

**UNIVERSIDADE ESTADUAL DO NORTE FLUMINENSE
DARCY RIBEIRO – UENF**

**CARACTERIZAÇÃO DOS PERFIS DE EXPRESSÃO GÊNICA E VIAS
MOLECULARES EM CÉLULAS TRONCO TUMORAIS DE
GLIOBLASTOMA COM DIFERENTES ASSINATURAS DE OCT4, NANOG
E SEUS PSEUDOGENES.**

MARCIO VALERIANO DA SILVA JUNIOR

**CAMPOS DOS GOYTACAZES - RJ
FEVEREIRO – 2023**

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“Dissertação apresentada ao Centro de Biociências e Biotecnologia, da Universidade Estadual do Norte Fluminense Darcy Ribeiro, como parte das exigências parciais para obtenção do título de Mestre em Biociências e Biotecnologia.”

Orientador: Prof^a. Alvaro Fabricio Lopes Rios

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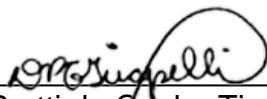
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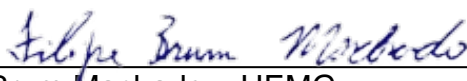
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LISTA DE ABREVIATURAS

- BTIC** – célula iniciadora de tumor cerebral
- ceRNA** – RNA endogeno competitivo
- CSC** – célula tronco tumoral
- DEG** – genes diferencialmente expressos
- DIPG** – gliomas pontino intrínseco difuso
- DUB** – enzimas deubiquitinantes
- ESC** – células tronco embrionárias
- GBM** – glioblastoma multiforme
- GBM-SC** – célula tronco do glioblastoma
- HAT** – histona acetiltransferase
- HDAC** – histona desacetilase
- hESCs** – células tronco embrionárias humanas
- HOX** – Homeobox Protein Hox
- ID** – código de identificação
- lncRNAs** – RNA longo não codificante
- mGluR** – receptor metabotrópico de glutamato
- miR-145** – microRNA-145
- miRNA** – microRNA
- mRNA** – RNA mensageiro
- NANOG** – Nanog Homeobox
- NANOG** – Nanog homeobox
- NANOGP1** – Nanog homeobox pseudogene 1
- NANOGP10** – Nanog homeobox pseudogene 10
- NANOGP2** – Nanog homeobox pseudogene 2
- NANOGP3** – Nanog homeobox pseudogene 3
- NANOGP4** – Nanog homeobox pseudogene 4
- NANOGP5** – Nanog homeobox pseudogene 5
- NANOGP6** – Nanog homeobox pseudogene 6
- NANOGP7** – Nanog homeobox pseudogene 7
- NANOGP8** – Nanog homeobox pseudogene 8
- NANOGP9** – Nanog homeobox pseudogene 9
- NCBI** – National Center for Biotechnology Information

ncRNA – RNA não codificador de proteína

NSCLC – célula de carcinoma pulmonar de célula não pequena

NSC – célula tronco neural

OCT4 – Fator de transcrição de ligação ao octâmero 4

OCT4-pg1 – Fator de transcrição de ligação ao octâmero 4 pseudogene 1

OCT4-pg2 – Fator de transcrição de ligação ao octâmero 4 pseudogene 2

OCT4-pg3 – Fator de transcrição de ligação ao octâmero 4 pseudogene 3

OCT4-pg4 – Fator de transcrição de ligação ao octâmero 4 pseudogene 4

OCT4-pg5 – Fator de transcrição de ligação ao octâmero 4 pseudogene 5

OCT4-pg6 – Fator de transcrição de ligação ao octâmero 4 pseudogene 6

OCT4-pg7 – Fator de transcrição de ligação ao octâmero 4 pseudogene 7

OPC – célula progenitora de oligodendrócitos

ORA – do inglês, over representation analysis

RIG – gliomas induzidos por radiação

RNA – ácido ribonucleico

RNAseq – sequenciamento de RNA total

RNAi – RNA de interferência

RPKM – do inglês, reads per kilobase of exon per million reads mapped

scRNAseq – análise de expressão gênica em células únicas

SNC – Sistema nervoso central

SOX2 – do inglês, SRY-Box Transcription Factor 2

SRA – do inglês, Sequence Read Archive

TFs – fatores de transcrição

USP – proteases específicas de ubiquitina

UTR – do inglês, untranslated region

RESUMO

Introdução: Glioblastomas multiformes (GBMs) são tumores cerebrais altamente agressivos que apresentam células-tronco tumorais (GBM-SCs) desempenhando um papel crucial na recidiva. A expressão de fatores de transcrição associados à pluripotência embrionária, como OCT4 e NANOG, assim como seus pseudogenes, é frequente em GBMs, indicando a existência de nichos de células-tronco tumorais durante o desenvolvimento desses tumores. **Objetivo:** Este estudo teve como objetivo identificar as assinaturas de expressão gênica de OCT4, NANOG e seus pseudogenes em GBM-SCs, bem como avaliar os perfis transcriptômicos de diferentes tumores com assinaturas específicas desses genes. Além disso, foi realizado o estudo das assinaturas de expressão gênica de mRNAs codificadores de proteínas e de lncRNAs nas diferentes sublinhagens de GBM-SCs, investigando as vias moleculares associadas a essas assinaturas. **Métodos:** Utilizamos pipelines de análise de RNA-seq disponíveis no software SeqMonk para identificar perfis de expressão gênica diferencial. Os dados utilizados foram obtidos do banco de dados público Short Read Archives (SRA) do NCBI. Além disso, realizamos uma análise de co-regulação gênica para identificar possíveis interações entre os genes estudados e para investigar as vias biológicas associadas às diferentes sublinhagens de células-tronco de GBMs (GBM-SCs). **Resultados:** A análise de co-regulação gênica revelou a presença de possíveis vias biológicas nas diferentes sublinhagens de GBM-SCs. Os perfis de expressão de OCT4, NANOG e seus pseudogenes permitiram identificar a existência de dois nichos de células-tronco tumorais (GBM-SC- e GBM-SC+), os quais contribuem para diferentes fenótipos durante o desenvolvimento dos GBMs. Além disso, a expressão diferencial de lncRNAs nos módulos identificados evidenciou níveis de expressão gênica que demandam uma maior exploração e caracterização quanto às suas funções na biologia dos glioblastomas. **Conclusão:** Este estudo destaca a importância das assinaturas de expressão gênica de OCT4, NANOG e seus pseudogenes na caracterização dos GBM-SCs e no entendimento dos mecanismos do desenvolvimento de glioblastomas. Os lncRNAs diferencialmente expressos representam potenciais alvos terapêuticos para o tratamento de tumores do sistema nervoso central. No entanto, são necessárias mais pesquisas e estudos clínicos para validar esses achados e aprofundar o conhecimento desses processos.

Palavras-chave: Células-tronco tumorais, RNA seq, pluripotência, transcriptoma

ABSTRACT

Introduction: Glioblastomas multiforme (GBMs) are highly aggressive brain tumors characterized by the presence of tumor stem cells (GBM-SCs) that play a crucial role in recurrence. The expression of transcription factors associated with embryonic pluripotency, such as OCT4 and NANOG, as well as their pseudogenes, is frequently observed in GBMs, indicating the existence of tumor stem cell niches during the development of these tumors. **Objective:** This study aimed to identify the gene expression signatures of OCT4, NANOG, and their pseudogenes in GBM-SCs, as well as to evaluate the transcriptomic profiles of different tumors with specific signatures of these genes. Additionally, we performed a study of the gene expression signatures of protein-coding mRNAs and lncRNAs in different sublineages of GBM-SCs, investigating the molecular pathways associated with these signatures. **Methods:** We utilized RNA-seq analysis pipelines available in the SeqMonk software to identify differential gene expression profiles. The data used were obtained from the public Short Read Archives (SRA) database of the NCBI. Furthermore, we conducted a gene co-regulation analysis to identify possible interactions among the studied genes and to investigate the biological pathways associated with different sublineages of GBM stem cells (GBM-SCs). **Results:** The gene co-regulation analysis revealed the presence of potential biological pathways in different sublineages of GBM-SCs. The expression profiles of OCT4, NANOG, and their pseudogenes allowed the identification of two tumor stem cell niches (GBM-SC- and GBM-SC+), which contribute to different phenotypes during the development of GBMs. Moreover, the differential expression of lncRNAs in the identified modules highlighted gene expression levels that require further exploration and characterization regarding their roles in glioblastoma biology. **Conclusion:** This study emphasizes the importance of the gene expression signatures of OCT4, NANOG, and their pseudogenes in characterizing GBM-SCs and understanding the mechanisms involved in glioblastoma development. Differentially expressed lncRNAs represent potential therapeutic targets for the treatment of central nervous system tumors. However, further research and clinical studies are needed to validate these findings and deepen our knowledge of these processes.

Keywords: Cancer stem cells, RNA-seq, pluripotency, transcriptome

1. INTRODUÇÃO

1.1 – Câncer e células-tronco tumorais

De acordo com a Organização Mundial de Saúde, os diferentes tipos de câncer constituem a segunda principal causa de morte no mundo e, no ano de 2018 foram responsáveis por uma a cada seis mortes registradas no planeta (OMS, 2020). No Brasil, em 2018 foram registradas 243,588 mortes causadas por câncer, o equivalente a aproximadamente 19% do total das mortes em registro (IBGE, 2019; OMS, 2020). Em termos de incidência mundial, os cânceres do sistema nervoso central (SNC) ocuparam a décima oitava posição no ano de 2018 (GLOBOCAN, 2018). Embora seja relativamente raro, os tumores do SNC são o segundo mais comum entre os tipos de câncer pediátrico, correspondendo a cerca de 26% dos casos (AMERICAN CANCER SOCIETY, 2019). Para o Brasil é estimado cerca de onze mil novos casos desse tipo de câncer para cada ano do triênio 2020-2022 (INCA, 2019). O glioblastoma multiforme (GBM) continua sendo uma neoplasia incurável, em que os protocolos terapêuticos mais agressivos ainda não se habilitam em aumentar a sobrevida média dos pacientes, nos quais se resumem de 12 a 15 meses (CLARKE; MOOSA; ANZIVINO; WANG *et al.*, 2014).

O glioblastoma é uma forma mais comum de tumor do SNC e apresenta uma alta taxa de recidiva em pacientes tratados, essa frequência é muitas vezes associada a células-tronco tumorais de glioblastoma (GBM-SCs, do inglês - *glioblastoma stem cells*) ou também descritas como células iniciadoras de tumor cerebral (BTIC) (CHEN *et al.*, 2012; ENING *et al.*, 2015). As células-tronco tumorais (CSCs, do inglês - *cancer stem cells*) são células presentes em tumores nas quais possuem a capacidade de se autorrenovar e se diferenciar em linhagens heterogêneas de células cancerosas que constituem o tumor (REYA *et al.*, 2001; SHIPITSIN; POLYAK, 2008). Essa propriedade de auto renovação, entre outras, como a resistência à quimioterapia, são responsáveis pelo sustento do crescimento do tumor e pode ocasionar uma permanência dessas células e casos de recidivas nos pacientes após concluído protocolos de terapia convencional do câncer (CLARKE *et al.*, 2006).

A primeira identificação dessas células ocorreu no final da década de 90 em camundongos portadores de leucemia mielóide aguda (BONNET; DICK, 1997). Após isso, diversas pesquisas puderam identificar essas CSCs em diferentes tipos de

tumores nas quais incluem o melanoma (SCHATTON *et al.*, 2008), os adenomas intestinais (SCHEPERS *et al.*, 2012), o câncer de próstata (BONKHOFF, 1996), o câncer de mama (AL-HAJJ *et al.*, 2003), o câncer de cólon (BRIEN *et al.*, 2007), os tumores cerebrais (SINGH *et al.*, 2003), entre outros. Esses estudos foram capazes de isolar as células-tronco tumorais e identificar seu potencial para a autorrenovação.

O mecanismo de autorrenovação das células-tronco tumorais pode originar diversas células cancerosas, e sua longevidade direciona para o acúmulo de mutações nas quais podem resultar na coexistência de diferentes populações de células tumorais maduras, carregando diferenças genéticas e epigenéticas (REN; QU; SUN, 2013).

Entre os vários tratamentos de câncer, os principais tratamentos comumente usados para tratar pacientes são a remoção cirúrgica, a radioterapia e a quimioterapia. A cirurgia pode remover o câncer do corpo com sucesso, e a combinação de radioterapia e quimioterapia pode tratar efetivamente diversos tipos de câncer (YOU; LAKHANI; JR, 2007). Porém quando se trata de gliomas malignos mesmo as ressecções cirúrgicas mais agressivas, capazes de desobstruir grande parte do tumor, sempre pode ocorrer a permanência de células tumorais que se infiltram no tecido circundante, ocasionando em recidivas do mesmo (ALBERT *et al.*, 1994; Bao *et al.*, 2006; Liu *et al.*, 2006). As CSCs possuem o potencial de serem resistentes à radioterapia e quimioterapia e portam capacidade de se manterem quiescentes, desse modo, sua persistência, mesmo que mínima pode resultar no desenvolvimento de novos tumores (LI; BHATIA, 2011; PHI *et al.*, 2018).

Conforme mostrado na Figura 1 quando a diferenciação normal das células do SNC é alterada, as células putativas dão origem ao GBM, levando à formação de tumores no SNC, incluindo o glioblastoma. As células-tronco neurais (NSCs) dão origem a células progenitoras neurais e gliais com proliferação limitada e capacidade de autorreplicação que se diferenciam ainda mais nos principais tipos de células neurais, oligodendrócitos e astrócitos. Alguns estudos teorizam que as BTICs surgem de células diferenciadas terminalmente (1) devido ao acúmulo lento de mutações-chave que conferem uma vantagem proliferativa a elas. Outras teorias sugerem que as BTICs surgem da transformação de NSCs (2) ou progenitores neurais e podem formar GBMs através da diferenciação de linhagens gliais ou neuronais maduras (3) (AGNIHOTRI *et al.*, 2013).

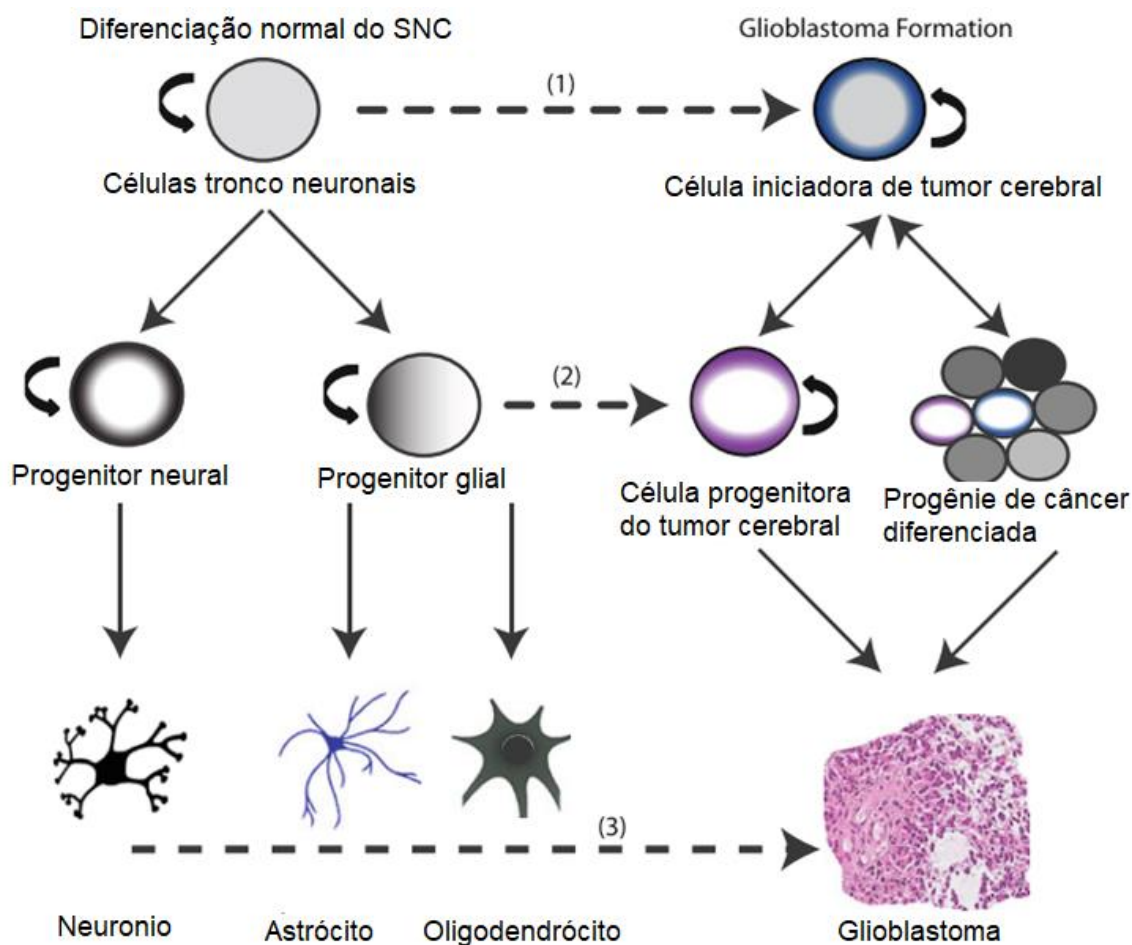


Figura 1. Diferenciações normais do SNC e formação de tumores do SNC. As células-tronco neurais (NSC) dão origem a progenitores neurais e gliais que então se diferenciam nos principais tipos de células dos neurônios do SNC, oligodendrócitos e astrócitos. BTIC foi teorizado para vir de células terminalmente diferenciadas (1) que adquirem mutações genéticas que lhes conferem uma vantagem proliferativa, um acúmulo lento de mutações críticas resulta em sua transformação. NSCs normais dão origem a progenitores com capacidade proliferativa e autorreplicativa limitada. BTIC foi teorizado para se formar como resultado de NSC (2) ou transformação de progenitor neural GBM também pode surgir através da diferenciação de linhagens gliais ou neuronais maduras (3). A seta curvada representa a capacidade de auto-renovação. Modificado de AGNIHOTRI et al., (2013).

As CSCs foram descritas usando diferentes marcadores de superfície celular adequados para reconhecimento específico. No entanto, um subconjunto de CSCs pode não expressá-las, e mesmo sua expressão pode variar de acordo com o estágio do tumor, fenômeno encontrado em gliomas malignos que descartam uma função de marcadores de superfície. Dessa forma, o estudo das CSCs começou a se afastar da superfície celular e outros métodos complementares surgiram para medir a atividade gênica e as vias de sinalização que poderiam ser usadas para identificar as CSCs,

como seus mecanismos moleculares (TOH; LIM; CHOW, 2017).

1.2 Expressão de *OCT4*, *NANOG* e seus pseudogenes no câncer

As células-tronco tumorais compartilham características moleculares similares às células-tronco normais, dentre essas características estão inclusos a capacidade de proliferar, a de autorrenovar-se continuamente, a formação de esferas e a expressão de vários fatores de transcrição envolvidos no processo de manutenção da autorrenovação e de padrões de pluripotência celular (SCHOENHALS *et al.*, 2009). Dentre esses fatores podemos destacar o fator de transcrição de ligação ao octâmero 4 (*OCT4*) e Nanog *Homeobox* (*NANOG*). Ambos são fatores de transcrição que desempenham papéis fundamentais na manutenção de auto renovação e pluripotência celular (BOYER *et al.*, 2005; HILL; CAROLINA, 2012; SCHOENHALS *et al.*, 2009). Em contraste, as células-tronco cancerígenas sólidas diferem das células-tronco normais em termos de frequência, proliferação, expressão aberrante de marcadores de diferenciação, anormalidades cromossômicas e formação de tumor. Eles estão associados à iniciação, progressão, manutenção e recidiva do tumor, bem como à resistência às terapias atuais, sugerindo que são críticos para a agressividade do tumor (MACHARIA; WANJIRU; MUREITHI; PEREIRA *et al.*, 2019).

A expressão de *OCT4* e *NANOG* têm sido relatada em diferentes tipos de cânceres nos quais incluem o câncer renal (RASTI *et al.*, 2018), câncer de mama (POURBAGHER *et al.*, 2020), câncer gástrico (BASATI; MOHAMMADPOUR; RAZAVI, 2019), câncer colorretal (ROUDI *et al.*, 2020) e o carcinoma de células escamosas oral (TSAI *et al.*, 2011; FU *et al.*, 2016).

Os níveis de expressão do *NANOG* em gliomas foram correlacionados positivamente com o grau patológico, onde pacientes com níveis mais altos de expressão apresentaram uma sobrevida mais curta (ELSIR *et al.*, 2013). Os níveis de expressão de *OCT4* também foram observados em gliomas, onde apresentaram uma alta taxa de expressão e as taxas de RNAs mensageiros foram aumentadas em paralelo com o grau dos gliomas (ZHANHUI *et al.*, 2009). Porém a expressão de *OCT4* não foi caracterizada em gliomas de grau IV deixando algumas lacunas a respeito do seu papel.

O gene *OCT4* apresenta três transcritos diferentes gerados por *splicing* alternativo (*OCT4A*, *OCT4B* e *OCT4B1*) e oito pseudogenes presentes no genoma

humano (SAHA *et al.*, 2018). O gene *NANOG* por sua vez apresenta onze pseudogenes identificados no genoma humano (HANNE; PETER, 2004). Devido a alta homologia entre *NANOG* e *OCT4* com seus pseudogenes, tem sido proposto que esses também podem contribuir com o mecanismo de autorrenovação das CSCs e/ou até mesmo com os comportamentos divergentes entre as células-tronco embrionárias e as células-tronco tumorais (SAHA *et al.*, 2018; SNEHA *et al.*, 2019).

Um estudo avaliando os pseudogenes do *OCT4* em diferentes linhagens celulares demonstrou que há uma expressão diferencial entre as mesmas e, que alguns desses pseudogenes quando expressos possuem o potencial de atuar como RNAs endógenos competitivos (ceRNA - competing endogenous RNAs) com afinidade ao microRNA-145 (miR-145), um importante supressor tumoral (POURSANI *et al.*, 2016; YE; SHEN; ZHOU, 2019).

Foi comprovado que os pseudogenes *OCT4-pg1*, *OCT4-pg3* e *OCT4-pg4* ocorrem em vários cânceres podendo desempenhar papéis ambíguos de acordo com o tipo de câncer, atuando na oncogênese ou supressores tumorais (SAHA *et al.*, 2018). A expressão do pseudogene *OCT4-pg1* (*OCT4-pg1*) teve seu papel demonstrado no câncer gástrico, promovendo tumorigenicidade e crescimento tumoral (HAYASHI *et al.*, 2013). Os pseudogenes *OCT4-pg1* e *OCT4-pg5* também podem desempenhar papéis na regulação da expressão do *OCT4*, induzindo e silenciando respectivamente (TAYLOR *et al.*, 2010; LETTNIN *et al.*, 2019). Além disso, o pseudogene *OCT4-pg1* pode atuar na geração do fenótipo de resistência a quimioterápicos em leucemia mielóide crônica (LETTNIN *et al.*, 2019).

Embora haja escassez de estudos, alguns pseudogenes de *NANOG* também desenvolvem papéis em células tumorais. O pseudogene *NANOGp8*, por exemplo, antes sendo considerado o único pseudogene de *NANOG* capaz de produzir proteína, foi identificado como um retrogene comumente expresso em câncer (ZHANG *et al.*, 2006; FAIRBANKS *et al.*, 2012). Kawamura *et al.*, (2015) demonstraram que a co-expressão de *NANOG* e seu pseudogene *NANOGp8* agem de modo a aumentar os potenciais de formação de colônias, migração, resistência a medicamento e tumorigenicidade de células de câncer de próstata. O pseudogene *NANOGp1* também possui um papel potencial no câncer uma vez que é hipotetizado que sua ativação transcricional representa um “ganho de função das células-tronco” na leucemia aguda (EBERLE *et al.*, 2010).

A presença de marcadores de pluripotência embrionária em tumores GBM vem

sendo associada a prognósticos ruins (VESCOVI *et al.*, 2006; ZEPPERINICK *et al.*, 2008; ZHANG *et al.*, 2015). *NANOG* e *OCT4* são dois importantes fatores de transcrição em humanos que apresentam envolvimento na pluripotência das células-tronco embrionárias (ESC) (BLINKA & RAO, 2017; SHE *et al.*, 2017). No entanto, o papel de ambos no glioblastoma ainda não foi totalmente elucidado. Apesar disso, em um relatório de Elsir *et al.*, essas duas proteínas foram associadas ao glioblastoma, demonstrando uma assinatura semelhante a células tronco embrionárias (ESC) em gliomas de alto grau (graus 3 e 4) com regulação positiva de suas proteínas (ELSIR *et al.*, 2014).

A regulação positiva dessas proteínas foi correlacionada com pior sobrevida em gliomas de alto e baixo grau, o que sugere que podem desempenhar um papel na tumorigênese e progressão desse câncer (ELSIR *et al.*, 2014; HOLMBERG *et al.*, 2011). O gene *NANOG* foi relatado como um dos marcadores de pluripotência conhecido por estar envolvido na tumorigênese cerebral (HIGGINS *et al.*, 2013; SEYMOUR *et al.*, 2015). Além disso, gliomas de alto grau apresentam a co-expressão simultânea de *OCT4*, *NANOG* e *SOX2* registrada (GUO *et al.*, 2011 ; SEO *et al.*, 2017).

Embora hajam relatos da expressão de ambos os genes em GBM, a interpretação dos dados da expressão de genes relacionados à pluripotência no câncer tem sido questionada devido ao grande número de pseudogenes processados ou mesmo sequências duplicadas presentes no caso desses genes (LIEDTKE *et al.*, 2008; SNEHA *et al.*, 2019). Um estudo realizado por Rios *et al.* (2021), corroboraram com essa hipótese ao observar divergências na expressão de *NANOG* e *OCT4*, a estudos anteriores dos quais utilizavam primers com baixa especificidade para os genes supracitados.

Embora haja uma escassez de estudos avaliando a presença e função dos pseudogenes de *NANOG* e *OCT4* em modelos de GBM, existem dados que confirmam o papel de alguns exemplares. Zhao *et al.* (2015), forneceram evidências de que os transcritos do gene *OCT4* e seus múltiplos pseudogenes foram detectados em uma variedade de linhagens celulares de câncer, incluindo glioblastoma. Além disso, foi demonstrado que o pseudogene 8 de *NANOG* (*NANOGP8*), é sugerido como capaz de promover o fenótipo de células-tronco cancerígenas (VAIDYA *et al.*, 2018).

Com base nas evidências supracitadas, é evidente que os genes *NANOG*, *OCT4* e seus respectivos pseudogenes desempenham papéis variados e muitas das

vezes até controversos nos diferentes tipos de células tumorais exibindo padrões específicos para cada linhagem dessas células.

1.3 Utilização de bancos de dados públicos para re-análise dos transcriptomas de células-tronco tumorais.

Nas últimas duas décadas, o crescimento de arquivos derivados de sequenciamento de RNA total (RNA-seq) em bancos de dados públicos, tem permitido que diferentes grupos de pesquisa possam re-analisar dados de diferentes estudos, permitindo uma análise mais robusta e refinada de dados gerados previamente (ZOABI & SHOMRON, 2021; ANAMIKA *et al.*, 2016). A análise de dados de diferentes artigos, permite que estudos com um maior número de amostras possam ser realizados, com *softwares* e *pipelines* mais aprimorados, gerando dados que permitam elucidar funções biológicas de diferentes tipos celulares saudáveis ou derivados de diferentes tipos de doenças (DE LIMA *et al.*, 2019; GANDAL *et al.*, 2018).

A análise de transcriptoma de dados públicos pode ser expandida para análise de expressão gênica em células únicas (*single-cell RNA sequencing* - scRNAseq) (LIU *et al.*, 2022; KRIEGER *et al.*, 2020; VERMESHEV *et al.*, 2019).

A utilização de banco de dados públicos também permite avaliar com maior abrangência, potencial de transcrição do genoma humano (cerca de 80% potencialmente transcrito) pela utilização de anotações genômicas de mRNAs codificadores de proteínas, pseudogenes e RNAs não codificadores de proteínas (*noncoding RNAs* - ncRNAs) disponíveis (FRANKISH *et al.*, 2021; NAVARRO GONZALEZ *et al.*, 2021; SISU, 2021; VOLDERS *et al.*, 2019; GRIFFITHS-JONES *et al.*, 2006).

A utilização de dados de RNA-seq e anotações genômicas permite identificar perfis de expressão gênica associados a diferentes tipos de doenças em um maior número de amostras quando utilizados dados de múltiplos estudos, aumentando a acurácia dos resultados (NOAM SHOMRON, 2021)

A hipótese do presente estudo é que os pseudogenes de OCT4 e NANOG podem desempenhar funções semelhantes aos genes originais nos tumores, contribuindo para a regulação de OCT4 e NANOG e influenciando a proliferação celular, pluripotência e regulação de outros genes. Além disso, esses pseudogenes podem estar envolvidos na regulação da expressão diferencial em diferentes perfis de

OCT4, NANOG e seus respectivos pseudogenes. Foram utilizados dados de RNA-seq gerados de amostras de células-tronco tumorais de GBMs de 21 estudos (CHEN *et al.*, 2022; CIECHOMSKA *et al.*, 2020; COTNEY *et al.*, 2015; EL-SEHEMY *et al.*, 2020; GIMPLE *et al.*, 2019; LE BOITEUX *et al.*, 2021, 2022; LIU *et al.*, 2017; MACK *et al.*, 2019; NICKEL *et al.*, 2021; PINSON *et al.*, 2022; PÖTSCHKE *et al.*, 2020; PUSAN NATIONAL UNIVERSITY, 2022; STANZANI *et al.*, 2021; TCHIEU *et al.*, 2019; UDAWANT *et al.*, 2021; UEBBING *et al.*, 2021; XIE *et al.*, 2018; YOON *et al.*, 2022). Também foram utilizadas anotações genômicas de lncRNAs, mRNAs codificadores de proteínas e pseudogenes (FRANKISH *et al.*, 2021; NAVARRO GONZALEZ *et al.*, 2021; SISU, 2021; VOLDERS *et al.*, 2019) visando caracterizar o perfil transcriptômico de CSCs derivadas de GBMs com diferentes perfis de expressão de OCT4, NANOG e seus respectivos pseudogenes. A identificação de assinaturas de expressão associadas aos genes supracitados deverá auxiliar na elucidação dos papéis funcionais dos mesmos em GBM, podem fornecer novos alvos terapêuticos para o tratamento desses tumores.

2. OBJETIVOS

2.1 Objetivo geral

Caracterizar o perfil de expressão dos genes *OCT4*, *NANOG* e seus respectivos pseudogenes em tumores do sistema nervoso central utilizando análise de dados RNA-seq derivados de bancos de dados públicos.

2.2 Objetivos específicos

- Analisar os perfis de expressão dos transcriptomas de amostras tumorais com diferentes assinaturas de expressão de *OCT4*, *NANOG* e seus respectivos pseudogenes;
- Identificar possíveis vias moleculares cujos genes apresentaram expressão diferencial presentes entre diferentes assinaturas de expressão de *OCT4*, *NANOG* e seus respectivos pseudogenes;
- Caracterizar assinaturas de expressão gênica de mRNAs codificadores de proteínas e de lncRNAs em diferentes sublinhagens de GBM-SCs.

3. METODOLOGIA

3.1 Análise de transcriptoma em células-tronco tumorais derivadas de glioblastomas humanos

Inicialmente foi realizada uma mineração de dados de arquivos de RNA-seq disponíveis em bancos de dados públicos correspondentes às amostras de GBMs, células-tronco tumorais derivadas de glioblastomas e células-tronco neuronais. Para as análises de RNA-seq, foram obtidos os dados de RNA-seq da plataforma SRA (*Sequence Read Archive*) vinculada ao NCBI (*National Center for Biotechnology Information*) (Tabela 1).

Tabela 1. Informações das amostras de RNA seq utilizadas no presente estudo, contendo suas respectivas referências, número de BIOPROJECT e data de publicação.

AMOSTRA	RUN	BIOPROJECT	REFERÊNCIAS PUBLICADAS	DATA DE PUBLICAÇÃO
NSCs	SRR7820982 ;SRR7820983 ;SRR7820984 ;SRR7820985 ;SRR7820986 ;SRR7820987 ;SRR7820988 ;SRR7820989 ;SRR7820990	PRJNA490436	(MACK et al., 2019)	19/03/2019
	SRR7609140 ;SRR7609141 ;SRR7609142	PRJNA483049	Sem publicação	26/09/2018
	SRR6074298 ;SRR6074299 ;SRR6074300 ;SRR6074301 ;SRR6074302 ;SRR6074303 ;SRR6074304 ;SRR6074305 ;SRR6074306 ;SRR6074307 ;SRR6074308 ;SRR6074309 ;SRR6074310 ;SRR6074311 ;SRR6074312 ;SRR6074313 ;SRR6074314 ;SRR6074315 ;SRR6074316 ;SRR6074317	PRJNA412090	(TCHIEU et al., 2019)	25/02/2019
	SRR1273697 ;SRR1273698 ;SRR1273699 ;SRR1273701 ;SRR1273702	PRJNA246355	(COTNEY et al., 2015; UEBBING et al., 2021)	21/01/2015
	SRR15319120 ;SRR15319121 ;SRR15319122 ;SRR15319123 ;SRR15319124 ;SRR15319125 ;SRR15319126 ;SRR15319127 ;SRR15319128 ;SRR15319129 ;SRR15319130 ;SRR15319131 ;SRR15319132 ;SRR15319133	PRJNA751380	(NICKEL et al., 2021)	15/10/2021
GBM-SCs	SRR15165564	PRJNA747023	(PINSON et al., 2022)	25/03/2022
	SRR14820412	PRJNA738156	(STANZANI et al., 2021)	30/06/2021
	SRR13057288 ;SRR13057287	PRJNA678319	(LE BOITEUX et al., 2021, 2022)	09/03/2021
	SRR12880339 ;SRR12880340 ;SRR12880338	PRJNA670729	(PÖTSCHKE et al., 2020)	19/12/2020
	SRR12056011 ;SRR12056012 ;SRR12056013	PRJNA640659	(YOON et al., 2022)	17/01/2022
	SRR10461717 ;SRR10461723	PRJNA589752	(CIECHOMSKA et al., 2020)	05/05/2021
	SRR9006692	PRJNA540966	(GIMPLE et al., 2019)	20/08/2019
	SRR8723368 ;SRR8723369 ;SRR8723370 ;SRR8723377 ;SRR8723378 ;SRR8723379	PRJNA526891	(EL-SEHEMY et al., 2020)	04/03/2020
	SRR7820971 ;SRR7820972 ;SRR7820973 ;SRR7820974 ;SRR7820975 ;SRR7820976 ;SRR7820977 ;SRR7820979 ;SRR7820980 ;SRR7820981	PRJNA490436	(MACK et al., 2019)	19/03/2019
	SRR7590042 ;SRR7590043	PRJNA482757	(XIE et al., 2018)	02/11/2018
ESC	SRR4011890 ;SRR4011891 ;SRR4011898 ;SRR4011899	PRJNA338181	(LIU et al., 2017)	10/07/2017
	SRR7248776 ;SRR7248778 ;SRR7248779	PRJNA474206	Sem publicação	20/08/2019

Fonte: (<https://www.ncbi.nlm.nih.gov/sra/>).

O download dos arquivos foi realizado utilizando o *software SRA downloader* (<https://www.bioinformatics.babraham.ac.uk/projects/srdownloader/>). As amostras de RNA-seq em formato FASTQ foram processados utilizando o *software* Trim Galore - Versão 0.4.4

(https://www.bioinformatics.babraham.ac.uk/projects/trim_galore/), para remoção de reads de baixa qualidade e adaptadores.

Posteriormente, os arquivos processados foram analisados utilizando o *software* FastQC e apenas arquivos *reads* de alta qualidade (seguindo os parâmetros padrão do FastQC) viram a ser utilizados para as subsequentes análises

(<https://www.bioinformatics.babraham.ac.uk/projects/fastqc/>).

Depois de processar as *reads*, foi realizado o alinhamento contra o genoma de referência GRCh37/hg19 usando o *software* HISAT2 (KIM; LANGMEAD; SALZBERG, 2015) seguido pela conversão dos arquivos SAM no formato BAM utilizando o *software* SAMtools (LI *et al.*, 2009). As análises de transcrição diferencial foram realizadas utilizando a ferramenta DESeq2 (LOVE; HUBER; ANDERS, 2014) incorporada ao *software* SeqMonk v. 1.48.1 (<https://www.bioinformatics.babraham.ac.uk/projects/seqmonk/>). Para identificar os genes/pseudogenes que são diferencialmente expressos foi utilizado o pacote DESeq2 (LOVE; HUBER; ANDERS, 2014). O teste de correção utilizado foi o de Benjamini e Hochberg (1995) ($P \leq 0,05$). Os dados de expressão gênica diferencial dos genes encontrados no presente estudo foram filtrados para diferença mínima de $\geq 1.5 \log_2FC$ para análises subsequentes de caracterização desses DEGs. Para os genes codificadores de proteínas, foi utilizada a plataforma MetaScape (ZHOU *et al.*, 2019) para identificação de vias biológicas enriquecidas com os DEGs encontrados.

3.2 Análise de co-regulação gênica de mRNAs codificadores e lncRNAs de proteínas em amostras com diferentes assinaturas de expressão de *OCT4*, *NANOG* e seus respectivos pseudogenes.

Para identificação de módulos de expressão gênicas de mRNAs e lncRNAs e suas possíveis associações vias biológicas, os conjuntos de DEGs identificados foram analisados utilizando a ferramenta webCEMiTool (CARDOZO *et al.*, 2019). Seguindo parâmetros padrão da mesma, foram analisados os dados de expressão diferencial entre sublinhagens de GBM-SCs para a identificação de módulos de co-expressão e identificação de vias de sinalização ou metabólicas (*pathways* biológicas) associadas a cada um desses módulos (ORA – *over representation analysis*) (CARDOZO *et al.* 2019). Ambos mRNAs codificadores de proteínas e

lncRNAs foram analisados conjuntamente no webCEMiTool, seguindo um *pipeline* modificados de Lima *et al.*, (2019), visando identificar possíveis vias biológicas comuns a ambas as classes desses RNAs. As DEGs up e down-reguladas foram avaliadas no MetaScape separadamente.

Para investigar a relevância dos genes encontrados nos módulos de expressão gênica, obtidos por meio do WebCEMiTool, em relação ao câncer, utilizou-se a funcionalidade "Reference publications (PubMed)" disponível na plataforma String. O "Reference publications" refere-se a um banco de dados que contém uma ampla coleção de referências científicas provenientes do PubMed, que é uma das principais bases de dados de literatura científica na área biomédica.

Ao utilizar a funcionalidade "Reference publications (PubMed)" no String, é possível realizar pesquisas e consultas relacionadas a publicações científicas que mencionam os genes ou proteínas de interesse. Essas publicações são obtidas a partir de artigos científicos indexados no PubMed, que abrange uma ampla gama de periódicos científicos e revistas biomédicas.

Através dessa abordagem metodológica, foi possível investigar a relevância dos genes encontrados nos módulos de expressão gênica obtidos pelo WebCEMiTool em relação ao câncer, embasando as análises e conclusões relacionadas à associação desses genes com o desenvolvimento e progressão do glioblastoma e potencialmente outros tipos de câncer.

3.3 Busca por dados funcionais dos lncRNAs diferencialmente expressos em GBM-SC.

Numa tentativa de encontrar funções já descritas na literatura científica para os lncRNAs encontrados nos módulos de co-expressão gerados pelo webCEMiTool, os IDs de cada transcrito do banco de dados do LNCipedia (com base em informações disponíveis no próprio banco de dados). Posteriormente as identificações referentes ao banco de dados Ensembl foram convertidas em identificadores de símbolo gênico utilizando a plataforma on-line Biotools (https://www.biotools.fr/human/ensembl_symbol_converter). O conjunto de lncRNAs encontrados foram submetidos a busca por dados funcionais dos mesmos na base de dados LncSea (CHEN *et al.*, 2021), visando identificar associação de funções desses RNAs a biologia tumores do sistema nervoso central.

3.4 Análise estatística

Toda a análise estatística relacionada a identificação de DEGs foram realizadas utilizando pacotes presentes na plataforma R e em ferramentas de bioinformática contidas no próprio software SeqMonk v. 1.48.1. Os dados de ORA e GSEA foram obtidos utilizando algoritmos internos do próprio webCEMITool. Para cada análise foram considerados significativos valores de $p < 0,05$.

4. RESULTADOS E DISCUSSÃO

4.1 Perfil de expressão de *NANOG*, *OCT4* e seus pseudogenes em células tronco-tumorais de GBM

Para investigar o perfil transcricional de *OCT4*, *NANOG* e seus pseudogenes, foi utilizado uma anotação genômica customizada gerada com dados do GENCODE v43(https://ftp.ebi.ac.uk/pub/databases/genCODE/GenCODE_human/release_43/GRCh37_mapping/genCODE.v43lift37.annotation.gff3.gz).

Essa anotação é composta por 27 transcritos incluindo *NANOG*, *OCT4* e seus pseudogenes conhecidos, além de genes codificadores de marcadores de células-tronco tumorais de GBM (BOOTH; HOLLAND, 2004; CORBEIL; FARGEAS; HUTTNER, 2001; GOELZ *et al.*, 1990; HELDIN *et al.*, 2020; POURSANI; SOLTANI; MOWLA, 2016; TAKEDA; SEINO; BELL, 1992; WEY; LYONS; SCHÄFER, 1994; ZHONG; HOLLAND, 2011). Foram analisados um total de 89 amostras de RNA-seq (Tabela 2) derivadas de 45 amostras de células-tronco tumorais de glioblastoma, 37 amostras de células-tronco neuronais e 7 amostras de células-tronco embrionárias humanas.

Tabela 2. Anotação genômica utilizada no presente estudo.

Transcrito	Cromossomo	Início	Fim	Fita
POU5F1P4	1	155402969	155404053	+
NANOGNBP1	2	101276661	101277140	+
NANOGP2	2	223317119	223317845	-
POU5F1P7	3	97838035	97838575	+
POU5F1P6	3	128393578	128395848	-
CD133	4	15969849	16077741	-
POU5F2	5	93070508	93077343	-
POU5F1-isoA	6	31132120	31138470	-
NANOGP3	6	53283250	53283535	-
NANOGP4	7	29251918	29252830	+
POU5F1P2	8	103633737	103634559	-
POU5F1B	8	128426535	128432311	+
NANOGP5	9	102937460	102938336	+
POU5F1P5	10	69769962	69770619	-
NANOGP6	10	101548321	101549167	-
CD44	11	35160728	35251574	+
CD15	11	94277017	94283063	+
NANOGNB	12	7917812	7926717	+
NANOG	12	7941992	7948655	+
NANOGP1	12	8045172	8052736	+
POU5F1P3	12	8286368	8287447	-
NANOGNBP2	12	133548924	133549476	-
NANOGP7	14	92070746	92071663	-
NANOGP8	15	35376394	35377311	-
NANOGP10	X	43266914	43267808	-
NANOGP9	X	64992583	64993474	-
NANOGNBP3	X	100592713	100593277	-

Devido ao padrão de expressão conhecido de *OCT4* e *NANOG* em hESC, em uma primeira análise foram avaliados os padrões de expressão desses genes e seus pseudogenes em hESC em comparação às demais amostras. Como esperado, os transcritos originais de *NANOG* e *OCT4* (*OCT4A*) foram detectados com altos níveis em hESC quando comparados às demais amostras (*OCT4-pg1* também) (ATLASI *et al.*, 2008; CHAMBERS *et al.*, 2003).

A presença de transcritos de *NANOG* se mostrou presente apenas em algumas amostras de células-tronco tumorais (19,5%) e em baixa quantidade (<0,11 RPKM) quando comparados às hESC (>17 RPKM). *NANOGP2*, *NANOGNB*, *OCT4A*, *OCT4-pg3* e *OCT4-pg4* foram detectados exclusivamente em células-tronco embrionárias, embora *NANOGP2* e *NANOGNB* apresentaram um nível de expressão menor que 0,80 RPKM e foram encontrados apenas em algumas das amostras (correspondendo respectivamente a 57,12% e 42,86% das amostras).

Os pseudogenes *NANOGP9*, *NANOGP10*, *NANOGNBP2*, *NANOGP6*, *NANOGP7*, *OCT4-pg2*, *NANOGP3*, *OCT4-pg7* e *NANOGNBP1* não apresentaram níveis de expressão detectáveis em todas amostras utilizadas.

Nas análises subsequentes o grupo controle utilizado foram as amostras de NSCs devido a: **(1)** a expressão da maioria dos genes promotores de câncer ou genes regulados positivamente em células cancerígenas são específicos ou pelo ao menos regulados positivamente em células neuronais embrionárias (LEI *et al.*, 2019; ZHANG *et al.*, 2017); **(2)** as células cancerígenas expressam níveis elevados de fatores/receptores de crescimento neurotróficos para promover a progressão do câncer, e a alta expressão de genes neurais prediz maior agressividade (ALBO *et al.*, 2011; LAGADEC *et al.*, 2009; VANHECKE *et al.*, 2011; ZHANG *et al.*, 2016); e **(3)** estudos recentes demonstram que células cancerígenas exibem potencial de diferenciação neuronal quando os fatores promotores de câncer endógenos são inibidos (LU *et al.*, 2017).

Nas amostras de NSC e GBM-SC foi observada uma ausência de expressão (0 RPKM) nos genes/pseudogenes: *OCT4-pg4*, *NANOGNBP1*, *NANOGP2*, *OCT4-pg7*, *NANOGP6*, *NANOGNB*, *NANOGNBP2*, *NANOGP10*, *NANOGP9* e *NANOGP7*. Já os pseudogenes *NANOGP3*, *OCT4-pg2* e *OCT4-pg3* não apresentaram expressão em NSC e na grande maioria das amostras de GBM-SC (95,5% das amostras). Nas poucas amostras de GBM-SC que apresentaram expressão desses genes, ocorreu uma baixa expressão (<0,2 RPKM). Curiosamente os transcritos originais de *NANOG*

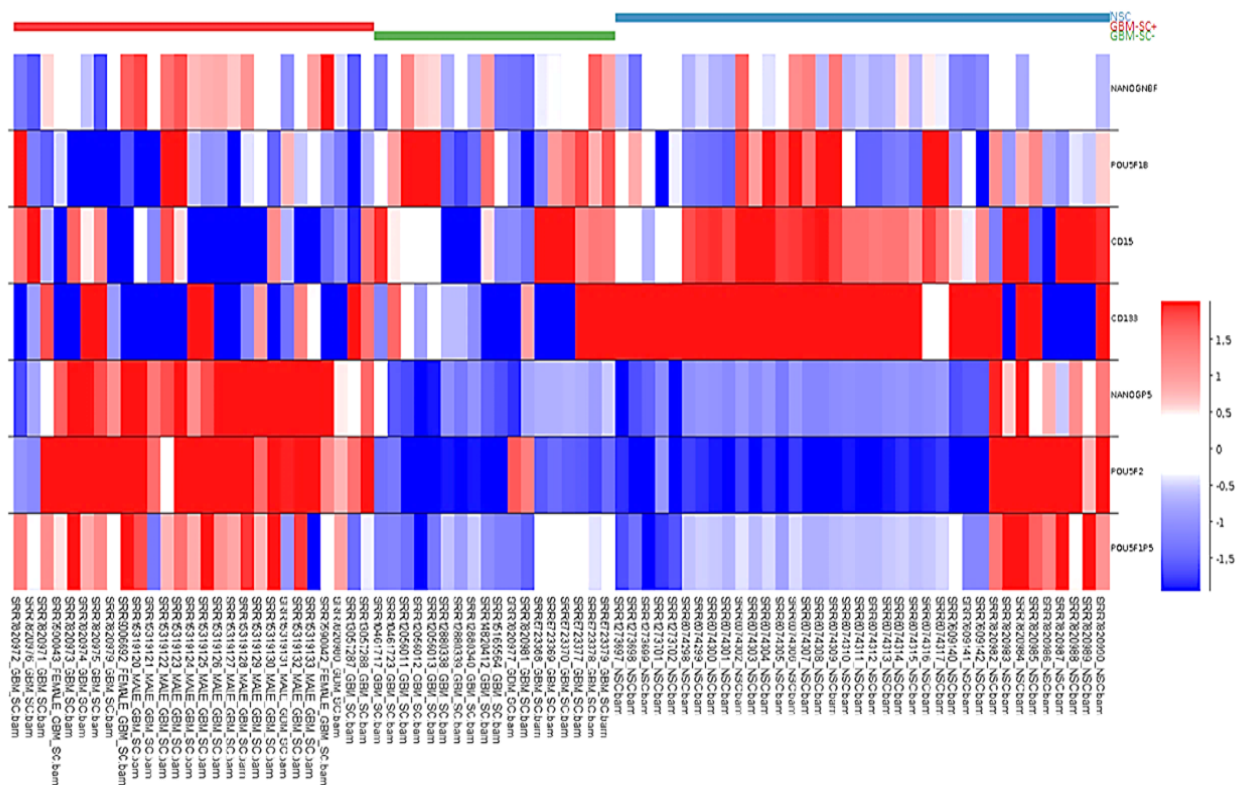


Figura 3. Heatmap demonstrando expressão diferencial (\log_2 RPM / $p < 0.05$) dos pseudogenes utilizando a ferramenta DeSeq2 associada ao software SeqMonk (<https://www.bioinformatics.babraham.ac.uk/projects/seqmonk/>). Retângulos vermelho e verde demonstram duas subpopulações de GSCs com perfis de alta e baixa expressão de NANOGP5 e/ou OCT4-pg5 respectivamente.

Ao comparar os padrões de expressão dos pseudogenes em nas amostras de GBM-SC em comparação com as amostras de NSC, foi possível identificar duas subpopulações de células-tronco tumorais: GBM-SC+ e GBM-SC-. Essas subpopulações são caracterizadas principalmente pela expressão do pseudogene *NANOGP5* e/ou *OCT4-pg5* (GBM-SC+) e pela baixa expressão (ou ausência) de *NANOGP5* e/ou *OCT4-pg5* (GBM-SC-). Dentro desses subgrupos é possível notar que existe uma coexpressão entre *POU5F2* e *NANOGP5* exibindo um perfil de hiperexpressão em GBM-SC+, esse perfil não é apresentado em nenhuma das amostras em GBM-SC-. O *OCT4-pg5* apresentou expressão similar, sendo detectado majoritariamente nas amostras de GBM-SC+ e apresentando hiperexpressão restrita às amostras desse grupo.

