P2	n.s.
## VSIG2	n.s.
## ZNF731P	n.s.
## PPP1R1B	n.s.
## RNF220	n.s.
## NARF	n.s.
## ZBTB3	n.s.
## DUT	n.s.
## MRM1	n.s.
## WDR35	n.s.
## RSBN1L	n.s.
## PCDHGA1	n.s.
## RASSF10-DT	n.s.
## CCDC144CP	n.s.
## DDX51	n.s.
## SELENOS	n.s.
## ATPAF1	n.s.
## MANF	n.s.
## FAM95B1	n.s.
## OR2A1	n.s.
## ZNF799	n.s.
## TTI1	n.s.
## CFAP206	n.s.
## VPS33B-DT	n.s.
## STARD10	n.s.
## TRPS1	n.s.
## RAET1E	n.s.
## CDKN2C	n.s.
## HEATR5B	n.s.
## NPAP1P9	n.s.
## NXPE4	n.s.
## KCNN1	n.s.
## LRP1B	n.s.
## CLYBL	n.s.
## ZDHHC15	n.s.
## WDR45B	n.s.
## PCDHGB2	n.s.

## LINC01115	n.s.
## FKBP14-AS1	n.s.
## ENTREP3	n.s.
## NUTM2D	n.s.
## LRRC37B	n.s.
## BAALC-AS2	n.s.
## COL25A1	n.s.
## BTN2A2	n.s.
## SAP30	n.s.
## NUDT6	n.s.
## INTS6	n.s.
## PIGB	n.s.
## TMEM106A	n.s.
## PCDH11X	n.s.
## ABCG5	n.s.
## RPS28	n.s.
## CCT4	n.s.
## KIAA1586	n.s.
## RN7SL566P	n.s.
## SORBS2	n.s.
## RPL26L1	n.s.
## E2F3P2	n.s.
## NPM1P37	n.s.
## MIR5581	n.s.
## DYNLRB2-AS1	n.s.
## TTLL12	n.s.
## CCDC7	n.s.
## ASB17	n.s.
## C2orf50	n.s.
## DMAC1	n.s.
## TRDJ1	n.s.
## PPP1R8	n.s.
## TRAPPC2	n.s.
## C1orf87	n.s.
## TMEM242	n.s.
## CDK20	n.s.
## XRRA1	n.s.
## LINC01976	n.s.
## ZNF571-AS1	n.s.
## IGKJ4	n.s.
## BEND3	n.s.
## SNX1	n.s.
## OR4D1	n.s.
## PLAAT3	n.s.
## LINC01564	n.s.
## PAX6	n.s.
## TMEM135	n.s.
## CD55	n.s.
## CREBL2	n.s.
## PIP4P1	n.s.
## KIAA0087	n.s.
## LINC01349	n.s.
## CNTNAP3P7	n.s.
## MIR3661	n.s.

## NOXA1	n.s.
## MED7	n.s.
## UPK2	n.s.
## LMF2	n.s.
## ULK1	n.s.
## NCEH1	n.s.
## RWDD4P2	n.s.
## LDHBP2	n.s.
## INTS1	n.s.
## MTND4LP1	n.s.
## CHCHD6	n.s.
## LINGO4	n.s.
## TMEM134	n.s.
## PTPN13	n.s.
## MAPK8IP1	n.s.
## TAS2R14	n.s.
## C20orf204	n.s.
## FTH1	n.s.
## SLC6A1	n.s.
## PRPF6	n.s.
## GPS1	n.s.
## PDE6B	n.s.
## CATIP-AS2	n.s.
## DOLPP1	n.s.
## ZNF689	n.s.
## LARP1	n.s.
## PTAR1	n.s.
## LINC00381	n.s.
## VIRMA	n.s.
## BTBD19	n.s.
## EVC2	n.s.
## NDUFAF6	n.s.
## CCDC137	n.s.
## CAPN9	n.s.
## ZNF32-AS2	n.s.
## RNU6-703P	n.s.
## RLN3	n.s.
## LINC02847	n.s.
## NME7	n.s.
## ELAVL1	n.s.
## EBNA1BP2	n.s.
## IGKJ3	n.s.
## DNAJC22	n.s.
## VPS35L	n.s.
## POLR1HASP	n.s.
## MIR331	n.s.
## SNRPA1-DT	n.s.
## ATP9B	n.s.
## NOTCH2NLA	n.s.
## MIA3	n.s.
## DEFA4	n.s.
## HOXB3	n.s.
## SERPINB8	n.s.
## LRRK2	n.s.

## PKD2	n.s.
## MSTO2P	n.s.
## FAM86HP	n.s.
## DAGLA	n.s.
## MIR5195	n.s.
## SHC2	n.s.
## POLE	n.s.
## IRF7	n.s.
## FNDC3B	n.s.
## PPP1R35	n.s.
## ANKRD55	n.s.
## RPS6P25	n.s.
## UFD1	n.s.
## SCN11A	n.s.
## ZSCAN12	n.s.
## COQ10A	n.s.
## UPF3AP3	n.s.
## WDR13	n.s.
## SLC7A6	n.s.
## IGHV3-20	n.s.
## SYT6	n.s.
## DLK2	n.s.
## PSTK	n.s.
## SAYSD1	n.s.
## ZNF559-ZNF177	n.s.
## MGLL	n.s.
## GLCCI1	n.s.
## CHURC1	n.s.
## TFB2M	n.s.
## PROSER2-AS1	n.s.
## MOGAT3	n.s.
## PKN2	n.s.
## LYPLALL1-DT	n.s.
## RPRML	n.s.
## LHX1-DT	n.s.
## PEX3	n.s.
## TANC1	n.s.
## SYT11	n.s.
## CNDP1	n.s.
## RAB33B	n.s.
## ADAM20P1	n.s.
## IL6ST-DT	n.s.
## SNHG19	n.s.
## FAHD2B	n.s.
## LINC01707	n.s.
## RN7SKP70	n.s.
## MYSM1	n.s.
## HTR2A-AS1	n.s.
## UGDH-AS1	n.s.
## TSR2	n.s.
## DHRS12	n.s.
## AMN	n.s.
## DGKZP1	n.s.
## GABRB2	n.s.

## OSBPL8	n.s.
## SERPINB6	n.s.
## SEPTIN10	n.s.
## SLC26A7	n.s.
## SPG11	n.s.
## LINC00574	n.s.
## ZNF736	n.s.
## CNTNAP3P2	n.s.
## SHROOM3-AS1	n.s.
## ZNF571	n.s.
## PCDH12	n.s.
## FAM245A	n.s.
## HNRNPH1	n.s.
## RMI2	n.s.
## DHX57	n.s.
## UBE2FP1	n.s.
## MDN1	n.s.
## LINC02885	n.s.
## ZFP30	n.s.
## PPP1CA	n.s.
## PSKH2	n.s.
## PSG5	n.s.
## TINAG	n.s.
## CYP2T1P	n.s.
## C6orf62	n.s.
## CLIP3	n.s.
## NEK5	n.s.
## SFT2D1	n.s.
## LINC02916	n.s.
## FOXD3-AS1	n.s.
## SPNS3	n.s.
## NCOR1	n.s.
## JAKMIP3	n.s.
## PYDC2-AS1	n.s.
## PRR35	n.s.
## MINCR	n.s.
## MBD1	n.s.
## MPP2	n.s.
## PUF60	n.s.
## SOCS1	n.s.
## PTGER2	n.s.
## RBM42	n.s.
## ZBTB8OSP2	n.s.
## CENPBD1P	n.s.
## ULBP2	n.s.
## GMDS-DT	n.s.
## AQP1	n.s.
## HMGN1	n.s.
## PUDP	n.s.
## APPAT	n.s.
## TASOR2	n.s.
## POC5	n.s.
## GULOP	n.s.
## ZG16	n.s.

## GPR37L1	n.s.
## CERS5	n.s.
## FLVCR2-AS1	n.s.
## CNBP	n.s.
## CYP4F2	n.s.
## FAM177B	n.s.
## CBR1-AS1	n.s.
## BCRP8	n.s.
## SLC35E2A	n.s.
## DENND6B	n.s.
## HERC2P4	n.s.
## DUX4L50	n.s.
## OR10AB1P	n.s.
## LINC02768	n.s.
## FAM209A	n.s.
## NOVA1	n.s.
## TMEM185A	n.s.
## UBE2J2	n.s.
## DDN-AS1	n.s.
## SLC25A1	n.s.
## H4C4	n.s.
## XYLB	n.s.
## IREB2	n.s.
## CELP	n.s.
## TMPRSS11BNL	n.s.
## LINC02237	n.s.
## RPS10	n.s.
## RPS7	n.s.
## IGKV1-6	n.s.
## SMNDC1	n.s.
## HAGHL	n.s.
## ERVK9-11	n.s.
## MSMP	n.s.
## POLDIP3	n.s.
## HARS2	n.s.
## VWA8-AS1	n.s.
## ZNF554	n.s.
## CORT	n.s.
## LINC01713	n.s.
## ANKRD33	n.s.
## LINC01491	n.s.
## RAB12	n.s.
## ZNF727	n.s.
## PDZK1	n.s.
## RRM2B	n.s.
## PPAN	n.s.
## TMEM120A	n.s.
## BOK-AS1	n.s.
## DDHD2	n.s.
## RER1	n.s.
## ASS1P12	n.s.
## NES	n.s.
## BICRAL	n.s.
## GOLGA8B	n.s.

## SH3RF1	n.s.
## CBY2	n.s.
## EGFL7	n.s.
## NDUFS3	n.s.
## LINC01619	n.s.
## GALNT11	n.s.
## PPP4R2	n.s.
## PRKAR1B	n.s.
## NGDN	n.s.
## CTSB	n.s.
## TATDN3	n.s.
## RAB40A	n.s.
## ZNF778	n.s.
## FOXD1	n.s.
## STMP1	n.s.
## HIC2	n.s.
## POLM	n.s.
## SLC22A23	n.s.
## NUDT22	n.s.
## LINC02148	n.s.
## POLR3A	n.s.
## SLC7A14	n.s.
## PLAC9P1	n.s.
## DCXR-DT	n.s.
## AVL9	n.s.
## TRUB2	n.s.
## ASIC2	n.s.
## H1-10-AS1	n.s.
## MECP2	n.s.
## SDC2	n.s.
## SEC14L2	n.s.
## C21orf62-AS1	n.s.
## SUZ12	n.s.
## ZBTB17	n.s.
## SIGLEC10-AS1	n.s.
## APOB	n.s.
## CASP12	n.s.
## C8orf82	n.s.
## NADK2	n.s.
## ANKRD24	n.s.
## NUDC	n.s.
## SPATA6L	n.s.
## RHEB	n.s.
## SFN	n.s.
## SPCS3-AS1	n.s.
## FOXN4	n.s.
## USP27X-DT	n.s.
## DSG4	n.s.
## MAB21L3	n.s.
## INTS6L-AS1	n.s.
## LINC02975	n.s.
## TEX41	n.s.
## PROX2	n.s.
## OR7A8P	n.s.

## CCDC154	n.s.
## C2orf74	n.s.
## MRGPRX7P	n.s.
## ANKRD33BP1	n.s.
## VIRMA-DT	n.s.
## CDC42-AS1	n.s.
## TLR4	n.s.
## RHOT2	n.s.
## GOLGA2P10	n.s.
## UQCC5	n.s.
## LIG3	n.s.
## LRFN1	n.s.
## RUSF1-DT	n.s.
## ESYT1	n.s.
## PIGN	n.s.
## DPRXP4	n.s.
## CRLS1	n.s.
## DTD2	n.s.
## PACERR	n.s.
## PSPN	n.s.
## CCAR2	n.s.
## LINC01134	n.s.
## SUSD2	n.s.
## C19orf84	n.s.
## TIMELESS	n.s.
## LINC00970	n.s.
## KMT2E	n.s.
## H2BC18	n.s.
## MXD3	n.s.
## SIRPB3P	n.s.
## LINC01165	n.s.
## SLC7A4	n.s.
## ARHGAP11B-DT	n.s.
## LINC02137	n.s.
## NAB2	n.s.
## FSTL5	n.s.
## RNASE2	n.s.
## MALRD1	n.s.
## RPS7P1	n.s.
## GPAA1	n.s.
## RUSC2	n.s.
## INPP5A	n.s.
## ZNF117	n.s.
## RCC2P7	n.s.
## ZNG1A	n.s.
## RPL13AP7	n.s.
## GAS2L2	n.s.
## LINC01801	n.s.
## CIMAP3	n.s.
## LINC01482	n.s.
## PELP1	n.s.
## TUBG1	n.s.
## NSMCE3	n.s.
## MFSD4B	n.s.

## FAM237B	n.s.
## GALNT16-AS1	n.s.
## FAM184B	n.s.
## HIPK3	n.s.
## SH3YL1	n.s.
## PYCR3	n.s.
## PTGR1	n.s.
## LINC02021	n.s.
## LINC02906	n.s.
## ANKRD65-AS1	n.s.
## RIMKLB	n.s.
## ZDHHC12	n.s.
## HNRNPA3P6	n.s.
## DMAC2	n.s.
## CHST7	n.s.
## KCTD10	n.s.
## NXPH2	n.s.
## TFRC	n.s.
## TP53BP2	n.s.
## SMPD5	n.s.
## TMA7	n.s.
## ZBTB46	n.s.
## UQCRRQ	n.s.
## CCNYL2	n.s.
## ABCG1	n.s.
## RHOBTB1	n.s.
## STAMB P	n.s.
## GOPC	n.s.
## ARAP3	n.s.
## KLHDC1	n.s.
## MRPS28	n.s.
## SP2-DT	n.s.
## GSTT2B	n.s.
## MICALL2	n.s.
## POLR2MP1	n.s.
## RBMS3-AS3	n.s.
## BGLAP	n.s.
## SKAP1-AS1	n.s.
## CYB561A3	n.s.
## PDIA3P1	n.s.
## LINC00603	n.s.
## RBM18	n.s.
## TTLL7	n.s.
## HSPA12A	n.s.
## SEMA6A	n.s.
## FAM86B2	n.s.
## GNA14	n.s.
## LINC01182	n.s.
## ATP7A	n.s.
## CUZD1	n.s.
## FOXO1	n.s.
## HDAC2	n.s.
## HCFC1	n.s.
## KDM2A	n.s.

## DVL1	n.s.
## LINC02955	n.s.
## NQO1	n.s.
## H2BP1	n.s.
## SCAMP1-AS1	n.s.
## STIP1	n.s.
## GSK3A	n.s.
## LINC01611	n.s.
## CLK4	n.s.
## CDK2	n.s.
## ACOXL-AS1	n.s.
## PMS2P13	n.s.
## CHMP7	n.s.
## LINC02680	n.s.
## UBB	n.s.
## LINC01783	n.s.
## RUFY1	n.s.
## SNRPGP14	n.s.
## IGHV3-64D	n.s.
## PHF6	n.s.
## LINC02944	n.s.
## ECPAS	n.s.
## UBE2H-DT	n.s.
## ERRFI1	n.s.
## GATM	n.s.
## ZNF248-AS1	n.s.
## TNRC18P1	n.s.
## ACO1	n.s.
## H2AC1	n.s.
## MPP7-DT	n.s.
## TPTE2P1	n.s.
## ILRUN-AS1	n.s.
## FAM183BP	n.s.
## LRRC71	n.s.
## PI4KAP2	n.s.
## WSB2	n.s.
## TBILA	n.s.
## PLXNA2	n.s.
## SIDT1	n.s.
## KPTN	n.s.
## CCBE1	n.s.
## TRBV11-3	n.s.
## SCYL2P1	n.s.
## GP6	n.s.
## PUS7L	n.s.
## MYO1B	n.s.
## RNU6-35P	n.s.
## ST3GAL1-DT	n.s.
## TLDC2	n.s.
## AKAP4	n.s.
## NDUFV2	n.s.
## CNTN4	n.s.
## PDAP1	n.s.
## HOXC-AS3	n.s.

## HECTD1	n.s.
## DNAJC12	n.s.
## MARS1	n.s.
## NPM1	n.s.
## EIPR1-IT1	n.s.
## PRAMENP	n.s.
## FAM162A	n.s.
## ZSCAN25	n.s.
## ZFHX3	n.s.
## OR52V1P	n.s.
## ULK3	n.s.
## NXF5	n.s.
## NME9	n.s.
## FTH1P19	n.s.
## TCHP	n.s.
## MIR589	n.s.
## DHX36	n.s.
## FOXN3-AS1	n.s.
## USP40	n.s.
## TFF2	n.s.
## COX5AP1	n.s.
## SLC14A2	n.s.
## HAGLROS	n.s.
## FOXQ1	n.s.
## MIS12	n.s.
## CYBA	n.s.
## RFC3	n.s.
## PPP1CB-DT	n.s.
## CENPJ	n.s.
## ZNF767P	n.s.
## ZNF782	n.s.
## RPS20P22	n.s.
## PCDHB19P	n.s.
## TIPRL	n.s.
## SNX15	n.s.
## SYT2-AS1	n.s.
## PGK1P2	n.s.
## LINC02515	n.s.
## IQCH-AS1	n.s.
## HOXD10	n.s.
## RIOK2	n.s.
## XYLT2	n.s.
## MAD2L2	n.s.
## DSCR9	n.s.
## LINC01841	n.s.
## INO80B	n.s.
## IBSP	n.s.
## LINC02043	n.s.
## RPL37AP1	n.s.
## EIF6	n.s.
## ABCB6	n.s.
## FAM227A	n.s.
## LINC02033	n.s.
## ZNF439	n.s.

## NEAT1	n.s.
## FADS3	n.s.
## ZNF419	n.s.
## SLC25A5	n.s.
## LINC02413	n.s.
## BZW1	n.s.
## ARL14EPL	n.s.
## ZDHHC17	n.s.
## ACSM2B	n.s.
## AOC2	n.s.
## S100P	n.s.
## SGMS1-AS1	n.s.
## ABCD3	n.s.
## ZBTB16	n.s.
## COG1	n.s.
## LINC01811	n.s.
## SNX19P3	n.s.
## ZSCAN9	n.s.
## FZR1	n.s.
## ABL2	n.s.
## SNORA63C	n.s.
## FAM66E	n.s.
## HNF4A-AS1	n.s.
## FBXL18	n.s.
## ZNF818P	n.s.
## GDF9	n.s.
## RFXANK	n.s.
## NLGN2	n.s.
## ZNF287	n.s.
## ZNF343	n.s.
## APOC3	n.s.
## PEBP1P2	n.s.
## MYH13	n.s.
## KARS1	n.s.
## SMUG1	n.s.
## XRCC4	n.s.
## ZNF22-AS1	n.s.
## BCLAF3	n.s.
## ZBTB40	n.s.
## C11orf16	n.s.
## MIER3	n.s.
## C10orf62	n.s.
## NAGA	n.s.
## RPS26	n.s.
## ELF2P2	n.s.
## ARVCF	n.s.
## MAPK11	n.s.
## SPTBN1	n.s.
## NDUFB1	n.s.
## PSMG2	n.s.
## COL4A2-AS1	n.s.
## DLX3	n.s.
## PLPBP	n.s.
## PCNA	n.s.

## ZNRF2P2	n.s.
## ISOC2	n.s.
## LOH12CR2	n.s.
## ACER2	n.s.
## TTC17	n.s.
## CENPS	n.s.
## MRPL40	n.s.
## HRH3	n.s.
## EXOSC3	n.s.
## SMIM17	n.s.
## MATN1-AS1	n.s.
## RAB4B	n.s.
## MLH3	n.s.
## PCDH11Y	n.s.
## ABCA7	n.s.
## RBM26-AS1	n.s.
## ZRANB2	n.s.
## NOP14-AS1	n.s.
## RN7SL526P	n.s.
## COG6	n.s.
## KLHL7	n.s.
## PDZK1IP1	n.s.
## LINC02625	n.s.
## SNRPF-DT	n.s.
## TMEM179B	n.s.
## ZNF345	n.s.
## SPIN1	n.s.
## DENND2A	n.s.
## KPNA1	n.s.
## RALGAPA1P1	n.s.
## TPRXL	n.s.
## PTMAP5	n.s.
## HERC3	n.s.
## RPUSD2	n.s.
## CBLN1	n.s.
## CCDC196	n.s.
## ATIC	n.s.
## A2M-AS1	n.s.
## LINC02156	n.s.
## ATP6V1B1	n.s.
## NSMCE2	n.s.
## IDH3G	n.s.
## LINC03011	n.s.
## GRIK3	n.s.
## RNMT	n.s.
## NCK2	n.s.
## LINC02640	n.s.
## CXXC5	n.s.
## ANXA10	n.s.
## GLRX2	n.s.
## PSMC6	n.s.
## MYCBP2-AS2	n.s.
## PCMTD2	n.s.
## DDX11L10	n.s.

## PSPC1-AS2	n.s.
## LINC01719	n.s.
## KMT2D	n.s.
## LINC02666	n.s.
## RPAIN	n.s.
## ZNF280A	n.s.
## SPATA33	n.s.
## RPUSD3	n.s.
## SUMF1	n.s.
## WASH3P	n.s.
## DYNLL1P1	n.s.
## PNO1	n.s.
## POU6F1	n.s.
## TAP2	n.s.
## KBTBD6-DT	n.s.
## SLC2A3	n.s.
## LINC01058	n.s.
## MPLKIP	n.s.
## PALM	n.s.
## ZNF844	n.s.
## TUBAP11	n.s.
## NTHL1	n.s.
## SKIC2	n.s.
## LINC02172	n.s.
## NAT8	n.s.
## COA7	n.s.
## SLF1	n.s.
## HOGA1	n.s.
## THOC6	n.s.
## MBL1P	n.s.
## ATP6V0E2-AS1	n.s.
## SUPT4H1	n.s.
## SLC46A2-AS1	n.s.
## DHRS4	n.s.
## SMAD9-IT1	n.s.
## EPS15L1	n.s.
## LINC03017	n.s.
## USB1	n.s.
## COX6B1	n.s.
## RPL7L1	n.s.
## TTTY10	n.s.
## PRIMPOL	n.s.
## LINC02646	n.s.
## LMO7-AS1	n.s.
## FRG1-DT	n.s.
## ATG4B	n.s.
## SMIM30	n.s.
## SCN9A	n.s.
## ZNF835	n.s.
## TBC1D8-AS1	n.s.
## NOP58	n.s.
## ZSCAN21	n.s.
## NSUN7	n.s.
## CLIC4P1	n.s.

## CTTN-DT	n.s.
## RPL31P30	n.s.
## AQP7P4	n.s.
## PCDHB11	n.s.
## RELB	n.s.
## MVD	n.s.
## ZNF512	n.s.
## RSPH14	n.s.
## ZNNT1	n.s.
## DNAJC30	n.s.
## NDUFB2-AS1	n.s.
## RPL41P2	n.s.
## ZNF516-AS1	n.s.
## SCN1A	n.s.
## YIF1A	n.s.
## PANX2	n.s.
## KIF25	n.s.
## FRMD8	n.s.
## CHID1	n.s.
## THEM7P	n.s.
## PAFAH1B2P2	n.s.
## ZBTB20-AS1	n.s.
## METTL27	n.s.
## TNNT2	n.s.
## RGS16	n.s.
## GFOD1	n.s.
##AGO2	n.s.
## LARP7	n.s.
## ZNF408	n.s.
## ZNF771	n.s.
## PNRC2	n.s.
## MRPS15	n.s.
## PTH1R	n.s.
## DPP8	n.s.
## KDM2B	n.s.
## TCP11L2	n.s.
## IGKV3D-11	n.s.
## KCNJ2-AS1	n.s.
## MIR199A1	n.s.
## ZC3H14	n.s.
## PKP4P1	n.s.
## YBX1P1	n.s.
## SLC7A9	n.s.
## ALDH7A1	n.s.
## TRIM68	n.s.
## MIR600HG	n.s.
## TEKT2	n.s.
## LINC01428	n.s.
## ENPP7P7	n.s.
## EIF2S2	n.s.
## HDAC4-AS1	n.s.
## CETP	n.s.
## RUNDC3A	n.s.
## DDX11-AS1	n.s.

## FUT3	n.s.
## SLC12A3	n.s.
## MTND1P30	n.s.
## LINC00051	n.s.
## RNFT1	n.s.
## LTC4S	n.s.
## LRRK2-DT	n.s.
## ZNF347	n.s.
## VPS13B	n.s.
## ADAT1	n.s.
## OR3A1	n.s.
## C1DP1	n.s.
## IBTK	n.s.
## ZDHHC9	n.s.
## SNORA65	n.s.
## RBCK1	n.s.
## KLHDC4	n.s.
## KLHL10	n.s.
## LDHAL6A	n.s.
## CEP97	n.s.
## NDUFA4L2	n.s.
## NMRAL1	n.s.
## ZNF131	n.s.
## LINC01827	n.s.
## AGBL2	n.s.
## WDR49	n.s.
## CLEC5A	n.s.
## SNHG16	n.s.
## CCT5	n.s.
## RAB3GAP2	n.s.
## ZNF362	n.s.
## CORO1B	n.s.
## PPIEL	n.s.
## GRSF1	n.s.
## NAMPTP1	n.s.
## C17orf107	n.s.
## DCAF12L2	n.s.
## ATP13A3-DT	n.s.
## ICAM4-AS1	n.s.
## ZNF560	n.s.
## PFN2	n.s.
## FIG4	n.s.
## MED27	n.s.
## MAPKAPK5-AS1	n.s.
## ADGRF2P	n.s.
## PGAM5	n.s.
## DUSP12	n.s.
## CLCN5	n.s.
## BRWD1-AS1	n.s.
## PREP	n.s.
## CDR2L	n.s.
## RSPO4	n.s.
## RAC1	n.s.
## PLEKHH1	n.s.

## RFX1	n.s.
## CNTNAP3B	n.s.
## GDI2P2	n.s.
## SCFD2	n.s.
## MORN5	n.s.
## TPSP2	n.s.
## ROCK1	n.s.
## WDR64	n.s.
## FAM149B1	n.s.
## MIR1249	n.s.
## PRAME	n.s.
## ZNF107	n.s.
## RNF26	n.s.
## RNF32-DT	n.s.
## DAZAP2P1	n.s.
## RHOQP3	n.s.
## HES7	n.s.
## IGKV1OR2-108	n.s.
## RPL10AP2	n.s.
## MTREX	n.s.
## B4GALT4	n.s.
## BOLA3-DT	n.s.
## PES1	n.s.
## RIMS3	n.s.
## ITGA2	n.s.
## CHP1P2	n.s.
## ZNF585A	n.s.
## PABPC4L	n.s.
## TSACC	n.s.
## RO60	n.s.
## LINC03022	n.s.
## RNF126	n.s.
## OLFM1	n.s.
## DRD4	n.s.
## ABCG8	n.s.
## PDZRN3-AS1	n.s.
## A4GNT	n.s.
## ATP2A3	n.s.
## NRSN1	n.s.
## LINC01350	n.s.
## OR13C6P	n.s.
## CCDC14	n.s.
## LRRC18	n.s.
## LINC00571	n.s.
## NT5DC2	n.s.
## TMEM14B-DT	n.s.
## PKD1L3	n.s.
## NUDT13	n.s.
## OR7C1	n.s.
## SDHAP4	n.s.
## PDCD6P1	n.s.
## GRASLND	n.s.
## RAN	n.s.
## PFN1P1	n.s.