Um grande número de linhagens celulares de câncer somático expressa *NANOGP8*, *NANOGP4* e *NANOGP5* (PALLA *et al.*, 2014). A expressão de *NANOGP5* também foi encontrada em linhagens de Leucemia aguda juntamente

com *NANOG2*, *NANOGP2* e *NANOGP4* e assim como em nosso estudo não houve uma expressão significativa de *NANOGP8* (EBERLE *et al.*, 2010).

O gene *POU5F2* codifica um fator de transcrição, conhecido como fator regulador de eventos meióticos. Foi demonstrado que uma mutação em *POU5F2* pode levar à formação de metástases em câncer de pulmão (DEHGHANIAN *et al.*, 2018). O *OCT4-pg1* é um pseudogene processado de *OCT4* e também pode desempenhar papéis na regulação da pluripotência celular e desenvolvimento de câncer (CROWTHER-SWANEOEL *et al.*, 2010, KASTLER *et al.*, 2010). A superexpressão de *OCT4-pg1* está associada a um prognóstico desfavorável em pacientes com câncer gástrico (CG), pois o mesmo confere um fenótipo agressivo ao CG (HAYASHI *et al.*, 2015). Em um estudo realizado por Yu *et al.*, (2019), foi demonstrado que o pseudogene *OCT4-pg1* é regulado positivamente em tecidos e linhagens celulares de câncer cervical e que seu silenciamento modula a expressão de *OCT4* inibindo a proliferação de células desse tipo de tumor e a migração *in vitro*, promovendo a apoptose de células de tumorais e inibindo o crescimento tumoral em camundongos xenoenxertados.

A transcrição de *OCT4-pg1* e *OCT4-pg5* em diferentes tipos de câncer humano pode desempenhar um papel na regulação da atividade do gene *OCT4*, portanto, pode ser contribuir para a tumorigênese (MOHIUDDIN *et al.*, 2020). A expressão de miR-145 é capaz de regular negativamente a expressão de *OCT4* se ligando na região 3'UTR (*untranslated region*) *OCT4*. O pseudogene *OCT4-pg5* possui sítios de ligação deste microRNA (miRNA) que permite que ele atue como uma esponja de microRNA bloqueando o silenciamento pós-transcricional de *OCT4* via miR-145 (BAI *et al.*, 2015). O padrão de hiperexpressão de *NANOGP1*, juntamente com a expressão de *NANOG* em hESCs também foi observado em outro estudo (PALLA *et al.*, 2014). O *NANOGP1* também foi reportado como expresso em células leucêmicas humanas, esse gene é localizado próximo a *NANOG1* e compartilha uma estrutura intron-exon semelhante, o que sugere um evento de duplicação (EBERLE *et al.*, 2010).

Os resultados da expressão utilizando uma anotação customizada com transcritos de *OCT4*, *NANOG* e seus pseudogenes, permitiu identificar padrões de expressão diferencial entre GBM-SC e células-tronco neuronais, assim como identificar possíveis sublinhagens com assinaturas de expressão específicas de *NANOGP5* e *OCT4-pg5*.

4.2 Análise de expressão diferencial de mRNAs codificadores de proteínas análise de enriquecimento funcional

Estudos comparando diferenças de expressão gênica entre o transcriptoma de células-tronco tumorais de GBM e células não tumorais têm identificado que essas alterações de transcrição afetam diferentes vias biológicas (HERSH *et al.*, 2022; VAJA, 2021).

Os dados de expressão diferencial dos RNAs mensageiros (mRNAs) codificadores de proteínas e os RNAs longos não codificantes (lncRNAs) foram gerados separadamente no SeqMonk v. 1.48.1, utilizando o pacote DESeq2 (LOVE; HUBER; ANDERS, 2014). Os resultados foram filtrados para no valores $\geq 1.5 \log_2$ fold change (*up* ou *downregulated*). Desse modo foram avaliados os transcritos com expressão diferencial entre os grupos: GBM-SC vs NSC e; GBM-SC+ vs GBM-SC- vs NSC.

Utilizando a abordagem supracitada, foram encontrados: 3.391 mRNAs codificadores de proteínas com expressão diferencial estatisticamente significativa ($P \leq 0,05$). Para encontrar assinaturas de regulação positiva e regulação negativa específicas para GBM-SC, foram listados genes com hiperexpressão e hipoexpressão em relação a NSC comuns entre GBM-SC+ e GBM-SC-. Dentre os mRNAs encontrados, 1035 são *down-regulated* específicos de GBM-SC e 902 são *up-regulated* específicos de GBM-SC. Dos genes regulados positivamente 28 apresentam expressão restrita em GBM-SC e dos genes regulados negativamente 5 não apresentam nenhum nível de expressão em GBM-SCs.

O conjunto de genes codificadores de proteínas diferencialmente expressos foram submetidos separadamente a busca por vias biológicas enriquecidas pelos mesmos (*Pathway and Process Enrichment Analysis*) na plataforma Metascape (ZHOU *et al.*, 2019) (Figura 4).

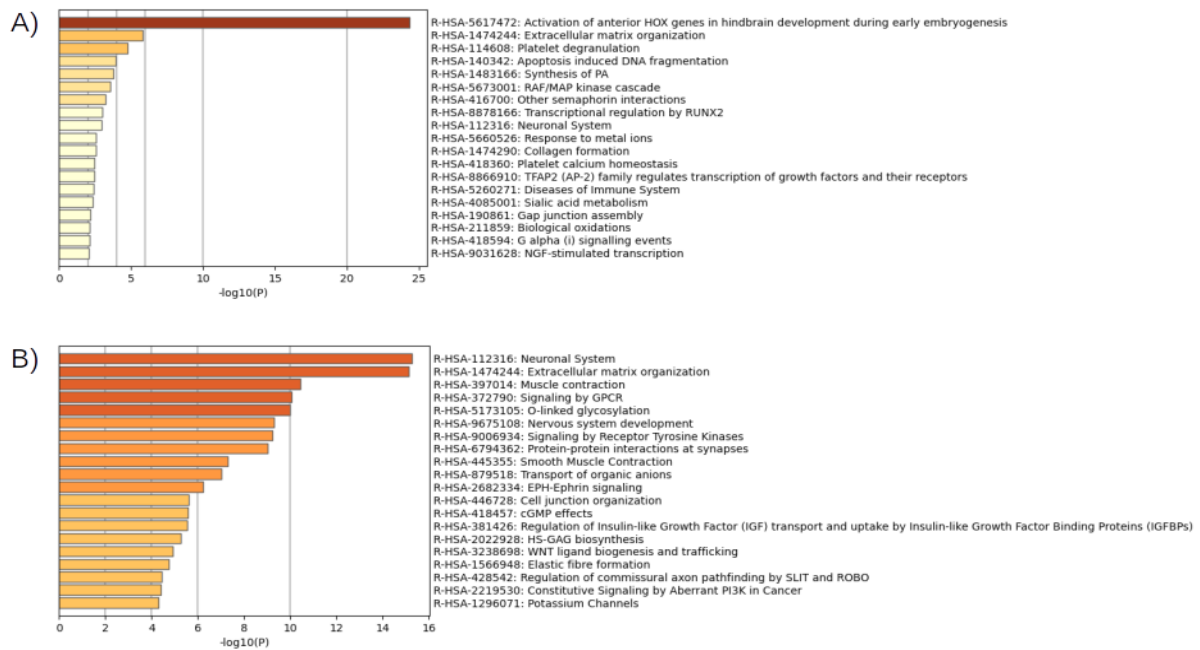


Figura 4. Resultados da análise de enriquecimento funcional para genes up e down-regulados em GBM-SC versus células tronco neuronais gerados pela plataforma MetaScape utilizando conjuntos gênicos da base de dados reactome (ZHOU *et al.*, 2019). **A)** Gráfico de enriquecimento funcional das principais vias biológicas encontradas para genes *up*-regulados em GBM-SC versus NSC; **B)** Gráfico de enriquecimento funcional das principais vias biológicas encontradas para genes *Down*-regulados em GBM-SC versus NSC.

Como pode ser observado na **Figura 4-A**, foi encontrado um enriquecimento de genes pertencentes à família HOX no conjunto de genes com hiper expressão em GBM-SC. No presente estudo os genes: *HOXC4*, *HOXA1*, *HOXC11*, *HOXB13*, *HOXD12*, *HOXD1*, *HOXC5* e *HOXA4* foram expressos exclusivamente em GBM-SCs. Além desses, existem mais 80 mRNAs expressos apenas em GBM-SC, sendo 13 deles exclusivos de GBM-SC-.

Os genes *HOX* desempenham diversos papéis nas funções e propriedades normais das células-tronco, desde a auto renovação até a diferenciação múltiplas linhagens (BHATLEKAR; FIELDS; BOMAN, 2018). A expressão alterada de genes do complexo *HOX* contribui para o desenvolvimento de diferentes tipos de câncer por alterarem a regulação de vias de auto renovação e de diferenciação das células-tronco (BHATLEKAR; FIELDS; BOMAN, 2014). Foi demonstrado que a expressão anormal de *HOXC10* pode induzir a ocorrência e o desenvolvimento de tumores ao promover a proliferação celular, metástase, angiogênese, resistência a drogas e mecanismos de evasão ao sistema imunológico (FANG *et al.*, 2021).

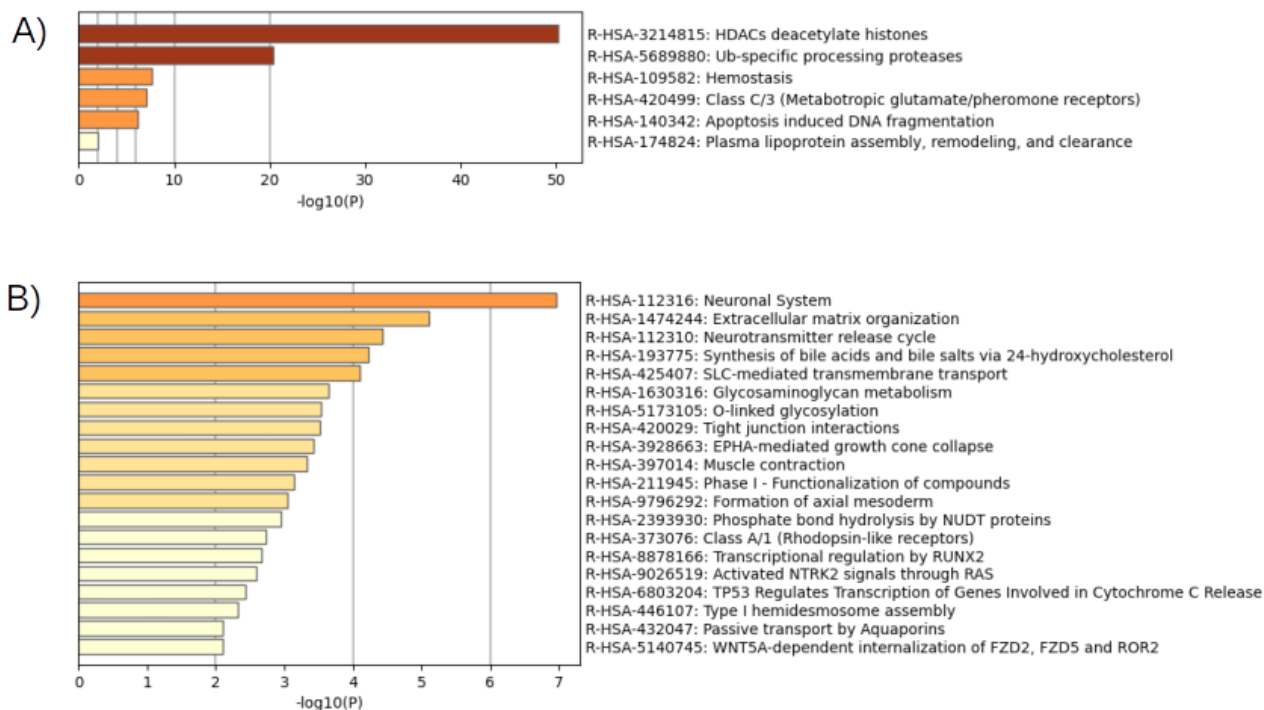


Figura 5. Resultados da análise de enriquecimento funcional para genes up e down-regulados em GBM-SC+ versus GBM-SC- gerados pela plataforma MetaScape utilizando conjuntos gênicos da base de dados reactome (ZHOU *et al.*, 2019). **A)** Gráfico de enriquecimento funcional das principais vias biológicas encontradas para genes *up*-regulados em GBM-SC+ vs GBM-SC-; **B)** Gráfico de enriquecimento funcional das principais vias biológicas encontradas para genes *up*-regulados em GBM-SC+ vs GBM-SC-.

Quando comparados GBM-SC+ vs GBM-SC-, foram encontradas diferentes vias biológicas associadas a os conjuntos de genes hiper ou hipo expressos nessas sublinhagens. Um dados interessante que pode refletir na biologia das GBM-SC+ é a hiper expressão de genes da famílias das HDACs, cuja via biológica (R-HSA-3214815) encontra-se representada no grafico de enriquecimento funcional gerado pelo *software* Metascape (**Figura 5 -A**).

A acetilação de histonas é uma modificação pós-traducional de histonas bem estudada, controlada pelas atividades opostas de histona acetiltransferase (HAT) e histona desacetilase (HDAC). Ao remover os grupos acetil, os HDACs revertem a acetilação da cromatina e alteram a transcrição de oncogenes e genes supressores de tumor (FRAGA *et al.*, 2005). Além disso, os HDACs desacetilam muitos substratos celulares não histônicos que controlam uma ampla gama de processos biológicos, incluindo iniciação e progressão do câncer (CHOUDHARY *et al.*, 2009). A maioria dos HDACs são altamente regulados no câncer, enquanto alguns têm função e

expressão variadas na progressão tumoral (MÜLLER *et al.*, 2013; SINGH *et al.*, 2022). Os HDACs também estão significativamente envolvidos nas células tumorais que adquirem potencial metastático e angiogênico para resistir ao microambiente antitumoral (DING *et al.*, 2014; KRAUSS *et al.*, 2022; LIU *et al.*, 2016; MÜLLER *et al.*, 2013).

Além dos dados mencionado acima, HDACs, também podem desempenhar papéis críticos em CSCs e desenvolvimento de câncer (BAYAT *et al.*, 2018; DESHMUKH *et al.*, 2017; WAGNER; MARTINS; CASTILHO, 2018). Por exemplo: Liu C *et al.*, descobriram que o gene *HDAC3* é altamente expresso em CSCs hepáticas que participam da auto-renovação de CSCs hepáticas por meio da regulação da expressão de fatores de pluripotência (LIU *et al.*, 2013).

Os HDACs também demonstram desempenhar importantes papéis para a biologia tumoral de glioblastoma. Um estudo recente revela um mecanismo regulatório anteriormente desconhecido no qual o eixo HDAC1/2/6/Sp1 induz a divisão celular e mantém a população de células-tronco para alimentar o crescimento do tumor e a resistência terapêutica (YANG *et al.*, 2020). O gene *HDAC2* demonstrou um papel central na tumorigênese do GBM através da reprogramação do metabolismo da glicose, controlando a expressão do *GLUT3* inibido pelo *miR-3189* (KWAK *et al.*, 2022). Embora existam poucos estudos, até o momento, caracterizando a atividade dos HDACs no glioblastoma, existem diversos estudos envolvendo o desenvolvimento de inibidores de *HDAC* para tratar o glioblastoma (LEE *et al.*, 2015). A utilização de um inibidor da *HDAC6* se mostrou capaz de suprimir a proliferação de células GBM resistentes a drogas por meio da regulação negativa do *LINC00461*, um lncRNA altamente conservado, que funciona como um regulador essencial na formação de gliomas (DEGUCHI *et al.*, 2017; WU *et al.*, 2022).

Outra via biológica cujos membros estão hiperexpressos em GBM-SC+ foi a via das Proteases Específicas de Ubiquitina (USPs – do inglês *Ubiquitin-specific proteases/* R-HSA-5689880). As USPs são a maior família de enzimas deubiquitinantes (DUB) com 58 membros descritos com vários domínios conservados e sítios catalíticos semelhantes (SUN *et al.*, 2020). As USPs regulam várias funções celulares importantes no contexto do câncer, como o ciclo celular, os mecanismos de reparo de danos ao DNA, a remodelação da cromatina e várias vias de sinalização.

Até o momento, mais de 40 USPs foram direta ou indiretamente relacionados a processos de câncer relacionados (LAMBIES; DE HERREROS; DÍAZ, 2019). As

USPs são classificadas como proteases associadas ao câncer e vários estudos abordaram o desenvolvimento de terapias anticancerígenas (PAL; YOUNG; DONATO, 2014). Foi observado que o *knockdown* de USP3 levou a uma redução nos níveis de fosfatase CDC25A, causando um atraso na progressão do ciclo celular e uma redução no crescimento tumoral em xenoinxertos de tumores cervicais em camundongos (DAS *et al.*, 2020). O USP7 promove a carcinogênese da mama estabilizando o PHF8 o que leva à regulação positiva de um grupo de genes, incluindo a ciclina A2, que são críticos para o crescimento e proliferação celular (WANG *et al.*, 2016). A expressão de *USP17* é regulada pelo ciclo celular, mas sua expressão elevada é uma característica de vários tipos de câncer e tem sido associada a fenótipos tumorais agressivos (MCFARLANE *et al.*, 2010, 2013; PEREG *et al.*, 2010). Um estudo recente demonstrou que a depleção de USP17 atenua a expressão gênica dependente de ELK-1 e retarda a proliferação celular (DUCKER *et al.*, 2019).

A hiperexpressão de *HDACs* e *USPs* em GBM-SC+ quando comparada a GBM-SC-, considerando os dados supracitados, poderiam refletir principalmente em diferenças na cromatina dessas células associadas a estágio de diferenciação celular e ao estabelecimento de padrões de expressão gênica diferencial dessas sublinhagens. Os aspectos de modificação de proteínas em vias de transdução de sinais também podem indicar diferenças em processos biológicos associados a regulação do ciclo celular entre GBM-SC+ e GBM-SC-.

A via associada aos receptores metabotrópicos de glutamato classe C/3 (mGluRs / R-HSA-420499) desempenham um papel inato no sistema nervoso central sendo amplamente conhecidos por seus papéis na sinalização sináptica atuando em processos como aprendizagem e formação da memória (ALIX; DE JESUS DOMINGUES, 2011; FAIRMAN; AMARA, 1999). No entanto, evidências acumuladas sugerem papéis de mGluRs em malignidades humanas. Os primeiros relatos de mGluRs em malignidades humanas foram em tumores neuronais, incluindo neuroblastomas, meduloblastomas e gliomas (IACOVELLI *et al.*, 2006; NAARALA *et al.*, 1993; SHIN *et al.*, 2008; TAKANO *et al.*, 2001). BROCKE *et al.*, realizou um estudo abrangente em tumores cerebrais pediátricos, onde foi possível observar que mGluR1, mGluR2 e mGluR6 exibem níveis de expressão elevados em meduloblastomas malignos, ependimomas e glioblastomas, em comparação com astrocitomas de baixo grau (BROCKE *et al.*, 2010). Um estudo demonstrou que a inibição de mGluR1 diminui significativamente a viabilidade celular em células de

glioma U87, resultando em apoptose por meio da ativação atenuada da via PI3K/Akt/mTOR (ZHANG et al., 2015). Tais resultados também foram observados em um xenoinxerto de glioma U87, indicando possível relevância clínica para o uso de inibidores de mGluR1 no tratamento de glioma (ZHANG et al., 2015).

Embora as vias supracitadas desempenham papéis importantes no desenvolvimento e para a regulação da homeostase no desenvolvimento normal, é notável que a desregulação dos mesmos é crítica para a iniciação e progressão tumoral, com maior ênfase em tumores do SNC. De modo geral, a diferença na expressão dessas vias nas duas sub-linhagens encontradas no presente estudo pode se referir a diferença no comportamento das mesmas. Tais diferenças podem se refletir na agressividade Intrínseca de ambas linhagens.

4.3 Análise de co-regulação de mRNAs codificadores de proteínas e lncRNAs em GBM-SC

Para identificar módulos de coexpressão de mRNAs e lncRNAs, foi utilizado uma estratégia de análise baseada no estudo de Diógenes *et al.*, 2019. Os resultados de expressão diferencial (expressos em valores de RPKM) de mRNAs (*coding*) e lncRNAs foram analisados conjuntamente no *software online* webCEMiTool (CARDOZO *et al.*, 2019). Foram utilizados dados de interação de genes codificadores de proteínas lncRNAs validados experimentalmente do próprio site do webCEMiTool. Com essa abordagem foram encontrados 8 módulos de co-regulação com perfis de regulação específicos para cada grupo de amostras (ver **Figura 6**). Os módulos gerados pelo webCEMiTool representam conjuntos de genes com perfis similares de expressão entre as amostras estudadas (GBM-SC+, GBM-SC- e NSC), não apenas padrões hiper ou hipoexpressão. Cada módulo encontrado possui mRNAs (*coding*) e lncRNAs como perfis de expressão similares que foram identificadas em cada um dos grupos analisados (**Figura 6**).

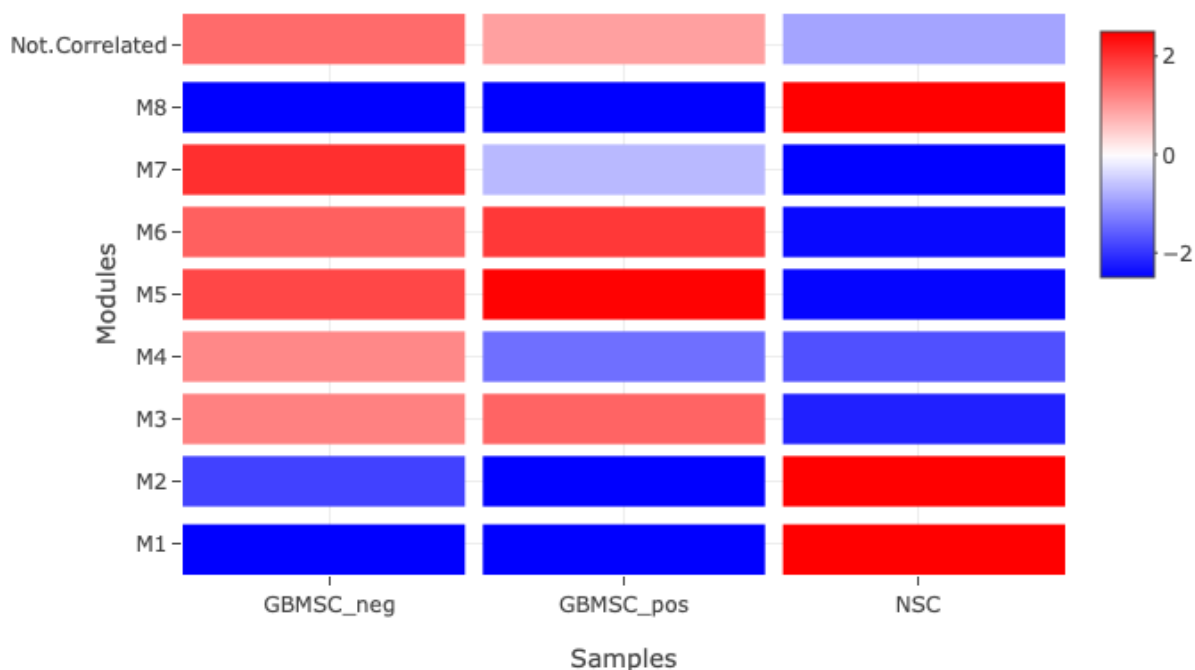


Figura 6. Resultados e GSEA (*Gene Set Enrichment Analysis*) dos DEGs de mRNA (coding) + lncRNAs, demonstrando os oito módulos de co-regulação encontrados pelo WebCEMitoool. Os módulos de M1, M2, M3, M5, M6 e M8 representam genes com expressão diferencial entre GBMSC e NSC. Os módulos M4 e M7 representam genes com expressão diferencial específica entre GBMSC-pos e GBMSC-neg.

Os módulos M1, M2 e M8 apresentaram um padrão de aumento de expressão em NSC com expressão reduzida em GBM-SC. Os módulos M3, M5 e M6 apresentaram um padrão de aumento de expressão em GBM-SC, mas *Downregulation* em NSC. Por fim, os módulos M4 e M7 apresentaram expressão diferencial específica entre os grupos GBM-SC+ e GBM-SC-, apresentando regulação negativa e positiva respectivamente.

Os dados gerados pelo webCEMitoool também geraram redes de interação gênica por módulos, os quais estão associados aos resultados de ORA gerados pela mesma plataforma (**Figuras 7, 8 e 9**). Os módulos e suas respectivas redes de interação gênica foram separados em subgrupos com base na similaridade de seus perfis de expressão (subgrupo M1-M2-M8; subgrupo M3-M5-M6; subgrupo M4-M7)

Os subgrupos encontrados apresentaram resultados $-\log_{10}$ (*adjusted - value*) e vias biológicas diferentes quando comparado aos dados encontrados na análise com a plataforma Metascape, sendo que essas plataformas analisaram o enriquecimento funcional com quantidades de grupos/módulos diferentes (2 grupos no Metascape e 8 módulos no CEMitoool).

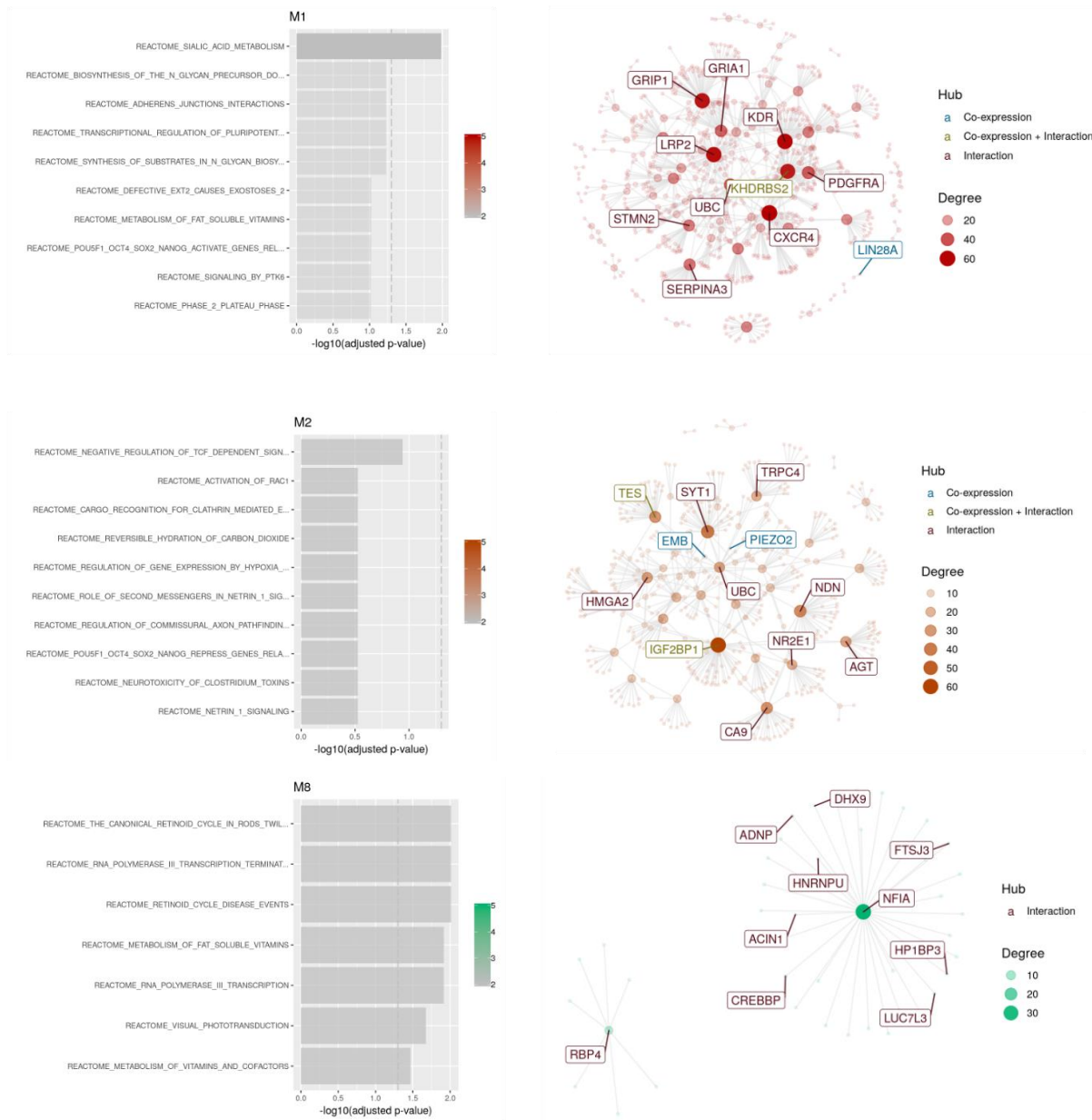


Figura 7. Resultados da rede interação gênica e de ORA (com vis biológicas encontradas) gerados pelo webCEMITool para conjunto de dados de expressão de DEG mRNAs (coding)+ lncRNA dos módulos M1, M2 e M8 ($-\log_{10}(\text{adjusted } - \text{value})$); filtro de variancia $p = 0.05$; VST aplicado; correlação de Pearson).

Quanto aos lncRNAs diferencialmente expressos do subgrupo M-M2-M8, os resultados da mineração de dados na plataforma LncSea encontraram 26 lncRNAs (Tabela 6) diferencialmente expressos associados a padrões de sobrevivência em GBM

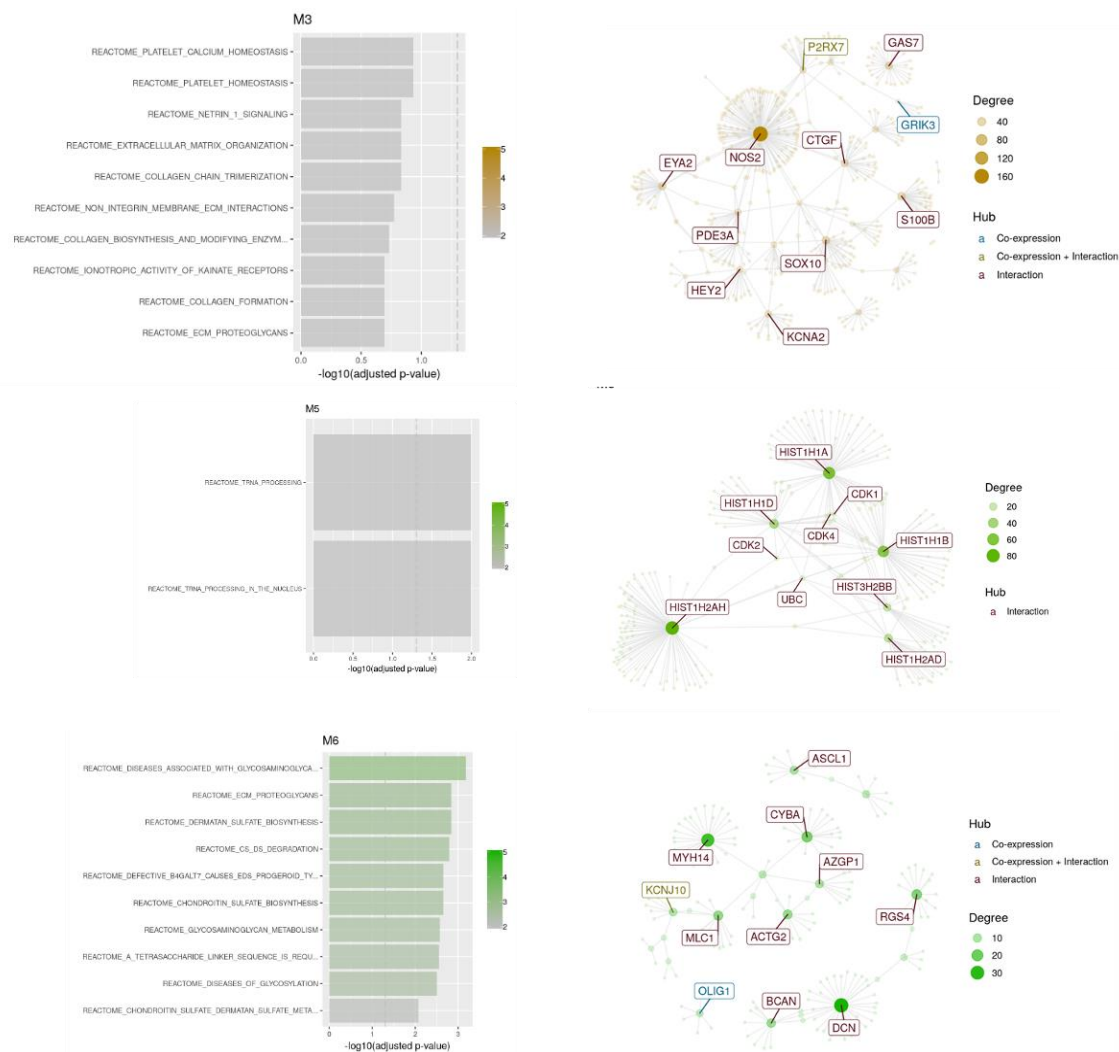


Figura 8. Resultados da rede interação gênica e de ORA (com via biológicas encontradas) gerados pelo webCEMITool para conjunto de dados de expressão de DEG mRNAs (*coding*) + lncRNA dos módulos M3, M5 e M6 ($-\log_{10} / \text{adjusted} - \text{value}$; filtro de variância $p = 0.05$; VST aplicado; correlação de Pearson).

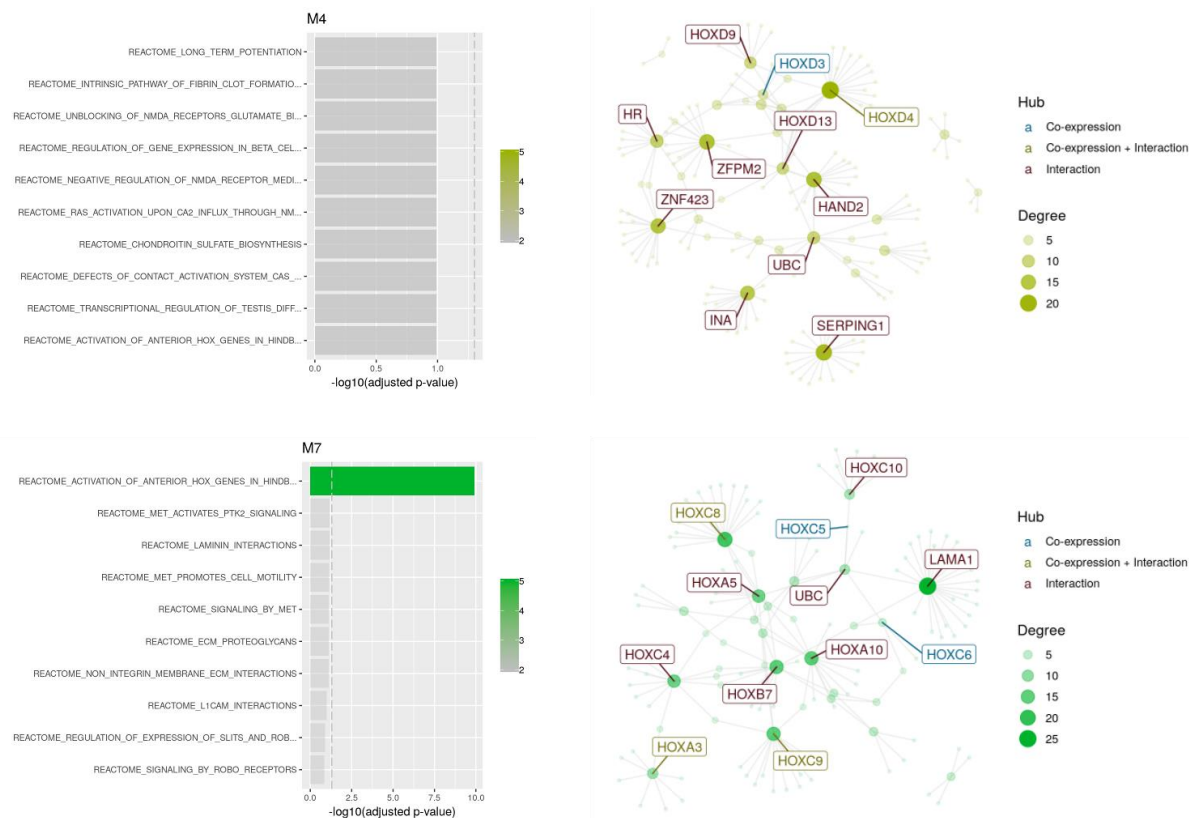


Figura 9. Resultados da rede interação gênica e de ORA (com vis biológicas encontradas) gerados pelo webCEMitoool para conjunto de dados de expressão de DEG mRNAs (*coding*) + lncRNA dos módulos M4 e M2 ($-\log_{10} / adjusted - value$); filtro de variância $p = 0.05$; VST aplicado; correlação de Pearson).

4.4 Análise das funções de genes diferencialmente expressos codificadores de proteínas pr módulos de co-expressão gênica

Os módulos que apresentaram um padrão de aumento de expressão em GBM-SC são compostos em sua totalidade por 88 genes codificadores de proteínas, onde 48 pertencem ao módulo M3, 18 ao M5 e 22 ao M6 (Tabela 3). Nas publicações, obtidas utilizando a plataforma *String* “Reference publications (PubMed)” cerca de 46,6% desses genes foram encontrados em 144 publicações relevantes, onde foram associados a diferentes tipos de câncer (**Figura 10**). Dos genes encontrados nas publicações 66,6% estavam associados ao glioblastoma.

Tabela 3. Genes pertencentes aos módulos com aumento de expressão em GBM-SC

Módulos	Genes	Cromossomos	Início	Fim	Fita	ID
M3	AC007405.7	2	171640296	171655481	+	ENSG00000204334
M3	AC114730.3	2	242749407	242753111	-	ENSG00000224272
M3	AC124789.1	17	36606675	36608643	-	ENSG00000228576
M3	ADAMTS12	5	33523640	33892297	-	ENSG00000151388
M3	APOD	3	195295573	195311076	-	ENSG00000189058
M3	ATP2B2	3	10365707	10749716	-	ENSG00000157087
M3	CD248	11	66081958	66084515	-	ENSG00000174807
M3	CHST8	19	34112861	34264413	+	ENSG00000124302
M3	COL20A1	20	61924538	61966203	+	ENSG00000101203
M3	COL3A1	2	189839046	189877472	+	ENSG00000168542
M3	CTGF	6	132269316	132272513	-	ENSG00000118523
M3	DSCAM	21	41382926	42219065	-	ENSG00000171587
M3	EFNA5	5	106712590	107006596	-	ENSG00000184349
M3	EYA2	20	45523263	45817492	+	ENSG00000064655
M3	FAM198A	3	43020759	43101703	+	ENSG00000144649
M3	FCRLA	1	161676762	161684142	+	ENSG00000132185
M3	FIBIN	11	27015628	27018630	+	ENSG00000176971
M3	GAS7	17	9813926	10101868	-	ENSG00000007237
M3	GPR139	16	20042989	20085089	-	ENSG00000180269
M3	GPR37L1	1	202091972	202098640	+	ENSG00000170075
M3	GRIK3	1	37261128	37499730	-	ENSG00000163873
M3	HAPLN1	5	82933624	83017432	-	ENSG00000145681
M3	HEPACAM	11	124789089	124806308	-	ENSG00000165478
M3	HEY2	6	126068810	126082415	+	ENSG00000135547
M3	ITIH5L	X	54775332	54824673	+	ENSG00000102313
M3	KCNA2	1	111136202	111174096	-	ENSG00000177301
M3	LHFPL3	7	103969104	104549001	+	ENSG00000187416
M3	MAN1A1	6	119498374	119670926	-	ENSG00000111885
M3	MT3	16	56623184	56625000	+	ENSG00000087250
M3	NEU4	2	242749920	242758739	+	ENSG00000204099
M3	NOS2	17	26083792	26127555	-	ENSG00000007171
M3	NTN4	12	96051583	96184930	-	ENSG00000074527
M3	P2RX7	12	121570622	121623876	+	ENSG00000089041
M3	PAPPA	9	118916083	119164601	+	ENSG00000182752
M3	PDE3A	12	20522179	20837315	+	ENSG00000172572
M3	PLAGL1	6	144261437	144385735	-	ENSG00000118495
M3	PMP2	8	82352561	82359758	-	ENSG00000147588
M3	RP11-231C18.1	4	55199059	55222121	+	ENSG00000248184
M3	RP11-472N13.3	10	31982012	31996316	-	ENSG00000237797
M3	RP11-698N11.2	11	35936601	35940289	-	ENSG00000254919
M3	RPH3A	12	113008184	113336686	+	ENSG00000089169
M3	S100B	21	48018875	48025121	-	ENSG00000160307
M3	SALL3	18	76740275	76757397	+	ENSG00000256463
M3	SEZGL	22	26565440	26779562	+	ENSG00000100095
M3	SLFN12	17	33738079	33760218	-	ENSG00000172123
M3	SLITRK2	X	144899350	144907360	+	ENSG00000185985
M3	SOX10	22	38366693	38383429	-	ENSG00000100146
M3	TTC9B	19	40721965	40724306	-	ENSG00000174521
M5	HIST1H1A	6	26017260	26018040	-	ENSG00000124610
M5	HIST1H1B	6	27834570	27835359	-	ENSG00000184357
M5	HIST1H1D	6	26234440	26235216	-	ENSG00000124575
M5	HIST1H2AD	6	26199079	26199471	-	ENSG00000196866
M5	HIST1H2AH	6	27114861	27115317	+	ENSG00000184825
M5	HIST1H3B	6	26031817	26032288	-	ENSG00000124693
M5	HIST1H3D	6	26197068	26199521	-	ENSG00000197409
M5	HIST1H3F	6	26250370	26250835	-	ENSG00000256316
M5	HIST1H4C	6	26104104	26104518	+	ENSG00000197061
M5	HIST1H4E	6	26204858	26206266	+	ENSG00000198518
M5	HIST3H2BB	1	228645808	228646259	+	ENSG00000196890

(Continuação)

M5	RN7SL1	14	50053297	50053596	+	ENSG00000258486
M5	RP11-124N14.3	10	17275324	17276832	-	ENSG00000234961
M5	RP11-661A12.7	8	144661806	144662840	+	ENSG00000254741
M5	RP1-65P5.3	11	32118689	32126637	-	ENSG00000255252
M5	RP4-541C22.4	11	33730981	33731568	+	ENSG00000254549
M5	RPPH1	14	20811207	20811844	-	ENSG00000259001
M5	SCARNA10	12	6619441	6619688	+	ENSG00000239002
M6	ACTG2	2	74119441	74146992	+	ENSG00000163017
M6	ASCL1	12	103351464	103354294	+	ENSG00000139352
M6	ASTN1	1	176826438	177134109	-	ENSG00000152092
M6	AZGP1	7	99564343	99573780	-	ENSG00000160862
M6	BCAN	1	156611182	156629324	+	ENSG00000132692
M6	C20orf103	20	9495008	9511171	+	ENSG00000125869
M6	C2orf80	2	209030067	209054797	-	ENSG00000188674
M6	CYBA	16	88709698	88717457	-	ENSG00000051523
M6	DCN	12	91539025	91576900	-	ENSG00000011465
M6	FAM181B	11	82443053	82444906	-	ENSG00000182103
M6	FOXS1	20	30432103	30433420	-	ENSG00000179772
M6	KCNJ10	1	160007257	160040038	-	ENSG00000177807
M6	LUM	12	91496406	91505608	-	ENSG00000139329
M6	MIR31HG	9	21455641	21559668	-	ENSG00000171889
M6	MLC1	22	50497820	50524331	-	ENSG00000100427
M6	MYH14	19	50706885	50813802	+	ENSG00000105357
M6	OLIG1	21	34442450	34444726	+	ENSG00000184221
M6	OLIG2	21	34398153	34401504	+	ENSG00000205927
M6	RGS4	1	163038565	163046592	+	ENSG00000117152
M6	RLBP1	15	89753098	89764922	-	ENSG00000140522
M6	RP11-226L15.4	1	160010261	160012085	-	ENSG00000250463
M6	TRPV2	17	16318888	16340317	+	ENSG00000187688

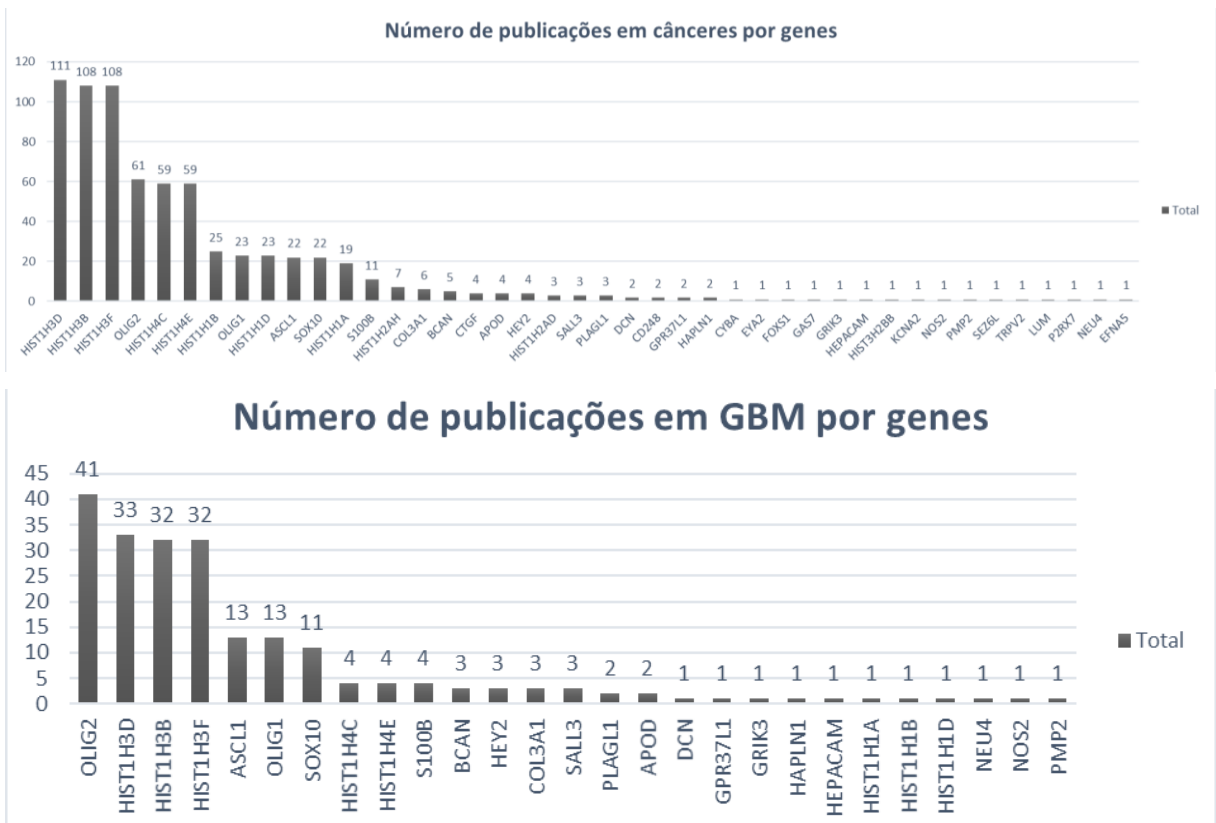


Figura 10. Número de artigos por genes. Gráfico de colunas apresentando o número de publicações associando os genes a mecanismos envolvidos em diferentes tipos de câncer.

Darmanis *et al.*, identificaram 30 genes expressos diferencialmente potentes em células neoplásicas e não neoplásicas, entre eles *PMP2* (DARMANIS *et al.*, 2017). Tal gene foi relatado juntamente com *OLIG1* como diferencialmente expresso em células tumorais e periféricas. Esses genes são regulados positivamente em tumores e regulados negativamente em células periféricas (YESUDHAS *et al.*, 2022).

O gene *COL3A1* é específico para células vasculares e apresenta up-regulation no tumor e down-regulation em tecido periférico. O *COL3A1* apresenta envolvimento no mecanismo de migração celular (YESUDHAS *et al.*, 2022).

O aumento da expressão de *DCN* foi relatado em tumores GBM sendo negativamente associado à taxa de sobrevida global de pacientes com GBM (TSIDULKO *et al.*, 2020).

O padrão de co-expressão de *ASCL1* e *OLIG2* em GBM foi relatado em diversos estudos (GANGEMI *et al.*, 2009; LIGON *et al.*, 2007; LU *et al.*, 2016; PARK *et al.*, 2017; RHEINBAY *et al.*, 2013; SINGH *et al.*, 2017) Recentemente, VUE *et al.*, mostrou que *ASCL1* é altamente expresso em tumores de GBM transplantados, com a maioria dessas células coexpressando *OLIG2* e *SOX2* (VUE *et al.*, 2020). Curiosamente, além de *OLIG2* e *SOX2*, foi descoberto que a expressão de uma variedade de outros genes que codificam fatores de transcrição, como os das famílias homeobox, domínio *POU* e *SOX* também estão altamente correlacionadas com a expressão de *ASCL1* em RNA-seq de GBMs primários. Tal achado condiz a relatos anteriores em GBM-SC de linhagens celulares de GBM cultivadas (RHEINBAY *et al.*, 2013; SUVÀ *et al.*, 2014).

Em um estudo realizado com 24 amostras foi observado que os gliomas pontino intrínseco difuso (DIPGs) superexpressam um conjunto de fatores de transcrição bHLH, incluindo *OLIG2*, que estava presente em 70% a 80% dos casos (BALLESTER *et al.*, 2013). A expressão de *OLIG2* também se correlacionou com a mitose de DIPG, agressividade e sobrevida geral mediana mais curta (BALLESTER *et al.*, 2013; PUGET *et al.*, 2012). Anderson *et al.*, relatou em seu estudo que o fator de transcrição bHLH *OLIG2* resiste à diferenciação e provavelmente é necessário para a formação do tumor em um modelo de xenoenxerto de DIPGs. Também observou que o silenciamento de *OLIG2* atrasou significativamente a tumorigênese e aumentou a sobrevida em camundongos (ANDERSON *et al.*, 2017). Embora o antagonismo com a diferenciação astrocítica, muitos gliomas astrocíticos adultos expressam *OLIG2* e

quase todas as células em proliferação, incluindo células-tronco CD133+ nesses tumores, expressam *OLIG2* (LIGON *et al.*, 2004). De fato, *OLIG2* foi necessário para a gênese do glioma em um modelo de camundongo de glioma adulto de alto grau e os precursores de oligodendrócitos *OLIG2+* foram definidos como a célula de origem do glioma murino (LIU *et al.*, 2011).

Diversos estudos suportam que os níveis de *ASCL1* em gliomas atuam em equilíbrio com as vias de sinalização Wnt e Notch para regular o status CSC de células tumorais em cultura (PARK *et al.*, 2017; RAJAKULENDRAN *et al.*, 2019; RHEINBAY *et al.*, 2013). Recentemente foi constatado que o fator de transcrição *ASCL1* regula os alvos transcricionais que são centrais para o desenvolvimento do GBM e que a perda do mesmo reduz significativamente a proliferação de GBMs induzida no cérebro de um modelo de camundongo com glioma, resultando em tempos de sobrevivência prolongados (VUE *et al.*, 2020). Análises de RNA-seq de tumores GBM de camundongos revelaram que a perda de *ASCL1* está associada à regulação negativa de genes do ciclo celular, ilustrando um papel importante para *ASCL1* no controle da proliferação de GBM (VUE *et al.*, 2020).

A expressão elevada de lécticos, como *BCAN*, foi relatada em diversas amostras de GBM (WADE *et al.*, 2015). O aumento na expressão de *BCAN* no GBM tem sido associado ao aumento da capacidade de invasão, e a sialilação no câncer está relacionada aos mecanismos de adesão e invasão, aumentando o potencial metastático das células cancerígenas (DOBIE; SKROPETA, 2020; VIRGA *et al.*, 2019). Mohiuddin demonstrou recentemente que as integrinas interagem com componentes da MEC, como brevicana (proteína produzida pelo gene *BCAN*), tenascina-C, fibronectina e trombospondina, o que leva à adesão e migração de células de glioma (MOHIUDDIN; WAKIMOTO, 2021).

É conhecido que os tumores tenham mutações oncogênicas da histona K27M essa mutação, foi encontrada principalmente em H3F3A (cerca de 75%), um dos dois genes que codificam o H3.3 independente de replicação, menos frequentemente no H3.1 dependente de replicação (cerca de 25%, principalmente *HIST1H3B* e, em menor extensão, *HIST1H3C*) e raramente em H3.2 (*HIST2H3C*) (CASTEL *et al.*, 2015; KARREMANN *et al.*, 2018; SCHWARTZENTRUBER *et al.*, 2012; WU *et al.*, 2012). Quase 80% dos gliomas pontino intrínseco difuso abrigam uma mutação no H3F3A ou no gene *HIST1H3B* relacionado (ANDERSON *et al.*, 2017). Essas mutações levam à redução da metilação das caudas das histonas, resultando no

bloqueio da diferenciação das células gliais e subsequente formação de gliomas (CASTEL *et al.*, 2015). Os gliomas difusos com mutação H3 K27M de linha média ocorrem principalmente em crianças e menos frequentemente em adultos, independentemente do sexo (MEYRONET *et al.*, 2017). A mutação K27M demonstrou estar fortemente associada a uma sobrevida global mais curta (LU *et al.*, 2018; WANG *et al.*, 2018).

As chamadas células progenitoras de oligodendrócitos (OPCs) também expressam os fatores de transcrição (TFs) básicos helix-loop-helix *OLIG1*, *OLIG2* E *ASCL1*, bem como a família Sox de TFs contendo grupos de alta mobilidade *SOX8*, *SOX9* E *SOX10* (EMERY; LU, 2015; GOLDMAN; KUYERS, 2015). *SOX10* também é expresso em oligodendrogliomas, astrocitomas, gliomas cerebelares difusos e gliomas de linha média mutantes H3K27M (BANNYKH *et al.*, 2006; TAKEI *et al.*, 2008a, 2008b), embora sua expressão seja silenciada em gliomas corticais pela metilação do promotor. A superexpressão de *SOX10* e *OLIG2* foi relatada em Gliomas induzidos por radiação (RIG) pediátrico (DONSON *et al.*, 2007; PHI *et al.*, 2018; WHITEHOUSE *et al.*, 2020). Estudos em um modelo de camundongo de glioma maligno mostram que *SOX10* não é suficiente para induzir a tumorigênese do glioma (FERLETTA *et al.*, 2007), provavelmente devido à relação inibitória cruzada de *SOX10* e *NFIA* que está presente no desenvolvimento e é conservada durante a tumorigênese no glioma (GLASGOW *et al.*, 2014).

Os módulos: M1, M2 e M8 apresentaram um padrão de diminuição de expressão nas amostras de GBMSC em relação às amostras de NSC (Tabela 4). Esses módulos são constituídos por 219 genes codificadores de proteínas. Utilizando a mesma abordagem em String com os genes dos módulos M1, M2 e M8, foram encontradas apenas 29 publicações citando 83 dos genes. A maioria dos genes mencionados nos estudos estão envolvidos na regulação do desenvolvimento do sistema nervoso, incluindo a formação de células-tronco neurais, a diferenciação neuronal e a morfogênese neuronal.

Tabela 4. Genes pertencentes aos módulos com aumento de expressão em NSC

Módulos	Genes	Cromossomos	Início	Fim	Fita	ID
M1	ABCB1	7	87132948	87342611	-	ENSG00000085563
M1	AC007390.5	2	37423631	37440868	+	ENSG00000218739
M1	AC092198.1	X	39868529	39871435	+	ENSG00000223486
M1	AC093726.6	7	154720208	154741618	+	ENSG00000214106
M1	AIM1	6	106808784	107018335	+	ENSG00000112297
M1	AP000459.4	21	24733426	24757182	-	ENSG00000228592
M1	BMP2	20	6748311	6760910	+	ENSG00000125845
M1	BTBD17	17	72352555	72357958	-	ENSG00000204347
M1	C10orf90	10	128113566	128359079	-	ENSG00000154493

(Continuação)

M1	C14orf162	14	70037483	70038032	-	ENSG00000255994
M1	C5orf38	5	2752245	2755508	+	ENSG00000186493
M1	C9orf4	9	111899167	111929571	-	ENSG00000136805
M1	CACNG7	19	54412589	54447195	+	ENSG00000105605
M1	CADM3	1	159141399	159173103	+	ENSG00000162706
M1	CALB1	8	91070836	91107703	-	ENSG00000104327
M1	CCDC160	X	133371077	133380237	+	ENSG00000203952
M1	CCDC48	3	128720472	128759585	+	ENSG00000114654
M1	CD200	3	112051915	112081659	+	ENSG00000091972
M1	CDH5	16	66400533	66438686	+	ENSG00000179776
M1	CDH8	16	61685917	62070739	-	ENSG00000150394
M1	CHODL	21	19165801	19639690	+	ENSG00000154645
M1	CNPY1	7	155266901	155326557	-	ENSG00000146910
M1	CNTFR	9	34551430	34590121	-	ENSG00000122756
M1	CNTNAP2	7	145813453	148118090	+	ENSG00000174469
M1	COL23A1	5	177664619	178017556	-	ENSG00000050767
M1	CRABP1	15	78632666	78640572	+	ENSG00000166426
M1	CRB2	9	126118449	126142603	+	ENSG00000148204
M1	CRISPLD1	8	75896750	75946793	+	ENSG00000121005
M1	CTC-338M12.9	5	180708376	180710653	+	ENSG00000248103
M1	CXCR4	2	136871919	136875735	-	ENSG00000121966
M1	CYTL1	4	5016313	5021199	-	ENSG00000170891
M1	DACH1	13	72012098	72441330	-	ENSG00000165659
M1	DDAH2	6	31694815	31698394	-	ENSG00000213722
M1	DIO3	14	102027688	102029789	+	ENSG00000197406
M1	DPPA4	3	109044988	109056419	-	ENSG00000121570
M1	DSC2	18	28645940	28682378	-	ENSG00000134755
M1	DUSP23	1	159750722	159752333	+	ENSG00000158716
M1	EN2	7	155250824	155257526	+	ENSG00000164778
M1	EREG	4	75230860	75254468	+	ENSG00000124882
M1	FAM150B	2	279565	288851	-	ENSG00000189292
M1	FAM181A	14	94385240	94395954	+	ENSG00000140067
M1	FERMT1	20	6055492	6104191	-	ENSG00000101311
M1	FGF10	5	44303646	44389808	-	ENSG00000070193
M1	FGF13	X	137713735	138304939	-	ENSG00000129682
M1	FOXB1	15	60296421	60353929	+	ENSG00000171956
M1	FXYD5	19	35645633	35660787	+	ENSG00000089327
M1	FZD10	12	130647004	130650285	+	ENSG00000111432
M1	GBX2	2	237073879	237077012	-	ENSG00000168505
M1	GPC3	X	132669773	133119922	-	ENSG00000147257
M1	GPC4	X	132434131	132549518	-	ENSG00000076716
M1	GNPMB	7	23275586	23314727	+	ENSG00000136235
M1	GPR27	3	71803201	71805647	+	ENSG00000170837
M1	GREB1L	18	18822203	19102791	+	ENSG00000141449
M1	GRIA1	5	152869175	153193240	+	ENSG00000155511
M1	GRIP1	12	66741211	67197966	-	ENSG00000155974
M1	GRM3	7	86273230	86494200	+	ENSG00000198822
M1	GSTT2	22	24322339	24326106	+	ENSG00000099984
M1	GYG2	X	2746829	2800859	+	ENSG00000056998
M1	IGDCC3	15	65619465	65670378	-	ENSG00000174498
M1	IGFBPL1	9	38408991	38424444	-	ENSG00000137142
M1	IRX2	5	2745959	2752969	-	ENSG00000170561
M1	KCNE4	2	223916532	224063117	+	ENSG00000152049
M1	KDR	4	55944644	55991756	-	ENSG00000128052
M1	KHDRBS2	6	62390139	62996132	-	ENSG00000112232
M1	KLRC2	12	10579453	10594899	-	ENSG00000205809
M1	KLRC4	12	10559983	10562356	-	ENSG00000183542
M1	LGI1	10	95517566	95557916	+	ENSG00000108231
M1	LIN28A	1	26737269	26756213	+	ENSG00000131914
M1	LIN28B	6	105404923	105531207	+	ENSG00000187772
M1	LINC00403	13	112761433	112762329	+	ENSG00000224243
M1	LINC00404	13	112760409	112761196	-	ENSG00000229520
M1	LIX1	5	96427574	96478576	-	ENSG00000145721
M1	LRP2	2	169983619	170219195	-	ENSG00000081479
M1	LRRCS5	11	56949221	56959191	+	ENSG00000183908
M1	LRRN1	3	3841121	3889387	+	ENSG00000175928
M1	LY96	8	74903587	74941322	+	ENSG00000154589
M1	MAGEL2	15	23888691	23891175	-	ENSG00000254585

(Continuação)

M1	MSMP	9	35752987	35756610	-	ENSG00000215183
M1	NELL2	12	44902058	45315631	-	ENSG00000184613
M1	NFIX	19	13106584	13209610	+	ENSG00000008441
M1	NKX6-2	10	134598297	134599556	-	ENSG00000148826
M1	NLRP2	19	55476438	55512510	+	ENSG00000022556
M1	NMU	4	56461396	56502865	-	ENSG00000109255
M1	NRN1	6	5998232	6007200	-	ENSG00000124785
M1	NTSR1	20	61340189	61394123	+	ENSG00000101188
M1	NXPH2	2	139428342	139537918	-	ENSG00000144227
M1	OAS3	12	113376157	113411054	+	ENSG00000111331
M1	OLFAM3	1	102268127	102462586	-	ENSG00000118733
M1	PAX5	9	36833272	37034476	-	ENSG00000196092
M1	PCDH19	X	99546642	99665271	-	ENSG00000165194
M1	PCDH8	13	53418109	53422775	-	ENSG00000136099
M1	PDGFRA	4	55095264	55164414	+	ENSG00000134853
M1	PID1	2	229715242	230136001	-	ENSG00000153823
M1	PIP5K1B	9	71320575	71624092	+	ENSG00000107242
M1	PLP2	X	49028273	49031588	+	ENSG00000102007
M1	PLXNA4	7	131808091	132333447	-	ENSG00000221866
M1	PPP1R16B	20	37434348	37551667	+	ENSG00000101445
M1	PROM1	4	15964699	16086001	-	ENSG00000007062
M1	RAI2	X	17818171	17879457	-	ENSG00000131831
M1	RARRES2	7	150035408	150038763	-	ENSG00000106538
M1	RBPMS2	15	65032091	65067786	-	ENSG00000166831
M1	RCAN3	1	24829387	24863506	+	ENSG00000117602
M1	ROR2	9	94325373	94712444	-	ENSG00000169071
M1	RP11-100E13.1	1	224802998	224803922	-	ENSG00000233384
M1	RP11-123O10.4	12	67285656	67462942	-	ENSG00000256248
M1	RP11-129M6.1	14	41424103	41445082	+	ENSG00000251363
M1	RP11-143E21.7	12	130634894	130646801	-	ENSG00000250208
M1	RP11-178A10.1	10	42970991	42990784	+	ENSG00000185904
M1	RP11-185P18.1	14	96342729	96391908	+	ENSG00000250366
M1	RP11-277P12.6	12	10564911	10588600	-	ENSG00000255641
M1	RP11-32K4.1	8	64599737	65281115	-	ENSG00000253554
M1	RP11-32K4.2	8	65285885	65296344	+	ENSG00000254377
M1	RP11-342C23.4	9	97320996	97330312	+	ENSG00000231806
M1	RP11-46C20.1	5	27472399	27496508	+	ENSG00000250337
M1	RP11-480D4.3	5	8457606	8460776	+	ENSG00000247516
M1	RP11-574H13.2	6	122907064	122910009	+	ENSG00000240283
M1	RP11-697M17.1	8	76135639	76236976	-	ENSG00000249395
M1	RP1-240B8.3	6	62340138	62390954	-	ENSG00000250686
M1	RP3-389A20.4	X	17819784	17855852	-	ENSG00000248906
M1	RP4-706A16.2	1	77533605	77544167	+	ENSG00000230498
M1	RP5-963E22.4	20	61798149	61812255	-	ENSG00000231977
M1	RP6-109B7.3	22	46449585	46453090	+	ENSG00000241990
M1	RP6-65G23.3	14	71276922	71282120	+	ENSG00000259153
M1	S100A6	1	153507075	153508720	-	ENSG00000197956
M1	S1PR1	1	101702444	101707074	+	ENSG00000170989
M1	SALL4	20	50400581	50419014	-	ENSG00000101115
M1	SEMA5B	3	122628041	122747452	-	ENSG00000082684
M1	SERPINA3	14	95058395	95090983	+	ENSG00000196136
M1	SFRP2	4	154701744	154710272	-	ENSG00000145423
M1	SLC13A5	17	6588032	6616740	-	ENSG00000141485
M1	SLC7A3	X	70145432	70150975	-	ENSG00000165349
M1	SLITRK1	13	84451344	84456528	-	ENSG00000178235
M1	SOD3	4	24797085	24802464	+	ENSG00000109610
M1	SOX1	13	112721913	112726020	+	ENSG00000182968
M1	SOX3	X	139585152	139587225	-	ENSG00000134595
M1	ST6GALNAC3	1	76540389	77100286	+	ENSG00000184005
M1	ST6GALNAC5	1	77333126	77531396	+	ENSG00000117069
M1	ST8SIA2	15	92937058	93015640	+	ENSG00000140557
M1	ST8SIA4	5	100145357	100238970	-	ENSG00000113532
M1	STMN2	8	80523049	80578397	+	ENSG00000104435
M1	TMEM132C	12	128751948	129192460	+	ENSG00000181234
M1	TMEM200C	18	5890184	5892103	-	ENSG00000206432
M1	TMOD1	9	100263462	100364023	+	ENSG00000136842
M1	TMSB15A	X	101768604	101771712	-	ENSG00000158164
M1	TOX3	16	52471918	52581714	-	ENSG00000103460

(Continuação)

M1	TRIM71	3	32859510	32933771	+	ENSG00000206557
M1	TSPAN18	11	44748015	44953972	+	ENSG00000157570
M1	VAT1L	16	77822483	78014003	+	ENSG00000171724
M1	WBSCR17	7	70597155	71178585	+	ENSG00000185274
M1	ZMAT4	8	40388109	40755352	-	ENSG00000165061
M2	ABCC9	12	21950335	22094336	-	ENSG00000069431
M2	AC090774.1	17	20771810	20901341	+	ENSG00000233098
M2	AGT	1	230838269	230850043	-	ENSG00000135744
M2	ATF7IP2	16	10479912	10577495	+	ENSG00000166669
M2	BASP1	5	17217669	17276943	+	ENSG00000176788
M2	BTBD11	12	107712190	108053419	+	ENSG00000151136
M2	C14orf23	14	29241910	29282493	+	ENSG00000186960
M2	C1orf94	1	34632484	34684732	+	ENSG00000142698
M2	CA9	9	35673853	35681156	+	ENSG00000107159
M2	CECR7	22	17517460	17539682	+	ENSG00000237438
M2	CNTN6	3	1134260	1445901	+	ENSG00000134115
M2	COL8A1	3	99357319	99518070	+	ENSG00000144810
M2	CYR1	21	27838528	27945603	-	ENSG00000166265
M2	DIRAS2	9	93372114	93405386	-	ENSG00000165023
M2	DKK2	4	107842959	108204963	-	ENSG00000155011
M2	DPP6	7	153584182	154685995	+	ENSG00000130226
M2	EDIL3	5	83236373	83680611	-	ENSG00000164176
M2	EDNRA	4	148402069	148466106	+	ENSG00000151617
M2	ELTD1	1	79355449	79472403	-	ENSG00000162618
M2	EMB	5	49692026	49739082	-	ENSG00000170571
M2	FAM26E	6	116832809	116845955	+	ENSG00000178033
M2	FLRT2	14	85996488	86095034	+	ENSG00000185070
M2	FOXG1	14	29235050	29238870	+	ENSG00000176165
M2	GABRQ	X	151806637	151825999	+	ENSG00000147402
M2	GFRA1	10	117816444	118033126	-	ENSG00000151892
M2	GSC	14	95234553	95236562	-	ENSG00000133937
M2	H2AFY2	10	71812552	71872032	+	ENSG00000099284
M2	HMGGA2	12	66217911	66360075	+	ENSG00000149948
M2	HOXA13	7	27233122	27239725	-	ENSG00000106031
M2	IGF2BP1	17	47074774	47133012	+	ENSG00000159217
M2	ISLR	15	74466012	74469213	+	ENSG00000129009
M2	LXN	3	158363611	158390482	-	ENSG00000079257
M2	MFAP2	1	17300997	17307330	-	ENSG00000117122
M2	MST4	X	131157293	131209971	+	ENSG00000134602
M2	NDN	15	23930565	23932450	-	ENSG00000182636
M2	NEFM	8	24770525	24776607	+	ENSG00000104722
M2	NEGR1	1	71868625	72748417	-	ENSG00000172260
M2	NR2E1	6	108487262	108510013	+	ENSG00000112333
M2	PABPC5	X	90689594	90693583	+	ENSG00000174740
M2	PDE1A	2	183004763	183387919	-	ENSG00000115252
M2	PIEZO2	18	10670238	11148761	-	ENSG00000154864
M2	PITX1	5	134362615	134370503	-	ENSG00000069011
M2	PTPRM	18	7567817	8406859	+	ENSG00000173482
M2	RHOD	11	66824289	66839484	+	ENSG00000173156
M2	RNF128	X	105937024	106040223	+	ENSG00000133135
M2	RP11-537P22.1	14	37641093	37643016	+	ENSG00000258708
M2	RP11-93B14.5	20	61294371	61298076	-	ENSG00000232803
M2	RP11-966I7.1	14	29198289	29234483	-	ENSG00000257126
M2	RP11-99J16_A.2	1	230846444	230931238	-	ENSG00000244137
M2	SDPR	2	192699028	192711981	-	ENSG00000168497
M2	SFRP1	8	41119481	41167016	-	ENSG00000104332
M2	SFTA1P	10	10826402	10836943	-	ENSG00000225383
M2	SHISA2	13	26618735	26625198	-	ENSG00000180730
M2	SLIT2	4	20254883	20622184	+	ENSG00000145147
M2	SULF1	8	70378859	70573150	+	ENSG00000137573
M2	SULT1C4	2	108994367	109004513	+	ENSG00000198075
M2	SYT1	12	79257773	79845788	+	ENSG00000067715
M2	TES	7	115850547	115898837	+	ENSG00000135269
M2	TGFA	2	70674412	70781325	-	ENSG00000163235
M2	TMEM132D	12	129556270	130388211	-	ENSG00000151952
M2	TMEM47	X	34645181	34675405	-	ENSG00000147027
M2	TMEM98	17	31254928	31268667	+	ENSG00000006042
M2	TRPC4	13	38210773	38444562	-	ENSG00000133107

(Continuação)

M2	TUSC3	8	15274724	15624158	+	ENSG00000104723
M2	VGLL3	3	86987119	87040269	-	ENSG00000206538
M2	ZIM2	19	57285920	57352097	-	ENSG00000259486
M8	NFIA	1	61330931	61928465	+	ENSG00000162599
M8	RBP4	10	95351444	95361501	-	ENSG00000138207

O gene *FOXP1* e o *GBX2* são marcadores de identidade anterior e desempenham papéis no estabelecimento inicial da padronização anterior/posterior da placa neural (por exemplo, *GBX2*) ou na padronização regional do prosencéfalo, mesencéfalo e rombencéfalo (CONTI; CATTANEO, 2010; GAMMILL; SIVE, 2001; TOUR *et al.*, 2002). Enquanto o gene *SOX1* é um marcador precursor neural precoce e desempenha um papel na especificação de células neurais (BEDOGNI; HEVNER, 2021; YUQI *et al.*, 2014).

O gene *SFRP1* atua como um antagonista da via de sinalização Wnt (WILLIAMS *et al.*, 2022), assim como o gene *SFRP2*, que desempenha um papel importante na regulação do desenvolvimento neural e do tecido ectodérmico (SEARS *et al.*, 2022).

O gene *FOXP1* contribui para o estabelecimento de padrões anterior/posterior da placa neural, regulando a proliferação e diferenciação de células neurais (WILLIAMS *et al.*, 2022; YUQI *et al.*, 2014). O gene *SOX3* também está envolvido na especificação de células neurais e determinação do destino celular durante o desenvolvimento do sistema nervoso (WILLIAMS *et al.*, 2022).

O gene *SALL4* é um marcador conservado de células-tronco neurais pluripotentes (CTNPs) indiferenciadas (WILLIAMS *et al.*, 2022; YUQI *et al.*, 2014), e o gene *FZD10* é um componente da via de sinalização Wnt associado à ativação dessa via em células específicas (YUQI *et al.*, 2014).

O gene *LRP2* faz parte da via Hedgehog e está relacionado às células progenitoras de oligodendrócitos no córtex (BEDOGNI; HEVNER, 2021). Os genes *LIX1* e *EN2* são marcadores de identidade anterior e estão envolvidos na padronização da placa neural (YUQI *et al.*, 2014).

A expressão do gene *LIN28B* diminui durante a diferenciação de células-tronco neurais pluripotentes (CTNPs) (YUQI *et al.*, 2014), enquanto o gene *LGI1* é um marcador específico de rosetas neurais e está presente nas células progenitoras neurais (YUQI *et al.*, 2014).

Outros genes mencionados, como *DACH1*, *PDGFRA*, *CALB1*, *MFAP2* e *CRB2*, desempenham papéis na regionalização neural, migração celular, diferenciação de

interneurônios e manutenção das junções aderentes nas células progenitoras neurais (BEDOGNI; HEVNER, 2021; YUQI et al., 2014).

Além disso, a regulação de genes como CRABP1, FGF13, BMP2, LIN28A e PLXNA4 pode ter um papel significativo no desenvolvimento neural (BEDOGNI; HEVNER, 2021; SEARS et al., 2022; WILLIAMS et al., 2019; YUQI et al., 2014).

Em resumo, esses genes desempenham funções essenciais no desenvolvimento neural, incluindo a especificação e diferenciação de células neurais, regulação de vias de sinalização importantes e formação de estruturas neurais específicas.

Os módulos M4 e M7 são os únicos que apresentaram padrões de expressão diferencial específicos para os subgrupos GBMSC-pos e GBMSC-neg (Tabela 5). Ambos os módulos apresentaram regulação negativa em GBMSC-pos e regulação positiva no grupo GBMSC-neg. Tais módulos apresentam um total de 56 genes codificadores de proteínas. Com a abordagem realizada na plataforma String foram encontrados 256 estudos realizados com variados tipos de câncer, que citam 51,7% dos genes pertencentes aos módulos M4 e M7. Curiosamente, entre os genes supracitados a maioria pertence à família dos genes *HOX*, correspondendo a mais da metade dos genes encontrados nesses módulos.

Tabela 5. Genes pertencentes aos módulos com padrões de expressão diferencial específicos para os subgrupos GBMSC-pos e GBMSC-neg.

Módulos	Genes	Cromossomos	Início	Fim	Fita	ID
M4	AC009336.21	2	176986339	177001826	-	ENSG00000237380
M4	AC009336.23	2	177037923	177053686	-	ENSG00000224189
M4	AC017048.3	2	177494568	177502659	-	ENSG00000163364
M4	AC132217.4	11	2150351	2151194	-	ENSG00000240801
M4	ARHGAP20	11	110447766	110583912	-	ENSG00000137727
M4	CHST15	10	125767184	125853206	-	ENSG00000182022
M4	COBL	7	51083909	51384515	-	ENSG00000106078
M4	CPAMD8	19	17003758	17137625	-	ENSG00000160111
M4	FOXF1	16	86544144	86548076	+	ENSG00000103241
M4	H19	11	2016406	2022700	-	ENSG00000130600
M4	HAND2	4	174446120	174451380	-	ENSG00000164107
M4	HOXD10	2	176973518	176984670	+	ENSG00000128710
M4	HOXD11	2	176968944	176974722	+	ENSG00000128713
M4	HOXD13	2	176957619	176960666	+	ENSG00000128714
M4	HOXD3	2	177001340	177039577	+	ENSG00000128652
M4	HOXD4	2	177015950	177020802	+	ENSG00000170166
M4	HOXD9	2	176987088	176989853	+	ENSG00000128709
M4	HR	8	21971928	21990897	-	ENSG00000168453
M4	INA	10	105036920	105050108	+	ENSG00000148798
M4	KIAA0040	1	175126123	175162079	-	ENSG00000235750
M4	LRRC3	21	45875369	45878739	+	ENSG00000160233
M4	MAOB	X	43625858	43741693	-	ENSG00000069535
M4	NEFL	8	24808468	24814624	-	ENSG00000104725
M4	NKX2-2	20	21491648	21494664	-	ENSG00000125820
M4	RANBP17	5	170288874	170727019	+	ENSG00000204764

(Continuação)

M4	RP11-611O2.5	12	69235068	69237017	-	ENSG00000257181
M4	RP11-834C11.4	12	54519882	54526627	+	ENSG00000250742
M4	SERPING1	11	57364860	57382326	+	ENSG00000149131
M4	ST8SIA5	18	44259081	44337132	-	ENSG00000101638
M4	TNFAIP6	2	152214106	152236560	+	ENSG00000123610
M4	WISP1	8	134203282	134240603	+	ENSG00000104415
M4	ZFPM2	8	106330920	106816760	+	ENSG00000169946
M4	ZNF215	11	6947635	7005863	+	ENSG00000149054
M4	ZNF423	16	49524522	49860918	-	ENSG00000102935
M7	AC009518.4	7	131582400	131618070	+	ENSG00000243416
M7	HOTAIRM1	7	27135266	27139773	+	ENSG00000233429
M7	HOXA10	7	27210210	27219880	-	ENSG00000253293
M7	HOXA2	7	27139721	27142430	-	ENSG00000105996
M7	HOXA3	7	27145816	27192200	-	ENSG00000105997
M7	HOXA4	7	27168126	27170418	-	ENSG00000197576
M7	HOXA5	7	27180671	27183287	-	ENSG00000106004
M7	HOXA6	7	27185015	27192217	-	ENSG00000106006
M7	HOXA7	7	27193335	27197555	-	ENSG00000122592
M7	HOXB2	17	46618256	46623441	-	ENSG00000173917
M7	HOXB3	17	46626232	46667634	-	ENSG00000120093
M7	HOXB7	17	46684590	46710934	-	ENSG00000120087
M7	HOXC10	12	54378849	54384063	+	ENSG00000180818
M7	HOXC4	12	54410715	54449814	+	ENSG00000198353
M7	HOXC5	12	54379629	54429145	+	ENSG00000172789
M7	HOXC6	12	54384408	54424607	+	ENSG00000197757
M7	HOXC8	12	54402832	54407570	+	ENSG00000037965
M7	HOXC9	12	54388679	54397121	+	ENSG00000180806
M7	LAMA1	18	6941743	7117813	-	ENSG00000101680
M7	RP11-357H14.17	17	46632895	46682274	-	ENSG00000257487
M7	SMOC1	14	70320848	70499083	+	ENSG00000198732

Os genes homeobox são genes reguladores que codificam fatores de transcrição durante a embriogênese e o desenvolvimento normal que regulam a diferenciação e proliferação celular (GRAY *et al.*, 2011). Existem mais de 20 subclasses de genes homeobox; a mais notável delas é a família de genes homeobox (*HOX*), que consiste em 39 genes, divididos em quatro grupos: A, B, C e D (LEVINE; HOEY, 1988; SCOTT, 1992, 1993). No presente estudo, 22 membros dessa família foram encontrados nos módulos M4 e M7. Diversas evidências apontam que os genes *HOX* estejam envolvidos na agressividade e progressão tumoral.

O genes *HOXA7*, *HOXB7* e *HOXA10* são altamente expressos no câncer de pulmão humano (CALVO *et al.*, 2000). O mRNA de *HOXD9* está presente no câncer cervical, mas não no colo uterino normal (CANTILE *et al.*, 2003; HUNG *et al.*, 2003). A superexpressão de *HOXB6*, *HOXB8*, *HOXC8* e *HOXC9* foi observada no câncer de cólon humano (VIDER *et al.*, 2000). A regulação positiva de *HOXD3* e *HOXD4* com regulação negativa concomitante de *HOXA11* e *HOXB5* foi observada em câncer de mama humano (CANTILE *et al.*, 2003). *HOXC10* teve seu papel demonstrado na promoção de metástase em carcinoma Hepatocelular, câncer de ovário e adenocarcinoma de pulmão (DANG *et al.*, 2020; PENG *et al.*, 2020; TANG *et al.*,

2017). Estudos em carcinoma nasofaríngeo e câncer de bexiga mostraram que HOXA10 é capaz de promover a proliferação e invasividade (LIU *et al.*, 2019; SHEN; ZHAO; DU, 2017).

Além dos membros do *HOX* supracitados, o *HOXB3* recentemente atraiu a atenção, *HOXB3* é regulado positivamente em tecidos de câncer de próstata primário em comparação com tecidos de próstata normais. Essa regulação positiva está associada à pontuação de Gleason mais altas e piores resultados de sobrevida do paciente (CHEN *et al.*, 2013). A superexpressão de *HOXB3* em células de câncer de próstata (LNCaP) promove proliferação e migração celular (CHEN *et al.*, 2013). O silenciamento de *HOXB3* em células de carcinoma pulmonar de células não pequenas (NSCLC) A549 resultou em crescimento reduzido, enquanto a superexpressão de *HOXB3* em células NCI-H1437 de NSCLC aumentou significativamente a taxa de crescimento do tumor (BLASCHUK; DEVEMY, 2009). O papel de *HOXB3* também foi investigado em glioblastoma, onde por meio do uso de técnicas de RNA de interferência (RNAi) tal gene se mostrou capaz de promover a proliferação e invasão celular (XU *et al.*, 2018).

Diversos estudos propõem contribuições dos genes da família *HOX* na biologia tumoral de glioblastoma. Por exemplo, o aumento da expressão de *HOXA5* pode promover a progressão do glioma e exibir um fenótipo de agressividade (CIMINO *et al.*, 2018; DING *et al.*, 2021). Um estudo recente demonstrou que a regulação positiva da expressão de *HOXAs* foi significativamente correlacionada com estágio tumoral mais elevado no glioblastoma, ressaltando o papel de *HOXA6* afetando as habilidades de proliferação e migração (XIULIN *et al.*, 2022). LI *et al.* (2021), relataram que embora a expressão de *HOXD10* seja baixa no GBM em comparação com o tecido cerebral saudável, os pacientes portadores de GBM com alta expressão de *HOXD10* apresentam um pior prognóstico. A desregulação dos genes *HOXD* também se mostraram capazes de participar da patogênese de gliomas pediátricos de baixo grau (BUCCOLIERO *et al.*, 2009). Altos níveis de expressão do gene *HOXA9/HOXA10* foram associados a uma sobrevida mais curta em amostras pediátricas de pacientes com glioma de alto grau estando associados a vias de resistência a temozolomida (GASPAR *et al.*, 2010). ARUNACHALAM *et al.*, mostrou que existe uma desregulação significativa desses genes e, especificamente, que os genes *HOXA9*, *HOXA10*, *HOXC4* e *HOXD9* são fortes candidatos a biomarcadores e alvos de tratamento para GBM e de GBM-SCs (ARUNACHALAM *et al.*, 2022). Estudos

anteriores relatam que o aumento da expressão de nove genes (*HOXA6*, *HOXA7*, *HOXA9*, *HOXA13*, *HOXB13*, *HOXD4*, *HOXD9*, *HOXD10* e *HOXD13*) pode contribuir para seu comportamento maligno, crescimento e invasão, viabilidade celular, migração, redução da angiogênese, capacidade de células-tronco, resistência à terapia e morte celular/apoptose em células adultas de glioma (ABDEL-FATTAH *et al.*, 2006; GONÇALVES *et al.*, 2020).

Em um estudo realizado com dados de RNA-seq de amostras de câncer de mama, *HAND2* (juntamente com *HOXA2*, *HOXA3* e *HOXA5*) foi definido como um dos 10 reguladores mestres transcricionais capazes de cooptar vias de sinalizações em favor do desenvolvimento do tumor (TAPIA-CARRILLO *et al.*, 2019). No câncer de endométrio a metilação *HAND2* é uma alteração molecular comum e crucial que exibe um potencial para ser empregada como um biomarcador para detecção precoce de câncer de endométrio e como um preditor de resposta ao tratamento (JONES *et al.*, 2013).

Uma análise de matriz de metilação identificou *NEFL* como um dos 10 genes (juntamente com *HOXB2* e *HOXD9*) candidatos a biomarcadores preditivos de metástase linfonodal (LNM) (NAGATA *et al.*, 2017). *NEFL* também apresentou expressão aumentada em ependimomas espinhais (SEPN) (AHMAD *et al.*, 2021). O ependimoma mixopapilar (MEPN) apresenta uma alta expressão *NEFL*, embora essa expressão seja significativa para a biologia molecular MEPN, é um alvo terapêutico pobre devido à sua expressão ubíqua nos processos axonais (BARTON *et al.*, 2010).

A partir desse estudo realizado onde foram destacados papéis já elucidados desempenhados pelos principais genes presentes nos módulos M4 e M7 foi possível observar que a maioria dos genes representados em tais módulos podem desempenham papéis importantes na biologia tumoral em diversos tipos de câncer, incluindo o GBM. Os papéis desempenhados pelos genes supracitados, variam entre aumento da capacidade de proliferação, invasividade, manutenção de um estado indiferenciado em CSCs e a capacidade tumoral de resistir a barreiras (terapêuticas e imunológicas). Desse modo, devido ao perfil de aumento de expressão desses módulos, encontrado na linhagem GBM-SC-, é possível associá-lo a um aumento de agressividade nas amostras pertencentes a sub-linhagem supracitada.

4.5 Análise das funções de lncRNAs diferencialmente expressos

Utilizando os dados de expressão gênica diferencial, foram avaliados os padrões de co-expressão de lncRNAs entre amostras de GBM-SC+, GBM-SC- e NSC. Os dados de ORA na correlacionam os lncRNAs de cada módulo encontrados **Figura 7** as vias biológicas identificadas com base em dados funcionais dos mRNAs codificadores de proteínas dos mesmos.

Os dados da figura 5 são indicativo de que os lncRNAs associados a módulos e vias biológicas encontradas possam estar associados a funções das mesmas. No entanto, a função da vasta maioria dos lncRNAs ainda está longe de ser elucidada (MATTICK et al. 2023).

Para se obter uma análise das funções de alguns desses RNAs melhor caracterizados na literatura científica, foi realizada uma investigação de possíveis lncRNAs na **Tabela 6**, onde estão representados os lncRNAs diferencialmente expressos por módulos e suas possíveis funções associadas à biologia tumoral baseado em dados depositados na plataforma LncSea (CHEN *et al.*, 2021). Os códigos de identificação (IDs) do LNCipedia foram convertidos em IDs do Ensembl e posteriormente em IDs de símbolos gênicos (*gene symbol* IDs) para mineração de dados na plataforma LncSea.

Tabela 6. Evidências funcionais sobre lncRNAs diferencialmente expressos encontrados no presente estudo utilizando mineração de dados da plataforma LncSea (CHEN et al., 2021).

gene_symbol	modules	Disease	Cancer phenotype	Cancer Hallmark	miRNA	Survival
AC022639.1	M1					
AC093726.1	M1					
AL035409.1	M1					
AL049544.1	M1					
AL096828.1	M1					
AL359091.1	M1					
LINC00404	M1					
LINC00839	M1					
LINC02315	M1					

(Continuação)

MIR124-2HG	M1					
PRR34-AS1	M1					
SOX1-OT	M1					
AC037198.1	M2					
LINC01551	M2					
SLCO4A1-AS1	M2					
ZIM2-AS1	M2					
AC009407.1	M3					
AC060766.4	M3					
AC060766.7	M3					
AC090692.1	M3					
AC091932.1	M3					
AL161935.3	M3					
LINC01896	M3					
LINC02283	M3					
AC025423.4	M4					
AC132217.1	M4					
H19	M4	Neuroblastoma/GBM/m eduloblastoma	GBM	prognosis/prolife ration/EMT/metas tasis		
HAGLR	M4	GBM				
AC005944.1	M5					
AC006064.5	M5					
AC015674.1	M5					
AC018761.2	M5					
AC093484.3	M5					
AL139099.4	M5					

(Continuação)

AL355075.4	M5					
AL627171.2	M5					
RMRP	M5			proliferation		
AL355974.2	M6					
AL355974.3	M6					
MIR31HG	M6			proliferation		
AC004080.5	M7					
AC009518.1	M7					
HOTAIRM1	M7	GBM	GBM	prognosis/proliferation		
AC107871.2	M8					
LINC02880	M8					
AC023830.2	M8					
AC093849.1	M8					
AL050349.1	M8					
AL138733.2	M8					
AL135905.1	M8					
AC069366.2	M8					
AC078814.1	M8					
AC107993.1	M8					

Quando observados os dados dos módulos M1-M2-M8 (genes hiperexpressos em GBM-SC vs NSC) foram encontrados 26 lncRNAs diferencialmente expressos. Desses, três lncRNAs (*MIR124-2HG*, *PRR-AS1* e *SLCO4A1-AS1*) possuem informação funcional baseado em publicações disponíveis no PubMed. O lncRNA *SLCO4A1-AS1* codifica o lncRNA com função de esponja de miRNAs, incluindo os microRNAs: miR-355-5p, miR-150-3p, miR-4673, miR-149-5p, miR-508-3p, miR-223-3p, miR-876-3p. Esses miRNAs estão envolvidos na regulação pós-transcricional de diferentes mRNAs em cânceres de pulmão, pâncreas, gástrico, colorretal e bexiga

(ZHANG *et al.*, 2022; FANG *et al.*, 2021; LI *et al.*, 2021; WU *et al.*, 2021; LI *et al.*, 2020; WANG *et al.*, 2019; YANG *et al.*, 2019).

Uma função importante na regulação mediada por *SLCO4A1-AS1* é sua ação como esponja de miR-355-5p, o qual regula negativamente a tradução do mRNA de *OCT4* (YANG *et al.*, 2019), afetando aspecto biológico importante em câncer de bexiga, como o crescimento e invasão tumoral. A regulação de *OCT4* via eixo miR-355-5p/*SLCO4A1-AS1* pode representar um alvo terapêutico em GBM, pois esse tipo de tumor expressa *OCT4* (RIOS *et al.*, 2021).

Outro lncRNA diferencialmente expresso encontrado no presente estudo foi o *MIR1242HG*, esse ncRNA foi detectado como down-regulado em GBM por Ghafouri-Fardo *et al.*, 2022). Esse lncRNA carrega o precursor do miR-124 e tem sido associado à doença de Moymoya (LI *et al.*, 2022).

O lncRNA *PRR34-AS1* possui função de esponja do miR-498 regulando a tradução dos mRNA dos genes *TOMM2* e *ITGA6*, onde a expressão do mesmo foi associada ao aumento da progressão de carcinoma hepatocelular (YANG *et al.*, 2020). Em outro estudo, analisando carcinoma hepatocelular, Qin *et al.*, (2020) demonstraram que o *PRR34-AS1* sequestra o miR-296-5p, modulando positivamente a tradução dos transcritos de *SOX12* e *E2F2*, afetando a progressão nesse tipo de tumor pela via Wnt/B-catenina. A expressão aumentada desses lncRNAs e a função dos mesmos como esponjas (de diversos miRNAs) ou precursores de microRNAs demonstra que a expressão alterada de três lncRNAs pode estar afetando o nível de diversas proteínas envolvidas em controle da transcrição e estabelecimento de fenótipos de pluripotência celular nesses tumores. A possibilidade de sequestrar mais de um miRNA que possui possivelmente mais de uma alvo molecular, demonstra que esses três lncRNAs constituem uma ramificação de regulação pós-transcricional ocorrendo em GBM-SCs.

No subgrupo-M3-M5-M6 (lncRNAs down-regulados em GBM-SC vs NSC) foram encontrados 20 lncRNAs diferencialmente expressos. Entre eles o evolucionariamente conservado *RMRP* (*RNA component of mitochondrial RNA-processing endoribonuclease*). Mutações nesse gene estão associadas a Hipoplasia Cartilagem Cabelo (CHH, do inglês - *cartilage-hair hypoplasia*) e diferentes estudos têm associado esse lncRNA a sobrevivência celular e progressão em câncer (HAO & ZHOU, 2022). Já o lncRNA *MIR31HG*, é um gene que carrega a sequência precursora do miR-31, em glioblastoma a expressão alterada desse lncRNA está alterada em >

72 % dos tumores, estando associado a baixa sobrevida dos pacientes (PARSONS *et al.*, 2008). Rajbhandari *et al.*, 2015, o miR-31 inibe a via NF- κ B alvejando o mRNA codificador do gene *TRADD*. Em nosso estudo, o *MIR31HG* foi relatado como hipoexpresso nas amostras de GBM-SC+ e GBM-SC- quando comparados a NSC.

Diferentes dos subgrupos previamente discutidos, o subgrupo-M4-M7 é constituído por lncRNAs diferencialmente expressos em GBMSC+ vs GBMSC-. Os módulos M4 e M7 são compostos por genes que apresentam expressão específica nas sublinhagens GBM-SC+ e GBM-SC- e possuem genes já reportados em maior número de publicações como afetando a biologia do glioblastoma.

Três genes desse subgrupo (*H19*, *HOTAIRM1* e *HAGLR*) possuem relatos quanto à sua função em GBM ou outros tumores do sistema nervoso central.

O lncRNA *HOTAIRM1* (*HOTAIR myeloid-specific 1*) age como uma esponja para os miR-129-5p e miR-493-3p sendo um regulador de HOXA (homeobox A cluster), aumento da expressão de *HOTAIRM1* está associado no desenvolvimento, agressividade, radioresistência, quimiorresistência e recidiva de glioblastomas (AHMADOV *et al.*, 2021; CHEN *et al.*, 2015; ZHANG *et al.*, 2012). O *knockdown* desse lncRNA causou inibição de proliferação, invasão, transição epitélio-mesenquimal, migração celular e aumento de sensibilidade a TMZ (temozolamida) em linhagens de glioblastoma (LIANG *et al.*, 2019).

Outra característica extremamente interessante de *HOTAIRM1* é sua natureza molecular “*moonlight*”. O termo “*moonlight*” deriva estudo de proteínas que podem apresentar mais de uma função dentro de uma mesma sequência polipeptídica - *moonlight proteins* (JEFFERY, 2009). Para lncRNAs, esse termo se assemelha, pois define lncRNAs que podem apresentar mais de uma funções molecular (esponjas, RNAs guias, precursores de microRNA, eRNAs e *scaffolds*) para a mesma sequência de nucleotídeos (LIU *et al.*, 2021).

Apesar inicialmente ser conhecido como uma esponja de miRNAs, *HOTAIRM1* pode regular a expressão de genes do *cluster* HOXA por interação de longa distância na cromatina entre elementos regulatórios nesses *loci* funcionando como um *enhancer* RNA (SHI *et al.*, 2020). O *knockdown* de *HOTAIRM1* causou redução na expressão de genes do cluster HOXA em linhagens de glioblastoma (SHI *et al.*, 2020). No presente estudo, a maior parte das amostras de GBM-SC+ e algumas GBM-SC- possuem expressão aumentada de *HOTAIRM1*.

O lncRNA *H19* é um dos primeiros lncRNA identificados, e sua função mais

estudada é a de supressor tumoral em diferentes tipos de câncer (BARTOLOMEI *et al.*, 1991). O gene *H19* codifica um lncRNA de aproximadamente 2.3 Kb regulado por *imprinting* genômico situado no cromossomo 11 humano, com expressão maternal alélica específica (MONNIER *et al.*, 2013). O gene *H19* é precursor do miR-675, o qual está associado a controle do crescimento placentário no final da gestação por regulação do gene *Igf1r* (KENIRY *et al.*, 2012). O lncRNA *H19* também apresenta papel de RNA guia, interagindo com MBD1, formando um complexo que induz a metilação de H3K9me3 em DMRs dos genes *Igf2*, *Slc38a4* e *Peg1* (MONNIER *et al.*, 2013).

Em glioblastomas, foi demonstrado que *H19* age como uma esponja de miRNAs alvejando o miR-491-5p, afetando a regulação da via de sinalização de autofagia por afetarem a expressão de genes como *ERN1* (WANG *et al.*, 2022). Esses mesmos autores demonstraram que *H19* está associado a progressão tumoral e inibição de apoptose em linhagens celulares de glioblastoma. Já no estudo realizado por Jiang *et al.*, (2015) foi demonstrado que a expressão aumentada de *H19* promove invasão, angiogênese, tumorigenicidade e pluripotencialidade em células de GBM. No contexto de possuir múltiplas funções, *H19* também pode ser considerado um moonlight lncRNA. No presente estudo, a expressão de *H19* possui maiores níveis em GBM-SC-, o que poderia em conjunto com a expressão dos demais lncRNAs desse subgrupo indicar fenótipos de mais agressividade dessa sublinhagem.

O *HAGLR* é outro lncRNA com função de esponja de microRNAs (miR-143-5p, miR-335-3p, miR-338-3p, miR-185-5p,) ocorre em diferentes tipos de câncer (HU *et al.*, 2022; JIN *et al.*, 2021; SUN *et al.*, 2020; YANG *et al.*, 2019). Entre os alvos dos miRNAs que sofrem a ação de captura de *HAGLR*, encontram genes como *CDK4*, *CDK6*, *WNT2* e *LDHA* os quais podem afetar a aspectos da biologia tumoral como progressão, invasão, migração, quimioresistência e mesmo o metabolismo de glicose (HU *et al.*, 2022; JIN *et al.*, 2021; SUN *et al.*, 2020; YANG *et al.*, 2019).

Os dados de expressão de lncRNAs demonstram assinaturas específicas por subgrupos encontradas no presente estudo. Consideram as evidências funcionais acima discutidas para os lncRNAs encontrados na plataforma LncSea, o subgrupo M4-M7 possui uma assinatura de expressão de lncRNAs não apenas específica para as sublinhagens GBM-Sc+ e GBM-SC-, mas com lncRNAs com extrema importância para desenvolvimento tumoral. Esses lncRNAs caracterizam com excelentes alvos terapêuticos, pois além de suas funções já estudadas na literatura científica, seu

característica *moonlight* indica que ramificações de vias de regulação transcricional e pós-transcricional ainda podem ser elucidadas, sendo de extrema importância para estudos terapêuticos futuros.

5. CONCLUSÕES

Com base nos resultados do presente estudo, pode-se concluir que:

- ✓ GBM-SC podem apresentar assinaturas específicas da expressão de pseudogenes de *OCT4* e *NANOG* (GBM-SC+ e GBM-SC-);
- ✓ Essas sublinhagens apresentam diferenças em seus perfis transcriptômicos em genes associados a vias biológicas de extrema importância para o desenvolvimento e sobrevivência de glioblastomas;
- ✓ A co-expressão de mRNAs e lncRNAs em módulos representam um possível associação da função desses lncRNAs com as vias associadas aos mRNAs codificadores de proteínas;
- ✓ A expressão diferencial de lncRNAs em módulos encontrados representam níveis de expressão gênica cuja grande maioria ainda precisa ser explorada e caracterizada quando suas funções junto a biologia de glioblastomas;
- ✓ O aspecto *moonlight* de alguns lncRNAs diferencialmente expressos constitui uma oportunidade de se obter novos dados terapêuticos para novas estratégias de tratamento de tumores do sistema nervoso central.

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APÊNDICE A - Tabela com os mRNAs utilizados no presente estudo ($P \leq 0,05$ filtrados para no valores $\geq 1.5 \log_2$ fold change) e o nível de expressão médio (em RPKM) de cada grupo.