## LIX1-AS1	n.s.
## FAM228B	n.s.
## LINC00472	n.s.
## QPRT	n.s.
## SMIM2-IT1	n.s.
## EFCAB10	n.s.
## KILH	n.s.
## ITGB1P1	n.s.
## SNRNP25	n.s.
## TSR3	n.s.
## CD151	n.s.
## SRBD1	n.s.
## SLC23A1	n.s.
## NANOGNBP3	n.s.
## TRAPPC1	n.s.
## PCSK1N	n.s.
## C6orf47-AS1	n.s.
## HSBP1	n.s.
## RPL23P8	n.s.
## AAAS	n.s.
## LINC02561	n.s.
## CAPN8	n.s.
## FRMPD2B	n.s.
## USP16	n.s.
## IGHV4-39	n.s.
## LINC01356	n.s.
## IGFBP5	n.s.
## TARBP2	n.s.
## MRPL11	n.s.
## TERLR1	n.s.
## DNAJC27	n.s.
## C7	n.s.
## ZNF430	n.s.
## RHBDF2	n.s.
## VSIG8	n.s.
## SMC1B	n.s.
## ZNF45-AS1	n.s.
## BCCIP	n.s.
## RFKP4	n.s.
## IGHG4	n.s.
## MYT1	n.s.
## NT5DC4	n.s.
## ZNF701	n.s.
## GALK1	n.s.
## TPT1P5	n.s.
## SLC6A4	n.s.
## SLC22A5	n.s.
## SPICE1	n.s.
## RPS3AP54	n.s.
## TMEM151B	n.s.
## MTCO1P31	n.s.
## IDUA	n.s.
## RNU6-807P	n.s.
## LINC01435	n.s.

## HMGB1P5	n.s.
## KIZ	n.s.
## DOCK9	n.s.
## QARS1	n.s.
## HMGB3P22	n.s.
## YEATS2-AS1	n.s.
## TOP3B	n.s.
## AGAP4	n.s.
## MASTL	n.s.
## TTC28-AS1	n.s.
## GLE1	n.s.
## EML3	n.s.
## HSPA6	n.s.
## XDH	n.s.
## HTR1B	n.s.
## TBCE	n.s.
## RMB8AP1	n.s.
## TEX26-AS1	n.s.
## ATF4P4	n.s.
## SAPCD2	n.s.
## PCAT7	n.s.
## PPP1R12A-AS1	n.s.
## CAPN10-DT	n.s.
## EIF2S1	n.s.
## ABLIM3	n.s.
## PEAR1	n.s.
## INHCAP	n.s.
## SLC39A4	n.s.
## AQP7P1	n.s.
## AP4S1	n.s.
## MAT2A	n.s.
## MIB1	n.s.
## LINC02950	n.s.
## ATP5F1EP2	n.s.
## PRMT3	n.s.
## TRIT1	n.s.
## MTMR4	n.s.
## MANCR	n.s.
## C19orf33	n.s.
## SLC10A7	n.s.
## RNF170	n.s.
## MTND5P27	n.s.
## ACTA2	n.s.
## IFITM3	n.s.
## RBM46	n.s.
## NUGGC	n.s.
## TBX19	n.s.
## OR2T11	n.s.
## ATXN7L2	n.s.
## RPL17P28	n.s.
## LINC02477	n.s.
## FAM182A	n.s.
## SEPTIN2	n.s.
## LENG1	n.s.

## KMT5AP2	n.s.
## SULT1A3	n.s.
## TAF4B	n.s.
## USP39	n.s.
## F2	n.s.
## LINC01560	n.s.
## ARHGAP27P1-BPTFP1-KPNA2P3	n.s.
## ZNF99	n.s.
## ZNF708	n.s.
## TOM1L1	n.s.
## MGAM	n.s.
## PSMB10	n.s.
## SELENBP1	n.s.
## ACMSD	n.s.
## SRXN1	n.s.
## ZNF772	n.s.
## NUBP1	n.s.
## PDF	n.s.
## CTBP2P7	n.s.
## KCNAB2	n.s.
## RCAN3	n.s.
## LINC00589	n.s.
## KL	n.s.
## PLAC1	n.s.
## HSPA8P11	n.s.
## GJB4	n.s.
## PRPF40A	n.s.
## CORO2B	n.s.
## RAPGEF6	n.s.
## FAM234A	n.s.
## PRDX6-AS1	n.s.
## EFL1	n.s.
## XIAP	n.s.
## MIR6774	n.s.
## PIH1D1	n.s.
## SULT1C5P	n.s.
## GIPR	n.s.
## MICALL1	n.s.
## ARMH3	n.s.
## CAPNS1	n.s.
## PSMB4	n.s.
## WDR81	n.s.
## SLC9A2	n.s.
## COX6CP1	n.s.
## TRIM40	n.s.
## LUARIS	n.s.
## LDHC	n.s.
## RHOXF1	n.s.
## UBBP4	n.s.
## ZNF225-AS1	n.s.
## NOX4P1	n.s.
## RNU6-125P	n.s.
## RAP2C	n.s.
## EPHA5	n.s.

## MRPL57	n.s.
## LIPT1	n.s.
## C22orf23	n.s.
## YWHAG	n.s.
## AGXT2	n.s.
## HGF	n.s.
## LDOC1	n.s.
## RRAGA	n.s.
## IVD	n.s.
## FAM229B	n.s.
## TET2	n.s.
## FAM106C	n.s.
## PXT1	n.s.
## MEIS2	n.s.
## TNS1	n.s.
## CRYBG2	n.s.
## ACSM5P1	n.s.
## BMP8A	n.s.
## TRAPPC14	n.s.
## XKR7	n.s.
## IL1R1	n.s.
## MIR450B	n.s.
## LUC7L	n.s.
## LINC02365	n.s.
## LRRC34	n.s.
## PRPF18	n.s.
## RNU2-17P	n.s.
## RPL41	n.s.
## VIL1	n.s.
## SEPTIN7P9	n.s.
## MCM9	n.s.
## SF3B5	n.s.
## KLF13	n.s.
## SATB2	n.s.
## CAPN1-AS1	n.s.
## PIGY-DT	n.s.
## ZNF232-AS1	n.s.
## HGSNAT	n.s.
## HSP90AB4P	n.s.
## MASP2	n.s.
## MCM8	n.s.
## RBM7	n.s.
## SLC10A3	n.s.
## AQP4-AS1	n.s.
## CRIPTOP6	n.s.
## CST11	n.s.
## FAM242C	n.s.
## MTCL2	n.s.
## OSGEPL1	n.s.
## TESMIN	n.s.
## HOXB13	n.s.
## PECR	n.s.
## SELE	n.s.
## LINC01208	n.s.

## EYA4	n.s.
## CA12	n.s.
## STK32C	n.s.
## TCTA	n.s.
## FBXO38-DT	n.s.
## TSGA10	n.s.
## ACY3	n.s.
## ANKRD44-IT1	n.s.
## TRAF6	n.s.
## ARF5	n.s.
## GLUD1P3	n.s.
## PPIAP41	n.s.
## MED19	n.s.
## ATG4C	n.s.
## MIR2117HG	n.s.
## PECAM1	n.s.
## LIMD1-AS1	n.s.
## LINC01965	n.s.
## ACTBP2	n.s.
## TRPC1	n.s.
## VHL	n.s.
## C2orf76	n.s.
## SLC16A3	n.s.
## RNU6-762P	n.s.
## AHSA2P	n.s.
## LINC02977	n.s.
## MED1	n.s.
## CERNA2	n.s.
## LINC01798	n.s.
## GCLM	n.s.
## RPL36AP13	n.s.
## ATP8B3	n.s.
## GALNT13-AS1	n.s.
## LINC00334	n.s.
## SYTL5	n.s.
## ABCF1	n.s.
## SYN2	n.s.
## LINC03053	n.s.
## PHF12	n.s.
## ZNF318	n.s.
## ERAS	n.s.
## IQCG	n.s.
## TUBAL3	n.s.
## LINC01550	n.s.
## REX1BD	n.s.
## ATP5F1E	n.s.
## DYNLT3	n.s.
## DDX10P1	n.s.
## IFitm2	n.s.
## ELK1	n.s.
## LAMTOR1	n.s.
## ZP2	n.s.
## USP12	n.s.
## TRIP11	n.s.

## RAMP2	n.s.
## SNORA33	n.s.
## H2BW3P	n.s.
## LINC02285	n.s.
## LINC01572	n.s.
## YTHDF3	n.s.
## CYP51A1P2	n.s.
## CCDC180	n.s.
## CDC42-IT1	n.s.
## ANKRD10	n.s.
## SWSAP1	n.s.
## LINC01629	n.s.
## GPRASP3	n.s.
## MIR3125	n.s.
## PINK1-AS	n.s.
## USP25	n.s.
## LBX2	n.s.
## BCS1L	n.s.
## GID8	n.s.
## LINC02691	n.s.
## FAM151A	n.s.
## NDUFS6	n.s.
## UGT2B28	n.s.
## SLC10A4	n.s.
## DXO	n.s.
## PAN3	n.s.
## BBOX1	n.s.
## NAPRT	n.s.
## TIMM21	n.s.
## MFAP1	n.s.
## LINC00562	n.s.
## GSTA4	n.s.
## MMP24OS	n.s.
## VTCN1	n.s.
## FOXH1	n.s.
## HERPUD2	n.s.
## MEIS1-AS3	n.s.
## CERKL	n.s.
## PGALS	n.s.
## TRPC5	n.s.
## SMCR8	n.s.
## TMED9	n.s.
## DNAJC18	n.s.
## TFAM	n.s.
## LINC00339	n.s.
## LINC03086	n.s.
## JMJD4	n.s.
## H3C1	n.s.
## LINC01775	n.s.
## ARRDC2	n.s.
## RPS24P10	n.s.
## SLC2A9-AS1	n.s.
## GAPDHP38	n.s.
## A2MP1	n.s.

## ZNF292	n.s.
## RNU6-137P	n.s.
## DDX11	n.s.
## ZDHHC7	n.s.
## PPP2R1B	n.s.
## CYP2G1P	n.s.
## GLDC	n.s.
## AK4	n.s.
## HACD3	n.s.
## ZNF518B	n.s.
## FSD1	n.s.
## GALNT14	n.s.
## YTHDF2	n.s.
## MAST4	n.s.
## PTCHD3	n.s.
## MAGOH	n.s.
## POLR1F	n.s.
## FPGT	n.s.
## ZNF8-DT	n.s.
## TTI2	n.s.
## OR2C3	n.s.
## OTOG	n.s.
## TECTB	n.s.
## MTG2	n.s.
## CDNF	n.s.
## CCT7P2	n.s.
## THOC7	n.s.
## FAM72B	n.s.
## NRF1	n.s.
## LINC00479	n.s.
## TUBGCP4	n.s.
## SLC46A3	n.s.
## SAPCD1	n.s.
## SMG5	n.s.
## STIMATE-MUSTN1	n.s.
## ATP6V1E1P1	n.s.
## RAD9A	n.s.
## LINC01585	n.s.
## PCDHGA8	n.s.
## RRP7A	n.s.
## RPS4XP16	n.s.
## MBD3	n.s.
## PCBD1	n.s.
## RAET1G	n.s.
## TBC1D15	n.s.
## NPIP86	n.s.
## TMEM8B	n.s.
## PPAT	n.s.
## VN1R108P	n.s.
## ACAD9-DT	n.s.
## MEF2A	n.s.
## C1RL-AS1	n.s.
## ABCC4	n.s.
## MBD6	n.s.

## TPM3P6	n.s.
## C4orf46P3	n.s.
## FRMD5	n.s.
## ATP5PO	n.s.
## GABPB1-AS1	n.s.
## VPS9D1-AS1	n.s.
## AKIP1	n.s.
## TRAPPC6B	n.s.
## MYRF-AS1	n.s.
## TTLL6	n.s.
## LINC01219	n.s.
## LINC02651	n.s.
## IGHV1-69D	n.s.
## C1GALT1	n.s.
## ALDH2	n.s.
## RAB26	n.s.
## OR52N4	n.s.
## CRAMP1	n.s.
## PLEKHH3	n.s.
## PHF14	n.s.
## ARHGEF33	n.s.
## TAFA1	n.s.
## PITRM1	n.s.
## DNASE1L2	n.s.
## CDKN1A	n.s.
## P4HB	n.s.
## LIPN	n.s.
## RPL29P17	n.s.
## SLC6A14	n.s.
## NGEF	n.s.
## MC1R	n.s.
## CCNI	n.s.
## NME2	n.s.
## NBPF20	n.s.
## RGS7BP	n.s.
## PBX2P1	n.s.
## SPICP2	n.s.
## LINC03069	n.s.
## LINC00200	n.s.
## LEO1	n.s.
## ECT2L	n.s.
## VN1R83P	n.s.
## TBX10	n.s.
## VDAC2P5	n.s.
## TRAV34	n.s.
## MUCL3	n.s.
## TRIM31	n.s.
## C1orf220	n.s.
## DNAJB2	n.s.
## ZNF114	n.s.
## SLC5A4	n.s.
## SUGT1	n.s.
## CAMSAP2	n.s.
## GCC1	n.s.

## RHOXF1P3	n.s.
## CYB5A	n.s.
## CWH43	n.s.
## FNDC10	n.s.
## CEP44	n.s.
## SDHAF3	n.s.
## KCNAB1-AS2	n.s.
## ELK4	n.s.
## LINC00642	n.s.
## LINC00511	n.s.
## ALOX5AP	n.s.
## IGHV4-59	n.s.
## OTUD5	n.s.
## CHRM5	n.s.
## AXDND1	n.s.
## WFDC12	n.s.
## MESTP1	n.s.
## PTCHD1-AS	n.s.
## CPLANE2	n.s.
## BTN2A1	n.s.
## IPMK	n.s.
## PNPT1P1	n.s.
## KCNK12	n.s.
## PPP1R2B	n.s.
## JTB	n.s.
## UGT3A1	n.s.
## CMTM8	n.s.
## IFT74	n.s.
## EHD3	n.s.
## PPIA	n.s.
## HMGB2	n.s.
## ZNF558	n.s.
## SNX30	n.s.
## PDPK2P	n.s.
## SMIM15-AS1	n.s.
## MBD5	n.s.
## APOBEC4	n.s.
## TAS2R13	n.s.
## MRPL10	n.s.
## DKC1	n.s.
## SLC23A2	n.s.
## JMJD8	n.s.
## CES1P1	n.s.
## C5orf64	n.s.
## GPR157	n.s.
## RAB6D	n.s.
## RNU6ATAC24P	n.s.
## PNOC	n.s.
## SMIM10	n.s.
## LINC03015	n.s.
## ZNF528	n.s.
## PLPPR5	n.s.
## RBMX	n.s.
## LINC02452	n.s.

## PUS1	n.s.
## AADACL4	n.s.
## LINC02167	n.s.
## HMX2	n.s.
## RBMS1P1	n.s.
## SPACDR	n.s.
## ATP6V1G3	n.s.
## C7orf50	n.s.
## ALOX12	n.s.
## MED8	n.s.
## CFAP47	n.s.
## MEMO1	n.s.
## TATDN2	n.s.
## FAM238A	n.s.
## PRR29-AS1	n.s.
## ADAMTSL2	n.s.
## LINC02475	n.s.
## ASB7	n.s.
## SRRM1	n.s.
## LINC00534	n.s.
## DLX1	n.s.
## DND1	n.s.
## IRX4	n.s.
## BMP8B	n.s.
## CFAP418-AS1	n.s.
## PDXK	n.s.
## LRSAM1	n.s.
## BRMS1L	n.s.
## LINC02893	n.s.
## HAO2-IT1	n.s.
## PPP1R21-DT	n.s.
## RRP1	n.s.
## HSP90AB2P	n.s.
## MRPS22	n.s.
## STIM1	n.s.
## C20orf144	n.s.
## RPL5P18	n.s.
## ARHGAP27P2	n.s.
## OVOL2	n.s.
## IGKV1-16	n.s.
## RAB17	n.s.
## UNC93B1	n.s.
## RN7SL172P	n.s.
## ACP1	n.s.
## PPP1R37	n.s.
## ASS1P5	n.s.
## NCAL1	n.s.
## ABCA17P	n.s.
## TAF13	n.s.
## TMEM252	n.s.
## RPS6KL1	n.s.
## WDR5B-DT	n.s.
## KRT36	n.s.
## UOX	n.s.

## MROH3P	n.s.
## TRABD	n.s.
## LINC02228	n.s.
## FOXK2	n.s.
## SREK1	n.s.
## FSTL3	n.s.
## SRGAP2D	n.s.
## ALG9	n.s.
## ATG16L1	n.s.
## CDH2	n.s.
## FBLIM1	n.s.
## EVA1CP5	n.s.
## DBIL5P2	n.s.
## MAL2-AS1	n.s.
## LINC01882	n.s.
## PAICSP4	n.s.
## NDUFA7	n.s.
## NR5A2	n.s.
## NAP1L1P3	n.s.
## SRGAP2	n.s.
## ZFYVE21	n.s.
## R3HCC1	n.s.
## DNAJB13	n.s.
## ANKRD30A	n.s.
## CHMP1B-AS1	n.s.
## ALG14	n.s.
## RIPOR1	n.s.
## ANKHD1-DT	n.s.
## TBC1D22A-DT	n.s.
## ARPC1B	n.s.
## ANKRD20A17P	n.s.
## CDK10	n.s.
## LOXL4	n.s.
## SULT1C2P2	n.s.
## PDE6G	n.s.
## LINC02888	n.s.
## PLA2G4D	n.s.
## RHBDD3	n.s.
## HULC	n.s.
## NDUFA5P11	n.s.
## MZF1-AS1	n.s.
## ZNF223	n.s.
## PPM1G	n.s.
## ARSH	n.s.
## BACE1-AS	n.s.
## MIR659	n.s.
## LACTB2-AS1	n.s.
## RPL41P5	n.s.
## PDCD2	n.s.
## DNAJC17	n.s.
## DGUOK	n.s.
## AGAP6	n.s.
## RAB2B	n.s.
## KCNK9	n.s.

## BTD	n.s.
## LINC00886	n.s.
## ZFP92	n.s.
## LINC02447	n.s.
## SCMH1-DT	n.s.
## SSUH2	n.s.
## CCDC102A	n.s.
## PLEKHM1P1	n.s.
## PPP1R14BP2	n.s.
## ITGA6-AS1	n.s.
## DNAAF6	n.s.
## GAS5-AS1	n.s.
## NDOR1	n.s.
## ACSF2	n.s.
## RNF207	n.s.
## C12orf56	n.s.
## INSYN1	n.s.
## KIRREL1	n.s.
## IFT43	n.s.
## OVAAL	n.s.
## ELMOD2	n.s.
## LINC01517	n.s.
## TRAPPC10	n.s.
## HMGN5	n.s.
## ASIP	n.s.
## UBXN7	n.s.
## IFITM10	n.s.
## MRPS12	n.s.
## KTI12	n.s.
## GNAZ	n.s.
## ABCA13	n.s.
## CCT6B	n.s.
## KCTD13-DT	n.s.
## SPAG7	n.s.
## PSME4	n.s.
## ACSL4	n.s.
## CBR1	n.s.
## KIF3A	n.s.
## VWDE	n.s.
## BAG6	n.s.
## UCN2	n.s.
## AGBL5	n.s.
## ZFP57	n.s.
## FBXO7	n.s.
## CEACAM6	n.s.
## LINC01283	n.s.
## CCK	n.s.
## PSAT1	n.s.
## POLR3E	n.s.
## SNX14	n.s.
## MIR6863	n.s.
## H3C6	n.s.
## LIMASI	n.s.
## BAALC	n.s.

## THAP7	n.s.
## CGA	n.s.
## KCTD15	n.s.
## SNORD93	n.s.
## FAM151AP1	n.s.
## NPTXR	n.s.
## CHMP6	n.s.
## KCNH7	n.s.
## CTRB2	n.s.
## H3C10	n.s.
## MYL9	n.s.
## NSUN2	n.s.
## ABHD17A	n.s.
## ABHD6	n.s.
## CHP2	n.s.
## GFM2	n.s.
## ZFPM1-AS1	n.s.
## GAS8	n.s.
## LINC01168	n.s.
## LCNL1	n.s.
## RNU4-1	n.s.
## HERC2P2	n.s.
## SLIT3-AS2	n.s.
## YARS1	n.s.
## SCRN2	n.s.
## LINC03079	n.s.
## RPL7P32	n.s.
## C16orf95-DT	n.s.
## PLEC	n.s.
## SRGAP3	n.s.
## FGF14-IT1	n.s.
## RRM1	n.s.
## BOP1	n.s.
## ALLC	n.s.
## KIAA0319	n.s.
## CDC40	n.s.
## TTC3P1	n.s.
## NRG1	n.s.
## C8orf33	n.s.
## USP38-DT	n.s.
## KLHDC2	n.s.
## ADO	n.s.
## MRGPRX2	n.s.
## ACADVL	n.s.
## ADAM21P1	n.s.
## RPS2P7	n.s.
## PRELID2	n.s.
## PKP2	n.s.
## SRP72	n.s.
## OPA1	n.s.
## SNED1-AS1	n.s.
## ANKRD36BP2	n.s.
## CROCC2	n.s.
## PGM5P2	n.s.

## CCDC110	n.s.
## DUSP5P1	n.s.
## SLC2A14	n.s.
## RPL34P10	n.s.
## IGKV1-12	n.s.
## TAS2R4	n.s.
## FAM224B	n.s.
## CDR2-DT	n.s.
## OR2T6	n.s.
## SNHG11	n.s.
## SPANXB1	n.s.
## YWHAZP10	n.s.
## EIF5AP2	n.s.
## PSME2	n.s.
## TMEM74	n.s.
## KDM6A	n.s.
## PSMD1	n.s.
## WDR45	n.s.
## KRT73	n.s.
## GPRC5D	n.s.
## ANKRD36B	n.s.
## ZNF746	n.s.
## SMARCE1	n.s.
## ZNF608	n.s.
## PTMAP10	n.s.
## ZNF473CR	n.s.
## TBC1D31	n.s.
## PTCHD3P2	n.s.
## NEDD8	n.s.
## ENDOU	n.s.
## CCNYL1	n.s.
## LINC00671	n.s.
## NHLRC4	n.s.
## PRORP	n.s.
## CASC3	n.s.
## FIGNL2-DT	n.s.
## CRAT	n.s.
## MICOS10	n.s.
## CDC37	n.s.
## TUBB4A	n.s.
## MRPL43	n.s.
## SLC26A8	n.s.
## LINC02038	n.s.
## CPLANE1	n.s.
## PCDHA2	n.s.
## LINC01587	n.s.
## ZNF692	n.s.
## RPS6KB2-AS1	n.s.
## LINC01547	n.s.
## SNTA1	n.s.
## CCDC140	n.s.
## SLC22A14	n.s.
## RASAL2	n.s.
## BTBD8	n.s.

## MRPS34	n.s.
## PET100P1	n.s.
## TPD52L1	n.s.
## NXT2	n.s.
## TMEM218	n.s.
## SRF	n.s.
## PHF13	n.s.
## PTRHD1	n.s.
## MCCD1P2	n.s.
## SEPTIN5	n.s.
## TRBV10-1	n.s.
## GALNT15	n.s.
## PHKG2	n.s.
## HPS1-AS1	n.s.
## ZNF397	n.s.
## FNIP2	n.s.
## HSD17B11	n.s.
## NPIPBA4	n.s.
## C3	n.s.
## RPL13P8	n.s.
## RTL8C	n.s.
## SULT4A1	n.s.
## FBXO11	n.s.
## JCHAIN	n.s.
## NT5DC1	n.s.
## NIPAL4-DT	n.s.
## CPSF3	n.s.
## TMEM50A	n.s.
## FTH1P15	n.s.
## RPS20P33	n.s.
## UBE2H	n.s.
## MIR3681HG	n.s.
## PSD2	n.s.
## ZNF845	n.s.
## LINC01470	n.s.
## NECTIN1	n.s.
## DDA1	n.s.
## SDHC	n.s.
## TCAIM	n.s.
## CARD10	n.s.
## MED13	n.s.
## RNPC3-DT	n.s.
## DLG5-AS1	n.s.
## RPS18P12	n.s.
## LINC02703	n.s.
## PELI3	n.s.
## PCDHGA11	n.s.
## NAIF1	n.s.
## MTND4P14	n.s.
## FTH1P23	n.s.
## PPIAP4	n.s.
## A3GALT2	n.s.
## TRAF3IP2	n.s.
## OR2I1P	n.s.

## EAF1-AS1	n.s.
## LINC02422	n.s.
## IGFL1	n.s.
## RPL7P18	n.s.
## FAM3D-AS1	n.s.
## IFT22	n.s.
## SLC8A2	n.s.
## LINC00882	n.s.
## ADRA1D	n.s.
## LINC02471	n.s.
## MYO1C	n.s.
## TMEM234	n.s.
## ACOT4	n.s.
## LINC01539	n.s.
## G6PD	n.s.
## EMC3	n.s.
## RUSC1	n.s.
## PSMC3	n.s.
## TRDMT1	n.s.
## FER	n.s.
## EPHA2-AS1	n.s.
## SNORD15B	n.s.
## GAS8-AS1	n.s.
## ADBG	n.s.
## ABHD12B	n.s.
## TRIM8	n.s.
## AK4P3	n.s.
## ZNF789	n.s.
## BAD	n.s.
## ROGDI	n.s.
## NORAD	n.s.
## ZNF682	n.s.
## MCM4	n.s.
## PCDH8	n.s.
## PA2G4	n.s.
## ANKRD6	n.s.
## PAD11	n.s.
## CPB2-AS1	n.s.
## PPP2R2C	n.s.
## FBXO24	n.s.
## LINC02814	n.s.
## RAD18	n.s.
## LINC01346	n.s.
## BRWD3	n.s.
## EFHD2-AS1	n.s.
## UBXN8	n.s.
## KRTCAP2	n.s.
## PPP1R9A-AS1	n.s.
## CCNY-AS1	n.s.
## HSD11B1L	n.s.
## UFL1-AS1	n.s.
## FUT8	n.s.
## METTL3	n.s.
## PHF20L1	n.s.