Probe	Chr	Start	End	Probe Strand	NSC	GBM-SC+	GBM-SC-
RP4-669L17.10	1	320162	328453	+	0.35503384470939636	0.12055493891239166	0.027716100215911865
RP11-206L10.3	1	677193	685396	-	0.31559574604034424	0.2670314311981201	0.10702813416719437
SAMD11	1	860260	879955	+	1.2645641565322876	0.7718784809112549	9.636918067932129
MXRA8	1	1288069	1297157	-	14.966611862182617	2.3602664470672607	1.2982654571533203
CALML6	1	1846266	1848735	+	0.18516771495342255	0.311733603477478	0.6155503392219543
GABRD	1	1950780	1962192	+	0.02289256453514099	0.8120062947273254	0.2847382724285126
PLCH2	1	2398898	2436969	+	2.666398048400879	1.8153096437454224	5.053842067718506
MEGF6	1	3406484	3528059	-	8.708520889282227	0.573119044303894	0.3169557452201843
TP73	1	3569084	3652765	+	0.396512895822525	3.0694081783294678	6.040432453155518
RP1-286D6.2	1	3689352	3692546	+	1.3331197500228882	0.3754347264766693	0.1765526682138443
AJAP1	1	4714792	4843850	+	5.2471818923950195	0.04515058547258377	0.5021423101425171
CHD5	1	6161853	6240183	-	0.6380643844604492	0.09820440411567688	0.16224896907806396
HES3	1	6304252	6305638	+	4.091836452484131	0.25396639108657837	0.0
ESPN	1	6484848	6521430	+	1.4259700775146484	1.695671796798706	0.26174941658973694
TAS1R1	1	6615241	6639817	+	0.03471643850207329	0.4260508716106415	0.1005210280418396
RP3-510D11.1	1	9228327	9262678	-	1.6091965436935425	1.6701639890670776	0.30761241912841797
MASP2	1	11086580	11107290	-	0.024102861061692238	0.06467042118310928	0.08381086587905884
PTCHD2	1	11539223	11597641	+	5.583565711975098	1.3703376054763794	1.95643150806427
FBXO2	1	11708424	11715842	-	19.31850814819336	0.3051227629184723	4.627310752868652
NPPB	1	11917521	11918988	-	0.4184872508049011	0.0	0.034841302782297134
TNFRSF8	1	12123434	12204264	+	0.041921697556972504	0.06885088980197906	0.00619679968804121
DHRS3	1	12627939	12677737	-	3.188657283782959	11.296452522277832	10.104737281799316
HNRNPCL1	1	12907261	12908578	-	0.28039050102233887	0.045967962592840195	0.0
KAZN	1	14925200	15444539	+	8.039083480834961	2.5554306507110596	2.3173487186431885
RP3-467K16.4	1	15729475	15735929	-	0.0430702306330204	0.03551585599780083	0.15008544921875
AGMAT	1	15898848	15911605	-	1.7384008169174194	0.4235614836215973	0.5780540108680725
CLCNKA	1	16345330	16360545	+	0.026719171553850174	0.10689109563827515	0.12518498301506042
SPATA21	1	16713612	16763919	-	0.03926581144332886	0.003534953109920025	0.5430206060409546
RP5-875O13.1	1	16860381	16862144	-	1.3467475175857544	0.6742837429046631	0.05616392567753792
AL137798.2	1	16946910	16951432	+	0.005064451135694981	0.00157797837164253	0.07801208645105362
RP11-108M9.3	1	17197440	17200587	+	0.46129289269447327	0.29315638542175293	0.01258587371557951
MFAP2	1	17300997	17307330	-	33.29283905029297	2.4899046421051025	4.796553611755371
RP11-380J14.1	1	17516278	17524112	+	0.013542109169065952	0.3084357976913452	0.06524558365345001
RP1-20B21.4	1	17733256	17733878	+	0.12423128634691238	0.0	2.187389850616455
ACTL8	1	18081808	18153558	+	0.02362247183918953	3.8015329837799072	0.07816512882709503
IGSF21	1	18434240	18704977	+	0.012946219183504581	0.7081798911094666	0.0646110326051712
PLA2G2A	1	20301925	20306932	-	0.010097826831042767	1.0185503959655762	1.0729100704193115
PLA2G5	1	20354672	20417683	+	0.016864560544490814	2.764983654022217	0.7282280921936035
VWA5B1	1	20617412	20681387	+	0.07141165435314178	0.46680620312690735	0.11434426158666611
RP4-749H3.1	1	20687072	20757727	-	0.002241044770926237	0.7905305027961731	0.017351675778627396
FAM43B	1	20878932	20881512	+	0.7185434103012085	1.4367341995239258	3.2676045894622803
RP5-930J4.4	1	21069480	21070455	+	0.08556398004293442	0.0	1.3149389028549194
ALPL	1	21835858	21904905	+	10.527328491210938	2.348025321960449	0.7063923478126526
WNT4	1	22446461	22470462	-	1.2987542152404785	0.09715337306261063	0.10925374180078506
EPHB2	1	23037332	23241818	+	44.65474319458008	7.929436683654785	14.735044479370117
HTR1D	1	23516993	23521222	-	1.0955075025558472	0.22422336041927338	4.7218451499938965
RP1-150O5.3	1	23875630	23877406	-	0.05213036760687828	0.17285126447677612	0.3012237846851349
IL22RA1	1	24446261	24469611	-	0.049264274537563324	0.19656044244766235	0.19920551776885986

IL28RA	1	24480647	24514449	-	0.012882319279015064	0.07215403020381927	0.41638362407684326
RCAN3	1	24829387	24863506	+	2.482937812805176	9.443710327148438	9.665611267089844
EXTL1	1	26346375	26362955	+	0.5661356449127197	5.479971408843994	3.938079833984375
RP11-96L14.7	1	26496438	26498312	-	0.041558410972356796	0.0018089722143486142	0.44131967425346375
CNKSRI	1	26503894	26516377	+	0.9239721298217773	0.18849581480026245	0.338267982006073
AIM1L	1	26648350	26680621	-	0.39444178342819214	0.007024196442216635	0.006178116891533136
LIN28A	1	26737269	26756213	+	49.87141036987305	6.374200820922852	0.0022200539242476225
FAM46B	1	27331511	27339327	-	11.670370101928711	1.5355111360549927	2.987475633621216
RP11-4K3_A.2	1	27633257	27634278	-	0.01929616928100586	0.0	1.4721972942352295
SNHG3	1	28832492	28837404	+	32.24152755737305	111.11801147460938	79.03397369384766
AL513497.1	1	28835514	28837109	-	0.017060143873095512	0.0037439779844135046	0.7504270076751709
OPRD1	1	29138654	29190208	+	0.1765490174293518	2.156216859817505	0.6830044984817505
RP1-212P9.2	1	29194087	29197779	+	0.3122155964374542	3.239255666732788	1.1158156394958496
EPB41	1	29213603	29446553	+	40.39934158325195	12.767674446105957	10.581814765930176
TMEM200B	1	29445940	29450447	-	6.350494384765625	0.6910189986228943	2.059760808944702
LAPTM5	1	31205316	31230667	-	2.281473398208618	3.6660983562469482	0.09079836308956146
NKAIN1	1	31652592	31712401	-	33.07903289794922	10.393916130065918	10.218157768249512
RP11-266K22.2	1	31805914	31819646	-	0.04664461314678192	0.01427689753472805	1.1324889659881592
FABP3	1	31838472	31849697	-	42.77044677734375	25.91897201538086	10.441043853759766
SERINC2	1	31882412	31907525	+	20.099937438964844	5.190151214599609	3.4082863330841064
COL16A1	1	32117848	32169920	-	2.201962947845459	5.700371742248535	9.452201843261719
FAM167B	1	32712834	32714457	+	0.24305281043052673	0.8885195851325989	1.3827556371688843
MARCKSL1	1	32799433	32801980	-	923.4706420898438	179.6057891845703	224.95962524414062
FNDC5	1	33327869	33338083	-	3.4990758895874023	1.7668310403823853	1.1777886152267456
TMEM54	1	33360195	33367039	-	3.1990785598754883	12.390811920166016	24.480464935302734
C1orf94	1	34632484	34684732	+	0.31361716985702515	2.8113858699798584	8.540931701660156
DLGAP3	1	35331037	35395186	-	3.9408411979675293	0.519321620464325	0.9551102519035339
RP4-765A10.2	1	35824423	35831678	-	0.0	0.0	0.6421533823013306
RP11-435D7.3	1	36204990	36209177	+	0.06299660354852676	0.022464515641331673	0.7450081706047058
GRIK3	1	37261128	37499730	-	2.935443639755249	25.4881591796875	29.321640014648438
RP11-109P14.9	1	38265392	38266551	-	0.09789052605628967	0.10641897469758987	1.0551437139511108
RHBDL2	1	39351479	39407471	-	0.2893098294734955	0.7348851561546326	1.4244978427886963
BMP8A	1	39957318	39991607	+	0.07168272137641907	0.19850513339042664	1.2463483810424805
RP11-15J6.1	1	40030832	40038875	+	0.04457670450210571	0.0	0.9384096264839172
BMP8B	1	40222854	40254533	-	0.1737963706254959	6.571216583251953	9.7271146774292
MYCL1	1	40361098	40367928	-	8.549333572387695	2.2116458415985107	0.9931326508522034
RP1-118J21.5	1	40363417	40364770	+	0.21088971197605133	0.01785440184175968	0.0
RIMS3	1	41086351	41131329	-	14.806297302246094	5.114245891571045	2.7018802165985107
RP4-739H11.3	1	41134761	41153260	-	0.14704756438732147	0.17689773440361023	0.49278566241264343
FOXO6	1	41827594	41849262	+	0.8176461458206177	3.0333540439605713	5.914728164672852
EDN2	1	41944446	41950344	-	0.19454963505268097	0.059087395668029785	0.6493690609931946
HIVEP3	1	41972036	42501596	-	1.1328651905059814	5.2486419677734375	8.506345748901367
SLC2A1	1	43391519	43424539	-	234.1811065673828	47.208614349365234	33.83542251586914
RP5-848E13.3	1	43424720	43449029	+	0.9204397201538086	0.6575228571891785	0.3020668923854828
FAM183A	1	43610029	43622067	+	0.590198814868927	0.14682480692863464	0.005064916796982288
TIE1	1	43766664	43788779	+	1.9449703693389893	0.16685430705547333	0.07750608772039413
RP1-92O14.3	1	43820355	43824329	-	0.09063086658716202	0.5908998847007751	0.6340332627296448
HYI	1	43916824	43919660	-	3.2881581783294678	3.5181970596313477	12.177812576293945
RP11-7O11.3	1	44410042	44412223	-	0.43894365429878235	1.1308869123458862	1.7449859380722046
ZSWIM5	1	45482071	45771881	-	7.201961040496826	2.816824436187744	2.2327659130096436

HPDL	1	45792545	45794347	+	0.11458179354667664	1.8407196998596191	0.7053195238113403
RP4-533D7.5	1	46599043	46604753	+	0.0711415559053421	0.16134534776210785	0.5049625039100647
DMBX1	1	46972668	46979898	+	0.0027851515915244818	0.1852165162563324	0.1655588299036026
TAL1	1	47681963	47697892	-	0.06412126868963242	0.2771734893321991	0.16409023106098175
RP11-511I2.5	1	47897805	47900313	-	0.7465921640396118	2.9780960083007812	2.7495687007904053
FOXD2	1	47901689	47906363	+	0.6266459822654724	0.42077839374542236	0.32128575444221497
RP11-543D5.3	1	48231308	48267295	-	0.27180999517440796	0.2855777442455292	0.030869273468852043
DMRTA2	1	50883222	50889172	-	0.37651124596595764	2.0723695755004883	1.6027333736419678
CDKN2C	1	51426417	51440305	+	7.643782138824463	23.559009552001953	64.04351806640625
RP11-296A18.3	1	51660767	51700768	-	0.05675534904003143	0.00918426550924778	0.010985580272972584
FAM159A	1	53099016	53135355	+	0.14236940443515778	0.017605137079954147	0.047826629132032394
PODN	1	53527854	53551174	+	1.081239938735962	0.11840063333511353	0.20503103733062744
RP11-67L3.4	1	55353236	55354523	+	1.5430792570114136	0.5313473343849182	0.38117271661758423
DAB1	1	57460451	59012406	-	12.238471031188965	2.159411907196045	3.6215410232543945
HOOK1	1	60280458	60342050	+	0.8940983414649963	0.013019668869674206	0.04856002330780029
CYP2J2	1	60358980	60392462	-	0.111580990254879	0.7285839915275574	2.12561297416687
RP11-436K8.1	1	61125303	61291256	-	0.25658607482910156	1.3972746133804321	0.8865676522254944
NFIA	1	61330931	61928465	+	514.4674682617188	22.297977447509766	10.19983196258545
RP11-230B22.1	1	63154153	63176365	+	1.3736463785171509	1.0821443796157837	0.46904921531677246
RP4-792G4.2	1	63786555	63790112	-	0.18441233038902283	1.8281105756759644	2.9817392826080322
FOXD3	1	63788730	63790797	+	0.10283935070037842	0.6295758485794067	0.7665939331054688
ROR1	1	64239693	64647181	+	4.971373081207275	1.0863893032073975	1.7351810932159424
CACHD1	1	64936428	65158741	+	31.951923370361328	9.85840892791748	7.812514305114746
RP11-182I10.3	1	65437908	65468159	-	0.10167697817087173	0.28520095348358154	0.016563063487410545
SGIP1	1	66999066	67213982	+	1.9594029188156128	1.239181399345398	0.22875891625881195
TCTEX1D1	1	67218142	67244470	+	0.4947870075702667	0.28124913573265076	0.10439682751893997
RP11-266I14.3	1	67240729	67241261	+	0.24154038727283478	0.01399947889149189	0.012015394866466522
DIRAS3	1	68511645	68517314	-	1.8423393964767456	3.3432860374450684	24.255884170532227
LRRC7	1	70034081	70589164	+	0.6105034351348877	0.07340846955776215	0.09992947429418564
PTGER3	1	71318036	71513491	-	0.2824513912200928	0.006109795533120632	0.0035243257880210876
RP11-108P2.1	1	71514538	71532867	+	0.01697843335568905	0.0	0.24711579084396362
NEGR1	1	71868625	72748417	-	5.2652153968811035	1.0495935678482056	0.4689633250236511
LRRIQ3	1	74491699	74663871	-	0.08810875564813614	0.26448389887809753	0.2664235234260559
LRRC53	1	74937776	74978298	-	0.0	0.16232933104038239	0.04453045874834061
RP11-17E13.3	1	75018088	75218059	-	0.0	0.016093183308839798	0.24537992477416992
C1orf173	1	75033795	75139422	-	0.027788661420345306	0.22246968746185303	0.42666810750961304
MSH4	1	76262567	76378923	+	0.27202194929122925	0.2624008357524872	0.05349001660943031
ST6GALNAC3	1	76540389	77100286	+	11.942569732666016	1.1674307584762573	0.4168875813484192
ST6GALNAC5	1	77333126	77531396	+	39.014163970947266	0.4263018071651459	3.999197244644165
RP4-706A16.2	1	77533605	77544167	+	4.460951805114746	0.1543586403131485	0.23944397270679474
PTGFR	1	78769568	79005434	+	1.3615680932998657	0.1335478127002716	0.07777732610702515
ELTD1	1	79355449	79472403	-	18.038192749023438	7.256836891174316	0.21328958868980408
LPHN2	1	81771845	82458107	+	105.3605728149414	25.591007232666016	14.131254196166992
RP11-170N11.1	1	83439565	83451891	-	0.07178717851638794	0.006179350428283215	0.0
MCOLN2	1	85391268	85462796	-	0.0487709641456604	1.967036247253418	0.6704961657524109
SYDE2	1	85622556	85666729	-	2.5322654247283936	0.910668671131134	0.5710981488227844
CYR61	1	86046444	86049645	+	141.2533721923828	61.009769439697266	28.626083374023438
COL24A1	1	86194916	86622626	-	0.9260227084159851	0.1493217796087265	0.2409685105085373
CLCA2	1	86889769	86922241	+	1.515120506286621	0.03442829102277756	0.03808223456144333
HFM1	1	91726323	91870426	-	2.3944907188415527	1.0829890966415405	0.45381611585617065

BTBD8	1	92545862	92613393	+	1.0160943269729614	0.6829842329025269	0.3178284168243408
KIAA1107	1	92632542	92650280	+	3.0338194370269775	1.7720582485198975	0.8985117077827454
FNBP1L	1	93913658	94020218	+	59.012786865234375	18.30914306640625	16.440107345581055
BCAR3	1	94027347	94312706	-	18.344017028808594	5.410846710205078	6.530534744262695
ABCA4	1	94458391	94586688	-	0.5392423271232874	0.17240583896636963	0.03637140616774559
F3	1	94994781	95007356	-	8.655218124389648	30.033655166625977	36.73517990112305
TMEM56	1	95582894	95663163	+	1.3601969480514526	0.5813668966293335	0.35385623574256897
RP5-1070A16.1	1	98676303	98738214	+	0.374021977186203	0.1359703093767166	0.06746381521224976
LPPR5	1	99355806	99470588	-	2.150831699371338	12.846900939941406	12.099113464355469
PALMD	1	100111499	100160097	+	4.659002304077148	1.025146245956421	1.0991514921188354
RP4-575N6.4	1	101701239	101702084	-	0.5407761335372925	0.08134593069553375	0.01657135970890522
S1PR1	1	101702444	101707074	+	14.643735885620117	2.0237627029418945	1.3453999757766724
OLFM3	1	102268127	102462586	-	4.3656686630249	0.6664657592773438	0.0709649994969368
NTNG1	1	107682629	108026080	+	0.9803476333618164	0.35464566946029663	4.983834266662598
C1orf194	1	109648573	109656479	-	0.9811079502105713	0.0650518611073494	0.06968869268894196
KIAA1324	1	109656301	109749401	+	0.7218027114868164	0.21219584345817566	0.1680319905281067
MYBPHL	1	109834987	109849663	-	0.10942883044481277	0.43490511178970337	0.3838215172290802
RP5-1160K1.6	1	110171039	110172927	-	0.00935652107000351	0.0	0.9854769706726074
RP4-735C1.4	1	110230450	110318050	+	0.9732547402381897	0.27326780557632446	0.695996901359558
KCNC4	1	110753965	110825722	+	0.6473170518875122	0.757607638835907	2.3422458171844482
KCNA2	1	111136202	111174096	-	1.3752316236495972	12.40109920501709	10.650321006774902
CD53	1	111415772	111442550	+	0.21147866547107697	9.347330778837204E-4	0.0
CHI3L2	1	111743393	111786062	+	0.47147998213768005	9.632096290588379	1.8204641342163086
RP11-426L16.8	1	113362792	113393265	-	0.02889583818614483	0.1687101274728775	0.07227692753076553
RP5-1073O3.5	1	114399257	114443859	+	0.0018501016311347485	6.938701844774187E-4	0.20570752024650574
DENND2C	1	115125469	115213043	-	0.5839605927467346	0.15172149240970612	0.14936234056949615
VTCN1	1	117686209	117753556	-	0.5994473099708557	0.0364447683095932	0.05907374247908592
FAM46C	1	118148556	118170994	+	0.9087079167366028	2.565178394317627	2.9517550468444824
AL583842.6	1	142620645	142714605	-	0.6654638051986694	0.2144349366426468	0.20240594446659088
RP11-423O2.5	1	142803224	142816004	-	0.18374450504779816	0.7506443858146667	0.8794823884963989
BX571672.2	1	143118704	143211070	-	3.3182356357574463	0.7580100893974304	0.560192883014679
BX571672.5	1	143211528	143275032	-	0.0051413727924227715	0.08845799416303635	0.030229514464735985
BX004987.4	1	143354963	143467658	-	0.004004711750894785	0.14664152264595032	0.14892859756946564
BX004987.5	1	143377281	143404415	+	3.5737082958221436	0.5364607572555542	0.5732052326202393
BX284650.2	1	143687097	143720401	+	7.29350955225273E-4	0.03872926905751228	0.073386050760746
ANKRD34A	1	145470508	145475646	+	1.6979120969772339	3.2086682319641113	7.90739107131958
RP11-315I20.1	1	145486272	145508262	-	0.18962693214416504	0.2691574692726135	0.8894100189208984
ITGA10	1	145524891	145543868	+	2.5926125049591064	3.8954577445983887	11.094204902648926
RP11-315I20.3	1	145541593	145542229	+	0.5784739255905151	0.7528067827224731	3.3055272102355957
GJA5	1	147228332	147245484	-	0.3362073600292206	0.08268367499113083	0.011546450667083263
RP11-495P10.2	1	147835127	147931933	-	0.070846326649189	0.11778049916028976	0.2460901290178299
RP11-495P10.1	1	147887350	147901508	+	0.008732501417398453	0.06461939215660095	0.08617718517780304
NBPF14	1	148003642	148025863	-	11.410726547241211	11.291681289672852	12.349133491516113
FAM72C	1	149438750	149459549	-	0.4262522757053375	0.7296625971794128	1.8448721170425415
CA14	1	150230169	150237478	+	84.70569610595703	40.85749053955078	20.861604690551758
C1orf51	1	150254953	150259505	+	3.4079248905181885	8.12552261352539	11.07821273803711
ADAMTSL4	1	150521884	150533413	+	3.590023994445801	0.9448214769363403	0.6005253791809082
AL356356.1	1	150521897	150524367	+	0.5187264680862427	0.17304030060768127	0.11653351783752441
RP11-316M1.12	1	150937736	150938734	+	0.453120619058609	0.38445478677749634	6.3585028648376465
RP11-126K1.8	1	151313124	151314442	+	0.0	0.0	0.8162310123443604

SELENBP1	1	151336778	151345209	-	26.253189086914062	6.904946327209473	3.036052942276001
RP11-404E16.1	1	151584514	151585839	+	1.4343092441558838	1.965663194656372	4.484395503997803
C2CD4D	1	151810295	151813033	-	0.012466286309063435	0.20866839587688446	0.5099073648452759
S100A10	1	151955391	151966866	-	44.35147476196289	127.09363555908203	298.40673828125
AL591893.1	1	151967007	152015250	+	0.009097578935325146	0.03550589829683304	0.036102715879678726
S100A11	1	152004982	152020383	-	85.23028564453125	162.58419799804688	274.55914306640625
S100A6	1	153507075	153508720	-	51.654361724853516	312.39508056640625	822.2372436523438
S100A2	1	153533584	153540366	-	23.869342803955078	0.5994872450828552	6.875461578369141
S100A1	1	153600402	153604513	+	0.234862819314003	15.924147605895996	26.578147888183594
RP1-178F15.3	1	153615538	153618305	-	0.009627190418541431	0.0	1.2629131078720093
RP11-216N14.9	1	153723459	153724652	-	0.01068707462400198	0.009088926948606968	0.7378913760185242
NUP210L	1	153965161	154127592	-	0.03397723287343979	0.042556293308734894	0.004152671899646521
SHE	1	154442248	154474589	-	0.02668568305671215	0.00405672425404191	0.007121813949197531
CHRN2	1	154540257	154552502	+	4.883649826049805	1.028551697731018	1.171109914779663
RP11-274N19.2	1	154675205	154680702	-	1.0277149677276611	0.8629764318466187	0.2366807907819748
KCNN3	1	154679902	154842756	-	1.103112816810608	1.0003448724746704	0.3967949151992798
LENEP	1	154966062	154966791	+	0.22032779455184937	0.2960244119167328	0.042989183217287064
EFNA1	1	155099936	155107333	+	0.9530027508735657	9.632323265075684	11.239513397216797
RP11-21N7.2	1	155279829	155280381	-	0.711121439937769	0.148149773478508	6.793792724609375
RP11-139I14.2	1	156358018	156365401	+	0.013836006633937359	0.033210210502147675	0.0013541642110794783
BCAN	1	156611182	156629324	+	27.13565444946289	86.56356048583984	173.15093994140625
CRABP2	1	156669398	156675608	-	266.47991943359375	19.453598022460938	33.266510009765625
LRRC71	1	156890442	156902886	+	0.12345772981643677	0.0019944533705711365	0.005176891107112169
KIRREL-IT1	1	157995340	158000956	+	0.4081183075904846	1.386458396911621	0.11484211683273315
AIM2	1	159032274	159116886	-	1.7596986293792725	0.8036743402481079	0.10448738187551498
CADM3	1	159141399	159173103	+	21.962175369262695	3.485997200012207	3.6724460124969482
DUSP23	1	159750722	159752333	+	4.574136734008789	3.7755417823791504	19.5886287689209
CCDC19	1	159842154	159869953	-	0.27911481261253357	0.5051425695419312	1.3459601402282715
TAGLN2	1	159887897	159895522	-	43.83994674682617	98.0782699584961	193.13787841796875
IGSF9	1	159896829	159915394	-	5.890475749969482	0.7197166085243225	0.8233787417411804
SLAMF9	1	159921282	159924044	-	0.0194240715354681	0.20976823568344116	0.11879319697618484
KCNJ10	1	160007257	160040038	-	3.425628423690796	26.238113403320312	21.0427188873291
RP11-226L15.4	1	160010261	160012085	-	3.749654769897461	25.08570098876953	25.045059204101562
RP11-536C5.2	1	160032278	160049611	+	0.03662453964352608	0.21769607067108154	0.25965896248817444
CASQ1	1	160160285	160171676	+	2.563899938964844	0.8777068257331848	0.7343440651893616
NHLH1	1	160336857	160342638	+	1.8962939977645874	0.5644676089286804	0.29173630475997925
VANGL2	1	160370376	160398468	+	89.3898696899414	19.361745834350586	29.36590003967285
ITLN2	1	160914815	160924589	-	0.20332130789756775	0.010118863545358181	0.0
F11R	1	160965001	161008784	-	12.382357597351074	2.291884422302246	0.48161277174949646
RP11-297K8.2	1	161123550	161129139	-	0.7283768057823181	0.7920904755592346	5.637380123138428
NR1I3	1	161199456	161208092	-	0.0071121696382761	0.0	0.07805851101875305
FCGR2A	1	161475220	161493803	+	0.11203668266534805	2.179518699645996	2.4221396446228027
HSPA6	1	161494036	161496681	+	0.12382548302412033	0.9470630288124084	1.3043369054794312
FCGR2B	1	161551101	161648444	+	0.0012437647674232721	0.16268931329250336	0.06866459548473358
FCRLA	1	161676762	161684142	+	0.1672159731388092	21.838741302490234	8.537739753723145
FCRLB	1	161691353	161697933	+	0.295966237783432	2.208458185195923	2.39721941947937
RP11-565P22.2	1	162286642	162287584	-	0.07687500864267349	1.00242280960083	0.2096768319606781
RGS4	1	163038565	163046592	+	21.799196243286133	7.197032928466797	1.7665648460388184
RGS5	1	163080911	163187426	-	23.00052261352539	4.552545547485352	0.7113006711006165
RP11-267N12.3	1	163117264	163291684	-	5.395432949066162	2.958496570587158	1.251813530921936

FAM78B	1	166026674	166136206	-	0.14497148990631104	1.199770212173462	4.817747116088867
RP11-479J7.2	1	166304121	166304999	+	0.00515588978305459	0.04307783395051956	2.103834629058838
MAEL	1	166958346	166991451	+	0.3761102855205536	0.43675416707992554	1.5585126876831055
GPA33	1	167022073	167059868	-	0.3755679428577423	0.03608021140098572	0.009108979254961014
DUSP27	1	167063282	167098402	+	0.17652727663516998	0.04529896751046181	0.015076768584549427
RP1-45C12.1	1	171137243	171220933	-	0.012765506282448769	0.49481871724128723	0.28840285539627075
FMO2	1	171154347	171181822	+	0.0032904676627367735	0.1616162359714508	0.07642237097024918
DNM3-IT1	1	171833327	171833827	+	0.0	1.713234543800354	0.1335599571466446
TNFSF4	1	173152873	173176452	-	0.5013668537139893	0.5227030515670776	2.6145710945129395
TNN	1	175036994	175117202	+	1.9197438955307007	0.7360126376152039	0.33794015645980835
KIAA0040	1	175126123	175162079	-	0.49922165274620056	3.360496997833252	9.37315845489502
PAPPA2	1	176432307	176814735	+	0.13114672899246216	0.522725522518158	0.13632811605930328
ASTN1	1	176826438	177134109	-	3.876441240310669	6.0764384269714355	16.2696590423584
FAM5B	1	177140063	177251558	+	0.31814098358154297	2.4341490268707275	7.916771411895752
RP11-177A2.4	1	179070798	179074885	+	0.006084806751459837	0.0022176012862473726	0.31143590807914734
AXDND1	1	179334855	179523870	+	0.0864204615354538	0.0831758975982666	0.028660202398896217
KIAA1614	1	180882290	180920750	+	0.777297854423523	1.8671159744262695	2.5507755279541016
RP11-538D16.2	1	182031812	182038388	-	0.016422219574451447	0.245799720287323	0.1480724960565567
FAM129A	1	184759858	184943682	-	2.305145263671875	13.660881042480469	17.714406967163086
PRG4	1	186265405	186283694	+	2.972951889038086	0.031014831736683846	0.0644519254565239
PLA2G4A	1	186798085	186958113	+	3.85591197013855	13.162935256958008	14.946253776550293
B3GALT2	1	193148175	193155784	-	7.471506595611572	1.1279383897781372	1.1557234525680542
KCNT2	1	196194909	196577541	-	5.308938980102539	1.0323957204818726	1.1106646060943604
CFHR3	1	196743925	196764536	+	0.07076536118984222	0.01498545054346323	0.0044319480657577515
LHX9	1	197881618	197904608	+	0.06890338659286499	0.21618597209453583	0.6369338631629944
RP11-92G12.3	1	200638635	200663378	+	0.13897563517093658	0.6415440440177917	0.7828620076179504
KIF21B	1	200938520	200992828	-	12.615737915039062	2.4569454193115234	2.5650129318237305
RP11-168O16.1	1	200993077	200997920	+	2.2966010570526123	0.2355678379535675	0.04767706245183945
TNNT2	1	201328136	201346890	-	0.15194226801395416	0.023548780009150505	0.0
TNNI1	1	201372896	201398994	-	0.05793759599328041	0.003972532227635384	0.002440026728436351
RP11-307B6.3	1	201862970	201869106	+	0.2658962905406952	0.7202339172363281	1.5936074256896973
LMOD1	1	201865580	201915716	-	13.094696044921875	0.6551262140274048	0.29412078857421875
GPR37L1	1	202091972	202098640	+	1.8725839853286743	8.263521194458008	12.737799644470215
SYT2	1	202559724	202679545	-	3.4634692668914795	0.06945361196994781	0.07052385807037354
CHI3L1	1	203148059	203155877	-	2.5782458782196045	39.93860626220703	34.0302734375
PRELP	1	203444956	203460480	+	0.9149747490882874	2.648019790649414	1.5109851360321045
CNTN2	1	205012325	205047627	+	1.8320188522338867	0.9254431128501892	0.20741356909275055
NUAK2	1	205271187	205290883	-	22.987628936767578	6.156087875366211	8.176610946655273
RP11-576D8.4	1	205425057	205438152	+	0.25881245732307434	0.31340292096138	0.037902798503637314
AC119673.1	1	205685228	205719310	+	0.27272236347198486	0.05560394749045372	7.549108505249023
RAB7L1	1	205737114	205744588	-	5.384407043457031	17.29621124267578	20.51113510131836
SLC26A9	1	205882176	205912588	-	0.10364980250597	0.12562617659568787	1.1043312549591064
C1orf186	1	206238872	206288647	-	0.30892789363861084	0.0	0.003719363594427705
RP11-421E17.3	1	206576565	206577294	+	0.9170919060707092	1.7455893754959106	0.24705524742603302
RASSF5	1	206680879	206762616	+	0.6339279413223267	2.20108962059021	2.8363640308380127
C1orf116	1	207191866	207206101	-	0.012401916086673737	0.09548992663621902	0.08553991466760635
C1orf132	1	207986905	208042495	-	0.4544411301612854	0.4074556231498718	0.0715918093919754
CD34	1	208057594	208084747	-	3.4895753860473633	0.5887995958328247	0.39155125617980957
TRAF3IP3	1	209929377	209955668	+	8.377904305234551E-4	9.177317260764539E-4	0.1195453628897667
C1orf133	1	210404801	210407392	-	1.9799892902374268	0.387958288192749	13.839892387390137

SERTAD4	1	210406144	210419976	+	2.884992837905884	1.7738194465637207	12.503077507019043
RD3	1	211649864	211666259	-	0.022625010460615158	0.001152413198724389	0.0019242210546508431
RP11-15I11.3	1	212398620	212412319	-	0.024867936968803406	0.630102813243866	0.4903136193752289
BATF3	1	212859760	212873327	-	0.8188322186470032	2.3393702507019043	4.543196201324463
RP11-478J18.1	1	213992978	214159496	-	0.23312313854694366	1.4554203748703003	1.6096755266189575
PROX1	1	214156524	214214853	+	3.9616341590881348	17.38001823425293	15.262540817260742
USH2A	1	215796236	216596738	-	0.17920811474323273	0.02694614790380001	0.014765704981982708
SLC30A10	1	219858769	220131989	-	0.33027383685112	0.12834499776363373	0.017185049131512642
HLA-AS1	1	221006105	221053482	-	0.12848198413848877	0.3663233518600464	0.526911199092865
TLR5	1	223282748	223316624	-	0.0633627399802208	0.37207674980163574	0.37025195360183716
SUSD4	1	223394161	223537544	-	0.2684214413166046	1.362146019935608	4.014011383056641
CNIH3	1	224622362	224928251	+	1.4315894842147827	7.840179920196533	20.57637596130371
RP11-100E13.1	1	224802998	224803922	-	0.2119988352060318	2.792046070098877	8.754595756530762
RP11-3L21.2	1	224905206	224918364	-	0.03018002212047577	1.6427466869354248	0.412288635969162
RP11-449J1.1	1	224954602	224961043	+	0.02281644195318222	0.2842058837413788	0.4594777226448059
RP11-496N12.6	1	225634945	225653045	-	0.5189607739448547	1.72367525100708	0.1355392038822174
RP11-396C23.2	1	226274582	226277993	+	0.24447815120220184	1.3258806467056274	1.4215078353881836
MIXL1	1	226411319	226414785	+	0.6316567659378052	0.039713725447654724	0.07285166531801224
RP5-1087E8.3	1	227179841	227180907	+	0.0	0.011779636144638062	0.5084745287895203
HIST3H2BB	1	228645808	228646259	+	26.66061019897461	100.74783325195312	8.71594524383545
RP5-1061H20.4	1	229394028	229406775	-	0.6252451539039612	1.4806586503982544	1.7733513116836548
RP5-956O18.3	1	230416058	230417639	-	0.13644899427890778	0.003334823762997985	3.4783153533935547
AGT	1	230838269	230850043	-	3.5099081993103027	207.28115844726562	443.6089172363281
RP11-99J16_A.2	1	230846444	230931238	-	0.5552526712417603	31.80777931213379	90.62066650390625
RP5-858B6.3	1	231010592	231014761	+	1.852516770362854	0.2970144748687744	0.5076044797897339
DISC1-IT1	1	232061580	232080979	+	0.20272889733314514	1.0905109643936157	0.028767431154847145
KIAA1383	1	232940643	232946092	+	0.33250054717063904	0.7623130083084106	2.731515884399414
KCNK1	1	233749750	233808258	+	0.1294497549533844	0.04451713338494301	8.939554214477539
RP4-781K5.2	1	234742754	234745229	+	0.2515109181404114	0.02568049170076847	1.5159024000167847
LINC00184	1	234765057	234770526	+	0.41682279109954834	0.017910663038492203	0.04818633943796158
ACTN2	1	236849754	236927931	+	0.3535933196544647	3.2775869369506836	4.379428386688232
RP11-371I1.2	1	238643684	238649323	-	3.7950830459594727	0.4469507932662964	0.01602224074304104
RP11-177F15.1	1	238648745	238701605	+	0.11631137132644653	0.0015581769403070211	0.03425068035721779
CHRM3	1	239549865	240078750	+	2.5892555713653564	3.3356313705444336	9.603832244873047
GREM2	1	240652873	240775449	-	0.9256324768066406	0.03567437082529068	0.025222185999155045
RP11-527D7.1	1	241587592	241596792	+	0.7456556558609009	0.15388472378253937	0.016202617436647415
RP11-561I11.2	1	242372565	242374129	+	0.7970983386039734	0.20168104767799377	0.04495874047279358
RP11-261C10.5	1	243299200	243303890	+	0.007115921471267939	0.003865510690957308	1.008808970451355
RP11-261C10.4	1	243327940	243332747	+	0.0	0.0	2.4205877780914307
RP11-370K11.1	1	243866159	243904123	-	0.2409398557556152	0.6522033214569092	0.00896221399307251
AKT3-IT1	1	243956507	243957702	-	0.1850484013557434	0.7350385189056396	0.006743329111486673
RP11-439E19.3	1	246939315	246955687	+	1.3946291208267212	0.5780296325683594	0.4019087553024292
TRIM58	1	248020501	248041507	+	2.3786370754241943	0.05984434485435486	0.0016780386213213205
OR2W3	1	248031277	248060449	+	1.8225704431533813	0.022420378401875496	0.0
FAM150B	2	279565	288851	-	6.47832727432251	0.22289370000362396	0.21320804953575134
AC079779.4	2	286419	301515	+	0.22947223484516144	0.1689702719449997	0.04314350336790085
AC079779.5	2	305841	309379	-	0.1894332617521286	0.026268359273672104	0.0
AC079779.6	2	317912	342118	+	0.9250233769416809	0.03875463828444481	0.312059223651886
AC092159.2	2	677186	697371	+	0.36274653673171997	0.0735183134675026	0.08762276917695999
SNTG2	2	946554	1371385	+	0.18606144189834595	0.003934133797883987	0.008066171780228615

AC010729.2	2	5866581	5870474	+	0.9978415966033936	0.09050844609737396	0.03739488869905472
IAH1	2	9613787	9636672	+	2.704195261001587	4.9934821128845215	9.349932670593262
AC092687.5	2	10729292	10744956	+	0.04324883222579956	0.029446301981806755	0.7593468427658081
ATP6V1C2	2	10861775	10925236	+	0.16217704117298126	0.08082189410924911	2.2173163890838623
KCNF1	2	11052063	11054350	+	5.5042338371276855	27.706443786621094	35.36829376220703
AC062028.1	2	11239977	11272896	-	0.014513450674712658	0.19586540758609772	0.6456447839736938
GREB1	2	11674242	11782914	+	22.144397735595703	4.889237403869629	2.670020580291748
AC096559.1	2	11988748	12718474	+	0.3070710301399231	2.1738216876983643	1.3419911861419678
AC064875.2	2	13106910	13147138	-	3.8017165660858154	14.115448951721191	19.31548500061035
AC008278.2	2	15704294	15713992	+	0.5304485559463501	0.9745981693267822	0.008523963391780853
MYCNOS	2	16061159	16082371	-	0.2913554310798645	0.7861368656158447	0.9667157530784607
AC130710.1	2	16190549	16225923	+	0.223488450050354	0.251529335975647	0.015446940436959267
AC092594.1	2	19167729	19546509	-	0.6983753442764282	0.3112531304359436	0.18638932704925537
MATN3	2	20191872	20212455	-	12.811590194702148	0.8690270781517029	1.1879199743270874
GDF7	2	20866424	20873418	+	0.46083125472068787	0.5022290945053101	0.0812213271856308
OTOF	2	26680071	26781566	-	0.07625401020050049	0.027094054967164993	5.35138591658324E-4
C2orf70	2	26785450	26802400	+	0.0	0.9127578735351562	0.9899958372116089
KCNK3	2	26915558	26956288	+	2.6316871643066406	1.1189409494400024	0.2547774910926819
DPYSL5	2	27070615	27173219	+	108.55705261230469	34.891441345214844	32.240760803222656
AC013472.3	2	27207644	27237480	-	0.0374000258743763	0.09099218249320984	0.004526348784565926
CGREF1	2	27321757	27341995	-	1.0491310358047485	9.586220741271973	7.426578044891357
ABHD1	2	27346682	27353680	+	0.08216386288404465	0.4570159614086151	0.3515957295894623
SLC30A3	2	27476552	27498685	-	0.12383012473583221	0.3769344687461853	0.7892234325408936
AC109828.1	2	27558409	27560670	+	0.011771474033594131	0.0	0.7278909683227539
CLIP4	2	29320560	29412509	+	4.108705520629883	5.240939617156982	13.935295104980469
LTBP1	2	33172039	33624576	+	35.53114700317383	21.23027801513672	10.364084243774414
AC007401.2	2	36758948	36779411	-	0.571121871471405	0.2501433193683624	0.16314494609832764
VIT	2	36923833	37041935	+	0.10771730542182922	0.4824197590351105	0.07280957698822021
AC007390.5	2	37423631	37440868	+	5.032065391540527	17.980791091918945	21.669897079467773
AC007390.6	2	37440610	37443336	+	0.1890600323677063	0.6511455774307251	1.4759868383407593
AC007391.2	2	37552483	37553940	+	0.016888314858078957	0.16316406428813934	0.10433381050825119
ARHGEF33	2	39117021	39202590	+	0.23659858107566833	0.10299606621265411	0.05781809985637665
TMEM178	2	39892122	39945103	+	46.94183349609375	6.845335960388184	3.3443281650543213
AC007254.3	2	40146833	40482349	+	0.1875872015953064	0.020237436518073082	0.04124527424573898
AC083949.1	2	42370378	42397441	-	0.048385798931121826	0.015740342438220978	0.24423430860042572
KCNG3	2	42669157	42721237	-	0.06844848394393921	0.22486688196659088	1.3024721145629883
AC093609.1	2	43324884	43329829	-	0.5686696767807007	0.09447579830884933	0.06179668381810188
SLC3A1	2	44502599	44548633	+	0.034273661673069	0.03320321813225746	0.3597886860370636
RP11-89K21.1	2	45147332	45166338	-	4.066373348236084	0.02981649525463581	0.014896179549396038
AC012354.5	2	45167293	45169012	-	1.148988962173462	0.04484282061457634	0.02465239353477955
SIX3	2	45168902	45173216	+	2.9037818908691406	0.23691566288471222	0.3652173578739166
AC012354.6	2	45181803	45195901	+	0.8660377264022827	0.019879741594195366	0.008219597861170769
AC016722.4	2	47126414	47135817	+	0.017270859330892563	7.011698908172548E-4	0.20744255185127258
C2orf61	2	47314130	47382517	-	0.24026846885681152	0.24537856876850128	0.06739488244056702
AC106869.2	2	47452933	47466364	+	0.31743305921554565	0.2212408035993576	0.0
NCRNA00117	2	55509460	55511578	+	0.14831477403640747	0.5556685924530029	0.3656850755214691
CCDC85A	2	56411258	56613308	+	0.13944020867347717	0.010805614292621613	0.006843987386673689
AC107081.5	2	62095567	62113217	+	0.016172362491488457	0.0	1.5741069316864014
AC009501.4	2	63271057	63275775	-	4.4054765701293945	0.10963574051856995	1.7312836647033691
AC008074.3	2	64622354	64680932	-	0.6011781692504883	0.2439631223678589	0.15898793935775757

AC010987.6	2	68023186	68052694	-	0.0	0.33388131856918335	0.9031733274459839
PROKR1	2	68870721	68882708	+	0.4534156322479248	0.299896240234375	0.010746479034423828
ARHGAP25	2	68906733	69053965	+	0.030784478411078453	1.5119171142578125	1.7185983657836914
AC016700.3	2	70321026	70330352	-	0.0045531140640378	0.19212943315505981	0.09358164668083191
TGFA	2	70674412	70781325	-	0.7605388164520264	16.659420013427734	12.001289367675781
CD207	2	71057347	71062952	-	0.20400360226631165	0.8357858061790466	1.333736777305603
AC007040.5	2	71115001	71117089	+	0.0058883000165224075	0.1929529458284378	0.26065459847450256
ATP6V1B1	2	71163012	71192555	+	1.372804045677185	2.148282289505005	4.680902004241943
AC007040.7	2	71168947	71175740	-	0.21343284845352173	1.037858486175537	1.2468271255493164
ZNF638-IT1	2	71601068	71602662	+	2.180745840072632	3.3779826164245605	0.731511116027832
DYSF	2	71680852	71913898	+	3.224484424591064	1.011570692062378	0.18258440494537354
SPR	2	73114489	73119287	+	7.589633464813232	13.111550331115723	40.3554801940918
ACTG2	2	74119441	74146992	+	17.825605392456055	8.481730461120605	2.0097129344940186
AC073046.4	2	74174769	74208568	-	0.4265715479850769	0.8002136945724487	1.2951326370239258
AC073263.1	2	74361599	74362521	+	0.010086092166602612	0.17908166348934174	0.2749871611595154
SLC4A5	2	74443369	74570541	-	0.5627889037132263	0.24643948674201965	0.1494889110326767
TLX2	2	74740590	74744769	+	0.08808586746454239	0.6803231239318848	2.0465712547302246
LRRTM4	2	76974845	77820445	-	2.084756851196289	1.3217682838439941	0.21074001491069794
LRRTM1	2	80515483	80531874	-	1.9962071180343628	0.24263416230678558	0.07916367053985596
DNAH6	2	84743579	85046713	+	0.6336479187011719	0.3175336420536041	0.11884497106075287
C2orf89	2	85048774	85134132	-	0.43758517503738403	1.0800683498382568	0.6769731640815735
CAPG	2	85621346	85645555	-	4.086693286895752	7.442697525024414	21.058544158935547
VAMP8	2	85788685	85809154	+	7.129366397857666	2.2703182697296143	0.7423609495162964
AC015971.2	2	86789198	86845889	+	0.009116154164075851	4.980030935257673E-4	0.35562261939048767
AC133644.1	2	87749037	87758508	+	0.8494939804077148	2.2418978214263916	0.12100154161453247
SMYD1	2	88367299	88412906	+	0.0019415901042521	0.029400011524558067	0.026231369003653526
C2orf51	2	88824169	88829102	+	0.17356844246387482	0.011273915879428387	0.0
AC104134.2	2	88838238	88875128	+	0.05889619514346123	0.012940851971507072	0.5764722228050232
KCNIP3	2	95963052	96051825	+	0.3966614603996277	1.8247756958007812	4.478527069091797
AC009237.1	2	96194603	96198143	+	0.2500459551811218	0.676234781742096	2.5904674530029297
DUSP2	2	96808905	96811179	-	0.34371164441108704	2.240453004837036	1.5572282075881958
ITPRIPL1	2	96991069	96994091	+	2.4027366638183594	10.508246421813965	9.831119537353516
FER1L5	2	97308474	97370624	+	0.16070251166820526	0.1797276884317398	0.05431923270225525
ZAP70	2	98330023	98356325	+	0.10672707855701447	0.05572040006518364	0.022009609267115593
VWA3B	2	98703579	98929762	+	0.008223280310630798	0.042647235095500946	0.032252974808216095
C2orf55	2	99410309	99552722	-	1.0066975355148315	1.4525238275527954	4.433160781860352
NPAS2	2	101436614	101613291	+	1.728939414024353	7.166833400726318	13.438735961914062
CREG2	2	101965209	102004057	-	0.2267300933599472	0.26926377415657043	0.17493493854999542
IL1R1	2	102681004	102796334	+	5.196895599365234	0.9763360619544983	1.0537266731262207
SLC9A2	2	103236166	103327777	+	0.03287683054804802	0.28803470730781555	0.8404571413993835
AC068535.2	2	105027659	105032070	+	0.32902270555496216	1.6481821537017822	2.0388574600219727
AC018730.4	2	105481865	105483954	-	2.171994924545288	0.3747444450855255	0.3963588774204254
AC018730.3	2	105481955	105489053	-	3.1673972606658936	0.6172871589660645	0.7634294629096985
AC010884.1	2	105552869	105654954	-	0.35512226819992065	0.012612653896212578	0.06797894090414047
AC104655.2	2	105713510	105719402	-	0.025534648448228836	0.0013204255374148488	0.4756954610347748
AC104655.3	2	105760571	105761882	+	3.119438648223877	1.5702584981918335	0.9999721050262451
AC009505.2	2	106471199	106473633	-	0.09047694504261017	0.019856790080666542	0.9413506388664246
ST6GAL2	2	107418056	107503564	-	1.2823415994644165	1.6122899055480957	0.24508453905582428
SULT1C4	2	108994367	109004513	+	4.193356037139893	0.18398180603981018	0.06780453026294708
ACOXL	2	111490150	111875799	+	0.0061982604674994946	0.004142268560826778	0.04107637330889702

AC017002.2	2	112249520	112252388	-	1.7720850706100464	2.922429084777832	0.2913599908351898
NT5DC4	2	113479063	113500456	+	0.0	0.0016139951767399907	0.0454770103096962
IL1A	2	113531492	113542167	-	1.2022188901901245	4.289585113525391	0.28253164887428284
RP11-19E11.1	2	119591401	119592686	-	0.2292729914188385	0.6664924025535583	1.215165138244629
STEAP3-AS1	2	120001998	120006647	-	0.0407237634062767	0.04791272059082985	0.26004207134246826
AC069154.2	2	120302008	120419827	+	0.5671501159667969	0.10427849739789963	0.0744447335600853
TFCP2L1	2	121974163	122042783	-	0.040286075323820114	0.5727922320365906	0.6301283836364746
MYO7B	2	128293378	128395304	+	0.00817098654806614	0.017025986686348915	0.10631394386291504
GPR17	2	128403439	128413754	+	0.19944033026695251	5.16661262512207	1.6928375959396362
POTEF	2	130831108	130886795	-	0.20748133957386017	0.9013997316360474	8.1112259067595E-4
CCDC74B	2	130896860	130902707	-	1.4739941358566284	1.3982003927230835	7.610762596130371
AC131180.1	2	131975882	132022965	+	0.4343293309211731	1.4677107334136963	0.011161327362060547
CYP4F31P	2	132044330	132050127	+	0.6743535399436951	0.9332179427146912	0.0
CCDC74A	2	132285248	132291239	+	3.1421453952789307	3.213881254196167	10.241405487060547
NCKAP5	2	133429374	134326034	-	7.321656703948975	4.685578346252441	2.806285858154297
LCT	2	136545410	136594750	-	0.0321289524435997	0.03515630587935448	0.007124790456146002
CXCR4	2	136871919	136875735	-	60.75225830078125	16.09709358215332	4.718904972076416
THSD7B	2	137523115	138435287	+	0.098246268928051	0.006536077708005905	0.003683103946968913
NXPH2	2	139428342	139537918	-	4.570440769195557	1.0918997526168823	0.3610542416572571
LRP1B	2	140988992	142889270	-	1.3522073030471802	6.1316375732421875	5.256291389465332
AC078882.1	2	142888747	142895399	-	0.19240929186344147	1.371921420097351	0.5168918967247009
ARHGAP15	2	143848931	144525921	+	0.01921524666249752	0.33964237570762634	0.057053033262491226
LYPD6B	2	149894621	150071776	+	0.8039336800575256	0.10608852654695511	0.02462550438940525
NMI	2	152126979	152146571	-	1.5705015659332275	3.6264846324920654	5.845235347747803
TNFAIP6	2	152214106	152236560	+	0.5854037404060364	13.009095191955566	32.19297409057617
AC005042.4	2	159514849	159591514	-	7.25169840734452E-4	0.0014118871185928583	0.061896197497844696
RP11-542H1.1	2	160407008	160407977	-	0.24737460911273956	0.6556180119514465	0.05597292631864548
CD302	2	160625364	160654753	-	2.3792343139648438	7.693831920623779	12.128758430480957
LY75-CD302	2	160628362	160761221	-	0.492911159992218	3.1330602169036865	2.542762041091919
LY75	2	160628362	160761260	-	0.31365102529525757	2.1111881732940674	1.642162561416626
KCNH7	2	163227917	163695240	-	1.6602051258087158	0.7010142207145691	0.15701432526111603
CSRN3P3	2	166326157	166545917	+	7.433680534362793	2.757502317428589	2.214909315109253
GALNT3	2	166604101	166651192	-	1.1640125513076782	0.6749151945114136	0.3945556581020355
AC009495.3	2	166689558	166695608	-	0.6089689135551453	0.24483107030391693	0.1095469519495964
SCN9A	2	167051695	167232503	-	3.5682780742645264	0.7485361695289612	1.2686465978622437
AC009475.2	2	169628463	169642939	-	0.0472775362432003	0.023124441504478455	1.2146492004394531
ABCB11	2	169779448	169887832	-	0.06828248500823975	0.012732879258692265	0.008862992748618126
LRP2	2	169983619	170219195	-	9.836524963378906	1.613297939300537	0.2093447595834732
AC007277.3	2	171494879	171551884	-	0.026983341202139854	0.12214571982622147	0.1814742386341095
AC007405.4	2	171579719	171627276	-	0.09174904227256775	0.3719187080860138	0.2987755239009857
AC007405.6	2	171627623	171634658	+	0.5105416178703308	2.964233636856079	4.087704658508301
AC007405.7	2	171640296	171655481	+	0.29298654198646545	2.4101948738098145	2.4423084259033203
GAD1	2	171669723	171717661	+	2.567042350769043	6.917184829711914	13.43502140045166
AC007405.8	2	171672803	171674547	-	0.3558555245399475	0.7386811375617981	2.728559490185547
DLX1	2	172949468	172954405	+	4.449652671813965	6.537041664123535	21.56690216064453
DLX2	2	172964167	172967628	-	3.1366159915924072	1.6272209882736206	16.894062042236328
AC104801.1	2	172967734	172974710	+	0.05664673447608948	0.13759106397628784	0.3169633448123932
RAPGEF4	2	173600002	173917621	+	0.6646657586097717	3.7401576042175293	2.570190668106079
GPR155	2	175296966	175351822	-	3.2760703563690186	16.381759643554688	17.476760864257812
EVX2	2	176942200	176948641	-	0.002394481096416712	0.11096800863742828	0.21600070595741272

HOXD13	2	176957619	176960666	+	0.018942663446068764	5.400055885314941	7.676580905914307
HOXD12	2	176964458	176966408	+	0.0	0.19402888417243958	0.2968364953994751
HOXD11	2	176968944	176974722	+	0.02262691594660282	12.021343231201172	5.152436256408691
HOXD10	2	176973518	176984670	+	0.02780429646372795	16.92269515991211	7.363836765289307
AC009336.21	2	176986339	177001826	-	0.007338174153119326	1.114060401916504	5.693637847900391
HOXD9	2	176987088	176989853	+	0.023095138370990753	3.471259832382202	7.739785671234131
AC009336.1	2	176992555	176994493	-	0.0	0.6019366383552551	2.7873926162719727
HOXD8	2	176994422	176997423	+	0.02869994007050991	0.585083544254303	8.052245140075684
HOXD3	2	177001340	177039577	+	0.00244360719807446	2.510194778442383	7.662466049194336
HOXD4	2	177015950	177020802	+	0.005146706011146307	3.8622817993164062	11.038869857788086
AC009336.23	2	177037923	177053686	-	0.004743687808513641	3.649352788925171	5.390628337860107
AC009336.24	2	177042445	177043737	+	0.009640871547162533	0.1263759732246399	0.580012321472168
HOXD1	2	177053307	177055688	+	0.0	0.14654119312763214	0.33701905608177185
AC017048.3	2	177494568	177502659	-	0.03590654209256172	3.939366340637207	7.4738311767578125
AC017048.4	2	177502438	177520686	+	0.007878030650317669	0.4338761568069458	0.7333213090896606
AC079305.1	2	178107103	178111509	-	0.7945699691772461	2.2531442642211914	0.2602185010910034
PDE11A	2	178492797	178973081	-	0.19126759469509125	0.033225610852241516	0.013193235732614994
ZNF385B	2	180306709	180726232	-	0.16995486617088318	1.1761082410812378	0.5818614959716797
CERKL	2	182401403	182545392	-	0.14960169792175293	1.12806236743927	0.9645168781280518
PDE1A	2	183004763	183387919	-	6.49371862411499	1.1362733840942383	0.02299381233751774
ZNF804A	2	185463093	185804219	+	1.6042073965072632	1.5698472261428833	5.530231475830078
FSIP2	2	186603355	186698017	+	1.1965972185134888	0.09014469385147095	0.056564800441265106
AC007319.1	2	187867947	188419390	+	0.10235938429832458	0.12546710669994354	0.6641249060630798
GULP1	2	189156396	189460653	+	9.41979694366455	2.8037917613983154	2.84944842424591064
COL3A1	2	189839046	189877472	+	132.9440155029297	23.847124099731445	8.4876070022583
MSTN	2	190920610	190927455	-	0.06949590891599655	0.336605966091156	0.21905946731567383
AC006460.2	2	191541670	191573442	-	0.0	0.0	0.4155540466308594
AC005540.3	2	191745523	191746785	-	0.3985929489135742	0.40579739212989807	1.577322006225586
MYO1B	2	192109911	192290115	+	50.99302291870117	15.342521667480469	10.316963195800781
SDPR	2	192699028	192711981	-	22.016155242919922	3.661616563796997	2.8218634128570557
HECW2	2	197063977	197458416	-	5.243997097015381	1.2131062746047974	0.7158039212226868
C2orf66	2	197669726	197675000	-	0.3681979775428772	0.4110254645347595	1.3600492477416992
SATB2	2	200134223	200335989	-	6.293162822723389	17.721086502075195	20.998062133789062
AC017096.1	2	200322423	200341658	+	0.19597755372524261	1.097200632095337	2.322075366973877
AC073043.2	2	200625267	200715896	-	0.20789480209350586	1.031330943107605	1.0003989934921265
AOX1	2	201450591	201541787	+	3.385409116744995	1.3338674306869507	0.6536852121353149
NDUFB3	2	201936156	201950473	+	53.52230453491211	26.848087310791016	53.8714485168457
CASP10	2	202047604	202094129	+	0.4427267014980316	0.33116039633750916	0.12163092941045761
ALS2CR11	2	202352148	202483901	-	0.1571028232574463	0.061101462692022324	0.0022206895519047976
FZD7	2	202899310	202903160	+	46.288883209228516	11.029413223266602	16.587491989135742
AC079354.1	2	202937978	203062585	+	0.05214323475956917	0.011091647669672966	0.009535599499940872
AC079354.3	2	202978349	202981781	-	0.06981711834669113	0.01460849680006504	0.005905674304813147
PARD3B	2	205410516	206484886	+	6.635002613067627	2.4648168087005615	1.0589089393615723
AC007383.4	2	206980271	206987047	+	0.0	0.002999496180564165	0.364493727684021
ZDBF2	2	207139387	207179148	+	12.383515357971191	7.027907371520996	3.9872379302978516
AC008269.2	2	207731519	207733013	+	0.28714895248413086	0.21342161297798157	0.013888143934309483
CPO	2	207804278	207834198	+	0.247353658080101	0.021981775760650635	0.02943909727036953
KLF7-IT1	2	207985608	207986768	-	1.1586893796920776	1.2654218673706055	0.2221975326538086
CRYGC	2	208992861	208994554	-	1.1974904537200928	0.010686920955777168	0.0
C2orf80	2	209030067	209054797	-	3.7155468463897705	18.561445236206055	13.846681594848633

ACADL	2	211052663	211090215	-	0.41855213046073914	0.20721504092216492	0.029924217611551285
CPS1	2	211342406	211543831	+	7.970713138580322	4.7585673332214355	1.3449476957321167
IKZF2	2	213864429	214017151	-	2.9017386436462402	0.6650123000144958	0.6064716577529907
VVC2L	2	215275789	215443683	+	0.23716872930526733	0.04709884151816368	0.05772121250629425
AC122136.1	2	216476286	216708445	-	0.4196189045906067	0.10232977569103241	0.07648973166942596
AC009492.1	2	218147462	218200843	+	0.029187016189098358	0.645923912525177	0.20924459397792816
CXCR2	2	218990012	219001976	+	0.0528571717441082	0.002148226834833622	0.0
GPBAR1	2	219124219	219128582	+	0.25172555446624756	0.07125590741634369	0.029221558943390846
C2orf62	2	219221579	219232822	+	0.06030263006687164	0.035467058420181274	0.0033952288795262575
VIL1	2	219283815	219318018	+	0.012031950987875462	0.0027071598451584578	0.13471384346485138
CYP27A1	2	219646472	219680016	+	1.692379355430603	6.95466947555542	8.322369575500488
WNT10A	2	219745085	219764303	+	0.0	0.07208564132452011	0.038344208151102066
CRYBA2	2	219854911	219858143	-	0.0	0.014055662788450718	0.14315824210643768
AC114803.3	2	220163724	220168852	+	0.07285686582326889	2.210332155227661	0.4450327754020691
AC053503.11	2	220346795	220381599	-	0.006684130989015102	1.7941534519195557	0.6235321164131165
ACCN4	2	220378892	220403494	+	1.8672747611999512	11.045995712280273	6.265432834625244
INHA	2	220433884	220440435	+	0.2388933300971985	0.8694303035736084	1.2648426294326782
PAX3	2	223064607	223163715	-	1.9143821001052856	2.3744709491729736	1.0478161573410034
SGPP2	2	223289236	223425667	+	0.1536923497915268	0.005227235145866871	1.0546742677688599
KCNE4	2	223916532	224063117	+	3.8393983840942383	18.745471954345703	19.831279754638672
AC068138.1	2	227044760	227050087	-	0.4358512759208679	0.05073804780840874	0.03193772956728935
COL4A4	2	227867427	228028829	-	0.9867497086524963	0.5561640858650208	1.9463715553283691
SLC19A3	2	228549926	228582728	-	0.13184098899364471	1.9513680934906006	1.3361492156982422
AC064853.4	2	228549966	228551622	-	0.06833823770284653	1.7496205568313599	1.0875920057296753
CCL20	2	228678558	228682272	+	0.026218196377158165	2.834712028503418	0.0
PID1	2	229715242	230136001	-	1.9347347021102905	7.583449363708496	10.974127769470215
SLC16A14	2	230899698	230933715	-	7.00079154968262	1.267533779144287	3.022798538208008
AC105344.2	2	231849083	231860747	-	0.017820900306105614	0.18401096761226654	0.34447363018989563
C2orf72	2	231902205	231914434	+	4.472263336181641	13.280564308166504	15.608135223388672
AC017104.6	2	232253687	232259702	+	0.3556719720363617	2.0319769382476807	3.006439685821533
B3GNT7	2	232260254	232265875	+	1.2080732583999634	4.547021865844727	13.08494758605957
ECEL1	2	233344537	233352538	-	4.1426849365234375	0.10657555609941483	0.11771640926599503
AC073254.1	2	233445658	233449247	-	0.03016521781682968	0.0	0.37318381667137146
EFHD1	2	233470767	233547491	+	8.12010669708252	3.076723098754883	28.112510681152344
NGEF	2	233743396	233877982	-	2.1777679920196533	5.715392589569092	14.581843376159668
TRPM8	2	234826043	234928166	+	0.6783149838447571	6.517588138580322	12.6017484664917
GBX2	2	237073879	237077012	-	76.6502456665039	3.3475961685180664	8.343631744384766
IQCA1	2	237232794	237416185	-	0.3698720633983612	0.02295062132179737	0.015391492284834385
RAB17	2	238482965	238510257	-	0.06099570170044899	0.4560142755508423	0.30226925015449524
RAMP1	2	238767536	238820756	+	6.920905113220215	18.502717971801758	42.04796600341797
FAM132B	2	239067623	239077541	+	1.3741878271102905	2.5288424491882324	8.292196273803711
AC016757.1	2	239072633	239077513	+	1.946035385131836	3.6096746921539307	10.286773681640625
TWIST2	2	239756673	239795893	+	1.6661919355392456	1.9077682495117188	9.1926851272583
AC110619.2	2	241388732	241396131	-	0.2559225559234619	0.028975019231438637	0.04926273226737976
SNED1	2	241938255	242034983	+	3.5175962448120117	3.16634464263916	11.521154403686523
AC005104.3	2	242290755	242292519	-	0.046317823231220245	0.0	1.478144645690918
AC114730.11	2	242664030	242665108	-	0.005784852895885706	0.0	0.3840307295322418
AC114730.8	2	242674130	242674913	-	0.07656753063201904	0.10067792236804962	0.7523703575134277
GAL3ST2	2	242716240	242743623	+	0.04553784057497978	0.1559874564409256	0.3666629195213318
AC114730.5	2	242740331	242741322	-	0.0	0.2930591404438019	0.872347354888916

AC114730.3	2	242749407	242753111	-	0.020399486646056175	2.3989858627319336	11.56546688079834
NEU4	2	242749920	242758739	+	0.09780770540237427	5.978976726531982	11.182323455810547
AC114730.2	2	242786532	242787188	+	0.01627519354224205	0.2757095396518707	0.5654630661010742
AC131097.3	2	242823514	243020873	+	0.2961100935935974	0.6724473237991333	0.9785355925559998
CNTN6	3	1134260	1445901	+	2.9465720653533936	0.621761679649353	0.002229028847068548
CNTN4	3	2140497	3099645	+	1.5079725980758667	0.230568990111351	0.1677202731370926
LRRN1	3	3841121	3889387	+	145.5058135986328	16.42140769958496	28.722280502319336
AC018816.4	3	4938493	5021646	-	0.2604311406612396	0.18792589008808136	1.4389654397964478
CPNE9	3	9745491	9771592	+	0.2316896915435791	0.05526549741625786	0.05174018815159798
PRRT3-AS1	3	9989088	9996471	+	0.8697288036346436	2.1919031143188477	3.831211805343628
ATP2B2	3	10365707	10749716	-	0.20039129257202148	3.4488301277160645	5.114765167236328
AC090939.1	3	11761930	11766453	-	0.1546161025762558	0.18893377482891083	0.7491552829742432
FBLN2	3	13573824	13679922	+	22.6511287689209	3.7819533348083496	0.87969970703125
WNT7A	3	13857755	13921618	-	2.5507311820983887	0.8419452905654907	0.018628699705004692
FGD5	3	14860469	14975895	+	0.11691629886627197	0.22914794087409973	0.006518275942653418
NR2C2	3	14989091	15095107	+	7.949316024780273	7.91181755065918	8.61448860168457
EAF1-AS1	3	15480576	15482101	-	0.058271124958992004	0.011724221520125866	0.6548673510551453
COLQ	3	15491640	15563258	-	1.3796277046203613	0.42987462878227234	0.3634817600250244
KCNH8	3	19189946	19577138	+	3.6233158111572266	1.0919328927993774	0.5871679782867432
SGOL1-AS1	3	20215736	20227919	+	0.11894210427999496	0.17687761783599854	0.5291836261749268
AC098973.2	3	27844253	27932792	+	0.9230007529258728	0.02396460995078087	0.0
GPD1L	3	32147181	32210205	+	8.346489906311035	15.820574760437012	29.18256950378418
TRIM71	3	32859510	32933771	+	21.980648040771484	3.0926706790924072	1.2955366373062134
ITGA9	3	37493606	37865005	+	5.261248588562012	1.3259093761444092	0.8142072558403015
PLCD1	3	38048987	38071253	-	35.85529327392578	4.4792022705078125	6.891498565673828
DLEC1	3	38080696	38165516	+	0.2605547308921814	0.10200560837984085	0.07525400072336197
ACVR2B	3	38495342	38524948	+	4.737188816070557	3.0921335220336914	1.6190928220748901
SCN11A	3	38887260	38992052	-	0.24906037747859955	0.022823382169008255	0.013871925882995129
XIRP1	3	39224701	39234087	-	0.006288485135883093	0.12008711695671082	0.23860539495944977
MYRIP	3	39850405	40301812	+	0.04147085174918175	0.22138789296150208	1.0793277025222778
ENTPD3	3	40428647	40470110	+	0.20190656185150146	0.008815300650894642	1.17424476146698
HHATL	3	42734155	42744319	-	0.05867695063352585	0.2626194953918457	0.3491850197315216
CCDC13-AS1	3	42774067	42788260	+	0.0010549519211053848	0.19726426899433136	0.0896950364112854
KRBOX1	3	42850938	43097363	+	0.30065488815307617	1.237992763519287	2.2653446197509766
FAM198A	3	43020759	43101703	+	0.33436593413352966	2.698242664337158	2.886667013168335
AC134943.1	3	44482424	44486946	+	0.0077463435009121895	0.0	0.25596919655799866
TGM4	3	44916100	44956482	+	0.09060630947351456	0.010348916053771973	0.006305157206952572
TMEM158	3	45265958	45267770	-	13.450905799865723	63.36717987060547	72.56322479248047
CCR1	3	46243200	46249887	-	0.020006930455565453	0.4478148818016052	0.7797203660011292
TMIE	3	46742823	46752376	+	0.09474851936101913	0.799821078773132	0.7439017295837402
NICN1-AS1	3	49460379	49461864	+	0.15238456428050995	0.6205250024795532	0.8118334412574768
RP11-493K19.3	3	50153455	50193518	-	0.02919371798634529	0.004139226861298084	0.6173216104507446
C3orf45	3	50316458	50325545	+	0.12496035546064377	0.2877274751663208	0.40375322103500366
HYAL1	3	50337320	50349812	-	0.7341254949569702	0.8621188998222351	0.27514100074768066
CACNA2D2	3	50400233	50541675	-	3.8297324180603027	0.21177278459072113	0.3929235637187958
GRM2	3	51741086	51752629	+	1.5355761051177979	0.21040856838226318	0.1786181926727295
TNNC1	3	52485118	52488086	-	2.96219539642334	0.18076400458812714	0.11981572955846786
ITIH3	3	52828784	52843025	+	0.9726307988166809	0.00975156482309103	0.005164790898561478
WNT5A	3	55499743	55523973	-	19.214797973632812	4.223815441131592	7.6598968505859375
ERC2	3	55542336	56502391	-	2.9138128757476807	0.3905958831310272	0.27113091945648193

ASB14	3	57302375	57326710	-	0.009611435234546661	0.013029941357672215	0.1560888864517212
FAM107A	3	58549844	58613337	-	2.7586617469787598	0.19424597918987274	0.7778756022453308
FHIT	3	59735036	61237133	-	0.33863019943237305	1.0677690505981445	1.553528904914856
RP11-129B22.1	3	64053640	64088807	+	0.014186142012476921	0.0018255290342494845	0.2631043493747711
FAM19A4	3	68780917	68981761	-	0.16013261675834656	0.006708983797580004	0.0
FOXP1-IT1	3	71619406	71623608	-	0.06086091697216034	0.25130996108055115	0.009402488358318806
GPR27	3	71803201	71805647	+	3.956775665283203	0.07572688162326813	0.1677054911851883
PZRN3-AS1	3	73672719	73674658	+	0.3253054618835449	0.04432075843214989	0.03216760605573654
CNTN3	3	74311719	74570291	-	0.7188332080841064	0.016421064734458923	0.2964037358760834
RP11-413E6.8	3	75721542	75728454	+	0.12134426832199097	0.002972234971821308	0.0
VGLL3	3	86987119	87040269	-	11.46600341796875	1.745467185974121	31.469825744628906
AC107204.1	3	87138430	87147851	+	0.026070743799209595	0.07454030960798264	0.25765570998191833
RP13-503K1.4	3	93795186	93800665	+	0.5094921588897705	0.47391754388809204	0.09505604207515717
EPHA6	3	96533425	97471304	+	0.43718498945236206	0.01666402816772461	6.732745096087456E-4
ST3GAL6-AS1	3	98433174	98451495	-	0.44168832898139954	1.53732328758239746	1.6882671117782593
ST3GAL6	3	98451080	98540045	+	1.7595195770263672	4.937088966369629	7.281179428100586
CTD-2021J15.2	3	98699902	98701940	+	0.39125803112983704	1.6238535642623901	9.811897277832031
COL8A1	3	99357319	99518070	+	32.84341812133789	3.993143320083618	7.6301164627075195
ABI3BP	3	100468000	100712359	-	2.6401877403259277	0.9552736878395081	1.0342801809310913
LINC00488	3	108897012	108904104	+	1.700742244720459	0.13540399074554443	0.3419744670391083
DPPA2	3	109012635	109035364	-	0.6934995055198669	0.012961335480213165	0.0
DPPA4	3	109044988	109056419	-	41.0676383972168	0.8638651371002197	8.65801062900573E-4
AC124945.1	3	109056665	109101875	+	0.17874450981616974	0.013134179636836052	0.0
RP11-553A10.1	3	110607231	110612323	-	4.141995906829834	1.2419863939285278	0.46037498116493225
PVRL3-AS1	3	110612555	110790400	-	0.7622337341308594	0.2530960142612457	0.21351605653762817
CD96	3	111260926	111384597	+	0.13596346974372864	0.015477360226213932	1.2982898950576782
PLCXD2	3	111393523	111565294	+	3.6651623249053955	0.6551465392112732	0.4805752635002136
PHLDB2	3	111451327	111695364	+	20.923057556152344	3.48533034324646	2.0656557083129883
TAGLN3	3	111717511	111732734	+	64.40819549560547	11.43568229675293	22.354217529296875
TMPRSS7	3	111753690	111800116	+	0.18104611337184906	0.013587959110736847	0.012648028321564198
SLC9A10	3	111859734	112013105	-	0.05588121712207794	0.035265110433101654	0.007716564927250147
CD200	3	112051915	112081659	+	38.195892333984375	3.7687394618988037	6.7640204429626465
SIDT1	3	113251143	113348425	+	0.44227704405784607	0.05696505680680275	0.00962289422750473
LSAMP	3	115528641	117716095	-	10.32812786102295	38.34793472290039	35.47756576538086
POPDC2	3	119355304	119384171	-	1.3796695470809937	0.4147709608078003	0.39273399114608765
FSTL1	3	120111140	120170100	-	120.73348999023438	29.972999572753906	44.01357650756836
HGD	3	120347020	120401418	-	1.0210355520248413	0.15918280184268951	0.05412742868065834
HCLS1	3	121350246	121379774	-	0.30938920378685	0.12132219970226288	0.04282773658633232
CSTA	3	122044091	122060819	+	0.278798907995224	0.0931604728102684	0.00683638546615839
SEMA5B	3	122628041	122747452	-	41.58830261230469	6.046506881713867	2.284573793411255
ADCY5	3	123001143	123168605	-	2.132781505584717	0.7868416905403137	0.769216775894165
MYLK	3	123328896	123603178	-	10.787803649902344	4.750535011291504	3.162978172302246
GATA2	3	128198270	128212028	-	0.19529137015342712	1.0509953498840332	1.0089571475982666
RP11-475N22.4	3	128208055	128221191	+	0.009210917167365551	0.2948519289493561	0.2833642065525055
KIAA1257	3	128628709	128721533	-	1.8156486749649048	0.4230995774269104	0.2671465575695038
RP11-723O4.6	3	128628717	128690173	-	1.506691575050354	0.18031451106071472	0.1283542857646942
RP11-723O4.8	3	128719477	128720388	-	1.5766147375106812	0.15010884404182434	0.06487337499856949
CCDC48	3	128720472	128759585	+	10.249848365783691	0.7291160225868225	0.9064065217971802
TRH	3	129693148	129696781	+	0.312372088432312	0.01237776205539703	0.007380617316812277
RP11-77P16.4	3	129831393	129838359	+	1.05960214138031	1.0114355087280273	0.14840784668922424

RP11-39E4.1	3	132440594	132546850	+	0.054457128047943115	0.007183554582297802	0.006889611482620239
NPHP3-AS1	3	132440594	132593067	+	0.055345188826322556	0.014689266681671143	0.00743445148691535
RAB6B	3	133543083	133614680	-	11.112049102783203	7.468642711639404	3.6358237266540527
AMOTL2	3	134074716	134094321	-	53.04413604736328	15.949889183044434	19.7540340423584
KY	3	134321980	134370478	-	0.07555283606052399	1.1654900312423706	0.411487340927124
RP11-657O9.1	3	135074909	135158730	-	1.8409397602081299	0.23966200649738312	0.057339511811733246
RP11-85F14.5	3	136560568	136580896	-	1.5807185173034668	2.8428804874420166	5.056802749633789
ESYT3	3	138153428	138200528	+	0.6665443181991577	0.18841566145420074	0.09683895856142044
FAIM	3	138327448	138352218	+	1.6274960041046143	2.168642282485962	5.507185459136963
C3orf72	3	138666076	138672293	+	1.0039900541305542	0.15827232599258423	0.23826250433921814
CLSTN2	3	139654027	140286919	+	3.7533469200134277	4.797420501708984	0.7562289237976074
RP11-231L11.3	3	140691586	140692097	+	0.36846089363098145	0.9070742130279541	0.08904853463172913
SPSB4	3	140770244	140867453	+	26.38384246826172	7.34682559967041	8.458415985107422
CP	3	148880197	148939842	-	2.685969114303589	2.668304920196533	0.5658161044120789
TM4SF18	3	149036285	149052201	-	6.303774833679199	0.20230086147785187	0.2339056432247162
RP11-651P23.5	3	149694542	149697142	+	0.5928422808647156	0.5181612968444824	0.1886003464460373
MME	3	154741913	154901497	+	0.42254647612571716	2.75571346282959	24.204633712768555
PLCH1	3	155093369	155462856	-	26.121034622192383	5.955606937408447	3.0392892360687256
AC104472.1	3	155459933	155461515	-	0.16348351538181305	0.19281350076198578	0.004404676146805286
PTX3	3	157154578	157161417	+	221.76319885253906	32.50931930541992	44.4424934387207
RP11-538P18.2	3	158263009	158288855	-	0.005821052938699722	0.00505690835416317	0.14126762747764587
LXN	3	158363611	158390482	-	12.041769981384277	0.3589818775653839	0.02757742814719677
RARRES1	3	158414681	158450485	-	1.290647268295288	0.35354748368263245	2.42209529876709
ZBBX	3	166958075	167099134	-	0.788245677947998	0.3320736587047577	0.1457538902759552
SERPINI1	3	167453031	167543356	+	13.24069881439209	13.002973556518555	3.6927742958068848
RP11-298O21.5	3	167613736	167641799	+	0.7246070504188538	0.003503269050270319	0.0
MECOM	3	168801287	169381406	-	1.0756064653396606	1.911197543144226	3.4858410358428955
AC078802.1	3	169484713	169487683	-	2.766214370727539	0.4074357748031616	0.2538750171661377
GPR160	3	169755717	169803191	+	0.08641566336154938	0.15897144377231598	0.43034860491752625
KCNMB2	3	177990720	178562217	+	0.7523752450942993	0.1973153054714203	0.6716158390045166
AC007620.3	3	179115405	179116506	+	0.2813469171524048	0.5280098915100098	1.8674641847610474
RP11-275H4.1	3	181138846	181160274	-	0.002521319780498743	2.4083406925201416	0.2805507183074951
C3orf70	3	184795838	184870802	-	5.982478141784668	24.007503509521484	18.398162841796875
LIPH	3	185224050	185270401	-	0.5852594971656799	0.5490396618843079	0.0600361637711296
RP11-573D15.2	3	186528669	186543310	-	0.08188119530677795	0.39292800426483154	0.3955920338630676
RTP1	3	186915274	186919253	+	0.49795159697532654	0.033156879246234894	0.07836134731769562
RP11-211G3.3	3	187420101	187451637	+	0.0	0.0	0.5102021098136902
AC022498.1	3	187896331	187898598	+	0.2801158130168915	0.9272000789642334	0.033755458891391754
TPRG1	3	188665003	189043093	+	0.09017583727836609	0.09381590783596039	0.5300043225288391
IL1RAP	3	190231840	190375843	+	5.7689528465271	12.974112510681152	19.1723690032959
GMNC	3	190570666	190610218	-	0.11485076695680618	0.003236247692257166	0.0
UTS2D	3	190984957	191048325	-	0.5528600215911865	0.07502276450395584	0.13478268682956696
HRASLS	3	192958914	192995527	+	1.8743082284927368	4.826259613037109	9.516615867614746
ATP13A5	3	192992579	193096632	-	0.0	0.29554617404937744	0.12006576359272003
ATP13A5-AS1	3	193025033	193032151	+	0.0	0.44187867641448975	0.8409638404846191
ATP13A4	3	193119866	193310900	-	0.22699780762195587	1.7064703702926636	0.7582971453666687
RP11-513G11.4	3	193920805	193967942	-	1.1858404874801636	0.2024759203195572	0.07306720316410065
RP11-513G11.1	3	194014254	194030592	-	0.0103086456656456	0.020981445908546448	0.47385385632514954
AC091633.3	3	195270871	195277400	+	0.36849069595336914	0.1671776920557022	0.07495465129613876
APOD	3	195295573	195311076	-	0.8478310108184814	15.660158157348633	12.653510093688965

AC069257.9	3	195938358	195970049	+	0.010669788345694542	0.005672980099916458	0.058244477957487106
LRR33	3	196366557	196388875	+	0.13730724155902863	0.9135691523551941	2.6879589557647705
BDH1	3	197236654	197300194	-	1.0733311176300049	1.7284817695617676	3.896270275115967
ZNF732	4	264464	299110	-	0.8100851774215698	0.2315160185098648	0.006309522315859795
AC116565.1	4	570957	578655	+	1.2968474626541138	0.10297603905200958	0.2191123515367508
RNF212	4	1050038	1107350	-	0.0666646733880043	3.2165570883080363E-4	0.0
SPON2	4	1160720	1202750	-	3.1727042198181152	2.3205859661102295	0.4560813009738922
AC092535.2	4	1203908	1212363	+	0.052128564566373825	0.008532678708434105	0.6461796164512634
TMEM129	4	1717679	1723085	-	27.982877731323242	14.448073387145996	30.729896545410156
ZFYVE28	4	2271309	2420390	-	0.6541357636451721	1.4783920049667358	3.215337038040161
HGFAC	4	3443614	3451211	+	0.40381723642349243	0.3562805652618408	1.672982096672058
ADRA2C	4	3768075	3770251	+	0.5556188225746155	0.6266847252845764	0.13086068630218506
MSX1	4	4861393	4865663	+	10.519767761230469	5.537063121795654	26.110658645629883
CYTL1	4	5016313	5021199	-	2.9513862133026123	11.84931755065918	9.015658378601074
STK32B	4	5053169	5502725	+	4.139849662780762	20.91921043395996	24.42438316345215
C4orf6	4	5526296	5529528	+	0.0	0.6019077301025391	0.14602991938591003
RP11-586D19.1	4	6202460	6240044	+	0.0067139193415641785	0.08663530647754669	0.03344203159213066
RP11-367J11.2	4	7032281	7047958	-	0.045073337852954865	0.003333732020109892	0.8073658347129822
SORCS2	4	7194265	7744554	+	7.492304801940918	1.282727599143982	1.483304500579834
RP11-774O3.3	4	8357038	8359103	-	1.296958238983154	0.7061792016029358	0.26116347312927246
RP11-689P11.2	4	8483997	8514337	+	0.34322232007980347	0.2593836486339569	0.093364417552948
AC006445.1	4	13527943	13535959	-	0.07636881619691849	0.01742233708500862	0.0
PROM1	4	15964699	16086001	-	36.01165771484375	5.518557071685791	4.662255764007568
FAM184B	4	17630929	17783135	-	0.9026486277580261	2.871281147003174	3.632286787033081
AC006160.8	4	17632547	17634062	-	0.9822705388069153	3.3783223628997803	3.758582592010498
SLIT2	4	20254883	20622184	+	20.484411239624023	2.02262282371521	2.370652675628662
SOD3	4	24797085	24802464	+	3.5136842727661133	15.868894577026367	29.443758010864258
SLC34A2	4	25656923	25680370	+	1.1618640422821045	0.013606101274490356	0.028203973546624184
RP11-293A21.1	4	26861428	26862221	-	0.15467706322669983	0.8703525066375732	0.5990474224090576
RP11-431M7.3	4	36245738	36275842	+	0.027031105011701584	0.17713023722171783	0.19592560827732086
RP11-83C7.2	4	38422283	38524801	-	0.21086657047271729	0.02121107652783394	0.006862147245556116
RP11-360F5.1	4	39114297	39128438	-	0.0067476676777005196	0.009978183545172215	0.644856870174408
RHOH	4	40192673	40246281	+	0.7421905398368835	0.08919276297092438	0.0019033107673749328
CHRNA9	4	40337346	40357234	+	0.6183900833129883	12.04874038696289	3.8600456714630127
RBM47	4	40425272	40632892	-	0.2417464852330688	1.0592546463012695	1.1553796529769897
BEND4	4	42112870	42154895	-	0.1152649074792862	0.2037302851676941	0.09082967042922974
RP11-328N19.1	4	44018878	44024080	+	0.006902645342051983	0.4261086881160736	0.20585395395755768
CORIN	4	47596015	47840123	-	0.07887859642505646	0.03682631999254227	0.005288741085678339
NIPAL1	4	47916159	48042188	+	0.541357696056366	0.06442219018936157	0.059871774166822433
TXK	4	48068410	48136273	-	0.15677352249622345	0.01689615100622177	0.007855662144720554
TEC	4	48137800	48271881	-	0.6266478896141052	0.1965906322002411	0.038069531321525574
OClAD2	4	48887036	48908954	-	2.297382116317749	10.127071380615234	19.67669105529785
ERVMER34-1	4	53588785	53617807	-	0.49086931347846985	0.08352161943912506	0.09014826267957687
FIP1L1	4	54243810	55161439	+	17.495336532592773	52.75548553466797	104.74381256103516
LNX1	4	54325468	54567572	-	0.7510079145431519	1.4970169067382812	3.7405002117156982
PDGFRA	4	55095264	55164414	+	7.833108425140381	68.79097747802734	231.14276123046875
RP11-231C18.1	4	55199059	55222121	+	0.19347351789474487	0.9371066093444824	9.944374084472656
KDR	4	55944644	55991756	-	52.35768127441406	1.2826871871948242	0.4205387830734253
NMU	4	56461396	56502865	-	16.561595916748047	2.9501867294311523	2.446936845779419
ARL9	4	57371375	57390058	+	0.1582530438899994	0.3632068932056427	1.6802730560302734

RP11-584P21.2	4	68283023	68333969	-	0.18615016341209412	0.12684890627861023	0.058485157787799835
UGT2B7	4	69917081	69978705	+	0.04291713982820511	2.231574058532715	1.5676771402359009
UGT2B4	4	70345883	70391732	-	0.16762442886829376	0.0	0.0
SMR3B	4	71235810	71255961	+	8.870919227600098	0.0	0.0
ALB	4	74262831	74287129	+	0.12279722839593887	0.02514277957379818	0.014452138915657997
AFP	4	74296855	74321891	+	0.8532605767250061	0.008686438202857971	0.1309085190296173
CXCL5	4	74861359	74864496	-	1.3906986713409424	3.622021198272705	0.5128890872001648
EREG	4	75230860	75254468	+	5.074580192565918	9.341859817504883	0.0803510919213295
PARM1	4	75858305	75975325	+	11.127853393554688	1.078061819076538	0.8726130127906799
C4orf26	4	76481258	76491095	+	0.1942984014749527	0.017658283933997154	0.019255612045526505
CDKL2	4	76503215	76555900	-	1.4099048376083374	0.20150697231292725	0.08730433136224747
SHROOM3	4	77356253	77704406	+	26.0173397064209	5.805413246154785	5.364800930023193
ANKRD56	4	77816082	77819002	-	0.5097838044166565	0.014539227820932865	0.07842593640089035
FRAS1	4	78978724	79465423	+	16.412324905395508	8.877272605895996	2.0949959754943848
RP11-792D21.2	4	79567057	79603853	+	0.6668749451637268	0.15763157606124878	0.13849587738513947
BMP3	4	81952119	81978685	+	0.6638929843902588	0.0213309358805418	0.0570051372051239
PRKG2	4	82009837	82136218	-	0.06532353162765503	0.17775334417819977	0.013282449916005135
HPSE	4	84213614	84256306	-	0.31040528416633606	3.5282766819000244	1.6257679462432861
AGPAT9	4	84457067	84527028	+	1.528139352798462	7.975287437438965	10.926788330078125
CDS1	4	85504132	85572491	+	1.5128836631774902	0.07760544866323471	0.49137330055236816
MAPK10	4	86936276	87515284	-	19.283491134643555	6.189432144165039	3.651401781939697
HSD17B13	4	88224941	88244058	-	0.06438175588846207	0.3322010636329651	0.24322737753391266
DMP1	4	88571459	88585513	+	0.15435190498828888	0.008421128615736961	0.0030430264305323362
SPP1	4	88896802	88904562	+	17.328109741210938	75.63178253173828	62.95261764526367
RP11-115D19.1	4	90472507	90647654	+	0.45058003067970276	0.01991870254278183	0.0640422998588562
RP11-67M1.1	4	90757559	90763129	+	0.06707780808210373	0.008473540656268597	0.0083636324852705
BMPR1B	4	95679119	96079599	+	7.022455215454102	5.244962215423584	1.033729910850525
RP11-696N14.1	4	100010008	100222513	+	2.412137508392334	0.6517186760902405	0.4787040054798126
ADH4	4	100044808	100078949	-	0.26238957047462463	0.006327401380985975	0.006182452663779259
MTTP	4	100484918	100545156	+	18.507184982299805	7.550573825836182	3.644212007522583
RP11-766F14.2	4	100557686	100575805	-	0.6129175424575806	0.40838319063186646	0.05969487503170967
RP11-15B17.1	4	100871163	101116256	+	0.20826910436153412	0.11728637665510178	1.2752063274383545
EMCN	4	101316498	101801283	-	0.13083714246749878	0.041965555399656296	0.01113622635602951
AC018797.1	4	103698194	103720732	+	0.019938264042139053	0.0	0.20060700178146362
TACR3	4	104507188	104640973	-	0.14108285307884216	0.00888047181069851	0.0
DKK2	4	107842959	108204963	-	19.995054244995117	0.09652198851108551	0.11180782318115234
COL25A1	4	109731877	110223813	-	1.4564275741577148	1.5484353303909302	0.13172324001789093
RP11-264J9.1	4	110268631	110354973	-	1.2771432399749756	0.4694049656391144	0.459237664937973
ENPEP	4	111286889	111486441	+	0.9195960760116577	0.2542116343975067	0.0029937985818833113
PITX2	4	111538579	111563279	-	0.1981399804353714	0.135105162858963	2.2129361629486084
RP11-148B6.1	4	113567632	113571207	-	0.14975421130657196	0.0015394948422908783	1.0864357948303223
NDST4	4	115748919	116035032	-	1.7174749374389648	0.12063149362802505	0.022562513127923012
USP53	4	120133742	120216672	+	4.235335826873779	2.828464984893799	1.5144294500350952
RP11-33B1.3	4	120377505	120378432	+	0.41603726148605347	0.6867623329162598	0.1153269037604332
PDE5A	4	120415550	120550146	-	7.082594394683838	0.994234025478363	0.4973246455192566
NDNF	4	121956768	121994176	-	4.602869510650635	1.447939395904541	0.3839326500892639
TMEM155	4	122680088	122686582	-	0.8086283802986145	0.008291412144899368	0.010075313039124012
AC079341.1	4	122685740	122687962	+	0.11594818532466888	0.0	0.0
RP11-381N20.2	4	124411423	124443261	+	0.5288340449333191	0.17096294462680817	0.02095787040889263
FAT4	4	126237554	126414087	+	11.518186569213867	3.2526659965515137	0.9493107795715332

INTU	4	128544426	128637930	+	7.017510414123535	3.029695510864258	2.489386558532715
AC108062.1	4	129431493	129436412	+	0.16087545454502106	0.12995347380638123	0.018981486558914185
PCDH18	4	138440072	138453648	-	40.65492248535156	14.469721794128418	5.380078315734863
RP11-725C19.1	4	138978618	139099331	+	0.007971057668328285	0.1333111971616745	0.11477215588092804
MGST2	4	140586922	140661899	+	8.525531768798828	3.04323673248291	2.5387301445007324
UCP1	4	141480588	141489959	-	0.21006684005260468	0.0024413052015006542	0.0
RNF150	4	141786725	142134031	-	8.436368942260742	4.106062412261963	2.1671698093414307
RP11-301H24.4	4	146435767	146438270	-	0.014689397066831589	0.0	0.8044125437736511
POU4F2	4	147560045	147563626	+	0.2974470555782318	0.004836400505155325	0.0
EDNRA	4	148402069	148466106	+	10.053581237792969	2.503704786300659	3.8980894088745117
NR3C2	4	148999913	149365850	-	2.925635576248169	0.3021385073661804	0.21719151735305786
SH3D19	4	152041431	152149182	-	21.145545959472656	22.825529098510742	78.42141723632812
FAM160A1	4	152330368	152584784	+	0.6362274289131165	1.1323189735412598	2.189021587371826
TMEM154	4	153539784	153601317	-	0.9119097590446472	1.6132649183273315	3.836986780166626
SFRP2	4	154701744	154710272	-	167.271728515625	13.59510612487793	18.25872802734375
LRAT	4	155548097	155674270	+	0.3276444971561432	0.026038246229290962	0.07049056887626648
GUCY1A3	4	156587863	156653501	+	1.067765474319458	0.24915169179439545	0.10703779757022858
TDO2	4	156775890	156841558	+	0.03517737612128258	0.24120090901851654	0.33374565839767456
FSTL5	4	162305049	163085187	-	1.3688712120056152	0.5737461447715759	0.010325883515179157
NPY1R	4	164245113	164265984	-	0.31831949949264526	0.06960858404636383	2.934361219406128
RP11-294O2.2	4	165675216	165724947	+	0.0	0.17356818914413452	0.018175700679421425
RP11-366M4.3	4	165798156	165820117	+	1.004049301147461	0.1007566824555397	0.024120554327964783
TRIM61	4	165875598	165898820	-	0.6898859143257141	0.20282450318336487	0.004781518131494522
CPE	4	166282346	166419472	+	68.83504486083984	29.84647560119629	22.29652214050293
TLL1	4	166794410	167025047	+	1.7736514806747437	0.027622239664196968	0.1737479716539383
GALNTL6	4	172733405	173962710	+	0.10771261900663376	0.0271857138723135	7.226769812405109E-4
SCRG1	4	174309299	174327531	-	15.73436164855957	41.53965377807617	47.308162689208984
HAND2	4	174446120	174451380	-	0.010736838914453983	2.743499517440796	8.960461616516113
RP11-471J12.1	4	174448421	174512475	+	0.004468244966119528	0.18077372014522552	0.484693318605423
RP11-148L24.1	4	175015811	175141549	-	0.10581284761428833	0.345117449760437	0.9549942016601562
HPGD	4	175411328	175444305	-	0.35875844955444336	0.5174609422683716	0.0029522147960960865
RP11-806K15.1	4	176711458	176733340	+	0.00795659888535738	0.452183336019516	0.061156343668699265
VEGFC	4	177604689	177713881	-	3.031137228012085	2.8831090927124023	8.500207901000977
C4orf38	4	184018188	184020352	-	0.5901430249214172	0.046858787536621094	0.21778450906276703
STOX2	4	184774584	184938894	+	9.544074058532715	3.0706424713134766	2.119544267654419
RP11-739P1.2	4	184908831	184909903	+	1.7346265316009521	0.3467739522457123	0.5280450582504272
ENPP6	4	185009859	185142383	-	0.13235189020633698	1.4051287174224854	0.5075525054394897
CCDC110	4	186366336	186392913	-	0.2729199528694153	0.4731389880180359	0.07867176085710526
PDLIM3	4	186422903	186456766	-	1.9822359085083008	8.502046585083008	5.5695600509643555
SORBS2	4	186506598	186877806	-	19.29071617126465	1.7783770561218262	3.639817953109741
F11	4	187187099	187210835	+	0.04735683277249336	0.0017213390674442053	0.001019213581457734
RP11-11N5.1	4	187812431	187813520	+	0.8399362564086914	0.0357557088136673	0.0
RP11-138B4.1	4	188225237	188230836	-	0.6654845476150513	0.034342776983976364	0.0
AHRR	5	304291	438406	+	5.942341327667236	11.64631462097168	23.53717613220215
SLC9A3	5	473425	524447	-	0.03524282947182655	0.026832861825823784	0.47645848989486694
AC116351.3	5	1004860	1006734	+	0.09113617241382599	0.06782728433609009	0.00957567896693945
NKD2	5	1008944	1039058	+	3.999871015548706	1.220800518989563	0.7288286089897156
SLC12A7	5	1050499	1112172	-	18.805715560913086	5.182027816772461	2.9052419662475586
TERT	5	1253262	1295184	-	0.44675764441490173	1.38716721534729	4.710499286651611
SLC6A3	5	1392909	1445545	-	0.08238456398248672	0.00265865633264184	0.0018020307179540396

IRX2	5	2745959	2752969	-	32.00910949707031	9.226737022399902	0.5979104042053223
C5orf38	5	2752245	2755508	+	7.897872447967529	1.3132840394973755	1.2736635208129883
CTD-2012M11.2	5	3609099	3612053	+	0.9810782670974731	1.2382439374923706	0.0843365490436554
ADCY2	5	7396321	7830194	+	3.0998611450195312	0.5945339202880859	0.19669976830482483
C5orf49	5	7830491	7851603	-	1.37318754196167	0.16299869120121002	0.2658304274082184
RP11-480D4.1	5	8333596	8457671	-	0.022512489929795265	0.6784710884094238	0.3016747534275055
RP11-480D4.2	5	8387751	8457677	-	0.03740664944052696	1.3231405019760132	0.747447291107178
RP11-480D4.3	5	8457606	8460776	+	1.1097277402877808	8.834355354309082	20.999744415283203
RP11-417J1.4	5	8839844	8881637	+	0.08465668559074402	1.1367509365081787	1.2092187404632568
FAM105A	5	14581884	14615073	+	5.815214157104492	0.6630451083183289	1.4782865047454834
FAM134B	5	16473147	16617167	-	2.716358184814453	16.72697639465332	15.875164031982422
AC091878.1	5	17130137	17217508	-	0.6041643023490906	0.0024275348987430334	0.02183900773525238
BASP1	5	17217669	17276943	+	178.3608856201172	10.182781219482422	60.014984130859375
RP11-454P21.1	5	17684693	17955966	+	0.7468433976173401	0.004980051424354315	0.0
CTD-2023M8.1	5	18704542	18746282	-	0.07070507854223251	0.7273659706115723	0.3260529041290283
CDH18	5	19473060	20575982	-	1.3578628301620483	0.3586864471435547	0.003302203956991434
RP11-46C20.1	5	27472399	27496508	+	27.016448974609375	1.614455223083496	3.8288440704345703
ADAMTS12	5	33523640	33892297	-	22.48257827758789	3.227844476699829	7.4640679359436035
RXFP3	5	33936491	33939023	+	0.3948487341403961	0.002504640258848667	0.05246080085635185
TTC23L	5	34838938	34899561	+	0.6204953789710999	0.20726285874843597	0.14874935150146484
PRLR	5	35048861	35230794	-	0.14206738770008087	0.1344023048877716	0.021440301090478897
RP11-122C5.1	5	38710469	38720375	-	0.0024103366304188967	0.07938661426305771	0.22877854108810425
RP11-122C5.3	5	38783682	38792856	+	0.0383247546851635	0.02950422838330269	0.3825003206729889
AC091435.1	5	38819804	38821581	-	0.06486456841230392	0.30007246136665344	0.3312762975692749
OSMR	5	38845960	38945698	+	8.444107055664062	16.848005294799805	30.153188705444336
PTGER4	5	40679600	40693837	+	5.181258678436279	1.913489818572998	2.683208703994751
FBXO4	5	41925356	41941845	+	1.5667225122451782	3.3372395038604736	7.369717121124268
AC114947.1	5	43192173	43280952	+	0.8593465089797974	8.429301261901855	11.725905418395996
HMGCS1	5	43289497	43313614	-	408.7374267578125	99.43463134765625	111.6217269897461
FGF10	5	44303646	44389808	-	3.1425607204437256	0.5635619163513184	0.003768363269045949
HCN1	5	45259349	45696253	-	0.884385883808136	0.08595302700996399	0.016771884635090828
EMB	5	49692026	49739082	-	8.66259479522705	1.040844202041626	0.02553214319050312
ITGA1	5	52083730	52252327	+	4.98482084274292	1.2468621730804443	0.8693912029266357
RP11-461C13.1	5	53616774	53710957	+	0.014069100841879845	0.3834136724472046	0.35129809379577637
HSPB3	5	53751445	53752207	+	0.0061274426989257336	5.478011608123779	0.37417417764663696
GPX8	5	54455946	54462899	+	48.50954818725586	8.612879753112793	17.403566360473633
RP11-528L24.3	5	54515442	54523143	-	0.18896500766277313	0.2746589779853821	1.528857946395874
CCNO	5	54526980	54529508	-	0.7540088295936584	0.6310397386550903	7.55418062210083
RP11-506H20.1	5	54529762	54591029	+	0.027869731187820435	0.026336347684264183	0.86893230676651
IL31RA	5	55147207	55218678	+	0.6832297444343567	0.4881979525089264	5.819139003753662
CTC-236F12.4	5	55753622	55777773	-	0.18484939634799957	0.4492575228214264	0.8158829212188721
AC022431.2	5	55807394	55902059	-	0.011803516186773777	0.4664404094219208	0.8465694785118103
AC022431.3	5	55832410	55833653	-	0.004259171895682812	0.2538028359413147	0.2936111390590668
MAP3K1	5	56111401	56191979	+	13.563015937805176	45.81208038330078	41.726158142089844
PDE4D	5	58264865	59817947	-	6.133786678314209	2.829444408416748	2.01192307472229
C5orf64	5	60933535	61047590	+	0.24985578656196594	0.1338954120874405	0.03184124454855919
RP11-141O11.2	5	68266519	68325992	-	0.022776223719120026	0.14767993986606598	0.41558390855789185
CTC-498J12.1	5	68334345	68339648	-	0.07411763072013855	0.3723457157611847	1.7920666933059692
CTC-498J12.3	5	68408939	68432221	-	0.13854584097862244	0.6149621605873108	0.8925617337226868
CCDC125	5	68576002	68628636	-	0.7135626673698425	2.6366689205169678	3.1524088382720947