## RPL12P47	n.s.
## SRPK1	n.s.
## PSME2P6	n.s.
## HSFX2	n.s.
## LINC00460	n.s.
## FDX1	n.s.
## PPIAP46	n.s.
## GALNT7	n.s.
## ST8SIA6-AS1	n.s.
## ERLNC1	n.s.
## RAD1P2	n.s.
## DOT1L	n.s.
## QDPR	n.s.
## ZNF75A	n.s.
## UGT3A2	n.s.
## SYCE3	n.s.
## ANAPC1P1	n.s.
## IGSF3P1	n.s.
## LINC02235	n.s.
## LONRF2	n.s.
## ZNF529	n.s.
## MIR3936HG	n.s.
## MX1-AS1	n.s.
## MPP1	n.s.
## PNP	n.s.
## TKFC	n.s.
## RPAP1	n.s.
## GSK3B-DT	n.s.
## SNORA23	n.s.
## WFDC2	n.s.
## RPL17P39	n.s.
## CASTOR1	n.s.
## PCDHGA3	n.s.
## VPS13A-AS1	n.s.
## RPL32P9	n.s.
## RXRB	n.s.
## TMED2	n.s.
## PCDHAC2	n.s.
## LINC02724	n.s.
## ATP5F1D	n.s.
## GNAQP1	n.s.
## POLR2B	n.s.
## C11orf65	n.s.
## LINC02765	n.s.
## LINC02259	n.s.
## GOLGA8N	n.s.
## LINC02700	n.s.
## IRAG2	n.s.
## NLRP2	n.s.
## RHOQP1	n.s.
## ST7-AS2	n.s.
## ZNF267	n.s.
## TYSND1	n.s.
## RPS10P7	n.s.

## ENPP7P15	n.s.
## SUMO2P17	n.s.
## FAM72D	n.s.
## GCH1	n.s.
## PIGBOS1	n.s.
## SPATA22	n.s.
## SLC25A6	n.s.
## GTF2IP20	n.s.
## ACVR2B-AS1	n.s.
## MTATP8P2	n.s.
## ATP5MGP1	n.s.
## IKBKB-DT	n.s.
## RPSAP9	n.s.
## RHOT1	n.s.
## SURF6	n.s.
## ZNF732	n.s.
## USH1G	n.s.
## MYO1H	n.s.
## LAMC3	n.s.
## GPAA1P2	n.s.
## UBE2R2	n.s.
## SNHG15	n.s.
## ANKRD26	n.s.
## CCT6A	n.s.
## SAP30BP	n.s.
## IL10RB	n.s.
## LINC01193	n.s.
## RN7SL558P	n.s.
## TAF1D	n.s.
## SUN1	n.s.
## SSBP3-AS1	n.s.
## PIRAT1	n.s.
## IK	n.s.
## SPATC1L	n.s.
## SDF2	n.s.
## LIPC-AS1	n.s.
## RAB11FIP5	n.s.
## AAMP	n.s.
## WARS2-AS1	n.s.
## NCOR2	n.s.
## ECH1	n.s.
## CATSPERE	n.s.
## SPOUT1	n.s.
## TTC1	n.s.
## SERP1	n.s.
## SERPINE2	n.s.
## BTF3L4P2	n.s.
## USE1	n.s.
## GTF2IP12	n.s.
## SERINC4	n.s.
## GUCY1B1	n.s.
## IATPR	n.s.
## TMEM185B	n.s.
## KCNH2	n.s.

## NKILA	n.s.
## KPRP	n.s.
## RPL17P38	n.s.
## GPR143	n.s.
## ELL3	n.s.
## TIPIN	n.s.
## INAFM1	n.s.
## TXNL4A	n.s.
## MSH5	n.s.
## CCDC59	n.s.
## LSP1P4	n.s.
## ELOBP2	n.s.
## RNF213	n.s.
## ZBTB26	n.s.
## SPTLC2	n.s.
## MIR503HG	n.s.
## MRGPRF-AS1	n.s.
## AMH	n.s.
## S100A8	n.s.
## SF3B3	n.s.
## PIAS4	n.s.
## UBTFL6	n.s.
## GPKOW	n.s.
## ATP6V1B2	n.s.
## NOLC1	n.s.
## ARSJ	n.s.
## MYO5A	n.s.
## IP6K3	n.s.
## MACROH2A2	n.s.
## NAA30	n.s.
## RPS4XP6	n.s.
## ZNF8-ERVK3-1	n.s.
## LPAR6	n.s.
## ARL17B	n.s.
## NKAPP1	n.s.
## PAFAH1B1	n.s.
## EIF4BP3	n.s.
## ZNF778-DT	n.s.
## HHAT	n.s.
## LINC01593	n.s.
## DECR1	n.s.
## ZNF304	n.s.
## LINC02933	n.s.
## MNS1	n.s.
## LGALS2	n.s.
## UBR3	n.s.
## B3GAT2	n.s.
## SPRTN	n.s.
## CAP1P2	n.s.
## SCAI	n.s.
## SLC4A1	n.s.
## LZTS2	n.s.
## CBARP-DT	n.s.
## PSG4	n.s.

## KLF7-IT1	n.s.
## FJX1	n.s.
## PPP1R9B	n.s.
## OR51B5	n.s.
## MYH9	n.s.
## CTNNB1	n.s.
## DIDO1	n.s.
## FMR1-IT1	n.s.
## PLA2G12AP2	n.s.
## ZFY-AS1	n.s.
## TMEM120B	n.s.
## CCDC152	n.s.
## SMG6	n.s.
## MFSD10	n.s.
## KLHL25	n.s.
## GIHCG	n.s.
## LINC01772	n.s.
## SNORA71B	n.s.
## TAF10	n.s.
## FMO4	n.s.
## PCDHB13	n.s.
## CDC23	n.s.
## RHOD	n.s.
## LINC02298	n.s.
## GADD45G	n.s.
## AMBRA1	n.s.
## PLBD2	n.s.
## PDE11A-AS1	n.s.
## MYLK3	n.s.
## JMJD6	n.s.
## LINC00470	n.s.
## ANKRD27	n.s.
## CNTROB	n.s.
## CLASP2	n.s.
## MIR3605	n.s.
## GPR35	n.s.
## LINC02080	n.s.
## MIDEAS	n.s.
## CNTN3	n.s.
## PCYT1A	n.s.
## IGLV3-1	n.s.
## IGHEP2	n.s.
## PLA2G4E-AS1	n.s.
## MIF	n.s.
## SNHG12	n.s.
## TRPC3	n.s.
## RWDD2A	n.s.
## USP4	n.s.
## TBC1D22B	n.s.
## PMS2P3	n.s.
## RASL11A	n.s.
## FAM3C2P	n.s.
## TMIGD1	n.s.
## MRPL58	n.s.

## HSPB1	n.s.
## SERPINI1	n.s.
## CNTLN	n.s.
## FRG1CP	n.s.
## PKD1P5	n.s.
## HLA-G	n.s.
## CHRM1	n.s.
## PSME2P2	n.s.
## NHIP	n.s.
## DMXL1	n.s.
## DOC2GP	n.s.
## MMADHC-DT	n.s.
## RPL19P4	n.s.
## GIPC3	n.s.
## SEMA4D	n.s.
## WASH7P	n.s.
## SGMS1	n.s.
## RPS19P3	n.s.
## ALDH9A1	n.s.
## OXA1L-DT	n.s.
## MT1E	n.s.
## SOAT2	n.s.
## VCP	n.s.
## LINC00345	n.s.
## MTCYBP37	n.s.
## ARL6IP6	n.s.
## FTH1P3	n.s.
## STEAP2	n.s.
## TM2D2	n.s.
## MIR6809	n.s.
## PPP1R3F	n.s.
## KTN1	n.s.
## DEPDC7	n.s.
## MRPL44	n.s.
## EIF3C	n.s.
## WDR27	n.s.
## DIAPH2-AS1	n.s.
## THBS1	n.s.
## NRXN3	n.s.
## ZNF808	n.s.
## CTDP1-DT	n.s.
## GTF2E2	n.s.
## CGB7	n.s.
## ZNF639	n.s.
## SLC25A28-DT	n.s.
## MIR548A1HG	n.s.
## TMEM183BP	n.s.
## STX18-AS1	n.s.
## THAP6	n.s.
## NUDT7	n.s.
## POM121B	n.s.
## KARS1P2	n.s.
## FABP5P7	n.s.
## ABAT	n.s.

## ATP6AP1-DT	n.s.
## JPH3	n.s.
## TMEM14A	n.s.
## TMEM60	n.s.
## DDX21	n.s.
## CCL28	n.s.
## CD83	n.s.
## ZNF274	n.s.
## EXOSC4	n.s.
## IGHV5-51	n.s.
## CMPK1	n.s.
## ITPRID2	n.s.
## NDRG2	n.s.
## SOX12	n.s.
## PAGR1	n.s.
## ASPHD2	n.s.
## LMO3	n.s.
## EFCAB5	n.s.
## OR5M6P	n.s.
## EXOSC7	n.s.
## AKT3	n.s.
## RAET1K	n.s.
## SSNA1	n.s.
## PIGL	n.s.
## POLR3C	n.s.
## SBNO2	n.s.
## IL22RA2	n.s.
## LCOR	n.s.
## RAE1	n.s.
## SLC5A9	n.s.
## TINF2	n.s.
## PLEKHM3	n.s.
## ZSCAN22	n.s.
## REXO5	n.s.
## HMX1	n.s.
## HSD3BP2	n.s.
## HEBP1	n.s.
## CLP1	n.s.
## LINC01068	n.s.
## LANCL3	n.s.
## YIPF4	n.s.
## ACD	n.s.
## RBM15-AS1	n.s.
## ATP8A1	n.s.
## BMPR1AP2	n.s.
## TFF3	n.s.
## RPS15AP10	n.s.
## ANAPC1	n.s.
## TRAPPC11	n.s.
## FXYD6	n.s.
## ZNF335	n.s.
## NUBPL	n.s.
## TWSG1-DT	n.s.
## RNASE7	n.s.

## SNX18	n.s.
## MRPS10	n.s.
## H1-12P	n.s.
## NFATC2IP	n.s.
## SLC2A3P2	n.s.
## ZNF385B	n.s.
## LINC01600	n.s.
## NUP160	n.s.
## PLCG1-AS1	n.s.
## SLC25A42	n.s.
## LINC01511	n.s.
## BNIP3P15	n.s.
## GUSBP19	n.s.
## DYNC2H1	n.s.
## RNASE2CP	n.s.
## IGLL5	n.s.
## MANBA	n.s.
## EIF4E3	n.s.
## LBX2-AS1	n.s.
## PLRG1	n.s.
## POU5F1P6	n.s.
## ADAMTS9-AS2	n.s.
## DPY19L3	n.s.
## FASTK	n.s.
## FAM209B	n.s.
## RPS21	n.s.
## GDAP2	n.s.
## CDRT15P12	n.s.
## ZNF214	n.s.
## DNAH10	n.s.
## SOX15	n.s.
## TP53TG5	n.s.
## RBX1	n.s.
## DNAH10OS	n.s.
## GOLPH3L	n.s.
## IL12A	n.s.
## PPP4R2P1	n.s.
## PCIF1	n.s.
## TRIOBP	n.s.
## ZC3H7B	n.s.
## RPL7AP70	n.s.
## MFN1	n.s.
## SP5	n.s.
## CPA2	n.s.
## MRPL20	n.s.
## RBIS	n.s.
## OVCH1-AS1	n.s.
## LINC01905	n.s.
## SPATA42	n.s.
## TAMM41	n.s.
## LINC02827	n.s.
## ADGRL1	n.s.
## GPLD1	n.s.
## MRPL12	n.s.

## SNHG4	n.s.
## EHD1	n.s.
## ANKRD13C	n.s.
## VPS45	n.s.
## LINC01685	n.s.
## LINC02334	n.s.
## APOL2	n.s.
## GCLC	n.s.
## EME2	n.s.
## HMGN2P5	n.s.
## GALNT17	n.s.
## FTX	n.s.
## HNRNPA0	n.s.
## CHCHD4	n.s.
## DSEL-AS1	n.s.
## TMEM59L	n.s.
## METTL2B	n.s.
## DNAJC2	n.s.
## RPSAP11	n.s.
## MORC1	n.s.
## NXF1	n.s.
## RD3	n.s.
## PSMB2	n.s.
## SLC28A2	n.s.
## SLC2A5	n.s.
## TOMM40P4	n.s.
## HAP1	n.s.
## SH3GL2	n.s.
## NBPF2P	n.s.
## NSUN5	n.s.
## C1orf53	n.s.
## PPP1R21	n.s.
## KHDRBS2	n.s.
## ANXA9	n.s.
## LINC01616	n.s.
## ACR	n.s.
## PRKCZ-DT	n.s.
## DDX19A-DT	n.s.
## EIF5AL1	n.s.
## TM4SF1-AS1	n.s.
## PWWP2A	n.s.
## ASB3	n.s.
## TMEM143	n.s.
## POLR2J3	n.s.
## ACCS	n.s.
## FLYWCH2	n.s.
## MPPED2	n.s.
## H2AZ1	n.s.
## ZNF329	n.s.
## RFPL2	n.s.
## CELA2B	n.s.
## DNAAF3-AS1	n.s.
## DBNDD1	n.s.
## TSNAXIP1	n.s.

## PPP2R2D	n.s.
## HLA-H	n.s.
## KIAA0825	n.s.
## RNA5SP108	n.s.
## PRDX2	n.s.
## VARS1	n.s.
## POLDIP2	n.s.
## FYB2	n.s.
## OR7D2	n.s.
## IGLV2-14	n.s.
## ZWILCH	n.s.
## MIR6814	n.s.
## ZCRB1P1	n.s.
## CASP8	n.s.
## LINC02390	n.s.
## RAD51C	n.s.
## SGMS2	n.s.
## PCDHB8	n.s.
## AGBL5-AS1	n.s.
## SPPL3	n.s.
## SBDS	n.s.
## MIR3176	n.s.
## ZNF101	n.s.
## TMPRSS7	n.s.
## ZKSCAN8	n.s.
## RN7SL333P	n.s.
## UBXN7-AS1	n.s.
## ZFP3	n.s.
## TLN1	n.s.
## SDF4	n.s.
## MBTD1	n.s.
## SPACA3	n.s.
## MARK1	n.s.
## LINC01089	n.s.
## UQCRRFS1P1	n.s.
## SLC25A19	n.s.
## LINC03016	n.s.
## MRPS33	n.s.
## LINC00052	n.s.
## PSMB5	n.s.
## ZNF414	n.s.
## ZNF862	n.s.
## TBC1D3L	n.s.
## FIGNL2	n.s.
## TCP1	n.s.
## B4GAT1-DT	n.s.
## HLA-V	n.s.
## LINC01770	n.s.
## MAP3K12	n.s.
## LRRC47	n.s.
## FBXW4	n.s.
## CHPT1	n.s.
## ANKRD54	n.s.
## MNAT1	n.s.

## PPP1R12A	n.s.
## CRB1	n.s.
## NAA20	n.s.
## DLEU1	n.s.
## ERF	n.s.
## IL1RAP	n.s.
## LSM12	n.s.
## RELN	n.s.
## CFAP36	n.s.
## ANKZF1	n.s.
## RNA5SP107	n.s.
## INTS10	n.s.
## ANKRD20A8P	n.s.
## STMN4	n.s.
## ERCC6L2	n.s.
## ITFG1-AS1	n.s.
## CIMAP2	n.s.
## LINC00482	n.s.
## CTBP1-AS	n.s.
## SNRNP27	n.s.
## SLC16A2	n.s.
## FANCM	n.s.
## ATF7-NPFF	n.s.
## PTS	n.s.
## XAGE3	n.s.
## SNORD83A	n.s.
## SEPTIN3	n.s.
## PSMD10	n.s.
## HOXA3	n.s.
## ALKAL1	n.s.
## NTNG1	n.s.
## NUDT17	n.s.
## ATPSCKMT	n.s.
## NIFK-AS1	n.s.
## RPS6KA2-IT1	n.s.
## CSPG4	n.s.
## FBXW5	n.s.
## COX6A1	n.s.
## TFPT	n.s.
## PRPF38B	n.s.
## RNU6-45P	n.s.
## MRPL4	n.s.
## THAP9	n.s.
## RMEL3	n.s.
## MIR4422HG	n.s.
## TMEM51	n.s.
## LINC02362	n.s.
## IGSF21	n.s.
## ITPR2-AS1	n.s.
## AURKC	n.s.
## ADAMTS19-AS1	n.s.
## SAMMSON	n.s.
## LINC02872	n.s.
## LINC01002	n.s.

## KCNJ5-AS1	n.s.
## PLS3	n.s.
## PAXIP1	n.s.
## RPL30-AS1	n.s.
## HSPA14	n.s.
## SRR	n.s.
## MCCC2	n.s.
## LRRC9	n.s.
## LRCOL1	n.s.
## MTA1-DT	n.s.
## DNASE2	n.s.
## TMEM11-DT	n.s.
## LINC01063	n.s.
## UGT1A1	n.s.
## ST7-OT4	n.s.
## TAX1BP3	n.s.
## OR2W3	n.s.
## ACLY	n.s.
## PRKAR2A	n.s.
## LDHD	n.s.
## EDIL3-DT	n.s.
## NUP133	n.s.
## GRAMD1A	n.s.
## RPSAP52	n.s.
## TTLL5	n.s.
## STON1-GTF2A1L	n.s.
## NOP2	n.s.
## SNAP29	n.s.
## SPA17	n.s.
## CNIH4	n.s.
## DPH1	n.s.
## CNTNAP3P1	n.s.
## MRPS24	n.s.
## SUV39H1	n.s.
## TMEM160	n.s.
## LGMNP1	n.s.
## KRT18P10	n.s.
## H4C11	n.s.
## SNORA13	n.s.
## FTH1P10	n.s.
## LINC01865	n.s.
## PLAAT2	n.s.
## NIPSNAP2	n.s.
## SRA1	n.s.
## DHDDS	n.s.
## NECTIN4	n.s.
## CYP2C8	n.s.
## AK5	n.s.
## RBM10	n.s.
## LINC01474	n.s.
## ZNF442	n.s.
## KLRC3	n.s.
## ZNF525	n.s.
## BMPR2	n.s.

## DDIT3	n.s.
## YOD1	n.s.
## ERICH6-AS1	n.s.
## HDAC6	n.s.
## SLC35E1P1	n.s.
## BTNL3	n.s.
## BNIP2	n.s.
## HCN3	n.s.
## CREBRF	n.s.
## ZNF316	n.s.
## ZDHHC20P4	n.s.
## SLC15A4	n.s.
## MRPS18C	n.s.
## IARS2	n.s.
## VWC2	n.s.
## LINC02280	n.s.
## SLC30A4	n.s.
## UBE2SP1	n.s.
## IFNE	n.s.
## CLTB	n.s.
## METTL15P1	n.s.
## SKIL	n.s.
## CCZ1	n.s.
## PI15	n.s.
## MINPP1	n.s.
## LEKRI1	n.s.
## DIO1	n.s.
## CBR4	n.s.
## PDCL3P5	n.s.
## UBE2Q2P13	n.s.
## MMRN2	n.s.
## FNTB	n.s.
## TLCD4-RWDD3	n.s.
## RLF	n.s.
## HLA-L	n.s.
## TCFL5	n.s.
## LCN10	n.s.
## TIGAR	n.s.
## NDUFB5	n.s.
## MTSS1	n.s.
## ZC2HC1C	n.s.
## NELFE	n.s.
## H2AX	n.s.
## RPS27AP11	n.s.
## WDR26	n.s.
## UBQLN2	n.s.
## ZBTB8A	n.s.
## HSP90AA3P	n.s.
## LLPH-DT	n.s.
## PI3	n.s.
## LINC02138	n.s.
## TMEM232	n.s.
## CD63-AS1	n.s.
## ATP7B	n.s.

## ACTG1P20	n.s.
## HAVCR2	n.s.
## DUSP22	n.s.
## SLC26A5	n.s.
## FLNA	n.s.
## IFT25	n.s.
## USP8	n.s.
## TAS2R46	n.s.
## OLFM4	n.s.
## DNMBP	n.s.
## FAM27C	n.s.
## NFS1	n.s.
## NCAPD2P1	n.s.
## ARID3C	n.s.
## PINX1-DT	n.s.
## PNMA8A	n.s.
## INTS4	n.s.
## EDF1	n.s.
## ZYG11B	n.s.
## BIK	n.s.
## HSP90B2P	n.s.
## LINC01569	n.s.
## YWHAH-AS1	n.s.
## IL20	n.s.
## TPT1P4	n.s.
## PRR7-AS1	n.s.
## RNU4-22P	n.s.
## ZNF460-AS1	n.s.
## IGHJ3	n.s.
## RBM26	n.s.
## TAF5L	n.s.
## NGB	n.s.
## EPRS1	n.s.
## PPIC-AS1	n.s.
## PLEK2	n.s.
## RPS3AP6	n.s.
## RBP7	n.s.
## ANKRD40CL	n.s.
## COL4A2	n.s.
## NIP7	n.s.
## IFRD1	n.s.
## CAMK1	n.s.
## TTBK2-AS1	n.s.
## DNAJC28	n.s.
## EPOR	n.s.
## IGKV4-1	n.s.
## HSP90B3P	n.s.
## LRRC59	n.s.
## PAPLN	n.s.
## HGD	n.s.
## INO80D	n.s.
## RPL26P30	n.s.
## BMS1P20	n.s.
## METTL18	n.s.

## ATP5PBP2	n.s.
## PHB1P13	n.s.
## BEAN1-AS1	n.s.
## GNAO1-DT	n.s.
## DDIT4L-AS1	n.s.
## PRC1-AS1	n.s.
## RABAC1	n.s.
## IGHG1	n.s.
## SNORA47	n.s.
## COG3	n.s.
## SBF1P2	n.s.
## SAT1-DT	n.s.
## FGF7P6	n.s.
## RPL7AP75	n.s.
## MIR6859-4	n.s.
## MITA1	n.s.
## TFB1M	n.s.
## SLC39A10	n.s.
## RPS4Y1	n.s.
## PURG	n.s.
## LINC02055	n.s.
## SRC	n.s.
## SNHG10	n.s.
## TIMM50	n.s.
## CCDC171	n.s.
## LINC02623	n.s.
## ALCAM	n.s.
## GTF3C4	n.s.
## PGLYRP4	n.s.
## ASGR2	n.s.
## SPMIP2	n.s.
## MICA	n.s.
## ARMC8	n.s.
## LINC02826	n.s.
## UQCR10	n.s.
## PCBP1	n.s.
## FAM3A	n.s.
## CREB3	n.s.
## CSPG4BP	n.s.
## MYLK4	n.s.
## TRBV260R9-2	n.s.
## CAVIN2-AS1	n.s.
## ALG1L13P	n.s.
## LINC02763	n.s.
## IL5RA	n.s.
## PEX11G	n.s.
## ANKRD46	n.s.
## NUDT19	n.s.
## CTIF	n.s.
## SOD1-DT	n.s.
## PLCH2	n.s.
## MED14	n.s.
## ACSS2	n.s.
## SEC31B	n.s.

## MMP20	n.s.
## LINC02688	n.s.
## NUDT14	n.s.
## SLC48A1	n.s.
## NPIPP1	n.s.
## SPNS2-AS1	n.s.
## RPL5P24	n.s.
## ASS1P7	n.s.
## SLTM	n.s.
## PCDHB4	n.s.
## IGKV1D-12	n.s.
## MAP3K14	n.s.
## FERMT2	n.s.
## SAXO1	n.s.
## LINC01982	n.s.
## SDCCAG8	n.s.
## FMC1	n.s.
## PBX1	n.s.
## GABBR1	n.s.
## TEX56P	n.s.
## SNORD99	n.s.
## CCDC121	n.s.
## RPS3P4	n.s.
## PDCD6IPPP1	n.s.
## CYYR1	n.s.
## TMPRSS4	n.s.
## ZC3H11C	n.s.
## IMPG1	n.s.
## DSN1	n.s.
## TRIM56	n.s.
## DMAP1	n.s.
## ALDH7A1P1	n.s.
## SLC4A1AP	n.s.
## RRP9	n.s.
## FAM99A	n.s.
## DPP7	n.s.
## IGLV4-3	n.s.
## VLDLR-AS1	n.s.
## RPL21P19	n.s.
## EIF2B5-DT	n.s.
## DPY19L1P2	n.s.
## C4orf33	n.s.
## ARMC6	n.s.
## MRPL34	n.s.
## MICD	n.s.
## RND1	n.s.
## ALG1L1P	n.s.
## OGDHL	n.s.
## RLIMP2	n.s.
## KRT25	n.s.
## FDPSP1	n.s.
## UQCRRB	n.s.
## LRAT	n.s.
## PLEKHH2	n.s.

## OR7E90P	n.s.
## SLC25A34	n.s.
## ZNF354B	n.s.
## AUTS2	n.s.
## ZNF688	n.s.
## UPK1A-AS1	n.s.
## PSMC3IP	n.s.
## RILP	n.s.
## ACBD3	n.s.
## LINC01284	n.s.
## RNU6-638P	n.s.
## MGAT4B	n.s.
## CCDC186	n.s.
## APPBP2-DT	n.s.
## GLTC1	n.s.
## ALKBH5	n.s.
## CLEC19A	n.s.
## HAVCR1	n.s.
## RN7SKP22	n.s.
## HIPK4	n.s.
## LINC00836	n.s.
## SFRP1	n.s.
## C16orf89	n.s.
## B4GALT1	n.s.
## SMIM1	n.s.
## SLX1B	n.s.
## SNORD101	n.s.
## SLC28A2-AS1	n.s.
## DDX11L17	n.s.
## FAM246C	n.s.
## C3orf33	n.s.
## JMJD7	n.s.
## IGLVI-70	n.s.
## APCDD1	n.s.
## C16orf87	n.s.
## TFDP1P2	n.s.
## PKD1P6	n.s.
## SRP14-DT	n.s.
## TREML3P	n.s.
## KEL	n.s.
## BRMS1	n.s.
## NONOP2	n.s.
## PTPRD-AS1	n.s.
## PGAM1	n.s.
## LINC02226	n.s.
## IFT81	n.s.
## RTN4R	n.s.
## LINC02391	n.s.
## ELN-AS1	n.s.
## ANKFY1	n.s.
## ATP13A5	n.s.
## SNTG2	n.s.
## SCAND1	n.s.
## GLTPD2	n.s.

## BEX3	n.s.
## DCAKD	n.s.
## MTCO1P11	n.s.
## LGALS3BP	n.s.
## PLGLB2	n.s.
## WAPL-DT	n.s.
## CNNM4	n.s.
## LINC01635	n.s.
## LINC01697	n.s.
## E2F6	n.s.
## RAD51B	n.s.
## H3P4	n.s.
## AGTPBP1	n.s.
## COMMD2	n.s.
## GNS	n.s.
## TNRC18	n.s.
## ODAM	n.s.
## DAAM2	n.s.
## TMEM262	n.s.
## ARHGEF19	n.s.
## EEA1	n.s.
## FAM201A	n.s.
## CHEK2P2	n.s.
## TCAF1	n.s.
## NAA40	n.s.
## FREY1	n.s.
## ISG20L2P2	n.s.
## GPCPD1	n.s.
## SLC39A12	n.s.
## ZNF383	n.s.
## LINC02354	n.s.
## LARP1P1	n.s.
## RANP4	n.s.
## FREM1	n.s.
## CACNG4	n.s.
## PI4KAP1	n.s.
## TMEM184A	n.s.
## SPAG8	n.s.
## MIR553	n.s.
## PYURF	n.s.
## LINC02442	n.s.
## HNRNPCP2	n.s.
## KRR1	n.s.
## SETD6P1	n.s.
## RUNX3-AS1	n.s.
## KRTAP5-7	n.s.
## OPRK1	n.s.
## BEND3P1	n.s.
## TFG	n.s.
## TEX30	n.s.
## BLCAP	n.s.
## PTPRJ	n.s.
## TMBIM6	n.s.
## PHGR1	n.s.

## U2SURP	n.s.
## SHISA8	n.s.
## ZNF37A	n.s.
## TEKTIP1	n.s.
## DYNLT1	n.s.
## XRCC6P2	n.s.
## IGKV2-30	n.s.
## CD300LG	n.s.
## PPM1N	n.s.
## ZBTB4	n.s.
## VPS72	n.s.
## APC2	n.s.
## SLAMF6P1	n.s.
## WDR93	n.s.
## CCDC185	n.s.
## BLTP3B	n.s.
## NOVA2	n.s.
## C2CD3	n.s.
## TMEM88B	n.s.
## FHIP1A-DT	n.s.
## RPH3AL-AS2	n.s.
## SIRT6	n.s.
## GP5	n.s.
## SNX12	n.s.
## TXNDC12	n.s.
## NDUFA3	n.s.
## LINC02261	n.s.
## CCDC178	n.s.
## RNFT2	n.s.
## TMEM192	n.s.
## SLC10A2	n.s.
## HADHA	n.s.
## ACKR2	n.s.
## C12orf54	n.s.
## TEX21P	n.s.
## CCDC144BP	n.s.
## RPL21P51	n.s.
## PHACTR3	n.s.
## CFAP299	n.s.
## ZNF736P4Y	n.s.
## PLPPR2	n.s.
## SDHDP3	n.s.
## PBLD	n.s.
## NEGR1-IT1	n.s.
## FOXD2-AS1	n.s.
## STX5	n.s.
## SPIDR	n.s.
## EEF1A1P11	n.s.
## ZC3H4	n.s.
## SPTBN1-AS2	n.s.
## MIR99AHG	n.s.
## ALG11	n.s.
## DKKL1	n.s.
## VWA3B	n.s.

## MIR7111	n.s.
## CIBAR2	n.s.
## PPIAP84	n.s.
## CSAD	n.s.
## SLC25A51	n.s.
## HECTD4	n.s.
## TAP1-AS1	n.s.
## CROCC	n.s.
## SEC22A	n.s.
## HMGB2P1	n.s.
## HMGN1P1	n.s.
## ZNF141	n.s.
## NKX1-2	n.s.
## LIN52	n.s.
## CMTM5	n.s.
## RDX	n.s.
## PCDH10-DT	n.s.
## SOD1	n.s.
## VSIG10	n.s.
## YME1L1	n.s.
## IRS3P	n.s.
## FGD5-AS1	n.s.
## TRIM29	n.s.
## OXCT1-AS1	n.s.
## EPS15	n.s.
## FAM43A	n.s.
## DLGAP4-AS1	n.s.
## NLGN4Y	n.s.
## BUB3	n.s.
## MIR429	n.s.
## ZFTRAF1	n.s.
## ZNF324B	n.s.
## ZNF768	n.s.
## ZNF618	n.s.
## HMGB3P9	n.s.
## TAF1B	n.s.
## TCEAL8	n.s.
## C15orf62	n.s.
## PNMA6F	n.s.
## LDB2	n.s.
## KRCC1	n.s.
## OR52N2	n.s.
## REM2	n.s.
## TMEM69	n.s.
## C9orf72	n.s.
## SDK2	n.s.
## LINC01449	n.s.
## DDX50P1	n.s.
## FNDC3CP	n.s.
## RPL7AP60	n.s.
## TNS1-AS1	n.s.
## TRGV5P	n.s.
## KRT41P	n.s.
## LINC03078	n.s.

## HCG9	n.s.
## ANKRD34B	n.s.
## TMX2P1	n.s.
## ZNF341-AS1	n.s.
## NCBP2	n.s.
## SLC8A1-AS1	n.s.
## C2orf92	n.s.
## CNKSR1	n.s.
## PAXBP1-AS1	n.s.
## LINC02321	n.s.
## TOR1B	n.s.
## ZNF394	n.s.
## DCTN3	n.s.
## EIF5A	n.s.
## PYCARD-AS1	n.s.
## ERV3-1	n.s.
## MAGED2	n.s.
## C2orf66	n.s.
## CCNY	n.s.
## DGKE	n.s.
## H4C9	n.s.
## MAP2K7	n.s.
## CCDC38	n.s.
## C19orf18	n.s.
## PHAX	n.s.
## F2RL2	n.s.
## SLC25A12	n.s.
## OPHN1	n.s.
## EEF1A1P22	n.s.
## PCCA	n.s.
## NDUFB3	n.s.
## NTMT2	n.s.
## INPP5E	n.s.
## ZNF431	n.s.
## RPL37A-DT	n.s.
## ZNF37CP	n.s.
## HAPSTR1	n.s.
## ZNF77	n.s.
## CPLX4	n.s.
## LINC03107	n.s.
## EGFEM1P	n.s.
## CHMP4A	n.s.
## SEC23A-AS1	n.s.
## PHTF1	n.s.
## ZNF121	n.s.
## CNTNAP3C	n.s.
## DHX37	n.s.
## IGHV2-5	n.s.
## RAB1C	n.s.
## MSL3-DT	n.s.
## DNAJC19P5	n.s.
## SF1	n.s.
## STARD4-AS1	n.s.
## PRDX6	n.s.

## TUSC3	n.s.
## UFM1	n.s.
## BTBD3-AS1	n.s.
## AKT3-IT1	n.s.
## PAIP1P1	n.s.
## LINC00507	n.s.
## SEPTIN7P14	n.s.
## PCDH15	n.s.
## KRTAP5-9	n.s.
## CLIP1	n.s.
## TIGD3	n.s.
## ZNF91	n.s.
## ZPLD2P	n.s.
## CXXC1	n.s.
## LRRC37A15P	n.s.
## SMARCE1P6	n.s.
## SUPT20H	n.s.
## GLB1L2	n.s.
## ETV7-AS1	n.s.
## BCO1	n.s.
## LSM1	n.s.
## RPL7AP62	n.s.
## ZBTB9	n.s.
## SEC14L5	n.s.
## MTND4P11	n.s.
## A1CF	n.s.
## FADS1	n.s.
## IGHV3-7	n.s.
## LINC02882	n.s.
## PLA2G2C	n.s.
## H2BC5	n.s.
## TRIM60P14	n.s.
## ETV3L	n.s.
## KCNC4	n.s.
## S1PR1-DT	n.s.
## RNU6-760P	n.s.
## KLHL36	n.s.
## STK40	n.s.
## PRPF8	n.s.
## ZNF891	n.s.
## CCL15	n.s.
## UBR1	n.s.
## TSPAN14-AS1	n.s.
## CYP4F12	n.s.
## BCDIN3D	n.s.
## ENTPD5	n.s.
## TCP11	n.s.
## CLIC4	n.s.
## C15orf40	n.s.
## R3HDM1-AS1	n.s.
## RPL5P30	n.s.
## C5orf60	n.s.
## KBTBD2	n.s.
## SLC47A1P1	n.s.

## AZGP1	n.s.
## TUB	n.s.
## LINC00314	n.s.
## TM6SF2	n.s.
## CASC22	n.s.
## POLD2	n.s.
## EIF5A2	n.s.
## SCGB1C2	n.s.
## EEF1A1P18	n.s.
## WDR25	n.s.
## RNASEH2A	n.s.
## CALCA	n.s.
## RTCA-AS1	n.s.
## ZBTB2P1	n.s.
## FRG1FP	n.s.
## ELAVL2	n.s.
## CALML4	n.s.
## KCNJ13	n.s.
## NPIP85	n.s.
## CCDC122	n.s.
## SNHG29	n.s.
## SUCLG2-DT	n.s.
## EPHX2	n.s.
## TRMT2A	n.s.
## GRIP1	n.s.
## MAN2A1-DT	n.s.
## CEBPZ	n.s.
## HNRNPA1P10	n.s.
## PASK	n.s.
## PRSS33	n.s.
## PRDX3	n.s.
## ELP1	n.s.
## ERGIC3	n.s.
## NRIP2	n.s.
## ZMAT4	n.s.
## IRF9	n.s.
## SLC13A1	n.s.
## XKR8	n.s.
## MIR4500HG	n.s.
## SPR	n.s.
## MED11	n.s.
## BCL7C	n.s.
## EIF4BP7	n.s.
## TRMT10B	n.s.
## SINHCAF2	n.s.
## POLR2J2	n.s.
## CCKAR	n.s.
## ZNF480	n.s.
## LINC01347	n.s.
## SPRY4	n.s.
## PKLR	n.s.
## TPTE2P6	n.s.
## RAMACL	n.s.
## TMPRSS11E	n.s.

## BRD8	n.s.
## SIGLEC12	n.s.
## CCZ1B	n.s.
## ZNF462	n.s.
## KRT34	n.s.
## LINC01397	n.s.
## RHBDF1	n.s.
## PLEKHB2	n.s.
## COMMD4	n.s.
## SNX2	n.s.
## RN7SL23P	n.s.
## ARPC3P3	n.s.
## CHRNE	n.s.
## TAS2R50	n.s.
## INSIG1-DT	n.s.
## FCER1A	n.s.
## CYP17A1	n.s.
## SETP8	n.s.
## NHERF1	n.s.
## ZNF181	n.s.
## PLBD1-AS1	n.s.
## FHIP2A	n.s.
## AMD1P1	n.s.
## LINC01023	n.s.
## IGLV8-61	n.s.
## AKAP9	n.s.
## ADAM17	n.s.
## TAF7L	n.s.
## RPA3	n.s.
## NKIRAS1	n.s.
## FASTKD3	n.s.
## COX7A2L	n.s.
## CHRNA10	n.s.
## PGLS-DT	n.s.
## TSKU-AS1	n.s.
## MAPK9	n.s.
## HAUS3	n.s.
## PPRC1	n.s.
## PKHD1	n.s.
## ABLIM2	n.s.
## TXNRD2	n.s.
## CHST1	n.s.
## MUCL1	n.s.
## C1QL4	n.s.
## HPX	n.s.
## SPANXA2-OT1	n.s.
## HOXC4	n.s.
## SNX29P1	n.s.
## LRRC56	n.s.
## RHBG	n.s.
## ZNF775	n.s.
## UBXN11	n.s.
## THRAP3	n.s.
## UNC5B	n.s.

## RAPGEFL1	n.s.
## TLE5	n.s.
## C4orf51	n.s.
## ANKS1B	n.s.
## GIGYF2	n.s.
## CLEC18A	n.s.
## OR2C1	n.s.
## ZNF721	n.s.
## TMEM254	n.s.
## TBCA	n.s.
## UBE2Q1	n.s.
## CEACAM19	n.s.
## POFUT2	n.s.
## KCNH4	n.s.
## LINC01668	n.s.
## LINC02656	n.s.
## HSPA8P18	n.s.
## NHEJ1	n.s.
## STN1	n.s.
## CLEC14A	n.s.
## FMO6P	n.s.
## ZNF594	n.s.
## IGHV2-70	n.s.
## NFRKB	n.s.
## NLRP4	n.s.
## MAPT	n.s.
## PPP1R17	n.s.
## SF3B4	n.s.
## FTH1P7	n.s.
## LINC02502	n.s.
## ST3GAL5-AS1	n.s.
## KIAA1328	n.s.
## KCNJ6	n.s.
## CH25H	n.s.
## GLRA2	n.s.
## PP1P	n.s.
## STX19	n.s.
## ZNF638	n.s.
## FBLL1	n.s.
## SLC6A9	n.s.
## CLASRP	n.s.
## PKP4-AS1	n.s.
## CYP2A6	n.s.
## MICAL1	n.s.
## LINC01460	n.s.
## MTCO3P22	n.s.
## BCL2	n.s.
## MACC1	n.s.
## ERMARD	n.s.
## LINC02398	n.s.
## POMGNT2	n.s.
## PSAPL1	n.s.
## IGHV1-69	n.s.
## IGHV2-70D	n.s.

## NCAPH2	n.s.
## TNS3	n.s.
## RPS4XP2	n.s.
## LPP	n.s.
## RP2	n.s.
## ZNF209P	n.s.
## ATG3	n.s.
## EPS15-AS1	n.s.
## FTSJ1	n.s.
## BAG1	n.s.
## PPIAP29	n.s.
## PPP4R3A	n.s.
## KCMF1	n.s.
## SYNCRIPI	n.s.
## KRTAP2-3	n.s.
## SRSF6P2	n.s.
## NCOA3	n.s.
## RPS4XP7	n.s.
## PDHX	n.s.
## SNORA5C	n.s.
## CDCP1	n.s.
## PA2G4P6	n.s.
## EPHA8	n.s.
## RNA5SP217	n.s.
## AKT1S1	n.s.
## RN7SL608P	n.s.
## PSMD4	n.s.
## UBLCP1	n.s.
## RPS12P26	n.s.
## SCAMP5	n.s.
## FKBP1C	n.s.
## CNOT7	n.s.
## SRSF6	n.s.
## LINC01099	n.s.
## ADAM2	n.s.
## SLC27A1	n.s.
## RLIG1	n.s.
## BLVRA	n.s.
## PAPOLG	n.s.
## CLDND2	n.s.
## IDO2	n.s.
## PAGE5	n.s.
## AOC1	n.s.
## VPS11-DT	n.s.
## AGGF1P2	n.s.
## FAUP1	n.s.
## SGK3	n.s.
## MAD2L1BP	n.s.
## IGHV3-53	n.s.
## CPO	n.s.
## SEPHS2	n.s.
## PCBP2	n.s.
## RNU5B-1	n.s.
## IGLV3-21	n.s.

## AGBL3	n.s.
## GTF2E1	n.s.
## PTGES2-AS1	n.s.
## RPL21P115	n.s.
## TXN	n.s.
## VPS25	n.s.
## RPUSD1	n.s.
## HLA-DRB6	n.s.
## FBXO5	n.s.
## VPS13A	n.s.
## EZHIP	n.s.
## EI24	n.s.
## LINC00504	n.s.
## LINC00491	n.s.
## MRTFA	n.s.
## KCNK5	n.s.
## PROB1	n.s.
## LINC00636	n.s.
## SNHG9	n.s.
## MARK2P16	n.s.
## RIDA	n.s.
## CRYZL2P	n.s.
## C1orf94	n.s.
## TRIM52	n.s.
## NANOS1	n.s.
## KXD1-AS1	n.s.
## CHMP5P1	n.s.
## VDAC1P6	n.s.
## RHAG	n.s.
## KDM7A	n.s.
## MPDZ	n.s.
## GPR68	n.s.
## CANT1	n.s.
## ANKRD26P1	n.s.
## ETAA1	n.s.
## ZEB1-AS1	n.s.
## MTND4P15	n.s.
## UBXN6	n.s.
## PBXIP1	n.s.
## EID3	n.s.
## LINC03026	n.s.
## UIMC1	n.s.
## EPHA2	n.s.
## AGTRAP	n.s.
## NPM1P9	n.s.
## TP53RK	n.s.
## RPL13AP20	n.s.
## FAM157B	n.s.
## CYP2E1	n.s.
## LINC01695	n.s.
## CDK5RAP1	n.s.
## GBX1	n.s.
## SUMO1P3	n.s.
## GTF3C6	n.s.

## CASP7	n.s.
## AHSG	n.s.
## TRGC1	n.s.
## FAM83F	n.s.
## RNU6-181P	n.s.
## SNORA5A	n.s.
## AFF4-DT	n.s.
## B4GALNT4	n.s.
## RASSF10	n.s.
## TMEM47	n.s.
## HSD3B2	n.s.
## ZNF888	n.s.
## MTERF2	n.s.
## COPS2	n.s.
## MGMT	n.s.
## FKBPL	n.s.
## PWP2	n.s.
## LGMN	n.s.
## CHFR-DT	n.s.
## PCDHGB6	n.s.
## GGTLIC4P	n.s.
## SUPT20HL1	n.s.
## IGLC6	n.s.
## SLC30A4-AS1	n.s.
## TIMM23B	n.s.
## ZNF543	n.s.
## TMBIM4	n.s.
## DLX6-AS1	n.s.
## RPL13P12	n.s.
## HTT-AS	n.s.
## LINC01301	n.s.
## GPX1	n.s.
## ERFE	n.s.
## SIGLEC11	n.s.
## CLK3	n.s.
## FAM90A25P	n.s.
## MEAK7	n.s.
## TUT4	n.s.
## VPS26C	n.s.
## ZNF595	n.s.
## MIR3117	n.s.
## PSMC4	n.s.
## AHRR	n.s.
## MEIG1	n.s.
## FRAT2	n.s.
## PKD1P2	n.s.
## SCAND2P	n.s.
## NUTM2B	n.s.
## RAD23BP1	n.s.
## STC2	n.s.
## Clorf116	n.s.
## SOX18	n.s.
## SEPTIN10P1	n.s.
## DHCR7-DT	n.s.

## LINC02674	n.s.
## MRPL39	n.s.
## LINC02864	n.s.
## SNORD113-3	n.s.
## RSKR	n.s.
## SYNPR	n.s.
## TBATA	n.s.
## MYH9-DT	n.s.
## FTH1P20	n.s.
## HRG-AS1	n.s.
## SULT1A2	n.s.
## RPS25P3	n.s.
## DYNLT5	n.s.
## UXT-AS1	n.s.
## SUGP1	n.s.
## EFCAB6-DT	n.s.
## GAPVD1	n.s.
## LINC02783	n.s.
## SELENOH	n.s.
## BTF3P3	n.s.
## ZNF300	n.s.
## IGLL1	n.s.
## MFF-DT	n.s.
## MRPL52	n.s.
## HSF1	n.s.
## FBH1	n.s.
## ATOH7	n.s.
## ZFP41	n.s.
## RFC2	n.s.
## PROX1-AS1	n.s.
## PM20D1	n.s.
## CAPZA2	n.s.
## GPRC5D-AS1	n.s.
## PALB2	n.s.
## HSBP1P2	n.s.
## ZBED5-AS1	n.s.
## PTPN9	n.s.
## INPP4B	n.s.
## Clorf115	n.s.
## ZMYND12	n.s.
## CACNA1G-AS1	n.s.
## ARGLU1	n.s.
## SIRPAP1	n.s.
## MFAP3	n.s.
## ZNF611	n.s.
## GRM5-AS1	n.s.
## ZNF620	n.s.
## CNOT7P1	n.s.
## ZNF215	n.s.
## RPL35AP36	n.s.
## ORMDL1	n.s.
## KPNA5	n.s.
## LINC02066	n.s.
## SZRD1	n.s.

## AMOTL2	n.s.
## FAM221B	n.s.
## MRM3	n.s.
## SELENOKP3	n.s.
## GAB1	n.s.
## HSPA12B	n.s.
## SCARNA7	n.s.
## PSG9	n.s.
## RASSF6	n.s.
## ZNF663P	n.s.
## GFRA3	n.s.
## HNRNPLL	n.s.
## GATC	n.s.
## PRDX1P1	n.s.
## BMP2K-DT	n.s.
## COL9A3	n.s.
## SRCAP	n.s.
## MIR378D2HG	n.s.
## BCAN-AS1	n.s.
## RPL39P3	n.s.
## ATXN1L	n.s.
## TSSK4	n.s.
## SGCG	n.s.
## ENOX1-AS2	n.s.
## POLR2F	n.s.
## SDHB	n.s.
## CHD9	n.s.
## A1BG	n.s.
## LRRC8B	n.s.
## ZNF137P	n.s.
## COX6A1P2	n.s.
## LINC01524	n.s.
## SDHAP1	n.s.
## RAPGEF3	n.s.
## ECHDC3	n.s.
## RTL6	n.s.
## LINC02593	n.s.
## CEBPZOS	n.s.
## GOT2P2	n.s.
## FAM228A	n.s.
## MSL3P1	n.s.
## FBXO27	n.s.
## UBE2CP5	n.s.
## KDM3B	n.s.
## XPO5	n.s.
## FLG	n.s.
## KLC2-AS1	n.s.
## RMND5B	n.s.
## SRFBP1	n.s.
## DALRD3	n.s.
## ARSD-AS1	n.s.
## CDHR2	n.s.
## TCP10L	n.s.
## ZNF681	n.s.

## LINC02966	n.s.
## FAM83G	n.s.
## RPL11P3	n.s.
## CNNM3-DT	n.s.
## ZCWPW1	n.s.
## FNDC3A	n.s.
## HMGN1P8	n.s.
## GARIN1B	n.s.
## SNORD123	n.s.
## LINC00919	n.s.
## MEI4	n.s.
## RHOXF1-AS1	n.s.
## STK25P1	n.s.
## RTEL1-TNFRSF6B	n.s.
## ZNF738	n.s.
## MAP10	n.s.
## TLE1P1	n.s.
## RPSAP12	n.s.
## MAST4-AS1	n.s.
## HNRNPA1P16	n.s.
## CYSRT1	n.s.
## PSG1	n.s.
## LINC02939	n.s.
## RPL7AP30	n.s.
## SHBG	n.s.
## NCOA7-AS1	n.s.
## PPFIBP1	n.s.
## PDGFC	n.s.
## RPL7L1P3	n.s.
## LINC01562	n.s.
## POC1B-AS1	n.s.
## PUM1	n.s.
## RNU1-70P	n.s.
## PROCA1	n.s.
## DCAF15	n.s.
## GGH	n.s.
## KDM8	n.s.
## MSH2-OT1	n.s.
## OSTN-AS1	n.s.
## KLHDC7B-DT	n.s.
## PDSS1	n.s.
## SLC38A3	n.s.
## SFTPA2	n.s.
## SPATA1	n.s.
## TP53I3	n.s.
## FREM3	n.s.
## IBA57-DT	n.s.
## DPY19L2P4	n.s.
## TUBA3D	n.s.
## SPIRE2	n.s.
## RPL21P32	n.s.
## TRAF6P1	n.s.
## CNTN5	n.s.
## SIPA1	n.s.

## EGR2	n.s.
## LINC02987	n.s.
## RTL5	n.s.
## CCNH	n.s.
## EGR3	n.s.
## RNU4-29P	n.s.
## DDX39B	n.s.
## LCMT1-AS2	n.s.
## TDG	n.s.
## GK4P	n.s.
## IRAK1BP1	n.s.
## RBM43	n.s.
## CECR3	n.s.
## GSTM2	n.s.
## SUCLG1	n.s.
## FBXL6	n.s.
## TEX46	n.s.
## RPS27P25	n.s.
## FBXW10	n.s.
## LINC01116	n.s.
## TPMT	n.s.
## POLR2H	n.s.
## CLN8	n.s.
## SYF2	n.s.
## ZBTB18	n.s.
## GTF2I	n.s.
## RSF1	n.s.
## KCNJ14	n.s.
## MIR3609	n.s.
## CNN2P1	n.s.
## DIO2	n.s.
## KRT72	n.s.
## FAM245B	n.s.
## RBM28	n.s.
## PRELID1P5	n.s.
## RPS3AP21	n.s.
## PTPRR	n.s.
## WWC2-AS1	n.s.
## RPS3P3	n.s.
## CDC37L1-DT	n.s.
## MYADM-AS2	n.s.
## FAM204A	n.s.
## MIR4292	n.s.
## HELQ	n.s.
## MYL6P5	n.s.
## PAPOLA	n.s.
## ACTR1B	n.s.
## ATXN7L1	n.s.
## DYNLRB2	n.s.
## TMEM212	n.s.
## TMEM200A	n.s.
## CUTALP	n.s.
## SNHG6	n.s.
## GOLGA8H	n.s.

## PCDHB10	n.s.
## HOXC12	n.s.
## RAVER2	n.s.
## LINC02918	n.s.
## LDHAL6FP	n.s.
## RASSF1-AS1	n.s.
## BRD1	n.s.
## WRAP53	n.s.
## AP2B1P1	n.s.
## IGHV3-74	n.s.
## KCNS2	n.s.
## LINC01675	n.s.
## ZNF593	n.s.
## SLC8A1	n.s.
## IGKV1-13	n.s.
## METAP1	n.s.
## ST13P20	n.s.
## HPN	n.s.
## BRPF1	n.s.
## LCN1	n.s.
## STIM1-AS1	n.s.
## CCDC18-AS1	n.s.
## ALKBH8	n.s.
## ATP1B1P1	n.s.
## FUT6	n.s.
## RPL7L1P9	n.s.
## LINC01694	n.s.
## MAP2K2	n.s.
## CSPG4P11	n.s.
## COL7A1	n.s.
## GUSBP9	n.s.
## ANKRD62P1	n.s.
## SMPD4	n.s.
## LINC02177	n.s.
## LINC01876	n.s.
## RPS16P4	n.s.
## GAPDHP35	n.s.
## ST6GALNAC4P1	n.s.
## METTL16	n.s.
## BZW1P2	n.s.
## PKD1P3	n.s.
## PPP1R12C	n.s.
## UBA3	n.s.
## KANK4	n.s.
## EFNA3	n.s.
## GDPD4	n.s.
## TSEN54	n.s.
## MGST3	n.s.
## INPP5B	n.s.
## HSFX1	n.s.
## CSTF3-DT	n.s.
## GSR	n.s.
## CBX3P4	n.s.
## KRT6A	n.s.

## TOR4A	n.s.
## MACF1	n.s.
## CTDSP12-DT	n.s.
## PITPNB	n.s.
## TMLHE-AS1	n.s.
## BTNL2	n.s.
## STX5-DT	n.s.
## EFCC1	n.s.
## SNRPCP3	n.s.
## TMEM144	n.s.
## YWHAH	n.s.
## IQSEC2	n.s.
## FEM1C	n.s.
## ARL5A	n.s.
## ZNF19	n.s.
## AKAP12	n.s.
## CAST	n.s.
## LINC01506	n.s.
## ATF1	n.s.
## IGHV4-31	n.s.
## VSTM2L	n.s.
## GTF2B	n.s.
## NPAP1P3	n.s.
## RNU6-94P	n.s.
## SUPT7L	n.s.
## IGLON5	n.s.
## ZNF84-DT	n.s.
## HCG25	n.s.
## ZNF503-AS2	n.s.
## ATP2C2-AS1	n.s.
## AOX2P	n.s.
## PWP1	n.s.
## FBXO22	n.s.
## LINC02599	n.s.
## SPRR2A	n.s.
## ABCB7	n.s.
## CHCT1	n.s.
## TIMM22	n.s.
## MRAP-AS1	n.s.
## MLLT1	n.s.
## RN7SL574P	n.s.
## DNAAF1	n.s.
## SLC17A2	n.s.
## HSPA8P15	n.s.
## RXYLT1-AS1	n.s.
## NEDD1	n.s.
## YAP1	n.s.
## IL24	n.s.
## MTND1P27	n.s.
## LINC03008	n.s.
## TMEM242-DT	n.s.
## MTFR2	n.s.
## MRPS14	n.s.
## LEPROTL1	n.s.