ZNF366	5	71738479	71803554	-	0.041677091270685196	0.03154555335640907	0.003941296134144068
RP11-60A8.1	5	72509774	72590761	+	0.0	0.07273439317941666	1.2177010774612427
RP11-79P5.8	5	72678211	72706336	+	0.744907796382904	0.0023289229720830917	0.0
RP11-79P5.6	5	72740654	72742815	-	1.6643565893173218	3.6056883335113525	10.73339309692383
RP11-79P5.2	5	72742184	72742811	+	0.00842750631272928	0.0	2.190330982208252
RP11-79P5.7	5	72747323	72749220	+	0.012518111616373062	0.049953412264585495	0.2892496585845947
GCNT4	5	74323289	74326724	-	3.1053695678710938	0.9054473042488098	0.7594066262245178
RP11-229C3.2	5	74343544	74348668	-	1.4699488878250122	0.3727017641067505	0.7837579846382141
ANKRD31	5	74364100	74532703	-	0.47323134541511536	0.19505371153354645	0.1309341937303543
IQGAP2	5	75699074	76003957	+	20.4343204498291	8.997188568115234	3.2197630405426025
F2RL2	5	75911328	75919259	-	4.227703285217285	0.9275504350662231	7.437429428100586
CTD-2384B11.2	5	75987264	76012040	-	0.2231748402118683	0.02290918678045273	0.053130462765693665
S100Z	5	76145826	76217475	+	0.01603853702545166	0.0	0.31803974509239197
CRHBP	5	76248538	76276983	+	5.909963130950928	0.6310052275657654	0.9409295916557312
OTP	5	76924538	76935513	-	0.16289275884628296	0.261881947517395	0.5145955681800842
CTD-2201I18.1	5	79348197	79379477	-	0.025623193010687828	0.09130486845970154	0.08177757263183594
RASGRF2	5	80256491	80525975	+	3.8018176555633545	0.1573079377412796	5.242056369781494
VCAN-AS1	5	82827171	82877139	-	0.06787704676389694	0.005538425873965025	0.7049828171730042
HAPLN1	5	82933624	83017432	-	1.2857215404510498	7.187802314758301	6.100025177001953
EDIL3	5	83236373	83680611	-	22.36871337890625	8.58653450012207	6.560269355773926
CTD-2269F5.1	5	83680245	83786583	+	1.9849064350128174	0.3714967966079712	0.43535077571868896
RP11-72L22.1	5	86263138	86433529	+	0.0	0.5553423762321472	0.7742559909820557
CTD-2316B1.1	5	86957859	86974964	+	0.003345002420246601	0.8837412595748901	0.8951379060745239
LINC00461	5	87803363	87986858	-	6.959759712219238	26.423622131347656	30.131372451782227
CTC-467M3.2	5	87987574	87988676	+	0.02103133499622345	0.3424297571182251	0.10813544690608978
CTC-454M9.1	5	88179145	88762215	+	0.061880361288785934	0.2998179793357849	0.28498396277427673
ELL2	5	95220802	95297775	-	7.7303571701049805	4.000259876251221	2.7622275352478027
PCSK1	5	95726119	95769847	-	4.147581100463867	1.3755340576171875	0.21745561063289642
LIX1	5	96427574	96478576	-	7.991994380950928	0.6325619220733643	0.0500570610165596
RP11-155G15.2	5	96519303	96772921	+	0.1847888976335255	0.20749452710151672	0.02732248418033123
RP11-1E3.1	5	96840400	97006750	+	0.45832160115242004	0.11063354462385178	0.0942474827170372
RP11-455B3.1	5	97217124	97258399	+	0.8485701680183411	0.15816736221313477	0.06302517652511597
ST8SIA4	5	100145357	100238970	-	16.021203994750977	2.019282341003418	2.3871295452111792
SLCO4C1	5	101569690	101632253	-	0.515882670879364	0.011225814931094646	0.0012245711404830217
EFNA5	5	106712590	107006596	-	22.728321075439453	2.12113094329834	4.181423664093018
AC034207.1	5	108061406	108063994	+	0.03501284494996071	0.0283668152987957	0.13018476963043213
RP11-231G15.2	5	108803054	108803653	+	0.03963860869407654	0.3182435929775238	0.18409042060375214
RP11-231G15.3	5	108806544	108807287	+	0.02443203143775463	0.3804037868976593	0.18491272628307343
TMEM232	5	109624934	110074657	-	0.39731985330581665	0.17980249226093292	0.11257603019475937
CTC-426B10.1	5	110847924	111075423	+	1.2649445533752441	0.06951957195997238	0.2312067747116089
C5orf13	5	110998318	111333161	-	75.59516143798828	16.68244171142578	13.13073444366455
EPB41L4A	5	111478138	111755013	-	7.344493865966797	1.4137728214263916	2.1734321117401123
RP11-159K7.2	5	111964133	111967797	+	0.29935532808303833	0.0298151932656765	0.011943728663027287
TSSK1B	5	112768251	112770728	-	0.03207177296280861	0.07158277928829193	0.0015263037057593465
KCNN2	5	113696666	113832321	+	0.22881275415420532	1.866343379020691	3.556394577026367
AC010226.4	5	114937754	114956356	+	0.054197039451754	0.1387193650007248	0.7043452858924866
CDO1	5	115140430	115152651	-	39.17429733276367	5.508474349975586	9.967375755310059
AC026449.1	5	115150892	115152356	+	0.1224176436662674	0.0055181002244353294	0.010470383800566196
SNCAIP	5	121647049	121799914	+	9.087634086608887	2.2358310222625732	0.7397652268409729
RP11-43D2.5	5	124056705	124057375	-	0.23052430152893066	1.4341588020324707	0.016837770119309425

RP11-436H11.5	5	124070311	124070868	-	0.41730552911758423	1.7750502824783325	0.06672050803899765
C5orf63	5	126378250	126409184	-	0.11750566959381104	0.37773993611335754	0.880695641040802
FBN2	5	127593601	127994878	-	72.898681640625	5.249448299407959	12.279019355773926
SLC27A6	5	127873706	128369335	+	0.47261175513267517	0.035238318145275116	0.14502567052841187
AC034228.3	5	131339285	131342715	+	0.10156525671482086	0.35520270466804504	0.31293803453445435
PDLIM4	5	131593364	131609147	+	11.475844383239746	12.665189743041992	36.1849555962383
AC034220.3	5	131646978	131705608	-	1.4754810333251953	0.4707967936992645	0.44945842027664185
AC004041.2	5	131966281	131999964	-	0.006064787972718477	0.011285289190709591	0.26025763154029846
CCNI2	5	132083137	132089856	+	0.03115859627723694	0.018686659634113312	0.13308946788311005
PHF15	5	133860003	133918918	+	2.5308384895324707	3.7129533290863037	9.389697074890137
PITX1	5	134362615	134370503	-	0.12521150708198547	3.6409623622894287	18.157062530517578
CTC-203F4.1	5	134368970	134691744	+	0.052908360958099365	0.4975831210613251	1.0445786714553833
CTC-349C3.1	5	134369072	134551255	+	0.00354887917637825	0.29974839091300964	0.42509403824806213
SLC25A48	5	135170338	135224326	+	0.0	0.3653252124786377	0.015345633029937744
PKD2L2	5	137223657	137278436	+	0.002166162244975567	0.006774995010346174	0.07256924360990524
RP11-256P1.1	5	137682716	137685330	-	0.033194396644830704	0.0	0.44559118151664734
CTB-46B19.2	5	138348336	138386892	+	0.0044214786030352116	0.0028562485240399837	0.07567500323057175
CTB-43P18.1	5	138700366	138705406	-	0.07033460587263107	0.001722657703794539	1.0382781028747559
NRG2	5	139226364	139422884	-	1.2660936117172241	3.2458999156951904	5.801568508148193
HBEGF	5	139712428	139726216	-	26.539037704467773	10.452889442443848	8.868830680847168
AC005609.17	5	140240341	140243224	-	0.37341952323913574	0.07965534925460815	0.1284542977809906
PCDHB1	5	140430979	140433512	+	0.02672436088323593	0.09400461614131927	0.16441631317138672
PCDHB2	5	140474227	140476962	+	32.66316223144531	4.541581153869629	11.044373512268066
PCDHB3	5	140480234	140483406	+	2.150096893310547	2.14477276802063	7.128629207611084
PCDHB4	5	140501581	140505201	+	0.7919519543647766	0.6721728444099426	5.654262542724609
PCDHB5	5	140514800	140517703	+	6.693089485168457	8.423470497131348	25.987030029296875
PCDHB6	5	140529683	140532868	+	0.43849635124206543	0.35438257455825806	2.925710678100586
PCDHB17	5	140535577	140538639	+	0.21722246706485748	0.4709402322769165	1.7066802978515625
PCDHB7	5	140552243	140555957	+	1.0535616874694824	3.7337498664855957	5.198052883148193
PCDHB8	5	140557371	140560081	+	0.5466760396957397	1.5999618768692017	4.261305809020996
PCDHB11	5	140579183	140582618	+	2.241920232772827	1.6922860145568848	0.6460785865783691
PCDHGC3	5	140855580	140892542	+	100.83246612548828	151.14585876464844	359.4989318847656
AC008781.7	5	140997981	141006048	+	0.08822091668844223	0.0018389784963801503	0.3760106861591339
PCDH12	5	141323150	141349304	-	0.44878748059272766	3.3163981437683105	3.109313726425171
PLAC8L1	5	145463949	145483932	-	2.6379473209381104	0.5454757213592529	0.9024002552032471
RP11-118M9.3	5	145478969	145499975	+	0.014867299236357212	0.0	0.5619946122169495
CTC-255N20.1	5	146559767	146614422	-	0.039783231914043427	0.930965006351471	0.40400567650794983
SPINK5	5	147405246	147516852	+	1.3371779918670654	0.030049320310354233	0.0
CTD-2283N19.1	5	147809722	147810370	+	0.5720817446708679	0.38277244567871094	0.14003582298755646
AFAP1L1	5	148651434	148721365	+	1.0580850839614868	10.703388214111328	8.403554916381836
IL17B	5	148750887	148783765	-	0.3826695382595062	0.02783199722387314	0.0319766104221344
PPARGC1B	5	149109861	149234585	+	0.49774235486984253	3.137179136276245	2.452301502227783
PDE6A	5	149237519	149324356	-	0.002367031294852495	0.15287554264068604	0.03165155649185181
PDGFRB	5	149493400	149535423	-	29.671436309814453	8.993335723876953	7.08713960647583
AC005895.3	5	149516867	149535435	-	20.01642417907715	4.679412364959717	2.487680673599243
SYNPO	5	149980642	150038782	+	1.7616863250732422	5.090090274810791	9.500778198242188
C5orf62	5	150157508	150176296	+	10.361190795898438	26.278791427612305	40.23420715332031
IRGM	5	150226085	150280298	+	0.00844370387494564	0.08891724050045013	0.15072154998779297
CTB-113P19.1	5	151056506	151104343	+	0.10514171421527863	0.042526938021183014	0.020565036684274673
CTB-12O2.1	5	151329132	151650009	+	0.05731678009033203	0.006594308186322451	0.015642158687114716

GRIA1	5	152869175	153193240	+	36.02237319946289	2.7579314708709717	5.607543468475342
SGCD	5	155297354	156194499	+	1.2135308980941772	1.8088384866714478	0.1100265234708786
CTC-248O19.1	5	156687132	156693635	-	0.13443754613399506	0.039828140288591385	0.02749021351337433
AC008676.1	5	156802749	156811947	+	0.6408782005310059	0.31343844532966614	0.12284637987613678
EBF1	5	158122924	158526788	-	9.539383888244629	1.9057464599609375	1.46339750289917
RP11-175K6.1	5	158527491	158544486	+	1.333965539932251	0.19702838361263275	0.1269439160823822
CCNG1	5	162864575	162875197	+	94.96363067626953	31.804576873779297	33.33818054199219
CTC-353G13.1	5	167364722	167380474	-	0.26756587624549866	0.014241624623537064	0.009851980023086071
SLIT3	5	168088745	168728133	-	2.167539358139038	0.021937230601906776	0.33068591356277466
LCP2	5	169673241	169725231	-	0.022745197638869286	0.09786001592874527	0.1647779494524002
RANBP17	5	170288874	170727019	+	3.288022518157959	1.2218537330627441	0.2591865062713623
FGF18	5	170846660	170884627	+	2.2052981853485107	0.0719590038061142	0.17846116423606873
STC2	5	172741716	172756506	-	14.455118179321289	4.112478256225586	3.2991983890533447
RP11-267A15.1	5	173763298	173959460	+	0.012230913154780865	0.3939245045185089	0.1232306957244873
CPLX2	5	175223313	175311023	+	4.669792175292969	0.5132023096084595	0.7092129588127136
RP11-843P14.2	5	175774944	175780587	+	0.03713829815387726	0.04556315764784813	0.7122510671615601
FGFR4	5	176513887	176525145	+	0.491847425699234	1.1818891763687134	1.9074413776397705
N4BP3	5	177540444	177553088	+	2.7987220287323	0.36915892362594604	0.20480358600616455
COL23A1	5	177664619	178017556	-	5.464707851409912	3.65405535697937	0.15342168509960175
ADAMTS2	5	178537852	178772431	-	3.6323750019073486	0.8180528283119202	0.05277889594435692
SCGB3A1	5	180017103	180018540	-	1.6245571374893188	0.013242853805422783	0.0
FLT4	5	180028506	180076624	-	1.9930648803710938	0.28665709495544434	0.0033502273727208376
CTC-205M6.2	5	180257957	180262726	+	1.733651876449585	5.114240646362305	6.990520477294922
BTNL9	5	180467225	180488523	+	0.04968966543674469	0.002813645638525486	0.0
TRIM7	5	180620924	180632293	-	0.33743906021118164	0.7840999960899353	1.5054166316986084
CTC-338M12.6	5	180622496	180630103	+	0.014860738068819046	0.11731888353824615	0.09213118255138397
CTC-338M12.7	5	180651646	180657685	-	0.03609341010451317	0.014825505204498768	0.24326419830322266
CTC-338M12.9	5	180708376	180710653	+	10.587989807128906	2.5313618183135986	0.18288414180278778
IRF4	6	391739	411447	+	0.09377527236938477	0.4333418011665344	2.8183748722076416
SERPIN9	6	2887500	2903514	-	1.9120675325393677	0.5481195449829102	0.18920862674713135
RP1-40E16.9	6	3182978	3195990	-	12.396072387695312	6.183806896209717	2.1727216243743896
C6orf201	6	4079440	4131185	+	0.010088491253554821	7.217524107545614E-4	0.24375313520431519
NRN1	6	5998232	6007200	-	6.591712951660156	78.92403411865234	68.8741683959961
RP11-405O10.2	6	7183316	7185520	+	0.3268703520298004	0.9088864922523499	0.048029035329818726
RP11-69L16.4	6	7276264	7299105	+	0.0	0.02061631716787815	0.5093390345573425
DSP	6	7541808	7586950	+	8.423318862915039	1.6914212703704834	6.944250583648682
RP11-314C16.1	6	8784411	8785678	+	0.7716039419174194	0.1669485718011856	0.13716192543506622
TFAP2A	6	10393419	10419892	-	0.32141587138175964	5.628828048706055	2.9910731315612793
RP1-290I10.6	6	10409573	10416679	+	0.18411195278167725	1.8826096057891846	1.8452348709106445
NEDD9	6	11183531	11382581	-	20.48474884033203	9.137174606323242	6.127336025238037
RP11-456H18.2	6	12007903	12009089	+	0.26069164276123047	0.02352975681424141	0.08164963126182556
PHACTR1	6	12717893	13288645	+	1.3391109704971313	0.6150155067443848	0.15777409076690674
RBM24	6	17281577	17294106	+	16.432931900024414	1.297995924949646	3.3644027709960938
AL023807.2	6	17878685	17882609	-	0.07214440405368805	0.28050458431243896	0.013004126958549023
NHLRC1	6	18120718	18122851	-	1.0642032623291016	0.15328460931777954	0.31056714057922363
RP1-167F1.2	6	19535175	19640814	-	0.5511951446533203	0.22811450064182281	0.03318281099200249
DCDC2	6	24171984	24358280	-	0.553084135055542	1.214388370513916	0.6429264545440674
KIAA0319	6	24544332	24646383	-	0.40503841638565063	0.3362120985984802	1.6480671167373657
FAM65B	6	24804513	25042238	-	23.24412727355957	5.179453372955322	3.0467541217803955
HIST1H1A	6	26017260	26018040	-	3.983541965484619	8.473946571350098	12.34898853302002

HIST1H3B	6	26031817	26032288	-	130.91278076171875	886.7344970703125	421.84002685546875
HIST1H4C	6	26104104	26104518	+	90.46809387207031	551.2315673828125	303.51971435546875
HIST1H3D	6	26197068	26199521	-	91.74144744873047	528.4163208007812	234.89016723632812
HIST1H2AD	6	26199079	26199471	-	100.88813018798828	589.8884887695312	273.7840576171875
HIST1H4E	6	26204858	26206266	+	38.16884994506836	227.35325622558594	103.9439697265625
HIST1H3E	6	26225383	26225844	+	61.415626525878906	104.10314178466797	42.271183013916016
HIST1H1D	6	26234440	26235216	-	46.76478958129883	373.7303161621094	151.91673278808594
HIST1H3F	6	26250370	26250835	-	91.10844421386719	524.656982421875	320.8822937011719
HIST1H4H	6	26281283	26285762	-	36.60450744628906	196.3770294189453	96.97618103027344
HIST1H4I	6	27107076	27108418	+	15.11911392211914	37.38766098022461	2.3005635738372803
HIST1H2AH	6	27114861	27115317	+	81.15235137939453	416.7474060058594	233.6144561767578
HIST1H1B	6	27834570	27835359	-	116.51750183105469	766.6198120117188	326.1460876464844
NKAPL	6	28227098	28228736	+	0.2533548176288605	0.08674538880586624	0.07608252763748169
PPP1R11	6	30034486	30038110	+	1.2854418754577637	0.17413969337940216	0.4040653705596924
MDC1	6	30667584	30685666	-	0.012805691920220852	0.067874975502491	0.12305611371994019
TUBB	6	30687978	30693203	+	0.04256058484315872	0.04780532419681549	0.19087351858615875
CDSN	6	31082867	31088223	-	0.13812436163425446	0.0	0.0
CCHCR1	6	31110216	31126015	-	0.4181840419769287	0.26937586069107056	1.9108314514160156
HLA-C	6	31236526	31239907	-	4.869870662689209	3.35500168800354	33.301300048828125
DDAH2	6	31694815	31698394	-	5.60806082000732	0.1867317259311676	0.8384837508201599
VAR5	6	31745295	31763730	-	0.052948739379644394	0.04778750613331795	0.4751864969730377
AGPAT1	6	32135989	32145873	-	2.528676748275757	1.0005587339401245	0.3940417170524597
AGER	6	32148745	32152101	-	0.08454467356204987	0.0061917131430590153	0.012395435012876987
BRD2	6	32936437	32949282	+	0.3223516345024109	0.926292359828949	1.1940011978149414
WDR46	6	33246885	33257304	-	0.0	0.6372089982032776	0.343243807554245
KIFC1	6	33359313	33377701	+	0.01738165132701397	0.44162464141845703	0.15096065402030945
PHF1	6	33378176	33384230	+	0.13391035795211792	0.33782896399497986	1.7686785459518433
SYNGAP1	6	33387847	33421466	+	0.21313795447349548	0.411679208278656	1.0294750928878784
MLN	6	33762450	33771788	-	0.22672364115715027	0.0	0.0
TCP11	6	35085848	35116387	-	0.04908137768507004	0.10233516991138458	0.0077958060428500175
SCUBE3	6	35182190	35220856	+	17.386802673339844	1.622972011566162	2.024656295776367
DEF6	6	35265595	35289548	+	0.5375596880912781	0.3457373380661011	0.08236658573150635
TEAD3	6	35441374	35464861	-	30.110034942626953	7.864656448364258	8.908040046691895
CDKN1A	6	36644305	36655116	+	239.4443817138672	64.2260513305664	73.00276947021484
TMEM217	6	37179956	37225931	-	1.3578071594238281	0.378599613904953	0.33093270659446716
DNAH8	6	38683117	38998301	+	0.0262432973831892	0.028502246364951134	0.005774894263595343
KCNK5	6	39156749	39197226	-	1.3852671384811401	0.8666253685951233	0.11082478612661362
KCNK17	6	39266777	39282329	-	1.377790069580078	0.0134666077926445	0.0
DAAM2	6	39760142	39872648	+	4.747859001159668	1.9239327907562256	0.3624652624130249
TREM1	6	41243712	41254457	-	0.16717985272407532	3.0209741592407227	2.167189598083496
USP49	6	41762107	41863099	-	6.525424480438232	2.250518321990967	2.3958325386047363
RP11-298J23.6	6	41763707	41764356	-	11.522356986999512	2.730232000350952	3.8031387329101562
GUCA1A	6	42123144	42147794	+	0.28369298577308655	0.06104688346385956	0.0
C6orf223	6	43968317	43972887	+	0.3158665895462036	2.9911587238311768	3.5601999759674072
CAPN11	6	44126548	44152139	+	0.06701654940843582	0.01873791590332985	0.0
TMEM151B	6	44238203	44346694	+	5.8549275398254395	0.5428289771080017	0.7024306654930115
SUPT3H	6	44777054	45345690	-	8.94774341583252	4.127244472503662	3.4615108966827393
CYP39A1	6	46517541	46620523	-	0.2245931327342987	0.13546019792556763	1.0460872650146484
PLA2G7	6	46671938	46703430	-	0.044261325150728226	0.08140086382627487	0.586654782295227
MLIP	6	53794780	54131078	+	0.6268090605735779	2.418074369430542	0.7069776058197021

HMGCLL1	6	55299167	55444012	-	0.8514904379844666	0.008989214897155762	0.01242345105856657
BMP5	6	55618443	55740362	-	2.5778770446777344	0.4595497250556946	0.07988382875919342
XXbac-BPG55C20.7	6	58291908	58298496	+	0.08410762995481491	1.3897260427474976	0.9063776135444641
RP1-240B8.3	6	62340138	62390954	-	2.7851035594940186	0.23360155522823334	0.03522702306509018
KHDRBS2	6	62390139	62996132	-	5.8634443283081055	0.4967825710773468	0.004174342844635248
COL19A1	6	70576463	70919679	+	0.6250990033149719	6.798340797424316	5.18384313583374
B3GAT2	6	71566382	71666741	-	0.8975050449371338	0.36458948254585266	3.3449203968048096
RP11-154D6.1	6	71961061	72037787	-	0.4367811381816864	0.07775931805372238	0.1320728063583374
LINC00472	6	72054047	72130472	-	8.7938814163208	2.217503786087036	0.8469125032424927
RIMS1	6	72596406	73112845	+	1.210012435913086	0.9777572751045227	0.01687563769519329
KCNQ5-IT1	6	73340223	73388282	+	0.1467716246843338	1.2655830383300781	0.23585304617881775
KHDC1	6	73951037	74020088	-	0.8621073961257935	1.063420295715332	3.395881175994873
CD109	6	74405508	74538040	+	3.31156587600708	11.643860816955566	21.338775634765625
FILIP1	6	76005626	76203496	-	1.3745088577270508	0.3036477863788605	0.2482176274061203
HTR1B	6	78171948	78173490	-	1.4844379425048828	0.11166384816169739	0.0
RP11-250B2.3	6	81153061	81175644	+	1.9897297620773315	0.5225191116333008	0.5666438937187195
PRSS35	6	84222194	84235423	+	2.0339112281799316	1.366736650466919	9.504597663879395
RIPPLY2	6	84562985	84567234	+	0.2287175953388214	0.8104661107063293	1.8367937803268433
C6orf163	6	88054571	88075181	+	1.6326804161071777	1.3800382614135742	0.49914827942848206
RP1-102H19.6	6	88081311	88102519	+	1.4034183025360107	0.8630954027175903	0.35410210490226746
C6orf164	6	88106840	88109467	+	1.3498210906982422	0.5754406452178955	0.307925523274231
AL079342.1	6	89674246	89676685	+	0.20588645339012146	0.3227185010910034	0.04954303056001663
BACH2	6	90636248	91006627	-	6.638938903808594	2.0854721069335938	2.450047731399536
EPHA7	6	93949738	94129265	-	8.516843795776367	1.3498761653900146	0.4533065855503082
RP1-104O17.1	6	98150157	98155979	+	0.06124178320169449	0.8669081926345825	1.0057460069656372
SIM1	6	100832891	100912805	-	0.5178483724594116	0.012981105595827103	0.0
C6orf220	6	105384169	105388402	-	0.4107409417629242	0.06453360617160797	0.0
LIN28B	6	105404923	105531207	+	29.018875122070312	1.6976065635681152	1.7075315713882446
POPDC3	6	105606155	105627870	-	1.395351529121399	1.886488914489746	7.1764373779296875
AIM1	6	106808784	107018335	+	1.9106674194335938	7.508687496185303	13.856874465942383
NR2E1	6	108487262	108510013	+	0.7816846966743469	1.858278512954712	7.232146263122559
C6orf186	6	110567131	110679475	-	0.6767873167991638	4.532915190793574E-4	0.0
RP11-544L8_B.4	6	114225302	114242806	+	0.14371371269226074	0.05256330594420433	0.025309229269623756
RP3-399L15.3	6	114290865	114792869	+	0.6459282636642456	0.19437015056610107	0.2071186751127243
NT5DC1	6	116421999	116566855	+	9.375944137573242	3.8487043380737305	3.5973479747772217
DSE	6	116575336	116759442	+	26.019287109375	6.190108299255371	4.805902481079102
RP1-93H18.1	6	116601362	116691436	+	0.45930007100105286	0.32979148626327515	0.10408538579940796
FAM26F	6	116782533	116784934	+	0.3508458435535431	0.19829899072647095	0.029856182634830475
BET3L	6	116816152	116866773	-	0.0491114966571331	0.0035601751878857613	0.0
FAM26E	6	116832809	116845955	+	7.70772647857666	0.5374253392219543	0.0470123216509819
RSPH4A	6	116937642	116954148	+	2.139253854751587	0.38525545597076416	0.38662874698638916
FAM162B	6	117073363	117086886	-	1.4111791849136353	0.43366894125938416	0.0
FAM184A	6	119280928	119470552	-	7.225090026855469	3.2404592037200928	2.4041900634765625
MAN1A1	6	119498374	119670926	-	15.785573959350586	2.594891309738159	4.761641025543213
RP11-574H13.2	6	122907064	122910009	+	3.8820507526397705	0.10236629098653793	0.0
CLVS2	6	123317116	123385612	+	2.649468183517456	0.30422326922416687	0.062174566090106964
RP11-160A10.2	6	123391444	123394062	+	0.8415278196334839	0.10129758715629578	0.00947511661797762
RP11-160A10.3	6	123392316	123393064	+	0.7452722191810608	0.08182623982429504	0.02086089923977852
NKAIN2	6	124125286	125146803	+	1.2625172138214111	0.02551238052546978	0.001316388719715178
TPD52L1	6	125440195	125585553	+	8.024846076965332	0.8527775406837463	1.8094042539596558

RP11-624M8.1	6	125899713	126070332	-	0.022578397765755653	0.6852841973304749	0.5481649041175842
HEY2	6	126068810	126082415	+	1.085964560508728	12.545985221862793	11.805281639099121
RSPO3	6	127439749	127518910	+	0.08217056840658188	0.0657673180103302	0.005276345647871494
RP1-86D1.3	6	128768789	128770446	-	0.11437013000249863	0.4409402310848236	0.018027471378445625
LAMA2	6	129204286	129837714	+	9.650967597961426	4.808103084564209	1.2172857522964478
ENPP3	6	131949582	132068553	+	0.11660207062959671	0.11382659524679184	0.035106390714645386
ENPP1	6	132129156	132216295	+	4.524204254150391	3.940580129623413	1.6063998937606812
CTGF	6	132269316	132272513	-	305.1776428222656	69.75275421142578	51.52618408203125
RP3-523C21.1	6	132453055	132490514	+	0.09540088474750519	0.4211372137069702	0.01435338705778122
LINC00326	6	133409219	133427717	+	0.2906205356121063	0.08687091618776321	0.0663033276796341
SLC2A12	6	134309835	134373774	-	15.66600227355957	2.1206626892089844	6.343719005584717
MAP3K5	6	136878185	137113656	-	1.6531248092651367	3.7423951625823975	6.831968784332275
SLC35D3	6	137243402	137246777	+	0.007789728697389364	0.20237940549850464	0.11331162601709366
IL20RA	6	137321108	137366298	-	0.014788583852350712	0.08950578421354294	0.08612434566020966
KIAA1244	6	138483058	138665800	+	0.41501376032829285	5.427945137023926	3.7666401863098145
RP11-390P2.4	6	139013685	139018425	+	7.309313774108887	17.010189056396484	23.860258102416992
RP11-12A2.3	6	139791301	139794192	-	0.7354402542114258	0.11400845646858215	0.1499975621700287
RP3-460G2.2	6	141167095	141174061	-	0.3868884742259979	1.9040250778198242	1.1453571319580078
RP1-20N2.6	6	143824531	143827475	+	0.06160113587975502	0.11811563372612	3.2640042304992676
PHACTR2	6	143857982	144152322	+	12.451415061950684	4.268578052520752	3.65006947517395
PLAGL1	6	144261437	144385735	-	22.233203887939453	2.3483614921569824	1.652439832687378
STX11	6	144471663	144509507	+	2.203746795654297	0.5211790800094604	0.18122701346874237
UTRN	6	144606837	145174170	+	26.48066520690918	14.534725189208984	9.131400108337402
RAET1L	6	150339470	150346668	-	0.024227989837527275	0.02300373464822769	0.5544494390487671
C6orf97	6	151815165	151942328	+	0.313509464263916	0.04781520739197731	0.09438611567020416
ESR1	6	151977826	152450754	+	0.2668917179107666	0.03885612264275551	0.002613583579659462
IPCEF1	6	154475631	154677926	-	0.0751815214753151	0.6179470419883728	0.3195735514163971
FNDC1	6	159590429	159693141	+	0.06629124283790588	0.012328343465924263	0.4094776511192322
ACAT2	6	160181360	160200144	+	154.94007873535156	31.92306900024414	50.3083381652832
RP1-257A15.1	6	163463589	163475193	-	0.13896538317203522	0.005812427960336208	0.0
AL590482.2	6	166193757	166399984	-	0.280641108751297	0.7471824884414673	0.029580052942037582
SDIM1	6	166307330	166309725	-	0.10215988755226135	0.5320611596107483	0.0066078524105250835
RP11-568A7.3	6	167650996	167653968	-	1.7354618310928345	0.027089526876807213	0.0
DACT2	6	168693512	168720434	-	0.358431339263916	0.002387125976383686	0.001729313051328063
SMOC2	6	168841831	169073984	+	0.6972446441650391	0.11201774328947067	0.03632022440433502
RP1-266L20.4	6	170125600	170139088	+	1.2738560438156128	0.43941229581832886	0.3806792199611664
LINC00242	6	170188886	170198921	-	0.4033823311328888	0.05659248307347298	0.13678303360939026
AC093627.10	7	149597	155465	+	0.0503276102244854	0.2486468404531479	0.13724584877490997
AC147651.3	7	560028	564869	+	0.20044103264808655	0.6495291590690613	1.6130667924880981
RP11-449P15.1	7	1094996	1098897	-	0.04716935381293297	0.4885239899158478	0.16013936698436737
TMEM184A	7	1585796	1600457	-	0.020650530233979225	0.04907887801527977	0.1788746863603592
PPP1R28	7	1748724	1786719	+	21.601520538330078	5.7627997398376465	6.308081150054932
AC074389.9	7	1778266	1781927	-	0.0	4.125436305999756	0.008670610375702381
MMD2	7	4945620	4998844	-	0.08214010298252106	0.6170510053634644	0.31451407074928284
AC092171.4	7	5515435	5519442	+	0.005039101466536522	0.04809574410319328	0.5008744597434998
RSPH10B	7	5965177	6010314	-	0.039199359714984894	0.0649399682879448	0.15001246333122253
AC079742.4	7	6618196	6628605	-	0.04005996137857437	0.0684584304690361	1.3686163425445557
AC005532.5	7	7294785	7317410	+	0.08263947814702988	0.37379205226898193	0.2952854633331299
AC009473.1	7	7989484	7990340	-	0.1814398616552353	0.5781612396240234	0.5111259818077087
AC006042.7	7	7997814	8009534	-	0.08757570385932922	0.28461509943008423	0.2793011963367462

AC005281.1	7	12536055	12581536	+	0.011077341623604298	0.01934020407497883	0.24281252920627594
AGMO	7	15239943	15601640	-	0.8150674700737	2.200089454650879	1.2841155529022217
AC005550.4	7	15728003	15735116	+	0.0957014262676239	1.3894531726837158	1.736671805381775
SOSTDC1	7	16501106	16570205	-	2.778794527053833	0.8253558874130249	0.025686020031571388
AC073333.8	7	16735496	16759523	-	0.005213509313762188	0.0049638221971690655	0.945132315158844
PRPS1L1	7	18066405	18067486	-	0.13562826812267303	0.0	0.0
HDAC9	7	18126572	19036993	+	3.5088930130004883	6.319118499755859	15.75130558013916
MACC1	7	20176020	20257027	-	0.01204772014170885	0.1688449124336243	0.05841321125626564
AC005083.1	7	20257200	20261323	+	0.004506126511842012	0.3141932785511017	0.46428313851356506
DNAH11	7	21582833	21941457	+	0.10214543342590332	1.3192083835601807	0.5361464619636536
CDCA7L	7	21940518	21985702	-	14.251215934753418	40.17041015625	63.05209732055664
GPNUMB	7	23275586	23314727	+	1.6814548969268799	195.52613830566406	14.561555862426758
STK31	7	23749786	23872132	+	0.21126672625541687	0.07690766453742981	0.060467254370450974
AC004485.3	7	24236281	24295338	-	0.00866381824016571	1.115511417388916	0.2567240297794342
NFE2L3	7	26191860	26226745	+	4.667501449584961	7.450107574462891	20.751972198486328
SNX10	7	26331541	26413949	+	1.3867231607437134	14.276061058044434	21.734447479248047
SKAP2	7	26706681	27034858	-	2.6290123462677	7.133713245391846	16.791162490844727
HOXA1	7	27132612	27135615	-	0.0	1.1596812009811401	1.801740288734436
HOTAIRM1	7	27135266	27139773	+	0.015334648080170155	6.045312404632568	15.807950973510742
HOXA2	7	27139721	27142430	-	0.004423457197844982	3.261244773864746	6.235373497009277
HOXA3	7	27145816	27192200	-	3.0108081409707665E-4	3.2605366706848145	11.21935749053955
AC004080.12	7	27147396	27173921	+	0.0	0.6734769344329834	6.24882698059082
HOXA4	7	27168126	27170418	-	0.0	3.3822643756866455	5.84434175491333
RP1-170O19.2	7	27169596	27195542	+	0.0	0.055575937032699585	0.2318698912858963
HOXA5	7	27180671	27183287	-	0.007450152188539505	3.8145556449890137	4.986991882324219
HOXA6	7	27185015	27192217	-	0.0019996094051748514	2.119460105895996	2.104914665222168
HOXA7	7	27193335	27197555	-	0.0015293428441509604	1.5024737119674683	12.26303482055664
HOXA9	7	27202057	27209269	-	0.013701672665774822	1.990159034729004	10.0302095413208
RP1-170O19.21	7	27202219	27214799	-	0.01432095654308796	1.921643853187561	7.713687896728516
RP1-170O19.20	7	27202926	27219632	-	0.00983200129121542	2.1944241523742676	9.057527542114258
RP1-170O19.6	7	27208238	27211534	+	0.0022250227630138397	0.32033655047416687	2.810307502746582
HOXA10	7	27210210	27219880	-	0.03420376032590866	2.435293436050415	8.998405456542969
HOXA11	7	27221129	27224842	-	0.09067463874816895	1.4366775751113892	7.9159464836120605
HOXA11-AS1	7	27224137	27228912	+	0.0012569056125357747	0.464063435792923	3.102079391479492
RP1-170O19.14	7	27226192	27233067	-	0.0	0.12064269185066223	0.6399940848350525
HOXA13	7	27233122	27239725	-	0.00355839217081666	1.5923271179199219	3.251025915145874
HOTTIP	7	27238194	27246878	+	0.0	0.107901431620121	0.1267177015542984
AC004549.6	7	27773014	27780014	-	0.06073785945773125	0.08600494265556335	0.6923897862434387
AC005017.1	7	28219941	28281515	+	0.027071259915828705	0.028751583769917488	0.22620843350887299
WIPF3	7	29846102	29956682	+	1.253157138824463	2.0884084701538086	0.27192017436027527
PPP1R17	7	31726329	31748069	+	0.5166419744491577	0.05224628746509552	0.3586031496524811
TBX20	7	35242042	35293758	-	0.0	1.1168363094329834	0.47966742515563965
AC007245.1	7	38381216	38418238	+	0.07886157184839249	0.36639538407325745	0.003953786101192236
AMPH	7	38423305	38671167	-	15.605199813842773	2.119819164276123	5.513157367706299
POU6F2	7	39017598	39532694	+	0.29363566637039185	0.6642093062400818	5.089528276585042E-4
HECW1-IT1	7	43157495	43202786	+	0.06391942501068115	0.12631656229496002	0.006321355234831572
NPC1L1	7	44552134	44580914	-	0.18828381597995758	0.029508419334888458	0.024525273591279984
MYO1G	7	45002261	45018697	-	0.00854433621525764	0.06847487390041351	0.04807985946536064
C7orf40	7	45022632	45023864	-	6.429687023162842	17.117801666259766	46.42438888549805
AC011294.3	7	46713383	46799449	-	0.025527473539114	0.43208974599838257	0.3747932016849518

AC095067.1	7	47661537	47669491	+	0.00117162533570081	0.7587447166442871	0.015720054507255554
IKZF1	7	50343720	50472799	+	0.31033051013946533	0.013471036218106747	0.0
COBL	7	51083909	51384515	-	0.5435160994529724	5.653662204742432	13.323694229125977
RP11-745C15.2	7	54827118	54872621	+	0.06358865648508072	27.842485427856445	0.9878953695297241
RP5-1091E12.1	7	55247443	55256627	-	0.0055522071197628975	0.02566266432404518	0.20167382061481476
ZNF736	7	63767837	63810017	+	1.2598868608474731	7.53080415725708	6.0911993980407715
RP11-797H7.5	7	64348905	64350478	-	0.23692089319229126	0.012259436771273613	0.027004141360521317
WBSR17	7	70597155	71178585	+	19.155248641967773	1.3457083702087402	4.245863437652588
STX1A	7	73113535	73134017	-	5.9952311515808105	8.3323392868042	21.637903213500977
ABHD11-AS2	7	73150728	73152026	+	0.015432653948664665	0.10754687339067459	0.995275616645813
CLDN3	7	73183328	73184600	-	0.05301754176616669	0.02208615280687809	0.8349553346633911
CLDN4	7	73213872	73247017	+	0.05939136818051338	0.2978428304195404	0.2622862458229065
CTB-51J22.1	7	73473906	73476614	-	0.35226985812187195	1.5296263694763184	1.9034494161605835
LAT2	7	73613982	73644161	+	0.4239989221096039	0.742679238319397	1.7715225219726562
AC083884.8	7	74103391	74143187	-	0.048967909067869186	0.008432788774371147	0.9259495735168457
STAG3L1	7	74988429	75024657	+	0.8704336285591125	1.4149397611618042	4.062795639038086
HSPB1	7	75931861	75933612	+	61.16094207763672	145.13853454589844	184.28489685058594
ZP3	7	76026835	76071388	+	0.5978883504867554	1.0191771984100342	2.539621353149414
POMZP3	7	76239303	76256578	-	5.631691932678223	10.248658180236816	18.866634368896484
PION	7	76940068	77046115	-	0.1598376337135315	4.0610151290893555	4.492550849914551
MAGI2-AS3	7	79082198	79100524	+	15.85084342956543	6.578222274780273	7.072916030883789
CD36	7	79998891	80308593	+	0.40754711627960205	0.6530212759971619	0.03303564712405205
SEMA3E	7	82993222	83278479	-	0.6784633994102478	5.96355676651001	15.374900817871094
SEMA3D	7	84624869	84816171	-	2.440178632736206	2.1642937660217285	0.08754254132509232
GRM3	7	86273230	86494200	+	29.123313903808594	2.4980955123901367	0.008057910017669201
AC005009.1	7	86404397	86405338	-	0.4074839651584625	0.004422786179929972	0.02011774852871895
AC005009.2	7	86413542	86415986	-	0.45970797538757324	0.02275010384619236	0.05114908143877983
KIAA1324L	7	86506222	86689015	-	14.08835220336914	2.958536386489868	4.024643421173096
ABCB1	7	87132948	87342611	-	9.335122108459473	0.7199088335037231	0.08096665889024734
RUNDC3B	7	87256864	87461611	+	2.8556013107299805	0.22308500111103058	0.16188466548919678
CTB-167B5.1	7	87845975	87848541	+	0.14117109775543213	0.809784471988678	1.1341829299926758
AC005075.5	7	87858974	87861089	+	0.06100655719637871	2.233093023300171	0.6086528897285461
AC003991.3	7	87861326	87921781	+	0.011942610144615173	0.8188479542732239	0.21508514881134033
AC002127.4	7	88339945	88386039	+	0.0	0.1984512358903885	0.12489060312509537
ZNF804B	7	88388682	88966346	+	0.016706962138414383	0.07413949072360992	0.1012582927942276
AC003092.1	7	93652145	93695973	+	0.05286978930234909	13.25886058807373	0.34079375863075256
DLX6-AS1	7	96594839	96643377	-	10.227251052856445	0.0781431645154953	24.72540855407715
DLX6	7	96634860	96640351	+	1.6603399515151978	0.14982271194458008	11.159271240234375
DLX5	7	96649704	96654409	-	3.1993906497955322	0.24925896525382996	29.274587631225586
TAC1	7	97361220	97369784	+	0.10003537684679031	0.07227259874343872	0.0
BHLHA15	7	97841566	97842271	+	0.08225834369659424	0.1295868456363678	0.2559646964073181
TMEM130	7	98444111	98468394	-	2.3977110385894775	0.3232347071170807	3.247041940689087
GJC3	7	99520892	99527243	-	0.0	0.684510350227356	0.055065520107746124
AZGP1	7	99564343	99573780	-	0.20363198220729828	10.923212051391602	5.46090841293335
STAG3	7	99775186	99819111	+	0.2658165991306305	0.6998803615570068	0.9248051047325134
PVRIG	7	99815864	99819113	+	0.05603837966918945	0.05641244351863861	0.22958990931510925
SPDYE3	7	99905325	99919819	+	0.0023601732682436705	0.0033201738260686398	0.14303825795650482
RP11-758P17.3	7	100033827	100036127	+	0.8964593410491943	1.1714972257614136	4.901623725891113
TSC22D4	7	100060982	100076902	-	15.988149642944336	28.962003707885742	50.25657653808594
FBXO24	7	100181605	100198740	+	0.1765548586845398	0.47433626651763916	0.5704777836799622

RP13-530H6.2	7	100187025	100201829	-	0.24969382584095	0.4070344865322113	1.2365742921829224
TFR2	7	100218039	100240402	-	0.3329091966152191	1.9153432846069336	1.1812597513198853
RP11-126L15.4	7	100434936	100450238	-	0.16103272140026093	0.6060605049133301	0.8668035268783569
MUC3A	7	100547187	100611118	+	0.14861050248146057	0.019218197092413902	0.4780232310295105
VGf	7	100805790	100808874	-	35.33542251586914	114.65190887451172	123.55669403076172
C7orf52	7	100813774	100823557	-	0.6099046468734741	2.4445693492889404	4.573505401611328
PL0D3	7	100849258	100861701	-	18.63298225402832	52.96289825439453	75.52665710449219
SH2B2	7	101928405	101962178	+	4.212030410766602	5.129678726196289	15.503462791442871
NAPEPLD	7	102740223	102790007	-	3.3452413082122803	5.159365177154541	11.951434135437012
RELN	7	103112231	103629963	-	3.157512903213501	0.2560388445854187	0.028892582282423973
LHFPL3	7	103969104	104549001	+	4.967230319976807	58.09370422363281	96.50707244873047
RP11-203P23.1	7	104379044	104444554	-	0.003841535421088338	1.0773452520370483	0.10240962356328964
NAMPT	7	105888731	105926772	-	8.416732788085938	54.23949432373047	35.581939697265625
AC078937.4	7	107297075	107302596	-	0.0	0.11214786022901535	0.3813767433166504
SLC26A4	7	107301080	107358254	+	0.13201531767845154	0.8586570024490356	1.1645056009292603
AC003088.1	7	110072296	110174811	-	0.8043668866157532	0.13808487355709076	0.022038280963897705
TFEC	7	115575202	115799950	-	0.13735602796077728	0.006092581897974014	0.01538344143629074
TES	7	115850547	115898837	+	25.536418914794922	2.1321017742156982	0.18020100891590118
AC073130.3	7	115877983	115967950	-	0.5302343368530273	0.2113647758960724	0.04584931582212448
ANKRD7	7	117854727	117882785	+	0.056709494441747665	1.1596897840499878	1.1755479574203491
KCND2	7	119913722	120390385	+	1.2812291383743286	9.317219734191895	14.95528507232666
WNT16	7	120965421	120981158	+	5.148930549621582	0.09041367471218109	0.1211162880063057
FEZF1	7	121941448	121950745	-	4.949937343597412	0.09568516165018082	6.132760524749756
IQUB	7	123092454	123175131	-	0.3594227135181427	0.2657920718193054	0.10283926874399185
RP11-332K15.1	7	123096683	123099910	+	0.7413282990455627	0.03435903787612915	0.0
TMEM229A	7	123670973	123673523	-	0.38324329257011414	0.06743170320987701	0.04158809408545494
GRM8	7	126078652	126893348	-	0.5377389788627625	0.26893535256385803	0.06003832072019577
PRRT4	7	127990379	128001739	-	3.8135387897491455	1.2567187547683716	0.9599572420120239
FAM71F1	7	128349115	128371677	+	0.17809252440929413	0.04847416654229164	0.02811269462108612
OPN15W	7	128412545	128415844	-	0.010242809541523457	0.3352104723453522	0.6369960904121399
IRF5	7	128577666	128590089	+	0.056461114436388016	0.760732889175415	0.8584192991256714
RP11-305M3.3	7	129142320	129152759	+	1.2908241748809814	3.3268563747406006	6.515522003173828
RP11-775D22.3	7	129813558	129845201	+	0.005961890332400799	0.0	0.3908878564834595
CPA2	7	129906667	129929638	+	0.4503929018974304	0.2968777120113373	0.1245841383934021
CPA4	7	129932974	129964020	+	13.023849487304688	0.58377904510498	9.89963436126709
CPA5	7	129984630	130008571	+	0.1403048932523376	0.016653183847665787	0.054073188453912735
CPA1	7	130020180	130027955	+	0.1561889797449112	0.004722454119473696	0.008033513091504574
MEST	7	130126046	130146133	+	89.21842956542969	31.613975524902344	26.917306900024414
MESTIT1	7	130126898	130131013	-	0.8512133359909058	0.3164929747581482	0.4781262278556824
AC009518.4	7	131582400	131618070	+	0.07198889553546906	4.435528755187988	6.2437005043029785
AC009518.5	7	131594979	131633712	+	0.03156952187418938	2.272026777267456	2.2472429275512695
PLXNA4	7	131808091	132333447	-	1.9257756471633911	7.697915077209473	16.20884895324707
SLC13A4	7	135365985	135412952	-	0.6745396852493286	0.012771550565958023	0.05875944346189499
AC091736.10	7	135392889	135414006	-	1.085869312286377	0.017206946387887	0.066701740026474
FAM180A	7	135413096	135433594	-	0.46218234300613403	0.3650246262550354	2.921034812927246
AC015987.1	7	135611203	135617629	+	0.09141372889280319	0.02608388662338257	1.6256746053695679
AC009264.1	7	136468822	136866518	-	0.015530502423644066	0.07175156474113464	0.08664585649967194
AC078842.3	7	137029676	137039229	-	0.28099843859672546	3.469268798828125	2.651475429534912
ATP6V0A4	7	138391040	138484305	-	0.057819586247205734	1.3077764511108398	0.3270053267478943
CLEC2L	7	139208602	139229730	+	0.21564516425132751	0.006163711193948984	0.007706543430685997

TBXAS1	7	139476850	139720125	+	0.42408105731010437	1.724583625793457	2.2409205436706543
TAS2R3	7	141463897	141464997	+	0.4341765344142914	1.378241777420044	0.07514692842960358
TAS2R4	7	141478242	141479235	+	0.7305033802986145	1.3108056783676147	0.1404331922531128
TAS2R5	7	141490017	141491166	+	1.4579927921295166	1.2687125205993652	0.4569995701313019
MGAM	7	141607613	141806547	+	0.14710164070129395	0.19911719858646393	0.011070960201323032
RP11-1220K.2.2	7	141811549	141921088	+	0.029846185818314552	1.4092745780944824	3.4131811116822064E-4
TMEM139	7	142977050	142985141	+	0.020381862297654152	0.2634330093860626	0.24323970079421997
EPHA1	7	143087382	143105985	-	0.02580314129590988	0.06965392082929611	0.33488520979881287
CNTNAP2	7	145813453	148118090	+	10.225232124328613	2.3265421390533447	0.1311773806810379
ATP6V0E2	7	149570057	149577787	+	38.77791976928711	95.9666519165039	124.1318359375
RARRES2	7	150035408	150038763	-	7.407176971435547	4.479877471923828	0.6668189167976379
RP4-584D14.5	7	150060866	150069679	-	0.09005424380302429	0.057703301310539246	0.5680269002914429
RP11-511P7.2	7	150130742	150145228	+	0.04869082197546959	0.10288883745670319	0.008877488784492016
GIMAP2	7	150382785	150390729	+	0.17945082485675812	2.945680618286133	2.437298536300659
GIMAP1	7	150413645	150421372	+	0.004469195380806923	0.05648026987910271	0.03232961520552635
TMEM176B	7	150488373	150498450	-	0.026665223762392998	0.20136544108390808	0.020306123420596123
NOS3	7	150688083	150711676	+	1.0818369388580322	0.2095973938703537	0.066969133913517
RP11-148K1.12	7	150771829	150773617	-	0.9155232310295105	0.7189609408378601	3.9979805946350098
WDR86	7	151072995	151107813	-	6.115372180938721	0.652909517288208	1.3749027252197266
RP11-796i2.2	7	151574127	151576299	+	0.07776375114917755	1.4308302402496338	1.2691532373428345
DPP6	7	153584182	154685995	+	0.6394455432891846	4.985848903656006	10.416677474975586
AC093726.6	7	154720208	154741618	+	0.8793843388557434	3.952603340148926	2.9803879261016846
AC008060.7	7	155174771	155189051	+	1.1574040651321411	0.1136750802397728	0.0789077289867401
EN2	7	155250824	155257526	+	70.51432800292969	3.5700504779815674	13.91262149810791
CNPY1	7	155266901	155326557	-	24.45549964904785	1.2643883228302002	2.3779964447021484
SHH	7	155592680	155604967	-	0.03636855259537697	3.527679920196533	2.378551959991455
AC021218.2	7	155755326	155759037	+	0.008617500774562359	0.8670151233673096	1.3148176670074463
AC005534.9	7	156461646	156469257	-	1.1456222534179688	4.364132881164551	3.587346076965332
MNX1	7	156786745	156803370	-	0.08449792861938477	1.3092252016067505	1.6116279363632202
RP5-1121A15.1	7	156803499	156809120	+	0.00449110334739089	1.8970417976379395	0.7412135601043701
AC006372.4	7	157258925	157292410	+	0.9765523672103882	0.08108032494783401	0.009114093147218227
VIPR2	7	158820866	158937649	-	0.05930839478969574	0.007636625319719315	0.003898918628692627
RP11-43A14.1	8	675188	675877	-	0.17646481096744537	0.7436258792877197	0.5672128200531006
DLGAP2	8	1449531	1656642	+	0.06210929527878761	3.0075336690060794E-4	3.2262643799185753E-4
RP11-439C15.4	8	1920736	1922803	-	2.0941452980041504	0.9185337424278259	0.637468159198761
RP11-378A12.1	8	2447076	2480453	-	0.0	0.160208061337471	0.08975157886743546
RP11-134O21.1	8	2523591	2585991	-	0.04957708343863487	0.76496422290802	0.8031913638114929
GS1-57L11.1	8	2584858	2680004	+	0.09180966019630432	1.394287109375	0.68434739112854
ANGPT2	8	6357172	6420930	-	0.7142124772071838	0.8702881336212158	2.2220847606658936
FAM66E	8	7812536	7848219	+	0.042558953166007996	0.08321777731180191	0.16237561404705048
RP11-556O5.5	8	7992174	8085385	-	0.28180205821990967	0.19546030461788177	0.06919185817241669
RP11-10A14.4	8	9009252	9025646	+	0.03382954001426697	0.40023937821388245	0.4224405884742737
AF131215.3	8	10980891	10983574	-	0.27945905923843384	1.6296864748001099	0.07694479823112488
AF131215.1	8	10983980	10987745	-	0.2500978112220764	1.0149422883987427	0.07172650098800659
AF131216.6	8	11173374	11182938	-	0.0028935675509274006	0.0012371373595669866	0.05692427232861519
FAM167A	8	11278972	11332224	-	9.809593200683594	3.159946918487549	1.2921260595321655
GATA4	8	11534468	11617511	+	0.09224946051836014	0.5987134575843811	0.5693949460983276
TUSC3	8	15274724	15624158	+	39.056365966796875	8.516423225402832	13.561877250671387
RP11-468H14.2	8	16988690	17007298	+	0.25496894121170044	0.4401336908340454	0.0683741644024849
MTMR7	8	17155539	17271037	-	0.9692413806915283	0.05834198370575905	0.043411847203969955