## CYCSP34	n.s.
## ACTR3-AS1	n.s.
## EEF1A1P34	n.s.
## WDR4	n.s.
## NOSIP	n.s.
## FH	n.s.
## MAP1LC3B2	n.s.
## ZBTB7A	n.s.
## RUNX1-AS1	n.s.
## SPDEF	n.s.
## TRIP10	n.s.
## MIR3153	n.s.
## TIMMDC1-DT	n.s.
## EXD1	n.s.
## CAPG	n.s.
## RNPEP	n.s.
## EGOT	n.s.
## SND1-DT	n.s.
## PELO-AS1	n.s.
## RPS26P21	n.s.
## FAM78B-AS1	n.s.
## NDUFB9P2	n.s.
## UBL7	n.s.
## GOLGA6FP	n.s.
## C6orf132	n.s.
## ANGEL2	n.s.
## ZNF268	n.s.
## BEGAIN	n.s.
## DMRTC1B	n.s.
## BSN-DT	n.s.
## THNSL2	n.s.
## MSANTD1	n.s.
## RPL23AP81	n.s.
## IPO9	n.s.
## ELFN2	n.s.
## NAXD	n.s.
## TM4SF18	n.s.
## VCX3B	n.s.
## TEX19	n.s.
## L3MBTL3	n.s.
## MYRF	n.s.
## CHD1	n.s.
## UBL5	n.s.
## NR1I3	n.s.
## KANSL1L-AS1	n.s.
## TUBAP2	n.s.
## RNF2	n.s.
## RBM22P2	n.s.
## OSBPL5	n.s.
## SNORA70F	n.s.
## SLC30A10	n.s.
## ABHD14A-ACY1	n.s.
## RPL23AP34	n.s.
## RPL7AP76	n.s.

## RPL37P6	n.s.
## MAP2K5	n.s.
## RRN3P3	n.s.
## COX15	n.s.
## LINC01897	n.s.
## RPS2P32	n.s.
## NFYB	n.s.
## REPS2	n.s.
## WASH8P	n.s.
## PSMF1	n.s.
## MIR26B	n.s.
## C17orf50	n.s.
## LINC00322	n.s.
## MITD1	n.s.
## PRB3	n.s.
## SSR3	n.s.
## FASN	n.s.
## SNX5P2	n.s.
## TLK2	n.s.
## MTDHP3	n.s.
## LINC02716	n.s.
## MOGAT1	n.s.
## HEXD-IT1	n.s.
## IGLV1-44	n.s.
## PRDX2P3	n.s.
## DNAH9	n.s.
## ABCD1	n.s.
## STK11IP	n.s.
## DCTN2	n.s.
## ALDH5A1	n.s.
## PGC	n.s.
## PATJ-DT	n.s.
## CARS1	n.s.
## MIR6757	n.s.
## CTBP1	n.s.
## MS4A10	n.s.
## SHTN1	n.s.
## JMJD1C	n.s.
## SLC24A1	n.s.
## EFHC1	n.s.
## IL6R	n.s.
## PRXL2AP2	n.s.
## TAAR8	n.s.
## BAZ2A	n.s.
## TULP2	n.s.
## SAMM50	n.s.
## KMT2C	n.s.
## APBB2	n.s.
## CSGALNACT2-DT	n.s.
## TRIM38	n.s.
## MOK	n.s.
## HINT1P1	n.s.
## CBX8	n.s.
## CSNK1A1	n.s.

## EHMT2-AS1	n.s.
## UPF3B	n.s.
## IFNGR2	n.s.
## TAGAP-AS1	n.s.
## ASCL4	n.s.
## CYP4X1	n.s.
## IGLV5-52	n.s.
## KCTD2	n.s.
## KDM5D	n.s.
## TPP1	n.s.
## IMP4	n.s.
## FKTN-AS1	n.s.
## HDAC10	n.s.
## CHCHD3P3	n.s.
## PCDHGA10	n.s.
## ZSCAN30	n.s.
## BRD3OS	n.s.
## TBC1D23	n.s.
## SIPA1L1-AS1	n.s.
## NUP107-DT	n.s.
## MIR663AHG	n.s.
## GSTT2	n.s.
## SGTA	n.s.
## ZNF26	n.s.
## MRGBP	n.s.
## DNAI1	n.s.
## ZFP28	n.s.
## SYT15	n.s.
## RFPL1	n.s.
## ANKHD1	n.s.
## AGK-DT	n.s.
## SEC11A	n.s.
## LINC01422	n.s.
## BAALC-AS1	n.s.
## WDFY3	n.s.
## KRT8P11	n.s.
## LPAL2	n.s.
## PIP5KL1	n.s.
## ARIH2OS	n.s.
## RN7SL130P	n.s.
## HIGD1C	n.s.
## SOS1	n.s.
## ZNF207	n.s.
## GABARAP	n.s.
## TIPARP-AS1	n.s.
## ARHGAP44	n.s.
## ATP6V0D2	n.s.
## ANKRD44-AS1	n.s.
## PCDHB14	n.s.
## RUFY2	n.s.
## SRRM5	n.s.
## PRELID1P6	n.s.
## CALHM4	n.s.
## PSMA6P1	n.s.

## ZNF395	n.s.
## LINC01337	n.s.
## TSEN2	n.s.
## LRRC58	n.s.
## CMIP	n.s.
## FAM227B	n.s.
## SPDYC	n.s.
## L3MBTL4	n.s.
## MIR3682	n.s.
## LINC00602	n.s.
## TRIM39	n.s.
## EI24P2	n.s.
## ZNF570	n.s.
## ANKRD10-IT1	n.s.
## MIR4768	n.s.
## PLEKHA6	n.s.
## IDH3B	n.s.
## DUOX2	n.s.
## RN7SL145P	n.s.
## RBKS	n.s.
## THUMPD2	n.s.
## FBXO30	n.s.
## MOV10	n.s.
## TUBA4B	n.s.
## IMMP1L	n.s.
## MYO16-AS1	n.s.
## VN1R80P	n.s.
## LINC02803	n.s.
## ZC3H11B	n.s.
## GYPA	n.s.
## OR9A3P	n.s.
## XRN2	n.s.
## G2E3	n.s.
## CCDC106	n.s.
## ABCC1	n.s.
## FGF13	n.s.
## PELO	n.s.
## CFTR	n.s.
## TSPAN10	n.s.
## ZDHHC11	n.s.
## RNY3P16	n.s.
## ZNF836	n.s.
## HAX1	n.s.
## FAM86C1P	n.s.
## MED26	n.s.
## GLB1L	n.s.
## ATF2	n.s.
## KCNT2	n.s.
## USP36	n.s.
## SMTN	n.s.
## LINC01911	n.s.
## EIF2S2P2	n.s.
## MPHOSPH8	n.s.
## PNMA8C	n.s.

## DNAJB6P1	n.s.
## EIF4A1	n.s.
## ADAM22	n.s.
## PDLIM1P4	n.s.
## CISD2	n.s.
## NKX3-1	n.s.
## NCAM1-AS1	n.s.
## GK	n.s.
## PSMB3	n.s.
## PURPL	n.s.
## LINC02119	n.s.
## PLCXD3	n.s.
## EBAG9	n.s.
## PSMC1P1	n.s.
## IGHV3-13	n.s.
## WASF3	n.s.
## LINC02739	n.s.
## ZNHIT2	n.s.
## RBM17	n.s.
## MYL12-AS1	n.s.
## ANKS1A	n.s.
## PLPP4	n.s.
## ANKRD7	n.s.
## AMD1P3	n.s.
## LINC01385	n.s.
## PJVK	n.s.
## LINC02652	n.s.
## TAF7	n.s.
## MTUS1-DT	n.s.
## KLRA1P	n.s.
## RAB7A	n.s.
## XKR9	n.s.
## SMYD3	n.s.
## KLHL21	n.s.
## CTRC	n.s.
## NCL	n.s.
## TMEM183AP2	n.s.
## GPALPP1	n.s.
## TNRC6B	n.s.
## HSPE1	n.s.
## ATP5MC2	n.s.
## FOXP2	n.s.
## TMEM132A	n.s.
## CD2AP-DT	n.s.
## RAI14-DT	n.s.
## PDCD6	n.s.
## RNF24	n.s.
## GLRX5	n.s.
## HNRNPA1P53	n.s.
## WHSC1L2P	n.s.
## HRH2	n.s.
## ATG101	n.s.
## IGLV3-10	n.s.
## PRMT9	n.s.

## ZNF713	n.s.
## SSBL4P	n.s.
## IFT56	n.s.
## LCIIAR	n.s.
## CIDECP1	n.s.
## CDHR5	n.s.
## CCDC88C-DT	n.s.
## TMEM139-AS1	n.s.
## WDR74	n.s.
## PLA2G1B	n.s.
## DRG1	n.s.
## LINC01724	n.s.
## H3C2	n.s.
## RN7SL663P	n.s.
## GCFC2	n.s.
## TMEM18	n.s.
## FAAP20	n.s.
## WASF4P	n.s.
## SMARCAD1	n.s.
## GLUD1P2	n.s.
## SLC24A2	n.s.
## TMPRSS5	n.s.
## HCAR1	n.s.
## NAPA	n.s.
## PMS2	n.s.
## HDHD3	n.s.
## MTPN	n.s.
## LINC02696	n.s.
## PIGP	n.s.
## UBE2Z	n.s.
## ZZEF1	n.s.
## FADS2	n.s.
## CAND1	n.s.
## TGS1	n.s.
## CLEC6A	n.s.
## UPP2	n.s.
## CCL16	n.s.
## SLC26A4-AS1	n.s.
## CHMP3-AS1	n.s.
## EPB41L3	n.s.
## HLA-DRB1	n.s.
## RBBP5	n.s.
## SNORA54	n.s.
## ACAA2P1	n.s.
## PIBF1	n.s.
## MORC2-AS1	n.s.
## LRRTM1	n.s.
## AKAP7	n.s.
## IFI35	n.s.
## HEATR5A	n.s.
## MIR137HG	n.s.
## CDK6-AS1	n.s.
## NOL3	n.s.
## MSI1	n.s.

## ANKRD62P1-PARP4P3	n.s.
## NAP1L4	n.s.
## DMTF1-AS1	n.s.
## SCPEP1	n.s.
## SORD	n.s.
## SPHKAP	n.s.
## CHILL1	n.s.
## TMEM230	n.s.
## AANAT	n.s.
## MTARC1	n.s.
## MIF-AS1	n.s.
## MYBBP1A	n.s.
## ASMT	n.s.
## PPM1F-AS1	n.s.
## SDHDP2	n.s.
## PPP4R4	n.s.
## SETD3	n.s.
## PA2G4P2	n.s.
## PAK5	n.s.
## TM4SF1	n.s.
## LPA	n.s.
## MKX-AS1	n.s.
## SHOX	n.s.
## DCAF12L1	n.s.
## GYS1	n.s.
## SLC22A7	n.s.
## SLC44A3	n.s.
## ZNF85	n.s.
## GUSBP18	n.s.
## AKR1E2	n.s.
## STK24-AS1	n.s.
## FGF13-AS1	n.s.
## CERT1	n.s.
## COPRS	n.s.
## PFDN2	n.s.
## MYLK	n.s.
## DNAAF4	n.s.
## POLR1C	n.s.
## RPS15AP14	n.s.
## LRRC3B-AS1	n.s.
## HNF1A	n.s.
## GIP	n.s.
## THAP12P7	n.s.
## PDK2	n.s.
## SEPTIN9	n.s.
## IDE	n.s.
## CHTF18	n.s.
## SETBP1-DT	n.s.
## RMDN1	n.s.
## SRSF3P1	n.s.
## UPK1A	n.s.
## RPS19P1	n.s.
## ADAMTS17	n.s.
## LAMTOR5-AS1	n.s.

## LINC00462	n.s.
## CSNK1A1P1	n.s.
## SH2B1	n.s.
## MXD1	n.s.
## NLRP10	n.s.
## FNBP1P1	n.s.
## DGKI	n.s.
## SCUBE3-AS1	n.s.
## STK11	n.s.
## DYNC1I2P1	n.s.
## RNF8	n.s.
## THOC3	n.s.
## UTP4	n.s.
## LINC01361	n.s.
## JMJD1C-AS1	n.s.
## CTAGE9	n.s.
## MFSD11	n.s.
## TES	n.s.
## DPYS	n.s.
## RETSAT	n.s.
## KRT18P4	n.s.
## TCTN1	n.s.
## CCDC188BP	n.s.
## ANTKMT	n.s.
## OCRL	n.s.
## BET1	n.s.
## LINC02512	n.s.
## AQP8	n.s.
## STAG1	n.s.
## GLIS1	n.s.
## NYNRIN	n.s.
## ZNF487	n.s.
## SDHBP1	n.s.
## NARS2	n.s.
## SNORA9B	n.s.
## AMPD2	n.s.
## ZNF644	n.s.
## PADI2	n.s.
## RDH16	n.s.
## OVCH2	n.s.
## TMSB4Y	n.s.
## CES1	n.s.
## SLC35E1	n.s.
## LPIN1	n.s.
## LRRC7	n.s.
## B3GALT1-AS1	n.s.
## SMIM19	n.s.
## RPL36AP40	n.s.
## RING1	n.s.
## ELOCP2	n.s.
## POT1	n.s.
## CLIP2	n.s.
## MIA2	n.s.
## RN7SL513P	n.s.

## ARF4-AS1	n.s.
## PRSS45P	n.s.
## LINC03047	n.s.
## INGX	n.s.
## PCDH17	n.s.
## UBR5	n.s.
## SUGT1P3	n.s.
## MP RIP	n.s.
## LINC02000	n.s.
## SRP14P2	n.s.
## CCDC33	n.s.
## DNAAF5	n.s.
## PDZD4	n.s.
## LGR5	n.s.
## PSMA2	n.s.
## TTC41P	n.s.
## MAFA-AS1	n.s.
## CCNB1IP1	n.s.
## RFX6	n.s.
## LINC02940	n.s.
## CIBAR1-DT	n.s.
## GALR1	n.s.
## GAPDHP63	n.s.
## HCCS-DT	n.s.
## PSMD14-DT	n.s.
## EOLA1-DT	n.s.
## SAP30L	n.s.
## ZNF551	n.s.
## ZNF563	n.s.
## ELOVL4	n.s.
## MROCKI	n.s.
## RPL29P7	n.s.
## TUFM	n.s.
## NFE4	n.s.
## GDF5	n.s.
## IQCC	n.s.
## WASF2	n.s.
## GPR162	n.s.
## HUWE1	n.s.
## ACAT1	n.s.
## GCLC-AS1	n.s.
## ZNF157	n.s.
## ZHX2	n.s.
## RPL34P24	n.s.
## PPDPF	n.s.
## PRELID1P1	n.s.
## VMAC	n.s.
## BFSP2	n.s.
## ANKRD12	n.s.
## LINC01166	n.s.
## MTCYBP24	n.s.
## NEK3	n.s.
## ASL	n.s.
## DNAJA1P3	n.s.

## RPL21P95	n.s.
## PCDHGB8P	n.s.
## FLT3	n.s.
## HCN4	n.s.
## TCF7L2	n.s.
## GLT1D1	n.s.
## SLIT2-IT1	n.s.
## UFC1	n.s.
## ZSCAN4	n.s.
## LINC01167	n.s.
## PHF23	n.s.
## PRKN	n.s.
## RNA5SP82	n.s.
## PRTG	n.s.
## CAPS2	n.s.
## ZNF587	n.s.
## AAR2	n.s.
## CHMP1A	n.s.
## DCUN1D5	n.s.
## CHRNB2	n.s.
## NKX6-1	n.s.
## PHB1	n.s.
## TMEM105	n.s.
## MTND5P12	n.s.
## LATS2	n.s.
## ERAP1	n.s.
## NRIP3-DT	n.s.
## DSCAM	n.s.
## NDUFV1	n.s.
## AGPAT4	n.s.
## H4C8	n.s.
## HBM	n.s.
## RNY1	n.s.
## GNB2	n.s.
## TCF3P1	n.s.
## PATL1-DT	n.s.
## LINC02389	n.s.
## NAALADL2	n.s.
## DDX19B	n.s.
## BTG3-AS1	n.s.
## RPL21P28	n.s.
## GNG10	n.s.
## RNASEK	n.s.
## ZRSR2	n.s.
## CFAP251	n.s.
## DOK7	n.s.
## ARHGEF2-AS1	n.s.
## PKN1	n.s.
## TONSL-AS1	n.s.
## PRPF19-DT	n.s.
## POLR2C	n.s.
## CLNK	n.s.
## TENT5C	n.s.
## CDAN1	n.s.

## GET3	n.s.
## LINC02747	n.s.
## GLYATL1P2	n.s.
## KCNH3	n.s.
## GLUD1	n.s.
## IQSEC3-AS1	n.s.
## WDSUB1	n.s.
## BOLA2-SMG1P6	n.s.
## DDX19A	n.s.
## NAP1L4P1	n.s.
## BBS4	n.s.
## CHKB-CPT1B	n.s.
## UNGP1	n.s.
## TUFMP1	n.s.
## DR1	n.s.
## LINC02387	n.s.
## IER5L	n.s.
## NFAT5	n.s.
## IGHG3	n.s.
## LINC03109	n.s.
## FBXO46	n.s.
## TMSB4XP6	n.s.
## AVPI1	n.s.
## ATP5MC2P4	n.s.
## UBE2MP1	n.s.
## ACTBP15	n.s.
## SEMA4C	n.s.
## COX6C	n.s.
## DUSP8P5	n.s.
## SRMP1	n.s.
## LIAS	n.s.
## VGLL4	n.s.
## SNX18P9	n.s.
## OOEP	n.s.
## CTNNA1P1	n.s.
## ZNF492	n.s.
## MGME1	n.s.
## RPL34-DT	n.s.
## HEATR4	n.s.
## SMC04	n.s.
## SZT2-AS1	n.s.
## RPL29P14	n.s.
## ZDHHC4	n.s.
## EEF1B2P2	n.s.
## RBBP4P1	n.s.
## CASP9	n.s.
## RPS4XP17	n.s.
## RPL21P54	n.s.
## ATP5PBP5	n.s.
## RBX1P2	n.s.
## HMBS	n.s.
## RNU6-925P	n.s.
## SULT1C2	n.s.
## RCCD1-AS1	n.s.

## RBFADN	n.s.
## ESX1	n.s.
## NR2E1	n.s.
## GDPD3	n.s.
## SHKBP1	n.s.
## ARHGEF38-IT1	n.s.
## IGSF11	n.s.
## CSTF1	n.s.
## PALS2	n.s.
## SNRPA1	n.s.
## KRBOX5	n.s.
## RBM12B-AS1	n.s.
## AP4E1	n.s.
## DYNC2I1	n.s.
## LINC02268	n.s.
## TLR2	n.s.
## EIF2A	n.s.
## RDH10-AS1	n.s.
## ORAI1	n.s.
## BRD7P4	n.s.
## ZNF148	n.s.
## SNRPB	n.s.
## RNA5SP154	n.s.
## TPTE2	n.s.
## RN7SL832P	n.s.
## SMC2	n.s.
## TAC3	n.s.
## DCLRE1A	n.s.
## L2HGDH	n.s.
## ELOVL2-AS1	n.s.
## TLE2	n.s.
## METAP2	n.s.
## ZNF256	n.s.
## MPZL3	n.s.
## RSPH10B	n.s.
## CCT6P1	n.s.
## TUG1	n.s.
## FCAR	n.s.
## KRT8P28	n.s.
## COQ7-DT	n.s.
## FAM66D	n.s.
## CLTA	n.s.
## SMIM7	n.s.
## ZC3HC1	n.s.
## MIR5587	n.s.
## CTRB1	n.s.
## IFT122P3	n.s.
## MIR140	n.s.
## UQCC1	n.s.
## EGFL8	n.s.
## STAG3L1	n.s.
## LSS	n.s.
## SCARNA9	n.s.
## KLHL7-DT	n.s.

## MIR8075	n.s.
## TNFAIP3	n.s.
## CAT	n.s.
## ARHGAP35	n.s.
## MANBAL	n.s.
## EMC8	n.s.
## AHR	n.s.
## FRG1	n.s.
## TCAF2	n.s.
## RPL12P13	n.s.
## ANKS6	n.s.
## BIRC7	n.s.
## CYP3A7	n.s.
## ZHX1	n.s.
## TIE1	n.s.
## SPINT3	n.s.
## INA	n.s.
## LINC01971	n.s.
## ERP29P1	n.s.
## PROC	n.s.
## DND1P1	n.s.
## SCN7A	n.s.
## MIR548AA2	n.s.
## RPS15AP6	n.s.
## INO80	n.s.
## MTMR1	n.s.
## TPI1	n.s.
## DANT2	n.s.
## DAP-DT	n.s.
## RPL13AP15	n.s.
## IMPDH1P8	n.s.
## KHSRP	n.s.
## TMEM214	n.s.
## LINC02100	n.s.
## RBBP7	n.s.
## ALDH1B1	n.s.
## PER1	n.s.
## WTAP	n.s.
## FHIT	n.s.
## ABRACL	n.s.
## HADHBP1	n.s.
## IFNL1	n.s.
## ERGIC1	n.s.
## PRKCQ	n.s.
## PPIL6	n.s.
## FCF1P1	n.s.
## ZNF222	n.s.
## SH3TC2-DT	n.s.
## RN7SL444P	n.s.
## CYP7A1	n.s.
## OR2G6	n.s.
## SNX30-DT	n.s.
## NAA35	n.s.
## TMEM31	n.s.

## TUB-AS1	n.s.
## CCDC116	n.s.
## ABHD10	n.s.
## MGST2	n.s.
## RNU6-341P	n.s.
## RPS20P10	n.s.
## BMS1P1	n.s.
## GTF2H2	n.s.
## ABO	n.s.
## ADIPOQ-AS1	n.s.
## RENBP	n.s.
## PMVK	n.s.
## WDR45P1	n.s.
## MKRN5P	n.s.
## LINC01597	n.s.
## DELE1	n.s.
## LINC02582	n.s.
## ADAM7	n.s.
## HSPE1P11	n.s.
## ERAL1	n.s.
## LINC01727	n.s.
## CETN2	n.s.
## PLA2G4B	n.s.
## SHLD2P1	n.s.
## MIS18A	n.s.
## LINC01996	n.s.
## RPL23P2	n.s.
## MOCS2-DT	n.s.
## RPL12P14	n.s.
## ADAL	n.s.
## LINC00942	n.s.
## SSC4D	n.s.
## FBXO42	n.s.
## URAD	n.s.
## MIR3657	n.s.
## ZNF582	n.s.
## PDXDC2P	n.s.
## TMEM161B-DT	n.s.
## ARHGEF15	n.s.
## LINC02388	n.s.
## ARHGAP26	n.s.
## SNORD100	n.s.
## HSPD1P9	n.s.
## YY1	n.s.
## RILPL2	n.s.
## NLRP9	n.s.
## RN7SL67P	n.s.
## COQ4	n.s.
## RPL23AP2	n.s.
## TRBV8-2	n.s.
## PMEL	n.s.
## GLRX	n.s.
## TRIM26	n.s.
## RANBP17	n.s.

## ZNF577	n.s.
## NBEAP1	n.s.
## NDST4	n.s.
## EMD	n.s.
## GDAP1L1	n.s.
## SEC14L1P1	n.s.
## MYO1D-DT	n.s.
## PCDHB7	n.s.
## RPL5P14	n.s.
## GPR75	n.s.
## CRABP1	n.s.
## POLR1A	n.s.
## SAMD15	n.s.
## MED23	n.s.
## FAM13A-AS1	n.s.
## LINC01331	n.s.
## USP15	n.s.
## FGF7P8	n.s.
## RPS23P6	n.s.
## PKHD1L1	n.s.
## RC3H1	n.s.
## RPS27P8	n.s.
## CAMK1G	n.s.
## PARD3	n.s.
## DOC2B	n.s.
## ZNF687-AS1	n.s.
## LINC01489	n.s.
## KIAA0586	n.s.
## ADAR	n.s.
## RPL30P4	n.s.
## LRRC45	n.s.
## OR7E2P	n.s.
## NAA25	n.s.
## APBA3	n.s.
## GCK	n.s.
## TAGLN2P1	n.s.
## RPL36AL	n.s.
## GAPDHP60	n.s.
## LDHAP3	n.s.
## DPM2	n.s.
## LNCRNA-IUR	n.s.
## KLHDC8A	n.s.
## TMSB15A	n.s.
## NRARP	n.s.
## ZNF584	n.s.
## ACTG1P3	n.s.
## OR13A1	n.s.
## GTF2IP5	n.s.
## ZNF415	n.s.
## DUSP19	n.s.
## GUSBP2	n.s.
## ZNF497	n.s.
## LETMD1	n.s.
## SMIM31	n.s.

## MIR4733HG	n.s.
## GSE1	n.s.
## LAS1L	n.s.
## CIB4	n.s.
## COMMD9	n.s.
## ARHGEF18-AS1	n.s.
## RPL7P7	n.s.
## SLC16A8	n.s.
## RPS6KA2	n.s.
## WDTC1	n.s.
## ACTG1	n.s.
## EBLN3P	n.s.
## ADAMTS15	n.s.
## HIGD1B	n.s.
## AFMID	n.s.
## GSTCD	n.s.
## PNMA6B	n.s.
## ZMAT2	n.s.
## TERF1P7	n.s.
## RANGAP1	n.s.
## SNORA72	n.s.
## LINC01730	n.s.
## MIR4730	n.s.
## RINT1	n.s.
## FOXJ3	n.s.
## LINGO1	n.s.
## LINC03059	n.s.
## VCF2	n.s.
## ZNF285DP	n.s.
## RNF4	n.s.
## MTCO2P11	n.s.
## ZBED4	n.s.
## SDHAF1	n.s.
## FRMD4A	n.s.
## NUP93	n.s.
## CDA	n.s.
## LRRIQ1	n.s.
## HOXA11-AS	n.s.
## NKTR	n.s.
## TRIM5	n.s.
## SMIM14	n.s.
## RB1CC1	n.s.
## RPS12P16	n.s.
## MTFMT	n.s.
## ARID3BP1	n.s.
## PCGF6	n.s.
## LMNB2	n.s.
## RPS24P8	n.s.
## MIR217HG	n.s.
## NEIL1	n.s.
## CCNO-DT	n.s.
## KIF5A	n.s.
## CA5A	n.s.
## TIA1	n.s.

## RASL10B	n.s.
## FBXO15	n.s.
## UNC93A	n.s.
## MED28P1	n.s.
## GPR199P	n.s.
## TMPOP2	n.s.
## PPIAP73	n.s.
## LINC01907	n.s.
## KBTBD6	n.s.
## MICOS13	n.s.
## ZNF839	n.s.
## NECTIN3-AS1	n.s.
## RELA	n.s.
## DDTL	n.s.
## ZNF750	n.s.
## C20orf96	n.s.
## PPP1R35-AS1	n.s.
## ATRAID	n.s.
## LYPD9P	n.s.
## RAB6B	n.s.
## MLLT10	n.s.
## TIGD7	n.s.
## DNAH11	n.s.
## ODAD1	n.s.
## NPHP3	n.s.
## MSNP1	n.s.
## OSGEPL1-AS1	n.s.
## PRKG2	n.s.
## TEX264	n.s.
## SCO2	n.s.
## RNU6-8	n.s.
## STRCP1	n.s.
## ANGPTL3	n.s.
## P2RX3	n.s.
## ARL14EP-DT	n.s.
## PNPLA7	n.s.
## ITGAL-AS1	n.s.
## LINC01117	n.s.
## B4GALT6	n.s.
## CA5B	n.s.
## HYMAI	n.s.
## CTAGE3P	n.s.
## GOLT1B	n.s.
## PCMTD1	n.s.
## RPS13P2	n.s.
## CCDC175	n.s.
## COL18A1-AS2	n.s.
## LRP4-AS1	n.s.
## LINC01814	n.s.
## ABI1	n.s.
## EEFSEC	n.s.
## LINC01355	n.s.
## SLC9C2	n.s.
## CDRT4	n.s.

## CYP4F32P	n.s.
## TRAJ39	n.s.
## DCTPP1	n.s.
## EIF5-DT	n.s.
## MIR7515HG	n.s.
## MIR1270	n.s.
## SMARCA2	n.s.
## ADH5P4	n.s.
## PTPN23-DT	n.s.
## IGLV5-37	n.s.
## RPL23AP87	n.s.
## TCP10L2	n.s.
## RN7SKP23	n.s.
## S100A3	n.s.
## LRP2BP-AS1	n.s.
## EXOC2	n.s.
## GATB	n.s.
## CLDND1	n.s.
## POM121L2	n.s.
## FAM163A	n.s.
## LDC1P	n.s.
## SCAF8	n.s.
## PACS1	n.s.
## TSGA10IP	n.s.
## RNU6-323P	n.s.
## LINC01255	n.s.
## RPL32P32	n.s.
## ZNF48	n.s.
## TDP2	n.s.
## P2RY2	n.s.
## HS6ST1P1	n.s.
## MDN1-AS1	n.s.
## RUVBL2	n.s.
## RNU6-1189P	n.s.
## TSEN34	n.s.
## SPDYA	n.s.
## CIB1	n.s.
## SATB2-AS1	n.s.
## ZNF23	n.s.
## RRAGAP1-AS1	n.s.
## PAN3-AS1	n.s.
## STAT5B	n.s.
## ATP5MK	n.s.
## ACSM2A	n.s.
## WWC3	n.s.
## MORF4L1	n.s.
## NAGPA	n.s.
## PTPDC1	n.s.
## CEBPB	n.s.
## JTB-DT	n.s.
## RNU6-1138P	n.s.
## MRPL38	n.s.
## RABGAP1L	n.s.
## WDR86-AS1	n.s.

## H3P47	n.s.
## GOT2P3	n.s.
## RALBP1	n.s.
## GTF3C3	n.s.
## B3GAT3P1	n.s.
## UBE2V1	n.s.
## LINC02145	n.s.
## C1GALT1P1	n.s.
## CENPB	n.s.
## C16orf46	n.s.
## MIR4728	n.s.
## KDM1B	n.s.
## TTC4	n.s.
## MIR145	n.s.
## TOB2	n.s.
## INPP5F	n.s.
## EDDM13	n.s.
## TMCO6	n.s.
## SLC16A6P1	n.s.
## TRPM3	n.s.
## TMEM269	n.s.
## FAM98C	n.s.
## SKA2	n.s.
## PTPRQ	n.s.
## PTP4A1	n.s.
## TBC1D32	n.s.
## RPL7AP26	n.s.
## HSD17B10	n.s.
## ASXL1	n.s.
## LINC03095	n.s.
## MHENCR	n.s.
## NDUFB10P1	n.s.
## DNALI1	n.s.
## CEP162	n.s.
## ECMXP	n.s.
## EXOSC3P1	n.s.
## VPS13B-DT	n.s.
## UBQLN4P1	n.s.
## ETNPPL	n.s.
## ACSM1	n.s.
## AKR1D1	n.s.
## DIP2A	n.s.
## MYO1E	n.s.
## FABP5P3	n.s.
## BCAS2	n.s.
## PFN1P2	n.s.
## RPS3P6	n.s.
## RNF186	n.s.
## LINC01126	n.s.
## EEF1A1P38	n.s.
## KCNK7	n.s.
## KRT10	n.s.
## VDAC1P2	n.s.
## LRRC37A6P	n.s.

## GPRC6A	n.s.
## OR2T3	n.s.
## ZNF527	n.s.
## SNORA14B	n.s.
## GPS2P1	n.s.
## FAM229A	n.s.
## PGD	n.s.
## ABCC10	n.s.
## PGBD2	n.s.
## SQSTM1	n.s.
## PRKCH	n.s.
## AKT2	n.s.
## PTPMT1	n.s.
## PREB	n.s.
## FOXI2	n.s.
## RNU1-73P	n.s.
## RAI2	n.s.
## LINC01004	n.s.
## LINC00159	n.s.
## LINC02925	n.s.
## WASH4P	n.s.
## CRNDE	n.s.
## KLHL30-AS1	n.s.
## IGLV5-45	n.s.
## DCAF13P3	n.s.
## RB1-DT	n.s.
## SPRYD4	n.s.
## PGR-AS1	n.s.
## METTL14	n.s.
## FAM192BP	n.s.
## BCAS3	n.s.
## ACTBL2	n.s.
## ALMS1-IT1	n.s.
## LRRIQ3	n.s.
## DNAJB6P2	n.s.
## SCN1A-AS1	n.s.
## ETV2	n.s.
## GAPDHP14	n.s.
## ATOSA	n.s.
## RNA5SP195	n.s.
## MCF2L2	n.s.
## ZFPL1	n.s.
## SRSF8BP	n.s.
## SLC6A19	n.s.
## PTPN12	n.s.
## GABPB1-IT1	n.s.
## SUMO3	n.s.
## MTA3	n.s.
## ZNF346-IT1	n.s.
## ASMTL	n.s.
## C10orf88	n.s.
## LRRFIP2	n.s.
## TAAR9	n.s.
## PBX3-DT	n.s.

## MICOS10P2	n.s.
## SLC31A1	n.s.
## CTU1	n.s.
## FUNDC2P1	n.s.
## PRPF4B	n.s.
## FAM182B	n.s.
## WWP1	n.s.
## RPS12P27	n.s.
## UBALD1	n.s.
## LYSMD4	n.s.
## SNORA59B	n.s.
## COX6B2	n.s.
## COL6A5	n.s.
## FBXW9	n.s.
## IQGAP1	n.s.
## ITGA10	n.s.
## SPOPLP1	n.s.
## MIR3944	n.s.
## KRBA2	n.s.
## USP41P	n.s.
## CDKN1B	n.s.
## ANKRD42-DT	n.s.
## NEMP2	n.s.
## MVB12A	n.s.
## ZNF695	n.s.
## RETREG3	n.s.
## CNFN	n.s.
## LINC00994	n.s.
## LINC01229	n.s.
## CERS4	n.s.
## SDCBP2-AS1	n.s.
## LAMB2	n.s.
## TRMT5	n.s.
## SNORA55	n.s.
## ENTPD3-AS1	n.s.
## EIF1B-AS1	n.s.
## DEPDC4	n.s.
## MUS81	n.s.
## TDRD12	n.s.
## GPRACR	n.s.
## TRMT12	n.s.
## LINC02356	n.s.
## GSDME	n.s.
## FRYL	n.s.
## CTSF	n.s.
## KIAA1191P2	n.s.
## CDRT15P10	n.s.
## LINC00390	n.s.
## RPL5P17	n.s.
## PLA2G10CP	n.s.
## LINC01001	n.s.
## TBL2	n.s.
## AURKAIP1	n.s.
## MPHOSPH10P1	n.s.

## NR2C1	n.s.
## TRPC7	n.s.
## PSMD9	n.s.
## TRIM62	n.s.
## ZNF876P	n.s.
## GRIA2	n.s.
## LCN1P1	n.s.
## CHRFAM7A	n.s.
## UGT1A10	n.s.
## TRIM52-AS1	n.s.
## VCL	n.s.
## TCF19	n.s.
## C2CD2L	n.s.
## LINC02576	n.s.
## ZNF354A	n.s.
## FAM200B	n.s.
## HAUS6P3	n.s.
## RNU7-57P	n.s.
## PPP1R9A	n.s.
## MAP9	n.s.
## DNAAF8	n.s.
## ACOT7	n.s.
## PACSIN2	n.s.
## GOLGA6L4	n.s.
## LINC00885	n.s.
## CAHM	n.s.
## PPP1R16A	n.s.
## RN7SL559P	n.s.
## CD164	n.s.
## GNG4	n.s.
## LINC01340	n.s.
## SOX21	n.s.
## RMDN2-AS1	n.s.
## JMJD7-PLA2G4B	n.s.
## CAP1	n.s.
## ZNF665	n.s.
## MAPK7	n.s.
## TAB2	n.s.
## POLD1	n.s.
## HSPA1B	n.s.
## IFIT5	n.s.
## DOCK6	n.s.
## NHEG1	n.s.
## LINC02367	n.s.
## IGLV1-40	n.s.
## ZNF205	n.s.
## CA5BP1	n.s.
## RNF138P1	n.s.
## PPM1D	n.s.
## NCBP2L	n.s.
## SLC22A24	n.s.
## GOSR2-DT	n.s.
## FAIM	n.s.
## ARAF	n.s.

## KLHL9	n.s.
## ARHGAP8	n.s.
## ARSA	n.s.
## ST13	n.s.
## SH2D4B	n.s.
## NPAS1	n.s.
## NICOL1	n.s.
## ZNF75D	n.s.
## RWDD4	n.s.
## MRPS31P5	n.s.
## DMWD	n.s.
## FAM88E	n.s.
## KCNV1	n.s.
## CHL1-AS2	n.s.
## TAS2R5	n.s.
## OXR1	n.s.
## HNRNPA3P5	n.s.
## PDCL	n.s.
## LINC01970	n.s.
## UGDH	n.s.
## ZNF490	n.s.
## BTF3-DT	n.s.
## CNTF	n.s.
## LINC00881	n.s.
## MIR3619	n.s.
## HDHD5-AS1	n.s.
## NUCB2	n.s.
## NSUN5P2	n.s.
## TEAD4	n.s.
## RPL19P21	n.s.
## RPL34P18	n.s.
## SRP14	n.s.
## AP3S2	n.s.
## CDHR17P	n.s.
## ARNILA	n.s.
## PEG13	n.s.
## LINC00174	n.s.
## SMG7-AS1	n.s.
## FTOP1	n.s.
## FGF5	n.s.
## MTRF1	n.s.
## ATG4A	n.s.
## CCDC125	n.s.
## PSG8	n.s.
## TAF1A-AS1	n.s.
## TAS2R3	n.s.
## LINC02961	n.s.
## HMGXB3	n.s.
## LRRC46	n.s.
## ADCY10P1	n.s.
## SLC35B4	n.s.
## NPY5R	n.s.
## MAPKAPK3	n.s.
## ABHD18	n.s.

## PTH2R	n.s.
## PLGLB1	n.s.
## TMEM81	n.s.
## SNX17	n.s.
## ACTL6A	n.s.
## HORMAD2-AS1	n.s.
## RPS12P3	n.s.
## EXD3	n.s.
## PRKDC	n.s.
## TMEM147	n.s.
## ZFAND2B	n.s.
## LINC02227	n.s.
## CES2	n.s.
## YJEFN3	n.s.
## BCL6	n.s.
## MRPL55	n.s.
## LINC00240	n.s.
## CRACDL	n.s.
## NPY1R	n.s.
## CLCN4	n.s.
## EEF1A1P13	n.s.
## COX7CP2	n.s.
## ZNF277-AS1	n.s.
## POM121L9P	n.s.
## RNVU1-30	n.s.
## IGIP	n.s.
## GABRA5	n.s.
## DPP9	n.s.
## TMEM231P1	n.s.
## NDUFAF5	n.s.
## CAPN10	n.s.
## HCG20	n.s.
## SPAG6	n.s.
## LRRC3C	n.s.
## ATP6AP1L	n.s.
## ZNF784	n.s.
## ENTPD2	n.s.
## GUCY1B2	n.s.
## MCEE	n.s.
## TAF9B	n.s.
## ZNF805	n.s.
## MIR3171HG	n.s.
## EDNRB-AS1	n.s.
## AGAP7P	n.s.
## JAG2	n.s.
## FGF20	n.s.
## CACTIN-AS1	n.s.
## SCARB2	n.s.
## KIAA1191	n.s.
## CREB3L4	n.s.
## FTH1P12	n.s.
## RAD54L2	n.s.
## EAF2	n.s.
## CPNE7	n.s.

## LINC02887	n.s.
## RIBC1	n.s.
## DUXAP1	n.s.
## SCGB1C1	n.s.
## TENT2	n.s.
## ZMYND10	n.s.
## SURF1	n.s.
## SLC38A8	n.s.
## CHPF	n.s.
## TRIM69	n.s.
## LINC02574	n.s.
## RPS4XP3	n.s.
## VKORC1	n.s.
## NIF3L1	n.s.
## RSL24D1P6	n.s.
## ZNF264	n.s.
## MLX	n.s.
## CD177	n.s.
## MRPL30	n.s.
## ZNF497-AS1	n.s.
## SLC03A1	n.s.
## PTMAP9	n.s.
## TSPAN33	n.s.
## SCGB2A2	n.s.
## EEF1A1P3	n.s.
## CTSLP1	n.s.
## WDR35-DT	n.s.
## ST20-AS1	n.s.
## CCDC28A-AS1	n.s.
## GCNT1P1	n.s.
## RARRES2P1	n.s.
## UBE2V1P2	n.s.
## LINC02275	n.s.
## LRRC42	n.s.
## TSHZ3-AS1	n.s.
## RPL12P7	n.s.
## LDHAP5	n.s.
## FAM156A	n.s.
## TMED1	n.s.
## IFITM3P3	n.s.
## RPL15P7	n.s.
## ZNF594-DT	n.s.
## C9orf163	n.s.
## SCDP1	n.s.
## RBM41	n.s.
## NDUFAB1	n.s.
## GARRE1	n.s.
## GYPB	n.s.
## HMGB1P41	n.s.
## RNF39	n.s.
## CYBC1	n.s.
## CYP1A1	n.s.
## KLRK1-AS1	n.s.
## CAB39	n.s.

## COQ9	n.s.
## COPS8P2	n.s.
## GSTA3	n.s.
## WFDC10B	n.s.
## PLPPR3	n.s.
## ZNF564	n.s.
## MTF2	n.s.
## GAPDHP65	n.s.
## PSMB3P1	n.s.
## OGA	n.s.
## MRO	n.s.
## SNHG1	n.s.
## CNEP1R1P1	n.s.
## CLASP1-AS1	n.s.
## LCMT1-AS1	n.s.
## DENND5B-AS1	n.s.
## GOLGA6L17P	n.s.
## LINC02970	n.s.
## TXLNG	n.s.
## C12orf57	n.s.
## NAA38	n.s.
## MIR138-1	n.s.
## ACBD7	n.s.
## SENP6	n.s.
## TNPO1P1	n.s.
## LINC00457	n.s.
## CPLANE1-AS1	n.s.
## PAICSP1	n.s.
## LINC01738	n.s.
## RNU6-6P	n.s.
## BDNF-AS	n.s.
## ESYT2	n.s.
## CCDC25	n.s.
## UBE2D2	n.s.
## DUX4L35	n.s.
## NEO1	n.s.
## APCDD1L	n.s.
## HMGN2P3	n.s.
## AHCTF1	n.s.
## OTC	n.s.
## SGO1-AS1	n.s.
## GDPD2	n.s.
## TMEM183A	n.s.
## IGLV10-54	n.s.
## SMASR	n.s.
## TEX261	n.s.
## LINC02778	n.s.
## RNU7-47P	n.s.
## OR4F13P	n.s.
## CORIN	n.s.
## ZBED1P1	n.s.
## KRT20	n.s.
## RPL15P11	n.s.
## VASP	n.s.

## CCND3	n.s.
## ATP6V0E1	n.s.
## MAP1LC3B	n.s.
## RPL5P5	n.s.
## GDNF-AS1	n.s.
## CFAP144	n.s.
## CCT2	n.s.
## EPPIN	n.s.
## HERC2	n.s.
## WWC2-AS2	n.s.
## CENPV	n.s.
## SP3	n.s.
## SLC25A11	n.s.
## ERBB3	n.s.
## KIF9	n.s.
## BMS1P2	n.s.
## SSBL2P	n.s.
## NPHP3-AS1	n.s.
## KANSL1-AS1	n.s.
## TEX15	n.s.
## GOLGB1	n.s.
## HOOK3	n.s.
## ZNF132	n.s.
## ICA1L	n.s.
## RPL13AP12	n.s.
## LCLAT1	n.s.
## PIN1-DT	n.s.
## KRT7-AS	n.s.
## PLPP2	n.s.
## PROS2P	n.s.
## RNU7-171P	n.s.
## ELFN1-AS1	n.s.
## RPL12P37	n.s.
## ZNF658	n.s.
## LINC02757	n.s.
## SETD9	n.s.
## SUGT1-DT	n.s.
## OR6K3	n.s.
## GNGT1	n.s.
## RABGEF1P2	n.s.
## CNN2P8	n.s.
## C6orf120	n.s.
## KISS1R	n.s.
## ZNF30-AS1	n.s.
## ASPA	n.s.
## SNORA31	n.s.
## NUDT18	n.s.
## SNORA11F	n.s.
## NUPR1	n.s.
## COPG2IT1	n.s.
## IDS	n.s.
## RPL36AP24	n.s.
## GOLGA6L3P	n.s.
## MIR708	n.s.

## FAM88C	n.s.
## TAS2R64P	n.s.
## AQP7P3	n.s.
## PPARA	n.s.
## SCYL1	n.s.
## RPP38	n.s.
## DOCK11	n.s.
## ALX1	n.s.
## LINC00592	n.s.
## PRR12	n.s.
## DCTN4	n.s.
## ZNF606	n.s.
## LINC02601	n.s.
## SLC9A3R1-AS1	n.s.
## LINC01561	n.s.
## LINC02733	n.s.
## RNU6-944P	n.s.
## WSPAR	n.s.
## CRADD	n.s.
## RNF227	n.s.
## LINC01889	n.s.
## POLD4	n.s.
## LRRC8D	n.s.
## TSSK1A	n.s.
## IGKV3-11	n.s.
## TESC	n.s.
## VARS2	n.s.
## MFSD14CP	n.s.
## ATP5PBP1	n.s.
## EAPP	n.s.
## HMGB3P10	n.s.
## PLG	n.s.
## ZNF503	n.s.
## HELLS	n.s.
## FAM157A	n.s.
## LRRC69	n.s.
## DYDC1	n.s.
## GNRHR2	n.s.
## CCDC30	n.s.
## F3	n.s.
## ABHD4	n.s.
## RPL7AP14	n.s.
## TCERG1L	n.s.
## NANOGP8	n.s.
## TRAPPC6A	n.s.
## PGGT1BP1	n.s.
## R3HDM2-DT	n.s.
## H2BC13	n.s.
## PRRT1	n.s.
## CTAGE7P	n.s.
## FIBCD1	n.s.
## TP53RK-DT	n.s.
## NAE1	n.s.
## CADPS2	n.s.

## DENND10	n.s.
## ARHGEF37	n.s.
## KRTDAP	n.s.
## LORICRIN	n.s.
## ZDHHC11B	n.s.
## YBX1P10	n.s.
## GPR160	n.s.
## LINC01141	n.s.
## ST13P15	n.s.
## RCC2P6	n.s.
## RSPH6A	n.s.
## NOP56P1	n.s.
## MED13L	n.s.
## TGM4	n.s.
## SGCB	n.s.
## STMND1	n.s.
## SCN10A	n.s.
## EVI5L	n.s.
## FOSL1	n.s.
## LINC00987	n.s.
## METTL14-DT	n.s.
## CIBAR1P1	n.s.
## RNU6-37P	n.s.
## C2CD5	n.s.
## SNRNP200	n.s.
## ESCO1	n.s.
## BAHCC1	n.s.
## MCOLN1	n.s.
## NTRK1	n.s.
## SLC2A6	n.s.
## PRUNE2	n.s.
## SLC7A7	n.s.
## GOLGA8Q	n.s.
## STRA6	n.s.
## NME5	n.s.
## STXBP5L	n.s.
## HDAC1P2	n.s.
## COA5	n.s.
## MEN1	n.s.
## FAM187B2P	n.s.
## OGFOD2	n.s.
## TAGLN	n.s.
## NUP43	n.s.
## HS3ST3A1	n.s.
## H4C14	n.s.
## SUZ12P1	n.s.
## MIR4786	n.s.
## MIR3149	n.s.
## EFHC2	n.s.
## SMARCB1	n.s.
## PDCL3	n.s.
## PJA1	n.s.
## ACP6	n.s.
## KRT18P59	n.s.

## HADHAP2	n.s.
## MIR200B	n.s.
## SLC6A15	n.s.
## RPP21	n.s.
## SLC4A5	n.s.
## KRT85	n.s.
## AZGP1P2	n.s.
## COPS6	n.s.
## TUBB2BP1	n.s.
## OR2AE1	n.s.
## CYP4F29P	n.s.
## PDSS2	n.s.
## FOXG1	n.s.
## FRA10AC1	n.s.
## MLPH	n.s.
## CHST5	n.s.
## COL18A1	n.s.
## ZBTB5	n.s.
## CARD14	n.s.
## ATP12A	n.s.
## AHI1	n.s.
## SYT9	n.s.
## RPL19P6	n.s.
## Clorf56	n.s.
## ZNF213-AS1	n.s.
## PLAU	n.s.
## MZT2A	n.s.
## EBF3-AS1	n.s.
## RPS8P4	n.s.
## SEPTIN11	n.s.
## AKR1C8	n.s.
## COMMD8	n.s.
## ATP11B	n.s.
## SASS6	n.s.
## TOP2B	n.s.
## TRPC6P10	n.s.
## PRR14L	n.s.
## TPBGL-AS1	n.s.
## TRAPPc3	n.s.
## TMEM249	n.s.
## CDH10	n.s.
## LRP2BP	n.s.
## FNIP1	n.s.
## ARL2	n.s.
## IFT74-AS1	n.s.
## LINC02405	n.s.
## CHDH	n.s.
## PCOTH	n.s.
## MED29	n.s.
## SPA17P1	n.s.
## ARMCX2	n.s.
## MIR641	n.s.
## RPL3P7	n.s.
## ITGA2-AS1	n.s.

## MOCS1	n.s.
## LRRC51	n.s.
## IPP	n.s.
## PACRG	n.s.
## ZNF723	n.s.
## BOD1L1	n.s.
## DYNLT2B	n.s.
## DYNLT3P2	n.s.
## LINC00676	n.s.
## COL11A2	n.s.
## GTF2H2B	n.s.
## ZDHHC20-IT1	n.s.
## FOXRED2	n.s.
## RPL21P44	n.s.
## MREG	n.s.
## SUMO2P21	n.s.
## FBXL13	n.s.
## CLCA4-AS1	n.s.
## ZCCHC14	n.s.
## MIR320E	n.s.
## BARX2	n.s.
## SEPTIN7P13	n.s.
## SHANK3	n.s.
## CYP4Z1	n.s.
## MED24	n.s.
## PCSK6	n.s.
## NDRG4	n.s.
## IGFL3	n.s.
## KRT8P33	n.s.
## ADGRG6	n.s.
## ILKAP	n.s.
## LINC01395	n.s.
## PPP4R1L	n.s.
## GTF2IP23	n.s.
## PIK3CD-AS2	n.s.
## STRN4	n.s.
## SCML1	n.s.
## ZNF598	n.s.
## DTD1	n.s.
## CYCSP24	n.s.
## BBS1	n.s.
## PSMA1	n.s.
## LHB	n.s.
## PAIP1P2	n.s.
## ODAPH	n.s.
## GDF7	n.s.
## UBE2Q2P1	n.s.
## RPL21P14	n.s.
## GSAP	n.s.
## CYLD-AS2	n.s.
## SF3A3	n.s.
## PPP2R5CP	n.s.
## EDEM2	n.s.
## ZNF132-DT	n.s.

## EIF5AP3	n.s.
## TENT5D	n.s.
## TUBBP1	n.s.
## ZNF146	n.s.
## MIR17HG	n.s.
## LRRC37A4P	n.s.
## SLC47A2	n.s.
## BCL9	n.s.
## WDR73	n.s.
## MYL12AP1	n.s.
## ZRANB1	n.s.
## LINC02302	n.s.
## LINC01342	n.s.
## JAKMIP1-DT	n.s.
## DCDC2	n.s.
## AFF2	n.s.
## NDST3	n.s.
## POP4	n.s.
## STPG4	n.s.
## ADIPOR1	n.s.
## CACHD1	n.s.
## TRIM23	n.s.
## BACH1-IT1	n.s.
## EIF1AXP1	n.s.
## RNU5A-1	n.s.
## THBS2-AS1	n.s.
## UGT2B26P	n.s.
## ANKRD34C	n.s.
## ARSF	n.s.
## RPL7P1	n.s.
## OPN5	n.s.
## USP35	n.s.
## ZNF610	n.s.
## RPS3AP20	n.s.
## C18orf32	n.s.
## SEPTIN9-DT	n.s.
## CHST8	n.s.
## YAE1	n.s.
## EP400P1	n.s.
## MYH11	n.s.
## KMT2E-AS1	n.s.
## NDUFB4P12	n.s.
## EGFR-AS1	n.s.
## GUSBP14	n.s.
## LINC00624	n.s.
## ACAP2-IT1	n.s.
## HNRNPDL4	n.s.
## TEAD1	n.s.
## SLC17A1	n.s.
## ATXN7L3-AS1	n.s.
## SLC35F2	n.s.
## MAN2A2	n.s.
## ALX3	n.s.
## MIR615	n.s.