MTU51	8	17501304	17658426	-	7.174455165863037	3.6714913845062256	2.2632651329040527
NAT2	8	18248755	18258728	+	1.3788554668426514	0.09559349715709686	0.045536234974861145
SH2D4A	8	19171128	19253729	+	1.1084872484207153	2.3136181831359863	7.025366306304932
NPM2	8	21881636	21894408	+	1.9307135343551636	0.1690155416727066	0.18561255931854248
FGF17	8	21899909	21906320	+	0.7924638986587524	0.08765146136283875	0.044378869235515594
EPB49	8	21906506	21940038	+	2.6598100662231445	4.0537285804748535	11.511363983154297
HR	8	21971928	21990897	-	0.1397591084241867	8.269336700439453	13.357850074768066
LGI3	8	22004338	22014597	-	0.06795447319746017	1.2666221857070923	0.310655802488327
SFTPC	8	22014426	22021992	+	0.0015485886251553893	0.11825599521398544	0.045818544924259186
RP11-582J16.4	8	22398358	22402918	-	0.046070270240306854	1.8757680654525757	0.28670626878738403
RP11-582J16.3	8	22423510	22424684	-	0.035487230867147446	0.0	1.3227145671844482
RP11-459E5.1	8	22547663	22656129	+	0.0014169036876410246	0.04066787660121918	0.324457049369812
RP11-875O11.3	8	22928890	22932001	-	0.02613127045333855	0.37434646487236023	0.21211202442646027
NKX3-1	8	23536206	23540440	-	0.47088686611984253	2.094761848449707	3.6663143634796143
NEFM	8	24770525	24776607	+	66.49980926513672	0.08177914470434189	0.3727118670940399
NEFL	8	24808468	24814624	-	91.4264373792969	2.4029104709625244	9.463589668273926
EPHX2	8	27348296	27403081	+	3.2919654846191406	0.9798182845115662	0.7493375539779663
SCARA5	8	27727399	27850244	-	0.5406705141067505	0.6074497699737549	0.012983135879039764
RP11-181B11.1	8	28273041	28277572	-	0.8476343750953674	0.8594167232513428	0.29948359727859497
AC091558.1	8	28779448	28922453	-	0.03994177654385567	0.15168409049510956	0.29250937700271606
CTD-2647L4.5	8	28924796	28925971	+	0.0	0.07985228300094604	0.9496046304702759
TEX15	8	30689060	30748122	-	0.46086326241493225	3.5372421741485596	1.7751024961471558
RP11-275E10.1	8	31883735	31996991	+	0.01340185385197401	0.2798822820186615	0.15266907215118408
RP11-150O12.6	8	37373968	37374539	-	0.09793880581855774	0.10505873709917068	3.655318021774292
ZNF703	8	37553269	37557537	+	2.8422799110412598	6.2708611488342285	35.278141021728516
RP11-863K10.7	8	37592279	37594944	-	0.19333931803703308	0.4442045986652374	0.5325196385383606
STAR	8	38001167	38008783	-	1.3805817365646362	0.31160736083984375	0.25517338514328003
RP11-90P5.2	8	38006259	38021290	+	0.03690265491604805	0.0125677939504385	2.179269313812256
RP11-675F6.3	8	38401170	38410198	-	0.04602925851941109	0.7322502136230469	1.2913740873336792
RP11-675F6.4	8	38409766	38416538	-	0.030739855021238327	0.48172974586486816	0.3043186366558075
PLEKHA2	8	38758753	38831428	+	9.34562873840332	28.76424789428711	35.99318313598633
CTD-2544N14.3	8	38827879	38830530	-	0.0	0.0	1.1519336700439453
IDO1	8	39759794	39785963	+	0.10878131538629532	0.08754470944404602	0.16665107011795044
ZMAT4	8	40388109	40755352	-	9.546913146972656	1.1977930068969727	0.8685117959976196
SFRP1	8	41119481	41167016	-	73.49712371826172	19.51803207397461	14.693166732788086
RP11-1134I14.8	8	48102395	48104885	+	0.04904763773083687	0.5009813904762268	0.32447537779808044
EFCAB1	8	49623348	49647870	-	0.19119229912757874	0.0463063009083271	0.013553603552281857
PXDNL	8	52232138	52722005	-	0.8416152000427246	0.25260084867477417	0.24445848166942596
ST18	8	53023399	53373519	-	0.6678979396820068	0.05006450042128563	0.0203683003783226
FAM150A	8	53446597	53478067	-	0.14997602999210358	0.0028187513817101717	0.0
OPRK1	8	54138284	54164257	-	0.43224576115608215	0.46920454502105713	0.0
RP11-400K9.4	8	54427731	54436491	-	3.453502893447876	0.5401011109352112	0.9846958518028259
AC113194.1	8	54811569	54821517	+	0.9175845980644226	1.6854455471038818	0.03528570383787155
XKR4	8	56014949	56438714	+	0.29904904961586	2.908139944076538	1.423546314239502
PLAG1	8	57073463	57123883	-	6.0352630615234375	1.8278257846832275	2.303632974624634
CTD-2339F6.1	8	58658708	58662758	+	0.0652549490326035	0.3945779502391815	2.2699551582336426
CA8	8	61099906	61193971	-	0.7065678238868713	2.123934268951416	5.818609714508057
RP11-163N6.2	8	61297147	61429354	-	0.20434029400348663	1.4398658275604248	3.018965482711792
RP11-91I20.2	8	61565061	61566120	-	0.006720096804201603	0.4892943203449249	0.15404586493968964
ACO22182.3	8	61878361	61880334	-	0.0025389306247234344	1.6210652589797974	0.7908057570457458

RP11-32K4.1	8	64599737	65281115	-	2.7364604473114014	0.38840511441230774	0.0
RP11-32K4.2	8	65285885	65296344	+	14.606826782226562	3.3973262310028076	1.7842351198196411
BHLHE22	8	65492814	65496181	+	0.3322698473930359	0.12544840574264526	0.0038243927992880344
CYP7B1	8	65500320	65711318	-	3.177093267440796	1.4002623558044434	0.21516749262809753
CRH	8	67088620	67090960	-	0.23354610800743103	0.0026646507903933525	0.08115793019533157
RP11-346I3.4	8	67331824	67341212	-	0.1758340299129486	0.09458793699741364	0.0037602961529046297
C8orf46	8	67372238	67430759	+	3.7576677799224854	11.278423309326172	16.247421264648438
SGK3	8	67579831	67774257	+	1.659108281135559	4.926206111907959	5.338016510009766
CPA6	8	68334360	68658620	-	0.039389610290527344	0.052003148943185806	0.9203037619590759
C8orf34	8	69242957	69731257	+	0.2083633542060852	0.006349614355713129	0.01787632144987583
SULF1	8	70378859	70573150	+	10.87540340423584	0.6560534238815308	0.7263312935829163
AC120194.1	8	71485681	71486671	+	0.04031854867935181	0.0012005342869088054	1.468003273010254
RP11-382I12.1	8	71520812	71575514	+	0.01840885914862156	0.06392855197191238	0.05628542602062225
TRPA1	8	72932152	72987852	-	0.2845267653465271	0.06623518466949463	0.015802839770913124
KCNB2	8	73449626	73850584	+	0.47552923236804962	0.010429072193801403	0.024557095021009445
RP11-531A24.5	8	73964413	73975296	+	0.704582154750824	1.0452191829681396	0.2086593210697174
C8orf84	8	73976775	74036323	-	2.0938992500305176	0.07945366203784943	0.09835047274827957
LY96	8	74903587	74941322	+	1.2712856531143188	13.443808555603027	8.597983360290527
RP1-16A9.1	8	75111631	75120377	+	0.004504144657403231	2.040219306945801	0.7956053018569946
CTD-2320G14.2	8	75259992	75262285	-	0.6319206953048706	0.09859631955623627	0.0311165452003479
PI15	8	75736772	75767264	+	8.908560752868652	3.3901803493499756	22.06608772277832
CRISPLD1	8	75896750	75946793	+	37.602745056152344	9.82133674621582	10.304265022277832
RP11-697M17.1	8	76135639	76236976	-	1.716681718826294	0.5192904472351074	0.0
RP11-65D13.1	8	77403435	77595513	-	1.5308352708816528	5.587378978729248	7.160083770751953
STMN2	8	80523049	80578397	+	112.03260803222656	1.8181052207946777	0.4267343580722809
HEY1	8	80676245	80680098	-	6.122724533081055	28.590394973754883	18.534927368164062
TPD52	8	80870571	81143467	-	2.8110902309417725	13.502971649169922	10.73124885559082
RP11-1149M10.2	8	82066514	82076834	+	0.0	0.15952889621257782	0.059769704937934875
FABP5	8	82192598	82197012	+	16.782703399658203	36.43141555786133	68.35171508789062
RP11-157I4.4	8	82351671	82434053	+	0.0	1.289575219154358	0.09518676996231079
PMP2	8	82352561	82359758	-	1.8286864757537842	216.00567626953125	121.37124633789062
FABP4	8	82390654	82395498	-	0.7758519053459167	0.2572653591632843	0.027490759268403053
RP11-257P3.3	8	82433853	82445510	+	0.006592766381800175	1.4283795356750488	0.19173453748226166
RALYL	8	85095022	85834079	+	1.4622248411178589	0.5314690470695496	0.13680033385753632
CA3	8	86285665	86361269	+	0.7488358020782471	0.39889854192733765	1.0783532857894897
AF121898.3	8	88554214	88767946	-	0.011922922916710377	0.39861008524894714	0.2631394565105438
DCAF4L2	8	88882973	88886296	-	0.005018145777285099	0.18076321482658386	0.18483172357082367
CTB-118P15.2	8	88986393	89031341	+	0.06662683188915253	0.6052694916725159	0.22912520170211792
MMP16	8	89044237	89340254	-	12.075197219848633	60.71009063720703	51.75804901123047
CALB1	8	91070836	91107703	-	16.73810386657715	0.6965560913085938	1.863207221031189
NECAB1	8	91803778	91971636	+	0.15478675067424774	1.021299958229065	0.651547372341156
RUNX1T1	8	92967203	93115514	-	2.1534669399261475	1.226965308189392	0.6367732882499695
AC117834.1	8	93895865	93898013	+	0.0014928227756172419	5.536200478672981E-4	0.21634884178638458
RP11-10N23.4	8	94745444	94746250	+	0.034841034561395645	0.057961203157901764	0.450509637594223
RP11-10N23.5	8	94753421	94756762	+	0.5258705615997314	0.3829347491264343	0.09685136377811432
KB-1608C10.2	8	95803871	95806064	-	0.004755053669214249	0.002681046724319458	0.33175697922706604
RP11-347C18.3	8	95962265	95963624	+	4.754615783691406	1.2579034566879272	1.5174137353897095
GDF6	8	97154558	97173020	-	1.575736403465271	0.12477049231529236	5.622145175933838
SDC2	8	97505579	97624000	+	132.9775848388672	40.590999603271484	25.699735641479492
KB-1208A12.3	8	99053954	99056349	+	0.2847811281681061	0.16238000988960266	1.8106396198272705

C8orf47	8	99076539	99105838	+	3.5522167682647705	0.07494481652975082	0.017794087529182434
NIPAL2	8	99202061	99306621	-	4.300423622131348	2.025031566619873	0.45840319991111755
KCNS2	8	99439250	99445076	+	0.1912933588027954	0.01304299384355545	0.0
FBXO43	8	101145588	101158028	-	0.32256028056144714	1.523324728012085	1.987979531288147
RP11-302J23.1	8	102064282	102088479	+	0.1406351923942566	0.03934858366847038	0.002409229287877679
KB-1460A1.1	8	102134373	102138386	-	0.18284665048122406	0.9853252172470093	0.5148357152938843
KB-1980E6.3	8	103540968	103550896	+	0.06979629397392273	0.47305816411972046	0.5326782464981079
C8orf56	8	104145191	104153703	-	0.954934298992157	4.448959827423096	6.306231498718262
RP11-318M2.3	8	104240653	104241542	-	0.08105185627937317	0.2140086144208908	2.2347798347473145
RP11-127H5.1	8	105602961	106431488	+	0.5246255397796631	0.2510482966899872	0.08226961642503738
ZFPM2	8	106330920	106816760	+	5.218469142913818	1.4225410223007202	0.32835277915000916
PKHD1L1	8	110374706	110542559	+	0.12347512692213058	0.0077953399159014225	0.004554413259029388
KCNV1	8	110975874	110988076	-	0.05133165791630745	0.0019206791184842587	0.0
RAD21-AS1	8	117886663	117889123	+	0.25120270252227783	0.20380555093288422	0.07807884365320206
C8orf85	8	117950438	117956726	+	0.111716128885746	0.043183449655771255	0.022261574864387512
SLC30A8	8	117962512	118188953	+	0.023666728287935257	0.0033201039768755436	0.0
EXT1	8	118806729	119124092	-	24.531402587890625	9.106815338134766	9.544005393981934
SAMD12	8	119201698	119634234	-	0.662003219127655	0.28470736742019653	0.03682954981923103
TNFRSF11B	8	119935796	119964439	-	15.35383415222168	2.655700922012329	4.993472099304199
MAL2	8	120177273	120257913	+	1.511828899383545	0.023652054369449615	0.013357460498809814
ENPP2	8	120569326	120685693	-	24.561368942260742	6.068871974945068	7.3297224044799805
HAS2	8	122624356	122653680	-	3.627426862716675	23.796384811401367	37.679351806640625
HAS2-AS1	8	122651533	122656933	+	0.22743560373783112	1.4775786399841309	1.9800869226455688
FAM83A	8	124191200	124222314	+	0.05598931759595871	0.002307703485712409	7.106892880983651E-4
FER1L6	8	124864227	125132302	+	0.6904809474945068	0.12227820605039597	0.002142064506188035
RP11-37N22.1	8	125204912	125259639	-	0.33762991428375244	0.02612275630235672	0.014044445008039474
RP11-1082L8.4	8	125823860	125827924	-	0.3840327262878418	1.1257240772247314	0.08923482894897461
RP11-6D1.6	8	125860979	125966570	+	0.0190360639244318	0.0315096415579319	0.0037563324440270662
RP11-89K10.1	8	127570120	127725660	+	0.15541818737983704	0.0271014291793108	0.39828842878341675
RP11-382A18.1	8	128302062	128494384	-	0.049591973423957825	0.009958300739526749	0.7005191445350647
RP11-1136L8.1	8	128698588	128746213	-	0.02438778430223465	0.1858009397983551	0.12250643223524094
MYC	8	128747680	128753674	+	34.44579315185547	84.38851928710938	113.60604858398438
PVT1	8	128806779	129113499	+	4.568324565887451	5.539400100708008	23.587356567382812
RP11-1057N3.1	8	130228728	130253496	-	0.014673669822514057	0.07912849634885788	0.20781777799129486
RP11-3O20.1	8	130363937	130692485	-	0.0	0.08501183241605759	0.35239526629447937
SLA	8	134048973	134115298	-	0.0029448922723531723	0.1805679053068161	0.08564423024654388
WISP1	8	134203282	134240603	+	0.9194885492324829	19.196043014526367	25.63595962524414
NDRG1	8	134249414	134314265	-	6.040322303771973	62.031368255615234	22.778589248657227
GPR20	8	142366600	142377367	-	0.3884010910987854	0.044045764952898026	0.0840640664100647
CTD-3064M3.4	8	142400039	142402674	-	0.020114172250032425	0.1952461302280426	0.08839625120162964
PTP4A3	8	142402093	142441620	+	6.776172161102295	22.50968360900879	32.298736572265625
BAI1	8	143530791	143626370	+	8.524389266967773	11.385927200317383	39.62519454956055
ARC	8	143692410	143695833	-	3.346421003341675	28.847017288208008	55.806697845458984
CTD-2292P10.4	8	143783670	143808391	-	0.08566804975271225	0.6430029273033142	0.41734153032302856
LY6H	8	144239331	144242128	-	3.7746078968048096	0.04383278638124466	0.25565052032470703
RP11-661A12.7	8	144661806	144662840	+	1.6521556377410889	0.3675798177719116	5.799861907958984
MAPK15	8	144798429	144804628	+	1.461557388305664	0.7913286685943604	0.32805806398391724
FAM83H	8	144806103	144815971	-	1.9958826303482056	0.8246941566467285	0.012358964420855045
RP11-429J17.6	8	144816310	144828507	+	0.14337581396102905	0.06422010809183121	7.714540115557611E-4
EPPK1	8	144939497	144952632	-	0.5169862508773804	0.10825110971927643	0.07913288474082947

AC145291.1	8	145317003	145331153	-	0.25261953473091125	0.7378278374671936	2.5247936248779297
SLC39A4	8	145635126	145642279	-	0.4486241340637207	0.9719540476799011	1.7290761470794678
FOXH1	8	145698795	145701718	-	0.0630415752530098	0.13963879644870758	0.35247334837913513
GPT	8	145728356	145732557	+	0.14478325843811035	0.25839337706565857	0.48306259512901306
KANK1	9	470291	746105	+	7.401519775390625	34.61231994628906	38.810523986816406
RP11-31F19.1	9	547317	549531	+	1.01434326171875	4.172953128814697	8.906964302062988
DMRT1	9	841690	969090	+	0.009676295332610607	0.03028181381523609	0.32016846537590027
DMRT2	9	1050354	1057552	+	0.011966031044721603	0.9024633765220642	6.266460418701172
RP11-70J12.1	9	4070906	4071884	-	0.20473985373973846	0.921607255935669	0.026255900040268898
RLN2	9	5299868	5304969	-	0.1131805852055496	0.005881470162421465	0.002772287465631962
RLN1	9	5334969	5339873	-	0.14591465890407562	0.038795117288827896	0.009979933500289917
CD274	9	5450503	5470566	+	0.9452984929084778	0.7878861427307129	0.30839595198631287
IL33	9	6215805	6257983	+	0.26185017824172974	2.1119306087493896	1.7760584354400635
RP11-390F4.3	9	6716548	6727438	+	0.1062922403216362	0.14127212762832642	0.3199709355831146
PTPRD	9	8314246	10612723	-	39.01868438720703	26.360313415527344	11.532573699951172
RP11-75C9.1	9	8858130	8862255	+	2.811647415161133	1.1625983715057373	0.7890435457229614
RP11-120J1.1	9	14317084	14357907	+	0.8590971231460571	3.7619776725769043	3.8175384998321533
FREM1	9	14734664	14910993	-	13.938461303710938	2.186990976333618	2.0430521965026855
SH3GL2	9	17578953	17797127	+	3.1861488819122314	0.43988919258117676	0.18975293636322021
ACER2	9	19408925	19452018	+	5.334933280944824	1.9527968168258667	1.7668585777282715
MIR31HG	9	21455641	21559668	-	2.2441840171813965	0.8696789741516113	13.5311279296875
CDKN2A	9	21967751	21995300	-	3.1118040084838867	15.956544876098633	44.79363250732422
CDKN2B-AS	9	21994790	22121096	+	0.2412737011909485	0.6565927863121033	1.7265182733535767
DMRTA1	9	22446840	22452472	+	1.0659137964248657	1.270363450050354	15.56429386138916
RP11-399D6.2	9	22646199	22824212	+	0.14723625779151917	0.654423177242279	7.498536586761475
TEK	9	27109139	27230173	+	3.8031558990478516	1.837905764579773	0.46273598074913025
C9orf35	9	27374215	27378942	-	0.06123797222971916	0.31263700127601624	0.015866875648498535
LINGO2	9	27948076	28670283	-	2.257012367248535	0.11174830794334412	0.006699388846755028
TAF1L	9	32629452	32635667	-	0.04570271819829941	0.014050847850739956	0.014427668415009975
RP11-326F20.5	9	33166973	33179981	+	3.6794862747192383	0.22208845615386963	0.7200945019721985
DNAI1	9	34457412	34520982	+	0.5501213073730469	0.2624560296535492	0.16732577979564667
CNTFR	9	34551430	34590121	-	76.0901870727539	16.57895278930664	15.329573631286621
KIAA1045	9	34957484	34984679	+	0.026472298428416252	0.20948466658592224	0.2530416250228882
CA9	9	35673853	35681156	+	0.07266736775636673	19.941648483276367	9.466329574584961
MSMP	9	35752987	35756610	-	11.254072189331055	4.07060432434082	22.78631019592285
RP11-112J3.15	9	35756709	35757937	-	0.11617084592580795	0.11858353018760681	1.6676273345947266
RP11-112J3.16	9	35786643	35790429	+	0.3458287715911865	1.1205830574035645	1.3652700185775757
C9orf128	9	35816388	35828744	-	0.160321906208992	0.012618840672075748	0.0
RP11-84P7.3	9	36332947	36334969	-	0.17542751133441925	0.3587038815021515	0.008985312655568123
PAX5	9	36833272	37034476	-	10.640819549560547	0.24845322966575623	0.041016239672899246
IGFBPL1	9	38408991	38424444	-	152.0167236328125	25.40032196044922	5.916045665740967
RP11-204M4.2	9	41961615	42019580	-	0.20148174464702606	0.9164243340492249	1.4218071699142456
ANKRD20A2	9	42368303	42411410	+	0.06096440553665161	0.24189136922359467	1.211599349975586
RP11-146D12.2	9	42410363	42474269	+	0.15931794047355652	1.6479490995407104	2.941480875015259
FAM95B1	9	42466317	42474236	+	0.07936270534992218	0.22335949540138245	1.5854010581970215
RP11-399F4.4	9	43027748	43032877	-	0.19964499771595	0.5385128855705261	3.85662841796875
RP11-327I2.2	9	43064966	43091857	-	0.15218836069107056	1.3709745407104492	3.5520195960998535
ANKRD20A3	9	43089972	43133544	-	0.07738925516605377	0.42496800422668457	1.236427903175354
RP11-374M1.2	9	45108392	45112532	+	0.052729517221450806	0.1543056219816208	0.2984176576137543
FAM27A	9	45727107	45728274	+	1.2082301378250122	1.959895133972168	6.19271993637085

FAM27E2	9	45733559	45734896	+	0.11188457161188126	0.6120700836181641	1.1661911010742188
RP11-292F9.1	9	46270786	46274928	-	0.024676304310560226	0.07965373992919922	0.11555655300617218
FAM27E1	9	46385691	46387031	-	0.1283257007598877	0.16004668176174164	0.5125190615653992
RP11-111F5.4	9	46685429	46688137	-	0.19058701395988464	0.2574347257614136	0.82636559009552
RP11-211N8.2	9	46843638	46846357	+	0.1479787975549698	0.2299596071243286	0.9390419125556946
RP11-262H14.4	9	66553273	66555928	+	1.1341512203216553	2.115539312362671	4.301389694213867
RP11-381O7.3	9	67017400	67032072	-	0.0	0.21394246816635132	0.3059805929660797
FAM27B	9	67792938	67794111	-	0.14642509818077087	1.0098211765289307	2.5337507724761963
ANKRD20A1	9	67926761	67969840	+	0.08138717710971832	1.1839231252670288	1.907012701034546
RP11-195B21.3	9	67968793	67987998	+	0.05012781545519829	1.1699557304382324	3.1519439220428467
CR786580.1	9	68408723	68414761	+	1.4065004587173462	2.3768200874328613	4.98065710067749
RP11-87H9.3	9	69082536	69108793	-	0.03638341650366783	0.29848212003707886	0.20414289832115173
ANKRD20A4	9	69381812	69425560	+	0.2462749034166336	0.8918112516403198	1.7366989850997925
AL445665.1	9	69650263	69660358	+	0.0016687983879819512	0.15647588670253754	0.32094821333885193
AL591479.1	9	70645650	70648248	-	0.5562095642089844	1.13025963306427	3.6175947189331055
PIP5K1B	9	71320575	71624092	+	14.989526748657227	1.4805229902267456	1.1954296827316284
RP11-265B8.4	9	71736209	71737148	+	1.6082096099853516	0.2610339820384979	0.6138402223587036
FAM189A2	9	71939488	72007371	+	1.163515329360962	1.0213313102722168	0.12184524536132812
RP11-548B3.3	9	72043164	72043637	-	9.724148750305176	7.328402042388916	2.906606674194336
APBA1	9	72045204	72287222	-	6.535054683685303	5.240604877471924	2.159609079360962
RP11-195E11.3	9	72768050	72790804	-	0.25316521525382996	0.17973658442497253	0.07292051613330841
TRPM3	9	73149949	74061820	-	0.6864509582519531	3.9694180488586426	2.1729729175567627
TMEM2	9	74298282	74431606	-	47.73626708984375	11.934892654418945	17.63508415222168
ANXA1	9	75766673	75785309	+	32.749141693115234	37.94883728027344	101.31661224365234
RP11-171A24.3	9	77100467	77114043	-	0.23171453177928925	0.07698645442724228	0.049223899841308594
TRPM6	9	77337411	77503010	-	0.05111297219991684	0.014091677963733673	0.0025304434821009636
GCNT1	9	79034752	79122332	+	4.782567501068115	0.7236249446868896	1.0179837942123413
GNA14	9	80037995	80263223	-	3.801222085952759	0.8435134291648865	0.2065243124961853
RP11-575L7.8	9	86587148	86590692	+	0.22110338509082794	0.0	2.270915985107422
RP11-395D3.1	9	89247062	89311411	+	0.0	0.37820202112197876	0.20441259443759918
GAS1	9	89559279	89562104	-	13.731549263000488	55.768096923828125	54.398372650146484
C9orf170	9	89763559	89774471	+	0.06024552509188652	0.3834279775619507	0.2374228686094284
DAPK1	9	90112143	90323548	+	19.296159744262695	4.101899147033691	5.632474899291992
C9orf47	9	91605778	91611055	+	3.66750431060791	0.3147662580013275	0.438670814037323
S1PR3	9	91606362	91619925	+	32.942535400390625	2.73921799659729	4.702694416046143
DIRAS2	9	93372114	93405386	-	9.530141830444336	1.329521656036377	1.86927890775879
ROR2	9	94325373	94712444	-	10.62081241607666	0.6922584176063538	0.06671904772520065
OGN	9	95146249	95166978	-	7.9428935050964355	0.02931690588593483	0.30620890855789185
ECM2	9	95256365	95298937	-	1.9299565553665161	0.40222716331481934	0.2754579782485962
RP11-342C23.4	9	97320996	97330312	+	3.228513479232788	0.5405060052871704	0.07491543143987656
FBP1	9	97365415	97402531	-	0.33121347427368164	0.007404445670545101	0.09135924279689789
LINC00092	9	98782876	98784042	-	0.5154081583023071	0.013994183391332626	0.0
TDRD7	9	100174232	100258407	+	2.820624351501465	6.914786338806152	10.59056568145752
TMOD1	9	100263462	100364023	+	0.6830694079399109	34.381378173828125	6.472783088684082
TRIM14	9	100831557	100881494	-	1.5612729787826538	9.378929138183594	11.874897003173828
NR4A3	9	102584137	102629173	+	3.815200090408325	0.9884389042854309	0.953535258769989
C9orf30-TMEFF1	9	103204553	103339918	+	62.277099609375	21.237974166870117	23.649703979492188
GRIN3A	9	104331635	104500862	-	0.30792245268821716	0.3595119118690491	0.002578460145741701
TAL2	9	108424738	108425367	+	1.3096346855163574	0.17316347360610962	0.3360676169395447
RP11-308N19.1	9	109040673	109367076	+	0.364414781332016	0.1221109926700592	0.053996313363313675

C9orf4	9	111899167	111929571	-	9.499032974243164	0.7132164239883423	2.2136430740356445
PALM2-AKAP2	9	112542589	112934792	+	73.44330596923828	35.06034851074219	26.590187072753906
AKAP2	9	112542769	112934792	+	71.17581176757812	32.82578659057617	25.213247299194336
SVEP1	9	113127531	113342160	-	6.92462158203125	1.5324982404708862	1.2391737699508667
LPAR1	9	113635543	113800981	-	39.00349807739258	18.32526969909668	12.455827713012695
PTGR1	9	114312002	114362135	-	6.324208736419678	6.74387788772583	21.71479034423828
ZNF883	9	115759495	115774507	-	3.601863145828247	13.837067604064941	12.480186462402344
LINC00256B	9	115865618	115873780	-	0.0014506056904792786	0.12221512943506241	1.4743858575820923
LINC00256A	9	115875353	115882208	+	0.006000198889523745	0.19521421194076538	1.0436182022094727
RNF183	9	116059480	116065656	-	0.10873352736234665	0.04302915930747986	0.0038745123893022537
PAPPA	9	118916083	119164601	+	25.270954132080078	4.8178229331970215	5.39996862411499
RP11-45A16.4	9	119050897	119080968	-	0.12559643387794495	0.4235873818397522	0.3951113820075989
ASTN2	9	119187504	120177348	-	1.8440349102020264	5.618477821350098	9.248014450073242
DBC1	9	121915736	122131745	-	3.423388957977295	2.4366610050201416	6.3272833824157715
RP11-2711.2	9	123605378	123616651	+	1.6176773309707642	5.963384628295898	7.701612949371338
TRAF1	9	123664671	123691451	-	0.37809091806411743	3.1831319332122803	1.818439245223999
LHX6	9	124964856	124991905	-	0.08113803714513779	0.35092541575431824	0.25878819823265076
SKA2L	9	125524123	125524948	+	6.9540181159973145	0.09266017377376556	1.0900276899337769
GPR21	9	125796806	125797975	+	0.8362878561019897	0.7045126557350159	0.01949218660593033
CRB2	9	126118449	126142603	+	29.973283767700195	4.621735095977783	10.080649375915527
LHX2	9	126763949	126795580	+	5.63248872756958	9.683188438415527	33.819889068603516
GPR144	9	127213423	127240868	+	0.0841711238026619	0.11891049146652222	0.003602290526032448
NR6A1	9	127279888	127533589	-	8.4055757522583	3.865767002105713	3.0914204120635986
C9orf117	9	130469268	130478281	+	0.027708830311894417	0.018114404752850533	0.12522198259830475
TTC16	9	130478345	130493879	+	0.006919184233993292	0.11939587444067001	0.03687846660614014
SH2D3C	9	130500596	130541020	-	1.7052910327911377	0.39890825748443604	0.07392247021198273
TMSL4	9	131104432	131105049	+	14.285940170288086	1.1480820178985596	2.8571696281433105
RP11-339B21.9	9	131231236	131235291	-	0.018016677349805832	0.008656765334308147	1.1977788209915161
RP11-545E17.3	9	131486724	131495473	+	1.9826111793518066	2.821162462234497	6.006580352783203
C9orf50	9	132374504	132383055	-	0.23264923691749573	0.5349624156951904	0.8936390280723572
ASS1	9	133320094	133376661	+	17.730682373046875	15.291275978088379	19.104650497436523
FIBCD1	9	133777825	133814673	-	2.2377288341522217	0.5982967019081116	13.607842445373535
LAMC3	9	133884469	133969860	+	1.0252128839492798	2.561812162399292	0.49273785948753357
PPAPDC3	9	134165081	134184649	+	4.496272087097168	4.060143947601318	1.5201561450958252
RP11-32B11.2	9	134907273	134952977	+	0.0	0.0	0.7716121673583984
GFI1B	9	135820932	135867083	+	0.0	0.1456787884235382	0.29325953125953674
AL593851.1	9	135894816	135896553	-	0.42001885175704956	0.18926623463630676	3.494950532913208
DBH	9	136501482	136524466	+	0.10997715592384338	0.00243200920522213	0.03024774231016636
DBH-AS1	9	136519708	136522435	-	0.3578009009361267	0.1513310819864273	0.03223738819360733
SARDH	9	136528682	136605077	-	1.1635253429412842	0.7759025692939758	0.16357287764549255
RP11-426A6.5	9	138395119	138398293	-	0.017081061378121376	0.0	0.2906949520111084
AL355574.1	9	138900082	138901544	+	0.024874409660696983	0.0034484912175685167	3.7852394580841064
AL138781.1	9	139006434	139010514	+	0.055477168411016464	0.00322155375033617	1.8954261541366577
C9orf172	9	139738867	139741797	+	1.7070891857147217	0.9503452181816101	8.314072608947754
RP11-229P13.21	9	139932430	139933342	-	0.22141508758068085	0.618259072303772	0.7913329601287842
C9orf140	9	139956581	139956040	-	14.692460060119629	23.42020034790039	54.764225006103516
RP11-229P13.23	9	139957987	139959033	+	0.03199048712849617	0.0470769926905632	1.6362441778182983
UAP1L1	9	139971953	139978991	+	3.0474610328674316	12.147147178649902	21.473970413208008
DPP7	9	140004994	140009629	-	8.70202350616455	33.8375129699707	54.28248977661133
RNF208	9	140114707	140116033	-	5.072206497192383	3.5720255374908447	16.900480270385742

BX255925.1	9	140118567	140122265	-	0.4322492182254791	0.7684462070465088	1.502471685409546
FAM166A	9	140138036	140142222	-	0.07050307095050812	0.2926337718963623	0.7822496891021729
C9orf167	9	140172201	140177093	+	3.847106456756592	1.892944574356079	14.893453598022461
CACNA1B	9	140772241	141019076	+	1.4804089069366455	0.038432758301496506	0.005536456126719713
RP11-631M21.2	10	92828	96053	-	0.21396055817604065	0.01386378426104784	0.03773580864071846
RP11-809C18.3	10	674578	677195	+	0.0019980536308139563	0.2230769842863083	0.07057719677686691
AL359878.1	10	1017097	1034281	-	0.11392683535814285	0.11242739111185074	0.026616692543029785
IDI2	10	1064847	1071799	-	0.016141433268785477	0.006174566689878702	0.1482818727249146
ADARB2	10	1228073	1779670	-	1.0337579250335693	0.20289470255374908	0.027636945247650146
RP11-298E9.3	10	3183864	3204580	+	0.18303914368152618	0.3300851881504059	0.6101191639900208
RP11-34C15.1	10	4426438	4452804	+	0.18876995146274567	0.007421080023050308	0.0
AKR1E2	10	4828820	4890254	+	0.6869693398475647	0.1997811496257782	0.009704670868813992
AKR1C1	10	4934796	5022159	+	1.3800239562988281	0.6528793573379517	4.726391792297363
AKR1C2	10	5029967	5060207	-	0.763059675693512	0.07414913922548294	6.499609470367432
RP13-463N16.6	10	5636954	5638081	-	0.07202289253473282	0.1321955770254135	1.642455816268921
RP11-536K7.3	10	5979079	5987863	-	0.15286469459533691	0.036526646465063095	0.4093899726867676
IL15RA	10	5991038	6020150	-	0.5005456805229187	1.2734252214431763	1.4960614442825317
PRKCQ	10	6469105	6622263	-	0.40525683760643005	1.581557273864746	2.142770528793335
RP11-5N23.2	10	6622381	6627641	+	1.5319346189498901	4.003626346588135	5.961096286773682
RP11-799O21.1	10	6821560	6884868	+	0.06307204067707062	0.22791264951229095	1.7449164390563965
SFMBT2	10	7200586	7453450	-	1.6738704442977905	6.144039154052734	5.85269021987915
ITIH5	10	7601232	7708961	-	0.12481357157230377	1.1984378099441528	10.593518257141113
SFTA1P	10	10826402	10836943	-	8.680705070495605	0.9313134551048279	0.5793027281761169
RP11-186N15.3	10	12287627	12289844	-	0.015095082111656666	0.005779902916401625	0.5973472595214844
RP11-398C13.4	10	14885630	14886747	-	0.0294987540692091	0.06198456138372421	0.4444606602191925
ITGA8	10	15555948	15762124	-	3.531193971633911	1.8528181314468384	0.06503789126873016
RP11-124N14.3	10	17275324	17276832	-	5.049313545227051	1.13832426071167	40.44207000732422
RP11-383B4.4	10	18820778	18822265	-	0.3335944414138794	1.0442734956741333	0.118934266269207
C10orf114	10	21783421	21786191	-	33.151268005371094	2.8588457107543945	7.260423183441162
C10orf140	10	21802407	21814611	-	15.9949369430542	2.7554500102996826	1.4322876930236816
SPAG6	10	22634399	22743153	+	0.18428224325180054	0.06790085136890411	0.027224453166127205
RP11-371A19.2	10	23632886	23634110	+	0.5485021471977234	0.1364346146583557	0.20304445922374725
RP11-80K21.1	10	25447001	25465205	-	0.1231012567877695	0.2324834167957306	0.49630245566368103
GPR158	10	25463991	25891155	+	3.615779161453247	28.197608947753906	10.61215877532959
MKX	10	27961803	28034989	-	2.3034121990203857	0.004860317334532738	0.0016260672127828002
MPP7	10	28339922	28591995	-	1.9778060913085938	0.12588295340538025	0.422029048204422
BAMBI	10	28966271	28971868	+	4.687424182891846	31.298967361450195	43.29519271850586
RP11-472N13.3	10	31982012	31996316	-	0.363054484128952	4.685390949249268	7.791686058044434
RP11-342D11.2	10	33500205	33502732	+	0.09960437566041946	0.03095678798854351	3.1306793689727783
FZD8	10	35927177	35930362	-	3.322650671005249	10.11536979675293	19.736160278320312
CCNYL2	10	42903616	42970797	-	0.03289653733372688	0.9383697509765625	1.1416910886764526
RP11-178A10.1	10	42970991	42990784	+	1.0746976137161255	8.50906753540039	16.110065460205078
RP11-517P14.2	10	43916047	43917254	+	0.2756919264793396	0.9940038323402405	2.485043525695801
ZNF32-AS2	10	44141390	44143467	+	0.07840193063020706	0.3114858865737915	0.5051794648170471
RP11-285G1.8	10	45497679	45567036	-	0.04529845342040062	0.0014304927317425609	0.3020852208137512
RP11-38L15.3	10	46951472	46966835	+	2.2642951011657715	0.7649196982383728	0.14973615109920502
SYT15	10	46952762	46971400	-	0.13271306455135345	0.0620562843978405	0.0036559770815074444
GPRIN2	10	46994087	47005643	+	0.06543795764446259	0.014300163835287094	0.0
RP11-508M1.5	10	48952569	48980342	+	0.2033994346857071	0.036533232778310776	0.006612203549593687
FRMPD2	10	49360856	49482941	-	0.22116869688034058	0.03160596266388893	0.0021813923958688974

ERCC6	10	50663414	50747584	-	8.526598930358887	4.4534993171691895	2.4578516483306885
PGBD3	10	50723151	50732273	-	9.250772476196289	2.648345708847046	2.2198338508605957
RP11-123B3.6	10	50723247	50747584	-	12.07891845703125	4.891329765319824	3.304715633392334
CHAT	10	50817141	50901925	+	0.05858701467514038	0.28533318638801575	2.5228190422058105
PRKG1	10	52750945	54058110	+	3.7536582946777344	0.6943897604942322	0.502074658870697
RP11-57311.2	10	53990519	54073888	-	0.15535002946853638	0.036536797881126404	0.03742320090532303
BICC1	10	60272900	60591195	+	13.055442810058594	2.0614776611328125	2.0226962566375732
SLC16A9	10	61410523	61495760	-	14.572349548339844	5.671948432922363	4.8807806968688965
ANK3	10	61788159	62493248	-	6.771149635314941	2.0461905002593994	1.6266735792160034
RP11-436D10.3	10	64553322	64565647	-	0.4057842195034027	0.09375621378421783	0.0666511207818985
RP11-174J11.1	10	65796105	65797040	-	0.05965731665492058	0.98813796043396	0.28824490308761597
RP11-222A11.1	10	67345446	67441220	+	1.98628568649292	1.1944023370742798	0.5216711163520813
CTNNA3	10	67679719	69455927	-	0.07987944036722183	0.9139086604118347	1.1820122003555298
MYPN	10	69865912	69971774	+	2.7773616313934326	0.28847604990005493	0.03426901251077652
RP11-343J3.2	10	71335563	71336910	+	0.8719744086265564	0.160818949341774	0.040617961436510086
C10orf35	10	71390007	71393352	+	12.451937675476074	0.7499330043792725	3.1983654499053955
H2AFY2	10	71812552	71872032	+	130.60763549804688	5.129116535186768	12.641607284545898
AIFM2	10	71857979	71892690	-	2.2943341732025146	3.0765604972839355	7.278069019317627
RP11-367H5.7	10	71968555	71969331	+	0.02597999945282936	0.0	1.612892746925354
AC022532.1	10	72194585	72196314	+	1.0251811742782593	0.5632882714271545	0.240627259016037
RP11-432J9.4	10	72577323	72577968	+	0.19247181713581085	0.4551485478878021	0.02628997713327408
C10orf54	10	73507316	73533337	-	4.906322956085205	0.26755115389823914	0.3325023055076599
SPOCK2	10	73818793	73848790	-	4.059497356414795	34.395626068115234	18.4801025390625
TTC18	10	75013517	75119452	-	0.8365324139595032	0.4343460202217102	0.12281829118728638
RP11-537A6.9	10	75141191	75143254	+	0.0	0.0	1.3788636922836304
MYOZ1	10	75391412	75401515	-	0.8719329833984375	0.11181221157312393	0.0651513934135437
SYNPO2L	10	75404639	75415830	-	0.02045062184338013	0.6796200275421143	0.7527247071266174
VCL	10	75757872	75879918	+	164.8146209716797	52.48635482788086	51.15259552001953
RP11-417O11.6	10	75788171	75789962	+	0.23092538118362427	0.8081264495849609	0.044804297387599945
ZNF503	10	77039484	77161664	-	3.749849557876587	2.450155735015869	15.395411491394043
RP13-39P12.3	10	79542624	79551665	+	0.0	0.0	0.5357454419136047
DYDC2	10	82104501	82127829	+	0.6029825806617737	0.1771460324525833	0.023531293496489525
NRG3	10	83635070	84746723	+	2.9215383529663086	0.2143254578113556	0.17780661582946777
AC022389.1	10	85926988	85931832	-	0.253717303276062	0.0036276699975132942	0.0
RGR	10	86004809	86019716	+	0.19277866184711456	1.3372217416763306	0.9193451404571533
GRID1	10	87359312	88126250	-	1.2499587535858154	4.8818817138671875	7.028377532958984
SNCG	10	88718375	88723017	+	12.687431335449219	0.9375675320625305	0.31603240966796875
RP11-96C23.8	10	88725496	88729158	-	0.6927416324615479	1.93901526927948	3.5163469314575195
FAM22A	10	88985205	88994912	+	0.3784717917442322	0.14669129252433777	0.13032551109790802
FAM22D	10	89117425	89130452	+	0.5031248331069946	0.3658410608768463	0.21572153270244598
ACTA2	10	90694831	90751147	-	63.7657356262207	13.895136833190918	24.11703109741211
FGFBP3	10	93666346	93669240	-	185.87608337402344	38.272403717041016	54.8571891784668
CYP26A1	10	94833232	94837647	+	0.4287240505218506	0.02899237908422947	0.32117247581481934
RBP4	10	95351444	95361501	-	12.188787460327148	0.09767983853816986	0.024473076686263084
LGI1	10	95517566	95557916	+	5.812464714050293	0.04260101541876793	0.07274188846349716
RP11-476E15.3	10	97114703	97117003	-	1.0648651123046875	0.4286123812198639	0.07719563692808151
CCNJ	10	97803151	97820627	+	31.562713623046875	7.899704933166504	11.561785697937012
TLL2	10	98124363	98273675	-	0.9513117671012878	0.17019103467464447	0.2708938717842102
HOGA1	10	99344080	99372559	+	0.9015308022499084	0.9524631500244141	0.24227574467658997
CRTAC1	10	99624757	99790585	-	0.47633475065231323	0.3968939483165741	0.043917879462242126

CNNM1	10	101088856	101154087	+	0.026172064244747162	0.6346676349639893	0.5421051979064941
DNMBP-AS1	10	101686767	101718138	+	0.012504851445555687	0.0	0.2915157079696655
WNT8B	10	102222798	102243501	+	0.4037342667579651	0.11194491386413574	0.03804146125912666
RP11-108L7.7	10	102762051	102767512	-	0.07161233574151993	0.03477122262120247	0.7230947613716125
TLX1NB	10	102849078	102901023	-	0.0	0.04610824212431908	0.022414466366171837
TLX1	10	102889257	102897545	+	0.019067013636231422	0.9555251002311707	0.8014312982559204
LBX1	10	102986733	102989551	-	0.01778748445212841	0.24045750498771667	0.10846088081598282
RP11-324L3.3	10	102989351	102992362	+	0.0054552811197936535	0.37326547503471375	0.13382786512374878
RP11-107I14.1	10	102992009	103029905	+	0.004254300147294998	0.23359860479831696	0.09313879162073135
PITX3	10	103989943	104001231	-	0.4565138518810272	0.033305056393146515	0.08155898749828339
C10orf95	10	104209574	104216054	-	0.03114684484899044	0.09994743764400482	0.2571885585784912
AS3MT	10	104629273	104661656	+	19.797809600830078	9.109064102172852	6.158664226531982
AL360001.1	10	104958490	105036751	-	0.24093346297740936	0.03845510631799698	0.002436972232222557
INA	10	105036920	105050108	+	74.3144302368164	3.9685351848602295	2.178071975708008
WDR96	10	105889646	105992120	-	0.20631910860538483	0.2495875507593155	0.06419291347265244
SORCS3	10	106400859	107024993	+	0.3828878700733185	1.4638985395431519	3.9944450855255127
C10orf81	10	115511213	115543188	+	0.015124992467463017	2.005831003189087	0.08614181727170944
GFRA1	10	117816444	118033126	-	15.832677841186523	2.4838342666625977	0.2984028458595276
C10orf82	10	118423207	118429481	-	0.3102363348007202	0.05245203152298927	0.1287013292312622
RP11-319I23.2	10	120116620	120124615	+	0.1600649356842041	0.005504943896085024	0.036498237401247025
RP11-179H18.2	10	121331316	121334113	+	7.205480942502618E-4	7.48589402064681E-4	0.3993440568447113
RP11-179H18.8	10	121430230	121484200	-	0.09661106765270233	0.06862503290176392	0.3908666670322418
RP11-323P17.1	10	122521324	122551437	-	0.14261996746063232	0.026991544291377068	0.00313835171982646
HMX3	10	124895478	124899995	+	0.0030847499147057533	0.12797118723392487	0.270718514919281
HMX2	10	124907638	124910188	+	0.00434107007458806	0.09096043556928635	0.4338585138320923
CHST15	10	125767184	125853206	-	18.529069900512695	1.0131784677505493	1.703155755996704
RP11-422P15.3	10	128102438	128110448	-	0.178140789270401	1.5522955656051636	1.6092004776000977
C10orf90	10	128113566	128359079	-	0.11989232897758484	6.385659217834473	2.6689560413360596
FAM196A	10	128933694	128994422	-	1.799973726272583	21.359220504760742	27.913766860961914
RP11-4C20.3	10	129727640	129732781	-	0.0	0.18770559132099152	0.11056216061115265
RP11-4C20.4	10	129732962	129734431	+	0.08479320257902145	0.7495695948600769	0.4271985590457916
EBF3	10	131633547	131762538	-	6.909582138061523	4.269351959228516	0.29486605525016785
TCERG1L	10	132890654	133109984	-	0.403491735458374	0.011252058669924736	2.2218761444091797
DPYSL4	10	134000404	134019266	+	90.32147979736328	20.690916061401367	24.475475311279297
RP11-432I24.6	10	134334331	134335953	-	0.03763684257864952	0.04552585631608963	0.30048245191574097
RP11-288G11.3	10	134596683	134598269	-	2.530874729156494	0.06604141741991043	0.5032055974006653
NKX6-2	10	134598297	134599556	-	5.871723651885986	0.25719311833381653	0.05810580030083656
KNDC1	10	134973951	135039916	+	2.1320343017578125	0.15679027140140533	0.0928478017449379
ADAM8	10	135075907	135090372	-	0.7479574084281921	2.3305864334106445	2.2461140155792236
SPRN	10	135234170	135382916	-	3.750673532485962	1.2343803644180298	0.5757028460502625
RP11-304M2.5	11	203623	205470	+	0.015422901138663292	0.0	0.4506351053714752
IFITM1	11	313506	315272	+	74.44461059570312	5.522082328796387	4.830702304840088
PKP3	11	392614	404908	+	0.21039840579032898	0.08171157538890839	0.8857728242874146
C11orf35	11	554855	560779	-	0.33471253514289856	0.25048497319221497	1.180712103843689
CEND1	11	787104	790123	-	8.342192649841309	11.347260475158691	29.438232421875
AC068580.6	11	1781578	1783716	+	0.010274768806993961	0.0014413355384021997	0.2895395755767822
SYT8	11	1848709	1858751	+	0.0014419881626963615	0.015262444503605366	0.14982981979846954
LSP1	11	1874200	1913497	+	0.07673022896051407	0.6073630452156067	1.328111171722412
H19	11	2016406	2022700	-	1.9556695222854614	275.09844970703125	153.02188110351562
IGF2	11	2150342	2182439	-	0.20282337069511414	5.371706008911133	19.59162712097168