## MIRLET7I	n.s.
## WASH5P	n.s.
## NUCB1-AS1	n.s.
## BDH2	n.s.
## NPIPBP10P	n.s.
## YPEL3-DT	n.s.
## CCDC12	n.s.
## SLC39A11	n.s.
## VWA7	n.s.
## MRPL40P1	n.s.
## NRADDP	n.s.
## RNU6-4P	n.s.
## AGGF1	n.s.
## SSU72	n.s.
## FXN	n.s.
## TMEM141	n.s.
## PAFAH2	n.s.
## H2BC4	n.s.
## DOCK4	n.s.
## TARS3	n.s.
## CSNK1G1	n.s.
## MTRES1	n.s.
## RTKN	n.s.
## SCMH1	n.s.
## LINC01881	n.s.
## SIRT4	n.s.
## CYP1A2	n.s.
## LINC02604	n.s.
## C12orf60	n.s.
## RHOA-IT1	n.s.
## ITGB1BP1	n.s.
## CCNL2	n.s.
## PLEKHA5	n.s.
## MAPRE1	n.s.
## SNAPC4	n.s.
## KREMEN1	n.s.
## TMED10P1	n.s.
## COX18	n.s.
## PPIAP16	n.s.
## EZR-AS1	n.s.
## C7orf25	n.s.
## RPL27P5	n.s.
## MAP3K8	n.s.
## RNA5SP122	n.s.
## LINC02029	n.s.
## QRFP	n.s.
## FAM86GP	n.s.
## EIF2S2P4	n.s.
## RNA5S9	n.s.
## RNU6-26P	n.s.
## ZFYVE16	n.s.
## LCN6	n.s.
## PRSS35	n.s.
## TIMM8A	n.s.

## CA2	n.s.
## NUP133-DT	n.s.
## MKRN9P	n.s.
## EDRF1-DT	n.s.
## TXN2P1	n.s.
## EVC	n.s.
## KRT19P1	n.s.
## TVP23CP1	n.s.
## HNRNPKP1	n.s.
## NDUFC1	n.s.
## ATP8B1	n.s.
## NUP98	n.s.
## LINC02901	n.s.
## WEE2-AS1	n.s.
## PXN-AS1	n.s.
## GOT2P7	n.s.
## TTC36	n.s.
## ZUP1	n.s.
## RPL21P13	n.s.
## CRYBG3	n.s.
## MIR3193	n.s.
## MIR221	n.s.
## NFU1	n.s.
## MIR124-1HG	n.s.
## LINC03101	n.s.
## DOCK3	n.s.
## TARDBPP2	n.s.
## DTX3L	n.s.
## WNK1	n.s.
## ANKRD37	n.s.
## NUTM2B-AS1	n.s.
## DDX23	n.s.
## RNLS	n.s.
## LINC02572	n.s.
## RPE65	n.s.
## VPS51	n.s.
## MIR559	n.s.
## PURB	n.s.
## TAS1R1	n.s.
## CRYBG1	n.s.
## ELOVL5	n.s.
## KLHL5	n.s.
## WARS2	n.s.
## PLSCR4	n.s.
## DOCK6-AS1	n.s.
## ZNF101P2	n.s.
## DNAAF9	n.s.
## ZDHHC1	n.s.
## OXLD1	n.s.
## TRAPPC12	n.s.
## SCGB1D2	n.s.
## MIR1285-1	n.s.
## RNU6-883P	n.s.
## DPP9-AS1	n.s.

## OR7E126P	n.s.
## FAM87A	n.s.
## NISCH	n.s.
## TCF7L1	n.s.
## ASAP3	n.s.
## ALS2	n.s.
## RPS27AP12	n.s.
## LINC01933	n.s.
## CCDC13-AS2	n.s.
## BCAN-AS2	n.s.
## ATP5PDP4	n.s.
## MDP1	n.s.
## TUBGCP5	n.s.
## SYNDIG1	n.s.
## CPA6	n.s.
## HNRNPKP2	n.s.
## BTBD2	n.s.
## CCDC61	n.s.
## UBXN10	n.s.
## MAGEC3	n.s.
## HEY2-AS1	n.s.
## GUCA2A	n.s.
## ZNRF2P1	n.s.
## LINC02615	n.s.
## NDUFV2P1	n.s.
## MBL3P	n.s.
## GRHL3-AS1	n.s.
## CHTOP	n.s.
## MARCHF9	n.s.
## ZNF251	n.s.
## ZBTB40-IT1	n.s.
## HSPE1P4	n.s.
## ERVK13-1	n.s.
## MAN1B1-DT	n.s.
## PDS5B	n.s.
## CSE1L	n.s.
## TMED4	n.s.
## RNU6-5P	n.s.
## VPS11	n.s.
## LINC01797	n.s.
## ITGA9-AS1	n.s.
## SNORD46	n.s.
## RASA4EP	n.s.
## PLCZ1	n.s.
## APOF	n.s.
## ACSS3	n.s.
## TLE1	n.s.
## PGA3	n.s.
## IGHV3-73	n.s.
## MIR4482	n.s.
## FN3KRP	n.s.
## TJAP1	n.s.
## HTATIP2	n.s.
## LRIG2	n.s.

## SDHAF4	n.s.
## TMEM82	n.s.
## ACVRL1	n.s.
## ITGB3BP	n.s.
## DNAI7	n.s.
## SLC6A12-AS1	n.s.
## RAB3GAP1	n.s.
## DOCK7-DT	n.s.
## RPL7P24	n.s.
## DSG2-AS1	n.s.
## BAMBI	n.s.
## OR51E1	n.s.
## LINC01269	n.s.
## HERC2P9	n.s.
## FAM86LP	n.s.
## WDR24	n.s.
## MYCNOS	n.s.
## THAP5P1	n.s.
## COQ5	n.s.
## FAM117A	n.s.
## CTR9	n.s.
## ARID4B	n.s.
## SEC61A1	n.s.
## LONRF1	n.s.
## PGAM1P5	n.s.
## MSANTD2-AS1	n.s.
## INCENP	n.s.
## KRT39	n.s.
## LYPLA2P2	n.s.
## NIT2	n.s.
## MID1IP1-AS1	n.s.
## SNORA75	n.s.
## SNORA80B	n.s.
## ANKRD20A5P	n.s.
## FAM124B	n.s.
## SLC25A34-AS1	n.s.
## GOLGA8IP	n.s.
## MORN4	n.s.
## EEF1B2P1	n.s.
## WTAPP1	n.s.
## UNC119	n.s.
## LINC02346	n.s.
## RAD50	n.s.
## ARHGAP28	n.s.
## NELFCD	n.s.
## FAM178B	n.s.
## GK-IT1	n.s.
## TFE3	n.s.
## SLC25A43	n.s.
## GAPDHP40	n.s.
## ACOT1	n.s.
## C6orf226	n.s.
## TTC14	n.s.
## IFT57	n.s.

## TCAM1P	n.s.
## CYP26A1	n.s.
## ZNF626	n.s.
## FUZ	n.s.
## RPS27P3	n.s.
## TCP1P1	n.s.
## RANP8	n.s.
## HSD11B1	n.s.
## BCORL1	n.s.
## GLRA3	n.s.
## RN7SKP296	n.s.
## CCT5P1	n.s.
## TMEM203	n.s.
## YWHAZP3	n.s.
## FOXK1	n.s.
## RSPH1	n.s.
## BNIP3P5	n.s.
## NPIPBP2	n.s.
## RNU4ATAC18P	n.s.
## ERG	n.s.
## STAG1-DT	n.s.
## LINC01686	n.s.
## STIM2-AS1	n.s.
## NKX6-2	n.s.
## IGLV2-28	n.s.
## PPIAP14	n.s.
## LINC01033	n.s.
## RPL21P40	n.s.
## MED30	n.s.
## RPL7P23	n.s.
## SLC35G5	n.s.
## MTCYBP35	n.s.
## DLX6	n.s.
## TMEM126A	n.s.
## TMEM270	n.s.
## GRAPL	n.s.
## SLC25A6P2	n.s.
## MIR6505	n.s.
## NMT1	n.s.
## SNORD94	n.s.
## CLRN2	n.s.
## PHACTR2P1	n.s.
## NARF-IT1	n.s.
## LINC03054	n.s.
## CCS	n.s.
## RAD52	n.s.
## FBXW12	n.s.
## VPS16	n.s.
## LINC02147	n.s.
## MOB1A	n.s.
## GIGYF1	n.s.
## PAN2	n.s.
## CFAP44	n.s.
## LINC00582	n.s.

## KRT8P10	n.s.
## EEF1A1P10	n.s.
## TAS2R10	n.s.
## MAK	n.s.
## LRRC37A16P	n.s.
## ETV3	n.s.
## PSMB6	n.s.
## TTC12-DT	n.s.
## MIR7851	n.s.
## BANF2	n.s.
## CHRNA7	n.s.
## CUTA	n.s.
## DCST1-AS1	n.s.
## CENPC	n.s.
## KLHL32	n.s.
## LOXL2-AS1	n.s.
## OR3A2	n.s.
## SNX18P14	n.s.
## FBXL19-AS1	n.s.
## ZNF524	n.s.
## SUGT1P4-STRALP	n.s.
## SEPSECS	n.s.
## MIR1180	n.s.
## RBP4	n.s.
## ATXN8OS	n.s.
## NMBR	n.s.
## LINC00992	n.s.
## LINC02926	n.s.
## PRKCZ	n.s.
## BSN	n.s.
## LINC01416	n.s.
## BAZ2B	n.s.
## RNF185	n.s.
## MIER2	n.s.
## EHHADH-AS1	n.s.
## N4BP2L2	n.s.
## ACSM6	n.s.
## SCOCP1	n.s.
## HOXA6	n.s.
## RBM12B-DT	n.s.
## FSCN3	n.s.
## SNORD14E	n.s.
## MED31	n.s.
## EPO	n.s.
## SEC24A	n.s.
## PRPF31-AS1	n.s.
## GRPR	n.s.
## EPHA7	n.s.
## H3-5	n.s.
## RN7SL364P	n.s.
## POLI	n.s.
## ATP5PF	n.s.
## HMGN3	n.s.
## CLEC20A	n.s.

## THAP12P1	n.s.
## TGFBR1	n.s.
## F7	n.s.
## NACAD	n.s.
## NPIPBP12	n.s.
## TRMU	n.s.
## LINC00305	n.s.
## AK4P4	n.s.
## IMPACT	n.s.
## MAGI2-AS3	n.s.
## GPHA2	n.s.
## PDCL3P4	n.s.
## LINC01545	n.s.
## LINC01393	n.s.
## STX16	n.s.
## ZMYM5	n.s.
## PGGHG	n.s.
## NDRG1	n.s.
## CFLAR-AS1	n.s.
## ESD	n.s.
## ZC3H15	n.s.
## USP34	n.s.
## AQP7	n.s.
## MUC19	n.s.
## MYLK-AS2	n.s.
## ISCA1P1	n.s.
## FAM86EP	n.s.
## THSD7B	n.s.
## PIGC	n.s.
## P2RY4	n.s.
## LYRM7	n.s.
## SNAPC5	n.s.
## NBPF17P	n.s.
## ANKRD16	n.s.
## EPS8L3	n.s.
## SH3BP5-AS1	n.s.
## RBMS2P1	n.s.
## RPL4P3	n.s.
## TCN2	n.s.
## SMILR	n.s.
## ENO2	n.s.
## EPHX1	n.s.
## IGHV4-34	n.s.
## ACTG1P14	n.s.
## FBXO47	n.s.
## SELENOO	n.s.
## GREB1L-DT	n.s.
## HTR1D	n.s.
## SLC4A1APP1	n.s.
## CPEB2-DT	n.s.
## SNORD9	n.s.
## DNAH3	n.s.
## DZANK1	n.s.
## RPL13AP11	n.s.

## TSFM	n.s.
## TEFM	n.s.
## LINC01621	n.s.
## PHF10	n.s.
## PABIR3	n.s.
## MCTS1	n.s.
## DCDC2C	n.s.
## GNG8	n.s.
## IKZF5	n.s.
## FZD1	n.s.
## TMEM184B	n.s.
## PSENEN	n.s.
## SLC25A27	n.s.
## MRGPRE	n.s.
## MDH1B	n.s.
## DGLUCY	n.s.
## LINC01836	n.s.
## PRDX1	n.s.
## RPE	n.s.
## RARA-AS1	n.s.
## CCDC85A	n.s.
## KCNJ15	n.s.
## EIF5A2P1	n.s.
## LEMD1	n.s.
## CCDC57	n.s.
## POGZ	n.s.
## AMER3	n.s.
## LINC02201	n.s.
## FCF1	n.s.
## RPL21P75	n.s.
## ASIC4	n.s.
## SUPV3L1	n.s.
## HMGB1P49	n.s.
## FGF8	n.s.
## VPS51P2	n.s.
## LINC00165	n.s.
## MBNL2	n.s.
## CASC15	n.s.
## TSPAN3	n.s.
## YIPF5	n.s.
## CFAP46	n.s.
## SPNS2	n.s.
## SRGN	n.s.
## AP2A1	n.s.
## KRT223P	n.s.
## NDUFAF7	n.s.
## VN1R85P	n.s.
## RNASE13	n.s.
## GRWD1	n.s.
## CR2	n.s.
## ZC3H13	n.s.
## MIPEPP3	n.s.
## SLC44A1	n.s.
## NPPA	n.s.

## TRAF3IP2-AS1	n.s.
## NRDC	n.s.
## GMEB1	n.s.
## SLAIN2	n.s.
## LINC02853	n.s.
## RNVU1-27	n.s.
## TAB1	n.s.
## TYW5	n.s.
## MTX3	n.s.
## BLTP3B-DT	n.s.
## CFAP99	n.s.
## RBAK	n.s.
## PRR4	n.s.
## FZD4-DT	n.s.
## ST3GAL1	n.s.
## GJB7	n.s.
## SOX30	n.s.
## PABPN1	n.s.
## RPS28P4	n.s.
## EEF1GP1	n.s.
## MIR542	n.s.
## SHH	n.s.
## DCTN1	n.s.
## MAGI1-IT1	n.s.
## RN7SL12P	n.s.
## LINC02133	n.s.
## RPS3AP5	n.s.
## TAF6	n.s.
## NELFB	n.s.
## SPSB2	n.s.
## DHX34	n.s.
## PTPA	n.s.
## PM20D1-AS1	n.s.
## CELF4	n.s.
## INPPL1	n.s.
## CYCSP10	n.s.
## TTC23L	n.s.
## IRAK2	n.s.
## SEPTIN7P7	n.s.
## GTF2A1L	n.s.
## SIGMAR1	n.s.
## HTR3C	n.s.
## SLC25A36P1	n.s.
## KIFAP3	n.s.
## CNTN1	n.s.
## SSPOP	n.s.
## CCDC88C	n.s.
## ASNSD1	n.s.
## TMEM244	n.s.
## INTS2	n.s.
## ABHD16B	n.s.
## COX7BP3	n.s.
## FLNB-AS1	n.s.
## FAM200A	n.s.

## GMPSP1	n.s.
## HNRNPLP2	n.s.
## BLTP2	n.s.
## ACAA1	n.s.
## RPSAP47	n.s.
## ZNF136	n.s.
## CEACAM7	n.s.
## ADPRH	n.s.
## PSMA6	n.s.
## HCG21	n.s.
## TFCP2	n.s.
## LRRC37A5P	n.s.
## LRRC37A11P	n.s.
## HPS6	n.s.
## MIR9-1HG	n.s.
## TXNP4	n.s.
## CEP295	n.s.
## ALDH1L1-AS1	n.s.
## BCRP4	n.s.
## ELL2P1	n.s.
## RNU6-658P	n.s.
## LIPJ	n.s.
## CFAP90	n.s.
## ARPC4	n.s.
## GOLGA8S	n.s.
## LINC03085	n.s.
## USP27X	n.s.
## AKTIPP2	n.s.
## ARPC1AP4	n.s.
## MAP1LC3A	n.s.
## GPATCH8	n.s.
## USP32P3	n.s.
## LINC00852	n.s.
## MATR3P3	n.s.
## ZKSCAN1	n.s.
## RNU1-103P	n.s.
## LINC01902	n.s.
## PAGE2B	n.s.
## ARHGEF9	n.s.
## HPN-AS1	n.s.
## ANOS2P	n.s.
## ALKBH3	n.s.
## HAPSTR2	n.s.
## RN7SL105P	n.s.
## ZFHX2-AS1	n.s.
## LOXHD1	n.s.
## KPNA2	n.s.
## DUX4L26	n.s.
## CHD2	n.s.
## RNPS1P1	n.s.
## ERVFRD-3	n.s.
## KIF26A-DT	n.s.
## SLC22A3	n.s.
## RBM33	n.s.

## PLBD1	n.s.
## CYP2D6	n.s.
## RSU1	n.s.
## DIP2A-IT1	n.s.
## CISTR	n.s.
## TMEM222	n.s.
## GPR155-DT	n.s.
## NSMF	n.s.
## NANOGP5	n.s.
## RPS17P2	n.s.
## MAP3K10	n.s.
## SMS	n.s.
## COA6-AS1	n.s.
## IGLV2-8	n.s.
## CYP26C1	n.s.
## FAM131A	n.s.
## PYGO2	n.s.
## ODC1	n.s.
## CCT5P2	n.s.
## SUMO2P1	n.s.
## ZNF160	n.s.
## FAM3C	n.s.
## SLC4A9	n.s.
## RAB37	n.s.
## CSE1L-DT	n.s.
## RPS29P3	n.s.
## SLC25A13	n.s.
## LINC00114	n.s.
## RSPH1-DT	n.s.
## HSDL2	n.s.
## PABPN1P1	n.s.
## RPS15AP29	n.s.
## RPL6P13	n.s.
## CCT7	n.s.
## SLC66A1	n.s.
## FOXO3	n.s.
## LRRC32	n.s.
## CACYBPP2	n.s.
## CTSC	n.s.
## ACTR1A	n.s.
## ELOCP19	n.s.
## RIIAD1	n.s.
## SNORA14A	n.s.
## ITIH6	n.s.
## ZSCAN5B	n.s.
## NAA16	n.s.
## SYMPK	n.s.
## LINC00222	n.s.
## ARMCX4	n.s.
## UBE2D3P1	n.s.
## AKAP10	n.s.
## CFL1P5	n.s.
## LINC01843	n.s.
## CTDSPL2	n.s.

## SCHIP1	n.s.
## KCNMB3	n.s.
## ZNF12	n.s.
## MTMR8	n.s.
## WDR88	n.s.
## IGHG2	n.s.
## POLR1B	n.s.
## ZNF440	n.s.
## ZNF484	n.s.
## SETDB2	n.s.
## DOCK1	n.s.
## PCNPP5	n.s.
## ASLP1	n.s.
## RASGEF1C	n.s.
## SNORD11	n.s.
## RNU12-2P	n.s.
## CIBAR1	n.s.
## TUBG1P	n.s.
## PLA2G12AP1	n.s.
## STUB1-DT	n.s.
## LINC02749	n.s.
## DCST1	n.s.
## ZNF488	n.s.
## HMGN4	n.s.
## GCC2-AS1	n.s.
## ZNF567	n.s.
## PTGES3P2	n.s.
## CHD1-DT	n.s.
## ZNF699	n.s.
## PTMAP4	n.s.
## MIR6859-1	n.s.
## RSL24D1	n.s.
## CCDC66	n.s.
## SERPINB7	n.s.
## SPTBN5	n.s.
## LINC00677	n.s.
## SECISBP2	n.s.
## RN7SL359P	n.s.
## LINC02236	n.s.
## GAPDHP23	n.s.
## TNFAIP8L1	n.s.
## UBTFL9	n.s.
## ARHGAP44-AS1	n.s.
## SUPT16H	n.s.
## C3orf18	n.s.
## LRP5L	n.s.
## TIMD4	n.s.
## KRT8P52	n.s.
## ZNF285CP	n.s.
## THRB-AS1	n.s.
## ACBD6	n.s.
## NAT10	n.s.
## RANGRF	n.s.
## LINC01096	n.s.

## ARRDC1-AS1	n.s.
## LINC01016	n.s.
## PIK3R2	n.s.
## C9orf78P2	n.s.
## PCNX4	n.s.
## SLC35E3	n.s.
## LAMB2P1	n.s.
## SLC25A26	n.s.
## AKR7A2P1	n.s.
## UNC93B3	n.s.
## PAQR5-DT	n.s.
## MACIR	n.s.
## ARL4AP5	n.s.
## KIAA1549L	n.s.
## KASH5	n.s.
## C1QTNF8	n.s.
## CYP4F59P	n.s.
## MAN2C1	n.s.
## EXOSC9	n.s.
## FADS6	n.s.
## INTS5	n.s.
## RMI1	n.s.
## DPP3-DT	n.s.
## RRP36	n.s.
## ZNF528-AS1	n.s.
## SDCBP	n.s.
## THUMPD3P1	n.s.
## MIR4519	n.s.
## IGLV4-69	n.s.
## TMEM256-PLSCR3	n.s.
## TSSC4	n.s.
## PRSS44P	n.s.
## AKAP1-DT	n.s.
## H2BC9	n.s.
## RNU6-646P	n.s.
## SNRPEP2	n.s.
## RN7SKP173	n.s.
## HIRIP3	n.s.
## PRXL2B	n.s.
## YWHAZP2	n.s.
## FAXC	n.s.
## NPM1P24	n.s.
## DBNDD2	n.s.
## PCDHA8	n.s.
## DGCR8	n.s.
## PSPHP1	n.s.
## RAB6C	n.s.
## RNU6-1223P	n.s.
## HNRNPCL1	n.s.
## LINC01311	n.s.
## IGHV7-4-1	n.s.
## TNPO3	n.s.
## C20orf203	n.s.
## MIR3942	n.s.

## MET	n.s.
## MATCAP1	n.s.
## BRCC3	n.s.
## COX4I2	n.s.
## CNOT8	n.s.
## KRT18P51	n.s.
## STRAP	n.s.
## RIOK3	n.s.
## RLN2	n.s.
## TRAJ35	n.s.
## LINC01418	n.s.
## SNX29P2	n.s.
## NPIP83	n.s.
## LINC00320	n.s.
## DMRTA2	n.s.
## FOXO4	n.s.
## LINC02344	n.s.
## PYDC1	n.s.
## LRRC63	n.s.
## AGER	n.s.
## TMEM191B	n.s.
## HTATSF1	n.s.
## CITED4	n.s.
## ALG1L2	n.s.
## WIZ	n.s.
## MAP3K11	n.s.
## XPNPEP2	n.s.
## ACOXL	n.s.
## LINC01102	n.s.
## GRIN3A	n.s.
## PEX5	n.s.
## TERB1	n.s.
## ANKRD20A21P	n.s.
## DNAJC6	n.s.
## SPATA41	n.s.
## ZNF100	n.s.
## AGR2	n.s.
## ATP8B5P	n.s.
## HNRNPA1L3	n.s.
## USP51	n.s.
## LNPEP	n.s.
## RSL24D1P11	n.s.
## PAK2	n.s.
## MPHOSPH10P3	n.s.
## LINC01431	n.s.
## UPK3BL3P	n.s.
## SLC22A6	n.s.
## IGLV2-5	n.s.
## OR2A42	n.s.
## MIR4737	n.s.
## TOP3BP1	n.s.
## PRELID1	n.s.
## ZNF143	n.s.
## CFL1P6	n.s.

## RCBTB1	n.s.
## MIRLET7IHG	n.s.
## ANKRD20A1	n.s.
## LTBP1	n.s.
## ARHGEF35-AS1	n.s.
## CCDC51	n.s.
## SUMO4	n.s.
## DOC2A	n.s.
## TRIM47	n.s.
## ZNG1B	n.s.
## H2AC6	n.s.
## RPL31P52	n.s.
## RBISP3	n.s.
## ZNF572	n.s.
## AMMECR1	n.s.
## IGHGP	n.s.
## RGN	n.s.
## EIF1P6	n.s.
## CDKL1	n.s.
## TRADD	n.s.
## MATR3	n.s.
## B3GNT4	n.s.
## NCKAP5-AS2	n.s.
## USP14	n.s.
## HIF1A-AS3	n.s.
## PAPPA-AS2	n.s.
## MIR3145	n.s.
## POU5F1B	n.s.
## PCBP2P2	n.s.
## PPP3CC	n.s.
## SRSF10	n.s.
## OGT	n.s.
## FGF2	n.s.
## RARS1	n.s.
## NME2P1	n.s.
## RGS7	n.s.
## NDUFA4	n.s.
## RPL7P38	n.s.
## LLPH	n.s.
## CAMTA1-AS3	n.s.
## TMEM223	n.s.
## STEAP1B-AS1	n.s.
## PSME2P1	n.s.
## HESX1	n.s.
## TPK1	n.s.
## POU4F3	n.s.
## KIAA2012	n.s.
## SPATA20P1	n.s.
## RPL7P6	n.s.
## PKIA-AS1	n.s.
## HMGB1P1	n.s.
## HMGB1P6	n.s.
## HOXB-AS1	n.s.
## SNORA59A	n.s.

## ZBTB37	n.s.
## ZNF428	n.s.
## WNT9B	n.s.
## PRDM12	n.s.
## DDX39B-AS1	n.s.
## THSD8	n.s.
## MTHFD2	n.s.
## NEFM	n.s.
## MST1R	n.s.
## KCTD9P2	n.s.
## ADAM7-AS2	n.s.
## MIR4635	n.s.
## TPI1P1	n.s.
## BAGE2	n.s.
## LRRC2-AS1	n.s.
## TMEM147-AS1	n.s.
## TMEM87B	n.s.
## ZFP36L1	n.s.
## RNU6-312P	n.s.
## FAM21EP	n.s.
## SNRPCP17	n.s.
## SF3A3P2	n.s.
## CAMTA1	n.s.
## PSMG3-AS1	n.s.
## MAP1S	n.s.
## SNHG25	n.s.
## IL36RN	n.s.
## PEF1-AS1	n.s.
## ABHD17AP3	n.s.
## RNPC3	n.s.
## TPTEP1	n.s.
## RNA5SP474	n.s.
## ADK	n.s.
## ZMYM2	n.s.
## CEP20	n.s.
## FAM185BP	n.s.
## MYCBP2-AS1	n.s.
## RABL2B	n.s.
## AFAP1-AS1	n.s.
## CHUK-DT	n.s.
## NAT2	n.s.
## CALML3	n.s.
## ATP5MKP1	n.s.
## ZKSCAN2	n.s.
## NAIPPP2	n.s.
## ST13P7	n.s.
## TXLNGY	n.s.
## RNASEH1	n.s.
## FUNDC2	n.s.
## TPRKB	n.s.
## NHS-AS1	n.s.
## EHHADH	n.s.
## NOXRED1	n.s.
## RNF139	n.s.

## EEF1A1P25	n.s.
## CSPG4P12	n.s.
## CTSLP3	n.s.
## TAGLN3	n.s.
## DDX17	n.s.
## ATG10	n.s.
## SRI	n.s.
## BBS7	n.s.
## TEPSIN	n.s.
## SH3GL1P2	n.s.
## SPEN	n.s.
## DYNLT4	n.s.
## MTUS1	n.s.
## ISX	n.s.
## GTF3C2-AS1	n.s.
## PPP4R3B-DT	n.s.
## NACA4P	n.s.
## LRIF1	n.s.
## SNTB1	n.s.
## KLHL42	n.s.
## TSNARE1	n.s.
## MRPL13	n.s.
## EMC9	n.s.
## NECTIN1-DT	n.s.
## ATP2B1	n.s.
## NFKBIZ	n.s.
## RN7SL809P	n.s.
## RAB11FIP3	n.s.
## RTL4	n.s.
## FAM174A-DT	n.s.
## SPTSSB	n.s.
## FAM66B	n.s.
## LINC03065	n.s.
## CCNO	n.s.
## RPS15AP36	n.s.
## MED28-DT	n.s.
## IL23R	n.s.
## PRDM10	n.s.
## SEC22B	n.s.
## GAPDHP52	n.s.
## CNGB3	n.s.
## DHDDS-AS1	n.s.
## TIAM1	n.s.
## FAM86KP	n.s.
## LINC01187	n.s.
## GORASP2	n.s.
## GAPDHP76	n.s.
## ZBTB1	n.s.
## WHAMM	n.s.
## CENATAC	n.s.
## NPAT	n.s.
## LIF-AS2	n.s.
## DHX16	n.s.
## GALR3	n.s.

## LINC02848	n.s.
## SNRPGP2	n.s.
## DAP3P1	n.s.
## CRYZL2P-SEC16B	n.s.
## FAM27B	n.s.
## SNORA16B	n.s.
## PTGES3P1	n.s.
## PRPF19	n.s.
## ZNF470-DT	n.s.
## TOE1	n.s.
## DPPA4P3	n.s.
## RAD51-AS1	n.s.
## PLPPR1	n.s.
## IGKV1D-43	n.s.
## ALPK1	n.s.
## ZNG1C	n.s.
## ZFP2	n.s.
## GPR84	n.s.
## GUF1	n.s.
## CYB5R3	n.s.
## PCDHGB9P	n.s.
## FAM185A	n.s.
## PROZ	n.s.
## TCP1P3	n.s.
## MAGEE2	n.s.
## PFN1P11	n.s.
## SLC41A3-AS1	n.s.
## INSYN2A	n.s.
## CHORDC1P4	n.s.
## FKTN	n.s.
## SNORA53	n.s.
## CNOT10	n.s.
## HOXD4	n.s.
## RARRES2P11	n.s.
## LINC02470	n.s.
## MAPK3	n.s.
## FAM50A	n.s.
## CAMKV	n.s.
## DNAJC8P1	n.s.
## CTAGE13P	n.s.
## CCDC32	n.s.
## PHLDA2	n.s.
## WAC	n.s.
## PRPF4BP1	n.s.
## LIPF	n.s.
## H4C16	n.s.
## DHX8	n.s.
## WDR97	n.s.
## RN7SL481P	n.s.
## GNAS	n.s.
## SLC38A4-AS1	n.s.
## GAPDH-DT	n.s.
## CNGA4	n.s.
## MIR4489	n.s.

## RPS26P15	n.s.
## EEF1A1P19	n.s.
## CYP4Z2P	n.s.
## CCT8	n.s.
## C6orf163	n.s.
## NFKBIE	n.s.
## KHK	n.s.
## LINC00858	n.s.
## LINC02641	n.s.
## AK3P3	n.s.
## CITED1	n.s.
## HSD17B2-AS1	n.s.
## ALOX12P2	n.s.
## DUSP5-DT	n.s.
## OOEPP2	n.s.
## PDILT	n.s.
## AK4P1	n.s.
## UPF3A	n.s.
## APOE	n.s.
## ATAD3B	n.s.
## H1-4	n.s.
## HDX	n.s.
## PRPF38A	n.s.
## SMG1P3	n.s.
## DTX2P1-UPK3BP1-PMS2P11	n.s.
## ZNF229	n.s.
## GLYATL1	n.s.
## ZNF700	n.s.
## MRPL36	n.s.
## MTND6P25	n.s.
## MORC2	n.s.
## LDHAP2	n.s.
## MRPL33	n.s.
## SLITRK3	n.s.
## CEP43	n.s.
## GRK3-AS1	n.s.
## TUBE1	n.s.
## CLK2	n.s.
## DLGAP1-AS5	n.s.
## FMR1-AS1	n.s.
## P2RX1	n.s.
## PDE6H	n.s.
## MED12	n.s.
## MLLT3	n.s.
## IGHV1-24	n.s.
## NANOGP4	n.s.
## MIR103A2	n.s.
## SLC36A2	n.s.
## RNU6-1160P	n.s.
## RN7SL771P	n.s.
## CLIC1P1	n.s.
## CTNNA1-AS1	n.s.
## YWHAEP5	n.s.
## SLITRK4	n.s.

## C10orf53	n.s.
## ZBED9-AS1	n.s.
## AIG1	n.s.
## DRG2	n.s.
## MADCAM1-AS1	n.s.
## CLGN	n.s.
## ENO1P3	n.s.
## ARPC5L	n.s.
## STEAP3-AS1	n.s.
## BNAT1	n.s.
## TRIM66	n.s.
## KCTD5P1	n.s.
## KCNIP1-AS1	n.s.
## HSPA4L	n.s.
## ANKRD18A	n.s.
## CDH3	n.s.
## SRD5A3	n.s.
## CCDC157	n.s.
## CCNT2-AS1	n.s.
## RHD	n.s.
## IL21R-AS1	n.s.
## IGHV1-3	n.s.
## TXNDC2	n.s.
## LKAAEAR1	n.s.
## LINC02620	n.s.
## NRG2	n.s.
## DIO2-AS1	n.s.
## KLHL23	n.s.
## MEIS3P1	n.s.
## PKD2L2	n.s.
## NDUFV1-DT	n.s.
## PLSCR3	n.s.
## IGKV5-2	n.s.
## GPS2	n.s.
## MPHOSPH10	n.s.
## HS1BP3	n.s.
## CAGE1	n.s.
## NPIPBP15	n.s.
## GCNT2P1	n.s.
## JARID2-AS1	n.s.
## SELENOKP1	n.s.
## LINC03104	n.s.
## UGP2	n.s.
## PNN-AS1	n.s.
## KIF21A	n.s.
## LPL	n.s.
## CALB1	n.s.
## SNORD3A	n.s.
## HNRNPA1P6	n.s.
## SDHCP2	n.s.
## TMEM191C	n.s.
## AKR7A3	n.s.
## ZNF285BP	n.s.
## ZNF593OS	n.s.

## MGAT3	n.s.
## CHERP	n.s.
## QNG1	n.s.
## SMN2	n.s.
## TMEM41A	n.s.
## MCCD1	n.s.
## TMEM86A	n.s.
## RNF111	n.s.
## PABPC1L	n.s.
## CCDC115	n.s.
## EBAG9P1	n.s.
## PLSCR1	n.s.
## RINL	n.s.
## ART5	n.s.
## ACAA2	n.s.
## MAB21L4	n.s.
## NUBP2	n.s.
## FBXL19	n.s.
## LINC01980	n.s.
## SLC41A3	n.s.
## RPSAP21	n.s.
## CTSLP8	n.s.
## HIKESHIP2	n.s.
## SERPINA12	n.s.
## ZNF418	n.s.
## RBM22P12	n.s.
## MRPL23	n.s.
## LARP4B	n.s.
## CFAP58-DT	n.s.
## IQSEC3P1	n.s.
## APH1A	n.s.
## LINC01532	n.s.
## EHD4	n.s.
## KRT8P15	n.s.
## BMS1P4	n.s.
## TBCAP1	n.s.
## SKIC3	n.s.
## LINC00205	n.s.
## TCEAL3-AS1	n.s.
## ACOT2	n.s.
## RN7SL153P	n.s.
## RPLP0P2	n.s.
## CLPP	n.s.
## ZNF76	n.s.
## CLIC4P3	n.s.
## RGS5	n.s.
## SOST	n.s.
## FAM117B	n.s.
## TPM3P8	n.s.
## STPG3-AS1	n.s.
## CDPF1P1	n.s.
## CSNK1G3	n.s.
## L3MBTL1	n.s.
## WASHC2C	n.s.

## RPS10P3	n.s.
## ANKUB1	n.s.
## IDH1P1	n.s.
## LYPD2	n.s.
## PPP1R13B-DT	n.s.
## ZNF252P	n.s.
## MYRFL	n.s.
## NEK10	n.s.
## FHL5	n.s.
## MTCO3P23	n.s.
## KATNAL2	n.s.
## MRPL41	n.s.
## LINC02594	n.s.
## MYCBPAP	n.s.
## HIGD2A	n.s.
## KPNB1	n.s.
## LINC00471	n.s.
## SPSB3	n.s.
## GMCL1P2	n.s.
## NF2	n.s.
## RIPPLY2	n.s.
## TMEM186	n.s.
## BTBD7	n.s.
## TRMO	n.s.
## CPT1B	n.s.
## SRPK2P	n.s.
## CD2BP2-DT	n.s.
## MTDHP1	n.s.
## HSPD1P10	n.s.
## SNRNP70	n.s.
## ENG	n.s.
## ACE2	n.s.
## SUMO1	n.s.
## ITGB4	n.s.
## LMO1	n.s.
## GLUD2	n.s.
## CLRN1-AS1	n.s.
## NUTM2A	n.s.
## ZNF433	n.s.
## LEISA1	n.s.
## SLC52A1	n.s.
## PMF1	n.s.
## EIF3LP2	n.s.
## HSP90AA4P	n.s.
## BACE2-IT1	n.s.
## AOX3P	n.s.
## HNRNPK-AS1	n.s.
## EXOC6B	n.s.
## ARAP2	n.s.
## CCDC6	n.s.
## ATP5MC1P3	n.s.
## HMGB1P3	n.s.
## OR6N1	n.s.
## MKS1	n.s.

## EIF4G1	n.s.
## RND2	n.s.
## PATE1	n.s.
## HSPA8P8	n.s.
## FEM1AP2	n.s.
## NFKBIL1	n.s.
## PRKAR2A-AS1	n.s.
## CCNYL7	n.s.
## SEPTIN7P2	n.s.
## SYCE1L	n.s.
## SYNGR4	n.s.
## TRIM37	n.s.
## KMT5AP1	n.s.
## OR5E1P	n.s.
## C5orf34-AS1	n.s.
## MRPS18A	n.s.
## AMT	n.s.
## MT1P1	n.s.
## REPIN1-AS1	n.s.
## NLGN3	n.s.
## RFESD	n.s.
## RPS3AP13	n.s.
## RPL36AP54	n.s.
## PLA2G6	n.s.
## SIAH2-AS1	n.s.
## VN1R87P	n.s.
## GSS	n.s.
## ZNF33BP1	n.s.
## SDR9C7	n.s.
## MIR548AT	n.s.
## ZNF518A	n.s.
## ZNF613	n.s.
## RPS2P17	n.s.
## ARL5AP3	n.s.
## ADD1	n.s.
## RPS29P19	n.s.
## PDPR	n.s.
## VDAC1P1	n.s.
## RNU6-652P	n.s.
## YPEL5	n.s.
## GRIN1	n.s.
## HMGN1P36	n.s.
## IMPA2	n.s.
## IGLV3-9	n.s.
## GNAT2	n.s.
## ZNF729	n.s.
## LRRFIP1P1	n.s.
## SOWAHCP5	n.s.
## CLCA1	n.s.
## SLC25A36	n.s.
## SRP14P1	n.s.
## PRIMA1	n.s.
## LINC01630	n.s.
## ENPP7P4	n.s.

## TH	n.s.
## RPL5P23	n.s.
## LINC02410	n.s.
## MDGA2	n.s.
## SMURF2P1	n.s.
## LINC02181	n.s.
## SNX25P1	n.s.
## PPIB	n.s.
## TSPAN9	n.s.
## NUP188	n.s.
## BPTF	n.s.
## SLC25A5P3	n.s.
## HEATR6-DT	n.s.
## ITGA1	n.s.
## AJM1	n.s.
## WDR55	n.s.
## RPL32P2	n.s.
## RN7SKP292	n.s.
## LINC02642	n.s.
## TTLL10	n.s.
## GLIS3-AS2	n.s.
## NXNL2	n.s.
## PPP1R15A	n.s.
## NHLRC3	n.s.
## PCYT1B	n.s.
## DMTF1	n.s.
## B3GNT8	n.s.
## SPATA45	n.s.
## LINC02551	n.s.
## PMS2P4	n.s.
## SMC3	n.s.
## VTI1B	n.s.
## SPEN-AS1	n.s.
## FRG1GP	n.s.
## RPL21P119	n.s.
## LINC02562	n.s.
## MTCO1P22	n.s.
## MIR765	n.s.
## ZNF603P	n.s.
## FAM219B	n.s.
## PRANCR	n.s.
## SETP14	n.s.
## SEMA5B	n.s.
## MRPL32	n.s.
## TGFBRAP1	n.s.
## IGLV6-57	n.s.
## UCKL1-AS1	n.s.
## ZNF606-AS1	n.s.
## SLC39A5	n.s.
## ADAM15	n.s.
## SLC5A11	n.s.
## LRRC26	n.s.
## SPON1-AS1	n.s.
## IPO11	n.s.

## PIK3CA	n.s.
## FATE1	n.s.
## TM4SF19-AS1	n.s.
## FOXC2-AS1	n.s.
## MIMT1	n.s.
## TATDN1	n.s.
## LINC02636	n.s.
## GOLGA1	n.s.
## ZNF33A	n.s.
## NSUN5P1	n.s.
## OR2T35	n.s.
## DAD1	n.s.
## TXNRD1	n.s.
## ZNF865	n.s.
## BRF1	n.s.
## BHMT2	n.s.
## KRT40	n.s.
## CCNB3	n.s.
## CTSI3P	n.s.
## ZNF827	n.s.
## SMC3P1	n.s.
## MIR4720	n.s.
## RN7SL812P	n.s.
## SLC25A3P2	n.s.
## TRIR	n.s.
## PPIG	n.s.
## MKRN3	n.s.
## IGHV3-49	n.s.
## CFL1P2	n.s.
## LINC01644	n.s.
## PRKD3-DT	n.s.
## HSDL1	n.s.
## HGFAC	n.s.
## PSMC1P9	n.s.
## SERINC5	n.s.
## FAM240C	n.s.
## ZBTB11-AS1	n.s.
## PNPLA4	n.s.
## DPCD	n.s.
## ZPLD1	n.s.
## UBE3D	n.s.
## ADAMTS13	n.s.
## TDRD6	n.s.
## RNF121	n.s.
## SLC25A21	n.s.
## AP1G2-AS1	n.s.
## RN7SL388P	n.s.
## KLK13	n.s.
## PIP5K1C	n.s.
## PCNX1	n.s.
## SORD2P	n.s.
## TXNDC11-AS1	n.s.
## SSBP1	n.s.
## MIR99B	n.s.

## BCYRN1	n.s.
## H2BC2P	n.s.
## KPNB1-DT	n.s.
## RNY1P16	n.s.
## OMP	n.s.
## SFXN4	n.s.
## LINC02278	n.s.
## ANK2	n.s.
## SRSF9	n.s.
## LINC02818	n.s.
## SELENOK	n.s.
## ABHD2	n.s.
## RAMAC	n.s.
## GTPBP8	n.s.
## ZNF669	n.s.
## CFAP70	n.s.
## POU2AF2	n.s.
## SLC47A1	n.s.
## SMIM2	n.s.
## LINC00863	n.s.
## POLN	n.s.
## KLC4-AS1	n.s.
## RAB34	n.s.
## MROH7-TTC4	n.s.
## TBC1D3E	n.s.
## SNORA11	n.s.
## LINC01592	n.s.
## MTX1LP	n.s.
## GABRQ	n.s.
## PRICKLE4	n.s.
## BDH2P1	n.s.
## LACTB	n.s.
## GOLGA6L23P	n.s.
## MIR302CHG	n.s.
## WHAMMP2	n.s.
## IGHE	n.s.
## MED8-AS1	n.s.
## CALR3	n.s.
## UBE2V1P1	n.s.
## RNA5SP268	n.s.
## NPIPA1	n.s.
## SPDYE16	n.s.
## NDUFS5	n.s.
## MKRN7P	n.s.
## EEF1DP4	n.s.
## YAE1-DT	n.s.
## DNAH17-AS1	n.s.
## FGF12-AS3	n.s.
## RN7SL745P	n.s.
## RPL35AP9	n.s.
## USP34-DT	n.s.
## MALINC1	n.s.
## RPS2P55	n.s.
## HYDIN	n.s.

## CCDC183-AS1	n.s.
## USP30	n.s.
## ENTPD4	n.s.
## GDNF	n.s.
## IGKV6D-21	n.s.
## CACNA1F	n.s.
## ZNF514	n.s.
## UQCRC2	n.s.
## PTMA	n.s.
## NUMA1	n.s.
## SLC25A15P5	n.s.
## PTPRK-AS1	n.s.
## MIR3667HG	n.s.
## ACE2-DT	n.s.
## SUCLA2-AS1	n.s.
## MPC1L	n.s.
## MIR4300HG	n.s.
## FNBP4	n.s.
## OTX1	n.s.
## FAM90A1	n.s.
## LARP4B-DT	n.s.
## ADGRF4	n.s.
## VPS54	n.s.
## DNAAF3	n.s.
## RNF169	n.s.
## CDK16	n.s.
## ARL5B	n.s.
## CSTPP1	n.s.
## ZNF670-ZNF695	n.s.
## SMIM11	n.s.
## STK31	n.s.
## RIMBP2	n.s.
## RNA5SP383	n.s.
## C5orf24	n.s.
## CATIP-AS1	n.s.
## SLC26A10P	n.s.
## ACTBP8	n.s.
## NPY	n.s.
## ARHGAP32	n.s.
## ABHD15	n.s.
## ZNF880	n.s.
## FAM83C-AS1	n.s.
## H2BC6	n.s.
## PLOD2	n.s.
## SMG1P1	n.s.
## ISCA2P1	n.s.
## BRINP3-DT	n.s.
## LINC00927	n.s.
## CRTC3-AS1	n.s.
## RPL36AP33	n.s.
## DLGAP1-AS3	n.s.
## ZBTB8OS	n.s.
## NGRN	n.s.
## ACOT8	n.s.

## FAM85B	n.s.
## RN7SL81P	n.s.
## EIF2AK1P1	n.s.
## FGF17	n.s.
## LMNTD2-AS1	n.s.
## MAP2K6	n.s.
## BLTP3A	n.s.
## BCRP2	n.s.
## LINC01359	n.s.
## INSRR	n.s.
## DYNLT2	n.s.
## IL13RA2	n.s.
## VCPKMT	n.s.
## LINC01603	n.s.
## FAM3D	n.s.
## GNG5B	n.s.
## ZNF429	n.s.
## ACE	n.s.
## MAD2L1P1	n.s.
## ZFAT	n.s.
## RAD21-AS1	n.s.
## MIR3939	n.s.
## CTXN2-AS1	n.s.
## RPS15AP24	n.s.
## VVN	n.s.
## NPEPL1	n.s.
## UCHL1-DT	n.s.
## ZBTB45	n.s.
## TUBA4A	n.s.
## PMS2P7	n.s.
## SNAP23P1	n.s.
## HOTAIRM1	n.s.
## BNIP1	n.s.
## IL5	n.s.
## TIGD1	n.s.
## HINT1	n.s.
## MTND1P15	n.s.
## SI	n.s.
## SMYD3-IT1	n.s.
## RNF216-IT1	n.s.
## CYP2C19	n.s.
## LINC02849	n.s.
## CHKB-DT	n.s.
## NTAN1P2	n.s.
## ST6GALNAC4	n.s.
## SPTBN4	n.s.
## MBTPS1-DT	n.s.
## UTP20	n.s.
## TRMT13	n.s.
## EXOC6	n.s.
## SLC27A2	n.s.
## DM1-AS	n.s.
## C2orf81	n.s.
## ZKSCAN2-DT	n.s.

## FHL1P1	n.s.
## HNRNPA1P15	n.s.
## NT5C3A	n.s.
## OPN1SW	n.s.
## HSPA5-DT	n.s.
## FECH	n.s.
## XPNPEP3	n.s.
## LINC02508	n.s.
## LINC02035	n.s.
## TXNL1	n.s.
## MPPEP1	n.s.
## PDZPH1P	n.s.
## CEP120	n.s.
## RNA5SP352	n.s.
## MIR6819	n.s.
## C9orf43	n.s.
## EPHA6	n.s.
## IGKV2D-40	n.s.
## FKBP8	n.s.
## ATP6V0E1P2	n.s.
## CHD8	n.s.
## PRIM2BP	n.s.
## FAM168A	n.s.
## MIR6081	n.s.
## PPP4R1-AS1	n.s.
## FAM133DP	n.s.
## HNRNPKP4	n.s.
## NDUFS8	n.s.
## KRT18P15	n.s.
## PUM2	n.s.
## TMEM217	n.s.
## PDC-AS1	n.s.
## LINC02332	n.s.
## LRP6	n.s.
## RN7SL521P	n.s.
## FBXO17	n.s.
## APOA4	n.s.
## NCCRP1	n.s.
## TPT1P6	n.s.
## PLAAT5	n.s.
## FAM9B	n.s.
## SLC30A9	n.s.
## LIVAR	n.s.
## SLC35E2B	n.s.
## IGHV4-4	n.s.
## PI4K2B	n.s.
## SSR4	n.s.
## KRT18P52	n.s.
## SLC34A1	n.s.
## SPMIP1	n.s.
## MAP3K1	n.s.
## PIAS3	n.s.
## SPATA31C2	n.s.
## GET4	n.s.

## PCNX4-DT	n.s.
## LINC02204	n.s.
## PPIAP22	n.s.
## CTCF	n.s.
## ALOX15B	n.s.
## SART3	n.s.
## DYNC1I2	n.s.
## NUPR2P1	n.s.
## ATP5MC1P5	n.s.
## PCDHA13	n.s.
## FLVCR1	n.s.
## MAPT-IT1	n.s.
## KCTD16	n.s.
## AHCY	n.s.
## ORC2	n.s.
## TSPAN7	n.s.
## SLC7A5P1	n.s.
## BBS2	n.s.
## RNU6ATAC14P	n.s.
## PA2G4P1	n.s.
## PPP1R1C	n.s.
## SORBS3	n.s.
## LAPTM4A-DT	n.s.
## PSMC5	n.s.
## CCAR1	n.s.
## C1orf159	n.s.
## SDHDP6	n.s.
## SUSD1	n.s.
## CTAGE11P	n.s.
## CFAP68	n.s.
## LINC00173	n.s.
## LNCPTCTS	n.s.
## ROPN1L	n.s.
## SLC6A18	n.s.
## TRIP12	n.s.
## VPS18	n.s.
## PTRH1	n.s.
## TMEM229A	n.s.
## ADGRl1-AS1	n.s.
## MIR6793	n.s.
## C3orf22	n.s.
## RAB33B-AS1	n.s.
## GTF2H4	n.s.
## LCA5L	n.s.
## CTNS-AS1	n.s.
## EEF1AKMT4	n.s.
## TAFAZZIN	n.s.
## CYP51A1P3	n.s.
## ONECUT2	n.s.
## TPST1	n.s.
## HNRNPA3P12	n.s.
## ZNF195	n.s.
## ZNF142	n.s.
## ABCA9-AS1	n.s.

## LINC02233	n.s.
## DRAM1	n.s.
## SHISA5	n.s.
## SLC38A7	n.s.
## RGL1	n.s.
## PSMD11	n.s.
## KDM3AP1	n.s.
## NFE2L1	n.s.
## CARF	n.s.
## ENSAP2	n.s.
## ADPGK	n.s.
## SPATA2	n.s.
## ZCCHC4	n.s.
## ANKRD20A11P	n.s.
## OR7E108P	n.s.
## FMNL1-AS1	n.s.
## TUBGCP2	n.s.
## KLF3-AS1	n.s.
## FAM114A2	n.s.
## FAT1	n.s.
## LHX2	n.s.
## LINC02935	n.s.
## GSTCD-AS1	n.s.
## GP9	n.s.
## WHRN	n.s.
## MPV17	n.s.
## FOXRED1	n.s.
## SEPTIN7P6	n.s.
## SREK1IP1	n.s.
## CLBA1	n.s.
## OCSTAMP	n.s.
## TATDN1P1	n.s.
## CLK2P1	n.s.
## SFR1	n.s.
## TREML4	n.s.
## PMS2P1	n.s.
## NAP1L6P	n.s.
## EPHA5-AS1	n.s.
## PQBP1	n.s.
## NEUROD1	n.s.
## COQ6	n.s.
## GPC1	n.s.
## GBP3	n.s.
## WDR43	n.s.
## CHN2-AS1	n.s.
## PHRF1	n.s.
## UPB1	n.s.
## BRWD1	n.s.
## LINC01488	n.s.
## MALSU1	n.s.
## ZNF540	n.s.
## LINC02050	n.s.
## CNPY2	n.s.
## FARPI-AS1	n.s.

```

## MRPL54          n.s.
## NFXL1          n.s.
## FAM47E         n.s.
## SMIM26         n.s.
## FXYD3          n.s.
## TFEB           n.s.
## PCDHGA9         n.s.
## SRRM2-AS1       n.s.
## ZDHHC12-DT      n.s.
## GGACT          n.s.
## SCARNA22        n.s.
## DDIT4           n.s.
## TBC1D5          n.s.
## SEC61B          n.s.
## ACYP1           n.s.
## TMEM44-AS1       n.s.
## RNF103-CHMP3      n.s.
## RNU6-48P          n.s.
## SLC25A52         n.s.
## UBN2            n.s.
## IGLV1-36          n.s.
## CHKB            n.s.
## LENG8           n.s.
## ZNF781           n.s.
## TTLL10-AS1         n.s.
## KRT8P45          n.s.
## SZT2            n.s.
## PFDN1P1          n.s.
## PRSS46P          n.s.
## NPHP3-ACAD11      n.s.
## C19orf81          n.s.
## MLEC            n.s.
## TAFA2           n.s.
## RNU6-118P          n.s.
## NUS1P1           n.s.
## PABPC4-AS1         n.s.
## ZMYM1            n.s.
## STAG3L2           n.s.
## RN7SL473P          n.s.
## ELF1             n.s.
## MIR5192          n.s.
## STAG3L5P-PVRIG2P-PILRB    n.s.
## HELZ-AS1          n.s.
##   [ reached 'max' /getOption("max.print") -- omitted 20843 rows ]

```