AC132217.4	11	2150351	2151194	-	0.556878924369812	8.599120140075684	28.396377563476562
INS-IGF2	11	2153768	2182439	-	0.07012676447629929	3.04138445854187	11.937891006469727
SLC22A18AS	11	2909010	2924970	-	0.04761536046862602	0.4085547626018524	2.8433337211608887
SLC22A18	11	2920951	2946476	+	1.431342363357544	1.382981300354004	5.999032497406006
AC131971.3	11	2965668	2966753	+	0.12555073201656342	0.004895373247563839	2.1850223541259766
ART5	11	3659733	3663546	-	1.0831961631774902	0.15258347988128662	0.12715603411197662
RP11-732A19.5	11	6642682	6643553	+	0.06544606387615204	0.019854089245200157	0.5117601752281189
OR2AG2	11	6789218	6790286	-	0.14871801435947418	0.1212940365076065	0.0
ZNF215	11	6947635	7005863	+	3.0901272296905518	1.0920138359069824	0.16424158215522766
ZNF214	11	7020549	7041599	-	3.930495023727417	1.694446325302124	1.4143831729888916
NLRP14	11	7041677	7092539	+	0.22764842212200165	0.06708110868930817	0.022060576826334
SYT9	11	7260099	7490273	+	0.2516237497329712	0.024344632402062416	0.026852723211050034
OLFML1	11	7506619	7532608	+	5.255173206329346	0.9919277429580688	0.017093578353524208
LMO1	11	8245851	8290263	-	1.1496329307556152	3.6677517890930176	5.764767169952393
RP11-540A21.3	11	9779839	9832866	+	0.4890561103820801	1.6131564378738403	1.7882359027862549
RP11-351I24.1	11	10324204	10325251	-	1.5730700492858887	0.29035064578056335	0.4246658980846405
ADM	11	10326227	10328944	+	67.39611053466797	25.83759880065918	16.21984100341797
LYVE1	11	10578513	10633236	-	2.051846981048584	0.035320084542036057	0.004643753636628389
MRV11	11	10594638	10715535	-	9.419602394104004	2.3747220039367676	0.2686062753200531
CTD-2003C8.2	11	10906432	10920869	-	0.04336275905370712	0.5634615421295166	0.7059209942817688
RP11-567I13.1	11	11373973	11374854	+	0.017367815598845482	0.014668136835098267	0.9970828890800476
RP13-631K18.2	11	12052422	12083332	+	0.01413504034280777	0.1817740499973297	0.055815044790506636
CTC-497E21.4	11	12984057	13011095	-	0.1998237818479538	0.04403958469629288	0.018475426360964775
CTC-497E21.3	11	13022637	13030706	-	0.6342069506645203	0.18776404857635498	0.13915418088436127
SOX6	11	15987995	16761138	-	2.109424591064453	12.065863609313965	11.088871002197266
KCNJ11	11	17407406	17410878	-	0.4958668649196625	0.3469390571117401	2.12306832672119
TPH1	11	18039111	18063973	-	0.7203418612480164	0.12081193178892136	0.1177736446261406
LDHA	11	18415935	18429972	+	41.82538986206055	174.42529296875	140.64308166503906
PTPN5	11	18749475	18814268	-	1.1479158401489258	0.47205376625061035	2.578221082687378
NAV2-IT1	11	19402031	19406561	+	0.5503438711166382	1.6352990865707397	0.12707482278347015
NELL1	11	20691117	21597227	+	1.0202348232269287	0.0808442011475563	0.1436213254928589
FIBIN	11	27015628	27018630	+	1.6887218952178955	21.922592163085938	23.128570556640625
DCDC5	11	30851916	31149212	-	0.20003752410411835	0.03401632234454155	0.007854428142309189
DCDC1	11	30964749	31391357	-	0.3173984885215759	0.11234774440526962	0.04608752205967903
RP1-65P5.3	11	32118689	32126637	-	0.7016687989234924	0.0219735000282526	5.382076263427734
WT1	11	32409321	32457176	-	0.030792197212576866	1.0234342813491821	0.5034733414649963
WT1-AS	11	32457064	32480315	+	0.007211850956082344	0.09818705171346664	0.07607989758253098
CCDC73	11	32623792	32816204	-	0.009792971424758434	0.0013087390689179301	0.07514165341854095
RP4-541C22.5	11	33686766	33718247	-	0.030325841158628464	0.15124300122261047	0.4431575834751129
RP4-541C22.4	11	33730981	33731568	+	0.2658696174621582	0.03413117304444313	21.572668075561523
RP4-607I7.1	11	35154202	35159579	-	0.09411950409412384	0.38758009672164917	0.4838007986545563
RP1-68D18.4	11	35231890	35236532	-	0.032810457050800323	0.02278963290154934	0.5901370644569397
SLC1A2	11	35272753	35441610	-	6.412253379821777	10.792815208435059	1.9917417764663696
RP11-698N11.2	11	35936601	35940289	-	0.8050323128700256	8.437386512756348	19.38014030456543
RP11-484D2.2	11	43350298	43380846	-	0.026076292619109154	0.0	1.6122026443481445
RP11-484D2.4	11	43411833	43417045	+	2.256815195083618	1.9952058792114258	0.5948322415351868
ACCS	11	44087475	44105772	+	0.4224148690700531	0.7129762172698975	2.1783602237701416
CD82	11	44585977	44641913	+	5.6069793701117875	12.652498245239258	18.95639419555664
TSPAN18	11	44748015	44953972	+	16.592708587646484	1.6571156978607178	0.6362080574035645
CHST1	11	45670427	45687172	-	1.7022088766098022	1.0781153440475464	7.559884548187256

RP11-618K13.2	11	45927492	45928012	-	0.3844350278377533	0.3039848506450653	6.784348964691162
MDK	11	46402306	46405375	+	369.25994873046875	54.816837310791016	54.739227294921875
AC104942.1	11	47599277	47599823	+	0.6176691651344299	0.48048919439315796	1.7390588521957397
C1QTNF4	11	47611216	47616211	-	7.908534526824951	0.559298038482666	1.2897597551345825
AGBL2	11	47681143	47736941	-	0.06056107580661774	0.36963215470314026	0.27918240427970886
FOLH1	11	49168187	49230222	-	0.08405053615570068	0.48537924885749817	4.396533966064453
OR4A16	11	55110627	55111707	+	0.8719890713691711	0.18723410367965698	0.0
LRRCS5	11	56949221	56959191	+	13.148040771484375	0.27681764960289	0.07140009105205536
RP11-872D17.4	11	57093077	57095432	+	0.5578621029853821	0.09445738047361374	6.083863258361816
P2RX3	11	57105848	57138073	+	1.6520088911056519	0.014940924011170864	0.005763961933553219
SERPING1	11	57364860	57382326	+	19.81288719177246	1.0940709114074707	0.2633202075958252
AP000662.4	11	57405497	57420263	+	7.740102291107178	1.1032788753509521	0.5903007984161377
DTX4	11	58938903	58976060	+	41.57255935668945	5.394165992736816	1.5137804746627808
RP11-804A23.2	11	60603469	60610438	-	0.08008381724357605	0.02328334003686905	0.7175348997116089
SLC15A3	11	60704556	60720002	-	2.3670902252197266	0.3544086515903473	0.915776789188385
VWCE	11	61025762	61062896	-	10.8997220993042	0.9715418219566345	3.5615904331207275
LRRC10B	11	61276272	61278482	+	7.5581769943237305	1.8268502950668335	2.069272518157959
SYT7	11	61282785	61348620	-	2.190321445465088	0.8243590593338013	0.32356351613998413
BEST1	11	61717293	61732987	+	0.3333236277103424	1.5626177787780762	8.13332462310791
AHNAK	11	62201016	62323719	-	95.8523178100586	56.312137603759766	34.14595031738281
GNG3	11	62475130	62476673	+	23.872539520263672	0.8527175784111023	1.3589894771575928
WDR74	11	62599814	62609281	-	27.59697914123535	830.1527099609375	742.7330322265625
CHRM1	11	62676151	62689279	-	0.00280974293127656	1.2549737691879272	2.171828508377075
PLA2G16	11	63340667	63384355	-	10.848221778869629	7.843115329742432	35.73419189453125
MACROD1	11	63766030	63933578	-	4.877504348754883	8.464753150939941	16.828210830688477
RP11-783K16.14	11	63996686	64001824	-	0.8225513696670532	1.0833215713500977	2.7714011669158936
CCDC88B	11	64107690	64125006	+	0.20033466815948486	0.3894633650779724	0.8732383251190186
AP003774.4	11	64216546	64219126	+	0.034893475472927094	0.22040776908397675	0.4441608190536499
RASGRP2	11	64494383	64512928	-	1.0475890636444092	0.8542780876159668	0.3127933442592621
PYGM	11	64513861	64527769	-	0.5271958112716675	0.3153955936431885	0.15206994116306305
AP003068.6	11	64852451	64856847	-	0.024023037403821945	0.005778288468718529	0.31086084246635437
NEAT1	11	65190245	65213011	+	3.8769185543060303	43.32703399658203	14.785663604736328
AP000769.1	11	65222728	65234028	+	0.603242814540863	2.4139349460601807	1.865356683731079
OVOL1	11	65554493	65564690	+	0.3815069794654846	0.008155912160873413	0.0036823491100221872
RP11-770G2.4	11	65556522	65558339	-	0.2184908539056778	0.009723924100399017	0.006195107940584421
SNX32	11	65601112	65624367	+	0.8345662355422974	1.9592477083206177	3.2667009830474854
TSGA10IP	11	65712916	65727434	+	1.2757679224014282	0.09131373465061188	0.032552313059568405
GAL3ST3	11	65809423	65816651	-	5.983377456665039	1.1136361360549927	1.819408655166626
RP11-755F10.3	11	66027038	66029305	-	0.16870257258415222	0.43499138951301575	0.658950924873352
RP11-867G23.3	11	66037303	66045996	-	0.08261581510305405	0.007313879672437906	1.285656213760376
RP11-867G23.4	11	66044250	66044963	-	0.10278480499982834	0.0236064326018095	3.961397647857666
CD248	11	66081958	66084515	-	19.683677673339844	4.380120277404785	2.0976688861846924
RP11-867G23.12	11	66101965	66107346	+	0.022545337677001953	0.03359723463654518	0.5307667255401611
RP11-867G23.10	11	66176629	66184608	+	2.9897255897521973	0.6856196522712708	0.6670656800270081
NPAS4	11	66188475	66194178	+	0.6631402969360352	0.15782439708709717	0.075416699051857
RHOD	11	66824289	66839484	+	3.1447651386260986	0.39165541529655457	3.8515360355377197
SSH3	11	67070919	67080078	+	2.461535930633545	2.137040376663208	9.0379056930542
TBC1D10C	11	67171386	67177560	+	0.6560815572738647	0.04376177862286568	0.0195284653455019
AP003419.16	11	67198838	67202870	-	0.07078802585601807	0.049671467393636703	0.8089022636413574
CABP4	11	67219877	67226699	+	0.01595395803451538	1.0076483488082886	0.19858327507972717

RP11-655M14.13	11	67385750	67394775	-	0.3885267674922943	0.277093768119812	0.050902534276247025
ACY3	11	67410026	67418130	-	0.014431320130825043	0.2023608237504959	0.17702409625053406
CTD-2655K5.1	11	67889520	67897979	+	0.10965864360332489	0.46779289841651917	0.5884642601013184
AP003071.1	11	68779899	68785913	+	0.10294485837221146	0.004263610579073429	0.40139755606651306
RP11-805J14.5	11	70052397	70053496	-	0.06549602746963501	0.005745382979512215	1.9840466976165771
SHANK2	11	70313961	70963623	-	1.7610665559768677	0.3239642381668091	0.03491649776697159
RP11-849H4.4	11	71725337	71731956	+	0.4996325373649597	0.17584310472011566	1.5811415910720825
PHOX2A	11	71950121	71956708	-	0.0644049346446991	0.008668855763971806	0.2576063275337219
ARAP1-AS1	11	72396120	72404853	+	0.0	0.009607954882085323	0.9082114696502686
RP11-809N8.2	11	73106604	73107481	-	0.13937431573867798	0.24782536923885345	0.6933677196502686
PLEKHB1	11	73357223	73373864	+	5.195185661315918	23.29952621459961	25.872478485107422
SLCO2B1	11	74811608	74917594	+	0.2780100703239441	0.07944688200950623	5.228165537118912E-4
KLHL35	11	75133438	75141674	-	1.0014140605926514	0.07593059539794922	0.06921087205410004
GDPD5	11	75145685	75236948	-	3.07222056388855	0.3480314314365387	0.2953386902809143
RP11-939C17.2	11	75282944	75283832	-	0.8680233359336853	0.014955799095332623	7.890355110168457
MAP6	11	75297963	75380165	-	28.589754104614258	3.7616114616394043	4.634686470031738
CTD-2530H12.8	11	75307189	75308315	-	1.6165575981140137	0.1948857605457306	0.05429913476109505
DGAT2	11	75470557	75512579	+	0.1552222220897675	1.4167581796646118	0.914344072341919
CAPN5	11	76777979	76837201	+	14.36768913269043	27.438724517822266	68.55101776123047
OMP	11	76813886	76814377	+	0.3773373067378998	1.4764968156814575	1.3232930898666382
RP11-689N19.3	11	76834749	76837201	-	0.008565603755414486	0.002744716592133045	4.132938385009766
MYO7A	11	76839310	76926284	+	0.20389440655708313	0.4240032434463501	0.9037978649139404
RP11-91P24.7	11	77540700	77583308	-	0.2077576369047165	0.15187780559062958	0.7084490656852722
KCTD14	11	77726761	77757237	-	0.9774553179740906	8.226283073425293	5.263017177581787
RP11-452H21.4	11	78135028	78140882	-	0.5952102541923523	0.412710040807724	0.1891472190618515
RP11-179A16.1	11	81590893	82429124	-	0.008843284100294113	0.16171735525131226	0.05085001885890961
FAM181B	11	82443053	82444906	-	8.769086837768555	32.552860260009766	46.5063591003418
CCDC81	11	86085778	86134151	+	1.1714839935302734	0.24755647778511047	0.2785893976688385
PRSS23	11	86502101	86663886	+	39.72300309033203	13.556262969970703	15.4220552444458
NAALAD2	11	89864683	89926062	+	2.531630754470825	0.21973323822021484	0.1506136655807495
CCDC67	11	93063137	93171653	+	0.05098113417625427	0.0010790710803121328	0.0
C11orf75	11	93211638	93276674	-	12.1992769241333	1.9550790786743164	1.2001521587371826
GPR83	11	94110477	94134585	-	0.49526795744895935	0.03195793181657791	0.015542999841272831
RP11-685N10.1	11	94206074	94206736	-	2.8343842029571533	2.459606409072876	0.7429999709129333
RP11-856F16.2	11	94607217	94658686	-	0.011052215471863747	0.0	1.055716872215271
PGR	11	100900355	101001255	-	0.1967424601316452	0.014255797490477562	3.5356555599719286E-4
RP11-864G5.3	11	102100582	102101653	-	0.15407085418701172	0.0	3.012742519378662
RP11-315O6.1	11	102323650	102332739	+	0.12119022756814957	0.6189430356025696	0.41847410798072815
PDGFD	11	103777914	104035107	-	9.070713996887207	0.6294480562210083	1.3987892866134644
RP11-677I8.3	11	105956717	105972702	-	0.005435432307422161	0.005640579387545586	0.3687642812728882
ELMOD1	11	107461817	107537505	+	0.9454885721206665	4.338399410247803	5.286275863647461
SLN	11	107578104	107590419	-	0.1409464329481125	2.092061758041382	1.4626179933547974
ARHGAP20	11	110447766	110583912	-	0.31008464097976685	13.738983154296875	12.116436958312988
RP11-108O10.2	11	111639392	111649074	-	0.7825415134429932	0.1819918006658554	0.03787635639309883
RP11-27G22.1	11	112658027	112666577	+	0.0	0.7597111463546753	0.06834032386541367
RP11-839D17.2	11	113140254	113144623	-	0.03915875032544136	0.01038662064820528	0.4200868606567383
ANKK1	11	113258513	113271140	+	0.007588974665850401	0.6750392913818359	0.1974693089723587
DRD2	11	113280318	113346413	-	0.4921815097332001	1.4210079908370972	3.7451953887939453
ZBTB16	11	113930315	114121398	+	4.010252475738525	0.9218416810035706	0.7844499349594116
RP11-713B9.1	11	115045697	115046044	+	0.030201641842722893	0.0	2.5759851932525635

CTC-774J1.2	11	115624966	115631345	-	0.18611951172351837	0.058039017021656036	0.020431842654943466
APOA1	11	116706467	116708666	-	2.1012494564056396	0.17690952122211456	0.11097168922424316
TAGLN	11	117070037	117075503	+	126.2299575805664	25.746686935424805	14.963857650756836
DSCAML1	11	117298489	117688240	-	0.10196907818317413	1.2287386655807495	0.5966650247573853
RP11-728F11.4	11	117704434	117708507	+	0.2553449273109436	0.0	1.5340700149536133
IL10RA	11	117857063	117872196	+	0.014271811582148075	0.0753047913312912	0.05036166310310364
RP11-770J1.5	11	118267810	118272610	-	0.08617808669805527	0.053645748645067215	1.2660754919052124
TREH	11	118528026	118550399	-	0.010265614837408066	0.0028327424079179764	0.5610494613647461
CXCR5	11	118754475	118768508	+	0.017445439472794533	0.0	0.10380961745977402
RP11-110I1.6	11	118914899	118916205	+	0.08842051029205322	0.0	1.8651374578475952
ABCG4	11	119019722	119033360	+	0.6486526727676392	0.191809743642807	0.21633000671863556
RP11-334E6.10	11	119206959	119208019	-	0.045169223099946976	0.002373117720708251	2.63212513923645
USP2	11	119225925	119252436	-	1.2745940685272217	4.015355110168457	4.742996692657471
RP11-305N23.1	11	119252520	119397374	+	0.08331681787967682	0.5829522609710693	0.41416022181510925
CTD-2523D13.2	11	119600293	119610333	+	0.06322876363992691	0.21242010593414307	1.5358467102050781
TECTA	11	120971882	121062202	+	1.3666455745697021	0.4800371527671814	0.44530346989631653
SORL1	11	121322912	121504387	+	5.221705913543701	21.520689010620117	16.284563064575195
SCN3B	11	123499895	123525952	-	2.5910255908966064	0.1796787828207016	0.7088870406150818
VSIG2	11	124617368	124622134	-	0.09246227145195007	0.034664228558540344	0.0031325912568718195
ESAM	11	124622026	124632186	-	1.7046171426773071	0.4218001663684845	0.5439788699150085
HEPACAM	11	124789089	124806308	-	1.0521665811538696	9.785364151000977	8.530871391296387
RP11-687M24.5	11	125028357	125034505	-	1.1913707256317139	0.18170392513275146	0.0
KIRREL3	11	126293254	126873355	-	0.557742178440094	0.2840254306793213	2.9292104244232178
RP11-115C10.1	11	126522747	126551999	+	0.17749227583408356	0.042481038719415665	0.7615523338317871
FLI1	11	128555046	128683161	+	3.3339507579803467	0.8129618763923645	0.26628831028938293
KCNJ5	11	128760140	128790930	+	0.8646535873413086	0.9398916959762573	1.493142008781433
TP53AIP1	11	128804626	128813040	-	0.4120386242866516	0.07830685377120972	0.1275060921907425
TMEM45B	11	129685714	129729898	+	0.09366939216852188	0.0	0.01924418844282627
RP11-890B15.2	11	130714086	130732005	-	0.022153306752443314	0.021055616438388824	0.2720564603805542
OPCML	11	132284871	133402414	-	0.4722958207130432	0.701036810874939	4.84879705505371
OPCML-IT1	11	133229924	133235975	-	0.01693168468773365	0.0487356036901474	0.46638116240501404
RP11-448P19.1	11	133653566	133680395	-	0.05596253648400307	0.3725484609603882	0.2659059166908264
RP11-259P6.1	11	133778894	133782774	-	1.899229884147644	4.191205978393555	7.90740966796875
IGSF9B	11	133785185	133826880	-	1.3624035120010376	4.732948303222656	6.739804744720459
RP11-713P17.3	11	133902167	133916744	+	0.1478026807308197	0.5273331999778748	0.5474146008491516
GLB1L3	11	134144139	134189458	+	0.009823355823755264	0.08159133046865463	0.05507482960820198
RP11-627G23.1	11	134306367	134375507	+	0.31451255083084106	0.1176433190703392	0.03521295636892319
IQSEC3	12	175931	287626	+	0.21754594147205353	0.37433159351348877	0.06636502593755722
B4GALNT3	12	569530	672675	+	4.023853302001953	3.7293965816497803	17.724864959716797
NINJ2	12	673462	772945	-	0.054850004613399506	1.045216679573059	1.8056937456130981
WNT5B	12	1639057	1756409	+	9.41031551361084	2.877098321914673	4.509716033935547
CACNA1C	12	2079952	2807115	+	1.1904113292694092	0.13030436635017395	0.07155726850032806
RP4-816N1.7	12	2906302	2913104	-	0.4034973084926605	0.5961342453956604	4.773718357086182
RP5-1063M23.2	12	3427884	3434509	+	0.024456381797790527	0.0764445811510086	0.2931705415248871
PRMT8	12	3490515	3703139	+	1.5304970741271973	0.22188876569271088	0.012584618292748928
AC005908.1	12	3592880	3601975	-	0.6125888824462891	0.06964679807424545	0.0021335589699447155
GALNT8	12	4829507	4960277	+	2.1479873657226562	0.6227554082870483	0.4598045349121094
ANO2	12	5641035	6055398	-	1.0301966667175293	0.032280679792165756	0.005867269355803728
CD9	12	6308881	6347427	+	19.430316925048828	87.05108642578125	89.3237075805664
PLEKHG6	12	6419602	6437672	+	0.16420762240886688	0.014748930931091309	0.007441796828061342

LOC678655	12	6548167	6560733	-	0.902864396572113	5.662694454193115	8.048210144042969
SCARNA10	12	6619441	6619688	+	196.9000701904297	1061.664306640625	530.0990600585938
SCARNA11	12	6687788	6693905	+	0.27686798572540283	0.09555672854185104	1.2992289066314697
AC125494.1	12	6772426	6781235	+	0.053176265209913254	0.002797861583530903	0.31779345870018005
MLF2	12	6857170	6876641	-	110.00389862060547	55.70081329345703	108.50916290283203
CD4	12	6896024	6929974	+	2.688987970352173	0.20580929517745972	0.08293363451957703
RBP5	12	7276280	7281538	-	2.3466148376464844	0.0856465995311737	0.026517413556575775
CLSTN3	12	7282294	7311541	+	28.270092010498047	7.372714042663574	7.335352897644043
RP11-90D4.2	12	8448582	8549399	-	0.0571049228310585	0.013950375840067863	0.012428748421370983
MFAP5	12	8789942	8815484	-	11.663553237915039	0.006195733789354563	5.228906154632568
RP11-20D14.6	12	8940853	8948385	+	1.1367300748825073	0.22450664639472961	0.07755951583385468
RP11-436I9.2	12	9217773	9220651	+	0.7814409136772156	0.36205852031707764	0.15534506738185883
RP11-118B22.2	12	9392599	9395635	+	0.20951618254184723	0.18238584697246552	0.05920616537332535
RP11-277P12.9	12	10511063	10513644	-	0.015477080829441547	0.4422137439250946	0.10831397771835327
RP11-277P12.20	12	10516368	10551105	+	0.1524846851825714	2.179560422897339	2.304654836654663
KLRC4	12	10559983	10562356	-	0.5646032094955444	6.2761383056640625	3.02740216255188
RP11-277P12.6	12	10564911	10588600	-	1.0168930292129517	8.04768180847168	4.5944061279296875
KLRC2	12	10579453	10594899	-	0.40470170974731445	4.899374961853027	2.830792188644409
KLRC1	12	10594863	10607284	-	0.005268310196697712	0.19574205577373505	0.04320584237575531
TAS2R50	12	11138512	11139511	-	0.35794246196746826	0.7228479981422424	0.09563814848661423
TAS2R30	12	11285557	11287243	-	0.3691678047180176	1.6342369318008423	0.10719238966703415
RP11-434C1.1	12	11700964	11743303	+	0.3097538352012634	0.23577778041362762	1.121371865272522
BCL2L14	12	12202797	12363947	+	0.13705457746982574	0.015873605385422707	0.0
APOLD1	12	12878865	12944400	+	27.631641387939453	7.760552883148193	4.617605209350586
GPRC5A	12	13043716	13070871	+	8.702327728271484	2.1508679389953613	0.8341836929321289
GSG1	12	13236494	13256619	-	0.35333266854286194	0.028310559689998627	0.04925532639026642
GRIN2B	12	13714144	14133053	-	2.5697007179260254	0.9542116522789001	0.38354945182800293
RP11-134N1.2	12	14369524	14374231	+	0.009025368839502335	0.3805018961429596	0.48992156982421875
RP11-695J4.2	12	14720684	14772689	+	0.06208851560950279	0.24321377277374268	0.2278788983821869
MGP	12	15034115	15038860	-	109.473876953125	4.0382537841796875	7.442661285400391
ARHGDIB	12	15094951	15114662	-	4.774350643157959	6.81617546081543	1.2502750158309937
PLEKHA5	12	19282648	19529334	+	7.858567714691162	1.6571160554885864	2.9964044094085693
RP11-282K24.3	12	19300008	19307593	+	0.20262813568115234	0.22448641061782837	0.010225088335573673
PDE3A	12	20522179	20837315	+	8.536099433898926	1.1031224727630615	2.7746388912200928
SLCO1C1	12	20848289	20906320	+	4.3356428146362305	0.7425968050956726	0.11599130183458328
SLCO1B3	12	20963636	21243040	+	0.18783704936504364	0.0041994210332632065	0.012059448286890984
RP11-545J16.1	12	20968608	21243179	+	0.26366931200027466	0.012468073517084122	0.01020407397300005
SLCO1B7	12	20968673	21245679	+	0.1927477866411209	0.01253017969429493	0.004393591079860926
SLCO1B1	12	21284136	21392180	+	0.1391063630580902	0.005026224534958601	0.0
SLCO1A2	12	21417534	21572528	-	0.1138082966208458	0.0337052047252655	0.0027493133675307035
IAPP	12	21507893	21532912	+	0.14079400897026062	0.0010340058943256736	0.0
C12orf39	12	21679241	21690311	+	5.3554558753967285	0.17961019277572632	0.039352208375930786
KCNJ8	12	21917889	21928515	-	8.04263687133789	3.0053699016571045	2.80880069732666
ABCC9	12	21950335	22094336	-	5.354597091674805	0.534064769744873	0.25312116742134094
RP11-625L16.3	12	24983355	24989492	+	0.0	0.008468620479106903	0.4533080458641052
LRMP	12	25173936	25261268	+	0.10917389392852783	0.06793417781591415	8.225720375776291E-4
IFLTD1	12	25562241	25801513	-	0.9674466848373413	0.1400153785943985	0.016364729031920433
RP11-421F16.3	12	27124519	27132515	+	0.012536749243736267	0.019087888300418854	0.13288214802742004
C12orf70	12	27619743	27655118	+	0.048858892172575	0.19121116399765015	0.22186480462551117
RP11-1060J15.4	12	27849321	27863703	-	0.00210097199305892	0.008203448727726936	1.2283439636230469

RP11-860B13.1	12	27932754	27934000	-	0.15200437605381012	0.03695858642458916	0.5742871761322021
RP11-771K4.1	12	31516415	31522235	-	0.38114693760871887	0.04517006129026413	0.0
RP11-843B15.2	12	32257051	32260462	-	0.009260687977075577	0.02503936178982258	0.6794680953025818
SYT10	12	33527173	33592754	-	0.4974173903465271	0.05262558162212372	0.0017687411746010184
LRRK2	12	40590546	40763087	+	0.7916196584701538	6.696659564971924	5.9945197105407715
MUC19	12	40787197	40964632	+	0.18480750918388367	0.035442691296339035	0.011881818063557148
ADAMTS20	12	43747669	43945724	-	0.45366761088371277	0.06104772910475731	0.029591387137770653
NELL2	12	44902058	45315631	-	54.76633834838867	6.699935436248779	6.091492652893066
ENDOU	12	48103517	48119350	-	0.028453964740037918	0.146408811211586	0.10896308720111847
C12orf68	12	48577366	48579709	+	22.08095359802246	4.3082075119018555	4.3470683097839355
RP11-579D7.2	12	49159977	49161106	+	0.007924271747469902	0.0	1.6645326614379883
WNT10B	12	49359123	49365546	-	0.38301751017570496	1.469486951828003	6.233798027038574
DDN	12	49388932	49393092	-	0.4460732638835907	2.4033312797546387	2.9407427310943604
RP11-386G11.10	12	49521565	49541652	+	2.497748851776123	0.858795166015625	45.69031524658203
TUBA1C	12	49582519	49667116	+	35.0543098449707	94.98116302490234	126.7092514038086
RP11-977B10.2	12	49627352	49658539	-	0.2523531913757324	0.6194195747375488	0.7328780889511108
RP11-161H23.5	12	49658939	49667089	-	0.026264658197760582	0.3936471939086914	3.6907520294189453
DNAJC22	12	49740700	49751309	+	2.306535243988037	5.215621471405029	8.02067756652832
KCNH3	12	49932940	49952077	+	0.9837825894355774	1.8251237869262695	5.484719753265381
RP11-133N21.10	12	49970623	49971288	-	1.2650226354599	0.08680915087461472	0.0
FAM186B	12	49976668	49999422	-	1.19835886604309	0.2502284348011017	0.1701253205537796
RP11-469H8.6	12	50345295	50356707	-	0.02186635136604309	0.011870097368955612	0.17223094403743744
AQP5	12	50355653	50359434	+	0.05821019411087036	0.022682728245854378	0.9267002940177917
GPD1	12	50497602	50505102	+	2.23329496383667	0.23335665464401245	0.1836099475622177
RP11-1100L3.7	12	52470625	52475868	-	0.028575442731380463	0.011077648028731346	2.372218370437622
KRT8	12	53290971	53343738	-	0.7579789757728577	0.7229101657867432	4.164379119873047
RP11-983P16.4	12	53408380	53448222	-	1.3713960647583008	1.9046097993850708	4.2573418617248535
SP7	12	53720362	53739099	-	0.058675069361925125	0.020368099212646484	0.3970491886138916
RP11-793H13.3	12	53907768	53911392	+	0.009922105818986893	0.009546374902129173	0.3132447600364685
HOXC13	12	54332535	54340328	+	0.0026653215754777193	1.1471333503723145	1.0719072818756104
HOTAIR	12	54356092	54368740	-	0.0	0.47653982043266296	1.6482551097869873
HOXC11	12	54366910	54371427	+	0.0	0.25279688835144043	1.3988178968429565
AC012531.14	12	54377234	54379303	-	0.0	0.1943579465150833	0.4182833433151245
HOXC10	12	54378849	54384063	+	0.004011358600109816	13.172798156738281	13.830524444580078
HOXC5	12	54379629	54429145	+	0.0	1.9809621572494507	3.334535598754883
HOXC6	12	54384408	54424607	+	4.553839680738747E-4	1.9900368452072144	4.389481067657471
HOXC9	12	54388679	54397121	+	0.003442098619416356	3.0547261238098145	7.409905910491943
AC012531.16	12	54388992	54390569	-	0.0	1.6123524904251099	0.591890275478363
AC012531.17	12	54392806	54393794	-	0.0	1.0494474172592163	1.3664849996566772
HOXC8	12	54402832	54407570	+	0.002071936847642064	2.2092835903167725	2.894263505935669
HOXC4	12	54410715	54449814	+	0.0	3.519092321395874	9.508883476257324
RP11-834C11.3	12	54452038	54516018	+	0.0	0.11099635809659958	0.06396294385194778
RP11-834C11.5	12	54478916	54519776	-	0.040040161460638046	0.31579262018203735	0.28995728492736816
RP11-834C11.4	12	54519882	54526627	+	0.0585203543305397	3.8899922370910645	6.987771987915039
PDE1B	12	54943134	54973023	+	0.08927695453166962	0.01244926918298006	0.005125752184540033
PPP1R1A	12	54969171	54982443	-	1.0741360187530518	0.08630222827196121	0.014047478325664997
METTL7B	12	56075330	56078395	+	4.394840240478516	28.40125274658203	37.0275993347168
ITGA7	12	56078352	56109827	-	160.03199768066406	27.2193603515625	39.262638092041016
PMEL	12	56347889	56367099	-	5.460449695587158	1.460322380065918	0.2304210662841797
RP11-973D8.4	12	56360622	56361258	-	0.09605064243078232	0.007436204236000776	1.6755740642547607

ERBB3	12	56473641	56497289	+	0.5674067139625549	19.965526580810547	28.206233978271484
RP11-603J24.17	12	56498398	56507689	-	0.6229692101478577	0.2017545998096466	2.128931999206543
RPL41	12	56510370	56511727	+	158.291748046875	270.104248046875	654.5477905273438
RP11-603J24.14	12	56544580	56552004	-	0.20346595346927643	0.34696337580680847	1.2890408039093018
GLS2	12	56864736	56882198	-	0.6551850438117981	0.04752672463655472	0.14805176854133606
TAC3	12	57403784	57422667	-	0.3168194890022278	0.030467236414551735	0.02420969799516678
NDUFA4L2	12	57628686	57634498	-	25.323623657226562	18.66130828857422	1.6702287197113037
ARHGAP9	12	57866038	57882597	-	0.3313148319721222	0.1462315320968628	0.06886567920446396
AC025165.8	12	58005901	58011848	-	0.02867959626019001	0.003594364272430539	0.33303388953208923
RP11-571M6.7	12	58087915	58115293	-	0.28323426842689514	0.1750815361738205	5.343005657196045
AGAP2	12	58118981	58135940	-	14.072575569152832	12.158909797668457	77.57811737060547
RP11-571M6.6	12	58120054	58122139	+	4.719240665435791	7.901134490966797	25.571697235107422
TSPAN31	12	58131796	58143994	+	11.775301933288574	9.723282814025879	51.248889230957
CDK4	12	58142034	58149796	-	158.42091369628906	113.97238159179688	1196.1153564453125
MARCH9	12	58148881	58154190	+	10.130860328674316	12.478838920593262	99.08980560302734
CYP27B1	12	58156117	58161034	-	1.4793810844421387	1.5379526615142822	8.218365669250488
RP11-571M6.13	12	58158794	58162769	-	3.07167387008667	2.950955629348755	9.990800857543945
AVIL	12	58191159	58212487	-	2.7419986724853516	0.8505169153213501	0.6692321300506592
RP11-620J15.1	12	58230875	58236528	+	2.2270820140838623	1.1991833448410034	0.2644209563732147
RP11-620J15.2	12	58263618	58290265	-	0.05098843574523926	0.2017507255077362	0.2182716280221939
FAM19A2	12	62102040	62672931	-	1.29386305809021	0.23691107332706451	0.10901865363121033
RP11-631N16.2	12	62996532	63007855	+	8.76901626586914	4.46323299407959	1.8827167749404907
PPM1H	12	63038367	63328817	-	5.759788513183594	2.2483227252960205	1.0444562435150146
AVPR1A	12	63539014	63544722	-	0.07458757609128952	0.0	0.0
MSRB3	12	65672423	65882024	+	23.940349578857422	3.9502108097076416	6.916382789611816
RP11-305O6.3	12	65675437	65680508	+	0.3665893077850342	0.30226120352745056	0.0010940643260255456
HMGA2	12	66217911	66360075	+	68.61407470703125	5.475674152374268	5.664400100708008
IRAK3	12	66582659	66648402	+	0.22964011132717133	0.1314144730567932	0.029643503949046135
GRIP1	12	66741211	67197966	-	7.848856449127197	0.31247803568840027	0.19809706509113312
RP11-123O10.4	12	67285656	67462942	-	3.4349892139434814	0.1476851850748062	0.0
RP11-81H14.2	12	68726668	68845443	-	0.01596793159842491	0.2826090157032013	0.2019250988960266
RP11-611O2.1	12	69221898	69222333	+	0.891305685043335	1.535487413406372	3.5076494216918945
RP11-611O2.5	12	69235068	69237017	-	0.08834380656480789	1.2090510129928589	13.40229606628418
CPM	12	69235977	69365350	-	0.7180649638175964	12.166908264160156	12.811014175415039
BEST3	12	70037140	70093256	-	0.5331689715385437	3.640467882156372	1.9759416580200195
RP11-320P7.1	12	70612912	70615642	-	0.30523309111595154	0.4498301148414612	0.03245130181312561
KCNMB4	12	70760056	70828072	+	7.447480201721191	1.1072545051574707	2.35785796813965
TPH2	12	72332626	72580398	+	0.04023905843963226	0.015771081671118736	0.0
TRHDE	12	72481046	73059422	+	0.8563494682312012	0.09211878478527069	4.46855354309082
RP11-56G10.2	12	74931925	74932413	-	0.28602901101112366	0.003172612050548196	1.2208133935928345
GLIPR1L2	12	75784850	75826468	+	0.12814795970916748	0.25022393465042114	0.5732512474060059
RP11-114H23.1	12	75956982	76377795	-	0.2717256247997284	0.8081424832344055	1.2804542779922485
RP11-114H23.2	12	76087790	76092596	-	0.14050182700157166	0.9651481509208679	1.1908386945724487
RP11-290L1.3	12	76424274	76425158	+	0.8811772465705872	0.29393574595451355	6.7928876876831055
RP11-54A9.1	12	76653619	76698911	+	1.2600747346878052	0.28390589356422424	0.04085182398557663
SYT1	12	79257773	79845788	+	22.863985061645508	2.9822299480438232	3.5190398693084717
RP1-78O14.1	12	79734985	79897176	-	0.49949541687965393	0.022175118327140808	0.04248802736401558
PAWR	12	79968759	80084877	-	9.251325607299805	2.0234529972076416	2.327861785888672
OTOGL	12	80603233	80772870	+	0.23983976244926453	0.1388818472623825	0.06853584200143814
PTPRQ	12	80799774	81074013	+	0.08191048353910446	0.012428835965692997	0.11901136487722397

PPFIA2	12	81652045	82153332	-	2.362093448638916	0.655262291431427	0.9159036874771118
TMTC2	12	83080659	83528649	+	18.87116050720215	4.063732624053955	5.671182155609131
TSPAN19	12	85408094	85430055	-	0.41590043902397156	0.03511197865009308	0.018939096480607986
LRRIQ1	12	85430092	85657002	+	1.1209050416946411	0.26438987255096436	0.39841702580451965
LUM	12	91496406	91505608	-	28.706623077392578	9.248648643493652	1.0463812351226807
DCN	12	91539025	91576900	-	6.372068881988525	3.07920503616333	0.3141961991786957
CLLU1	12	92815307	92885703	+	0.013829332776367664	0.06987471133470535	0.06826666742563248
NUDT4	12	93771659	93797024	+	17.214677810668945	22.527151107788086	91.59026336669922
FGD6	12	95470525	95611258	-	8.76339042663574	1.9697446823120117	1.8477534055709839
USP44	12	95910336	95945266	-	4.225902557373047	0.2021568864583969	0.27822670340538025
NTN4	12	96051583	96184930	-	31.0656681060791	3.04923152923584	8.161044120788574
AMDHD1	12	96337071	96362370	+	0.11504094302654266	0.41846731305122375	0.5049060583114624
HAL	12	96366440	96390143	-	0.1319349706172943	0.02834879420697689	0.042604029178619385
RP11-541G9.2	12	97666470	97669987	-	0.5551811456680298	0.06879504024982452	0.05577205866575241
SLC17A8	12	100750857	100815808	+	0.521110475063324	0.022663667798042297	0.03060891106724739
PAH	12	103230663	103352188	-	0.003688886296004057	0.04428665339946747	0.041435644030570984
ASCL1	12	103351464	103354294	+	4.719179153442383	28.742576599121094	25.615779876708984
BTBD11	12	107712190	108053419	+	8.24610424041748	0.9584737420082092	3.222620964050293
WSCD2	12	108523248	108644314	+	1.7133543491363525	0.022222084924578667	0.07588225603103638
DAO	12	109252708	109294819	+	0.34227076172828674	0.008475951850414276	0.0
RP11-256L11.3	12	109883215	109885302	-	0.611757218837738	0.25034627318382263	0.1669091433286667
RP11-478C19.5	12	110906085	110907073	-	0.06599868834018707	0.18726390600204468	0.21421997249126434
HVCN1	12	111065646	111142755	-	0.9342451095581055	0.5450941920280457	0.20299120247364044
CUX2	12	111471828	111788358	+	2.6068897247314453	0.08522988855838776	0.0037543263752013445
RP3-462E2.3	12	112250597	112251224	+	0.8888015747070312	0.18939682841300964	0.05026416853070259
RPH3A	12	113008184	113336686	+	0.15342977643013	4.186641216278076	7.867264747619629
OAS3	12	113376157	113411054	+	2.81122088432312	8.16419506072998	19.836305618286133
RASAL1	12	113536624	113574044	-	0.002869041170924902	0.06683812290430069	0.3258453905582428
CCDC42B	12	113587663	113597081	+	0.14728866517543793	0.05670134723186493	1.1093944311141968
LHX5	12	113899838	113910085	-	4.491814613342285	0.025470349937677383	7.746807532384992E-4
RP11-780K2.1	12	114370374	114375060	+	0.3784140348434448	0.007862073369324207	0.05251980945467949
TBX5	12	114791736	114846247	-	0.0011109138140454888	1.2565762996673584	0.8194015622138977
RP11-385N17.1	12	114845996	114850636	+	0.001774354200810194	0.08902836591005325	0.057828389108181
LINC00173	12	116971227	116974323	+	0.25341349840164185	1.1468371152877808	2.7305960655212402
RP11-809C9.2	12	116985911	116992186	+	0.020501786842942238	0.1720302402973175	0.26120662689208984
HRK	12	117298932	117319232	-	0.32935631275177	1.6680279970169067	1.8253262042999268
RP11-231I16.1	12	117415247	117425142	-	0.002733588684350252	0.0012771771289408207	0.04760299250483513
RP11-357K6.1	12	119210837	119212942	-	1.1153886318206787	0.041280005127191544	0.14268028736114502
SRRM4	12	119419300	119600856	+	1.784793496131897	0.017720410600304604	0.0013640152756124735
RP11-768F21.1	12	119825792	120105884	-	0.018840767443180084	0.026884397491812706	4.367588043212891
TMEM233	12	120031264	120079363	+	0.5185773968696594	1.6048376560211182	8.974939346313477
RP11-173P15.3	12	121134927	121137344	-	0.11159778386354446	0.030684294179081917	3.4716596603393555
RP11-173P15.5	12	121159310	121161442	-	0.04928147420287132	0.0	2.140629291534424
HNF1A	12	121416346	121442296	+	0.01372053287923336	0.04842045530676842	0.16220931708812714
P2RX7	12	121570622	121623876	+	0.22804108262062073	18.10885238647461	23.642154693603516
HPD	12	122277433	122326517	-	0.8241351842880249	0.16269585490226746	0.14700114727020264
AC156455.1	12	122501212	122506522	+	2.391423225402832	2.7562215328216553	0.313552588224411
RP11-463O12.3	12	123349882	123351568	+	0.36617136001586914	0.4749222993850708	3.6802947521209717
FAM101A	12	124773710	124800570	+	7.579249382019043	0.7672213912010193	0.4414243698120117
RP11-173C20.2	12	127214333	127256957	-	0.005068272817879915	0.17122934758663177	0.03300553187727928

TMEM132C	12	128751948	129192460	+	7.455819606781006	0.5385709404945374	0.7458291053771973
GLT1D1	12	129337972	129469509	+	2.2737715244293213	0.11975840479135513	0.006497131194919348
TMEM132D	12	129556270	130388211	-	4.1507158279418945	0.03660652041435242	0.015841146931052208
RP11-669N7.2	12	129594174	129597839	+	0.0	0.39936143159866333	0.14419332146644592
RP11-572C21.1	12	130336753	130339489	-	0.1145411282777863	0.005260732490569353	0.0
RP11-143E21.7	12	130634894	130646801	-	3.740800142288208	0.18535728752613068	0.0
FZD10	12	130647004	130650285	+	8.347068786621094	0.31735023856163025	0.0
RIMBP2	12	130880682	131200826	-	0.6149900555610657	0.7446486353874207	0.15970881283283234
MMP17	12	132312938	132336328	+	4.280680179595947	9.054027557373047	25.229833602905273
RP11-417L19.2	12	132341965	132348596	+	0.04498566314578056	0.3011320233345032	0.7527933716773987
RP13-820C6.2	12	132562348	132565005	-	0.004611951299011707	0.0	0.9787373542785645
RP13-977J11.2	12	132671287	132674240	-	0.16541136801242828	0.3692779242992401	0.9007867574691772
GALNT9	12	132680924	132905935	-	0.1390456852970886	0.05604518949985504	1.6228851079940796
RP13-554M15.6	12	133179736	133187037	-	0.06033853441476822	0.055284254252910614	0.9627020955085754
RP11-46H11.12	12	133464428	133465169	+	0.3469782769680023	0.5490692853927612	1.111452579498291
GJA3	13	20712394	20735188	-	0.11877499520778656	2.860445261001587	2.7601234912872314
GJB2	13	20761609	20767037	-	5.4764838218688965	4.435335636138916	5.051976680755615
LATS2	13	21547171	21635718	-	17.388427734375	4.674440860748291	6.335524082183838
ZDHC20-AS1	13	21947808	21950797	+	0.03686078265309334	0.026625938713550568	1.097232225570679
FGF9	13	22245522	22278637	+	1.0088931322097778	0.2110397666927338	0.0037701658438891172
AL157931.2	13	23477402	23493348	+	1.3350274562835693	0.1385425180196762	0.35784411430358887
SGCG	13	23755091	23899304	+	0.10980445146560669	0.002274701837450266	0.011350924149155617
LINC00327	13	24044186	24060449	+	0.5504892468452454	2.189596176147461	1.5866581201553345
TNFRSF19	13	24144509	24250232	+	8.975905418395996	33.673912048339844	51.66665267944336
RP11-45B20.4	13	24513696	24520921	-	0.05879126861691475	0.004331303294748068	0.009132306091487408
LINC00357	13	25511014	25512491	-	0.40971502661705017	0.14060543477535248	0.02409893088042736
RP11-165I9.4	13	25746966	25754217	-	0.3212532103061676	0.024341000244021416	0.013553841970860958
ATP8A2	13	25946209	26599989	+	1.4924945831298828	0.6086105704307556	0.037525251507759094
SHISA2	13	26618735	26625198	-	5.936426162719727	7.715446949005127	0.015079447999596596
RPL21	13	27825446	27830828	+	50.6710090637207	125.66436004638672	144.9200439453125
RASL11A	13	27844464	27847827	+	4.878145694732666	0.7062088251113892	1.6564695835113525
GSX1	13	28366780	28368905	+	0.7719076871871948	0.20495496690273285	5.766696453094482
FLT1	13	28874489	29069265	-	0.24734941124916077	0.020957792177796364	0.006137654185295105
ALOX5AP	13	31309645	31338556	+	0.2138204127550125	0.06482852250337601	0.029347730800509453
C13orf33	13	31480328	31499709	+	19.56053352355957	0.0729624330997467	1.503460168838501
EEF1DP3	13	32420978	32527609	+	0.11502188444137573	0.13380730152130127	0.014885899610817432
N4BP2L2-IT1	13	33066436	33072629	-	0.2059669941663742	0.5750185251235962	0.020722052082419395
STARD13-IT1	13	33732724	33738546	-	0.24973523616790771	0.7429447770118713	0.008367656730115414
LINC00464	13	33929343	34250905	-	0.01188032329082489	1.6353503465652466	0.3349146842956543
POSTN	13	38136720	38183563	-	5.175002098083496	18.298419952392578	19.51486587524414
TRPC4	13	38210773	38444562	-	8.382901191711426	0.6514114737510681	0.5713595151901245
RP11-196I2.1	13	38624954	38717369	-	0.5208887457847595	0.1285560429096222	0.1729896515607834
STOML3	13	39540062	39565203	-	0.7193735241889954	0.008349880576133728	0.0
AKAP11-IT1	13	42848464	42851124	+	0.24097199738025665	0.3732486665248871	0.0351996012032032
LACC1	13	44453420	44468067	+	2.716092824935913	1.01267409324646	0.9180782437324524
LINC00284	13	44596624	44604073	+	0.0035494291223585606	0.04803832247853279	0.07094290107488632
SIAH3	13	46353363	46425871	-	0.24212424457073212	0.02953561767935753	0.07190269231796265
LCP1	13	46700061	46786006	-	0.5144667029380798	5.60005521774292	0.06641080975532532
KIAA0226L	13	46916139	47012325	-	1.1956002712249756	2.8488237857818604	4.105642795562744
MED4-AS1	13	48651273	48654127	+	0.01912504993379116	0.0	0.7678509950637817

RCBTB2	13	49063095	49109872	-	19.553997039794922	4.085085868835449	5.022345542907715
KPNA3-IT1	13	50351804	50354767	-	0.201100155711174	0.7127123475074768	0.0519193634390831
DLEU7	13	51285144	51418075	-	0.9064851999282837	0.12999510765075684	0.002321470994502306
PCDH8	13	53418109	53422775	-	20.128952026367188	3.509212017059326	0.5082017779350281
OLFM4	13	53602830	53626196	+	0.16424411535263062	0.0639239028096199	0.006341093685477972
KLHL1	13	70274726	70682591	-	0.5074658989906311	0.0	0.0
DACH1	13	72012098	72441330	-	5.517250061035156	0.4754210114479065	1.2508617639541626
KCTD12	13	77454312	77460540	-	38.7357292175293	7.860979080200195	6.976707935333252
POU4F1-AS1	13	79152611	79193239	+	0.019225919619202614	0.014187713153660297	0.2549229562282562
POU4F1	13	79173227	79177673	-	0.6638109683990479	3.925550937652588	3.531878709793091
SLITRK1	13	84451344	84456528	-	6.540768623352051	0.4884951412677765	0.42796891927719116
SLITRK6	13	86366925	86373623	-	1.3661341667175293	1.3656418323516846	0.034581832587718964
MIR17HG	13	92000074	92006833	+	7.957115173339844	4.0945868492126465	1.9578875303268433
UGGT2-IT1	13	96567601	96568330	-	0.20273643732070923	0.445771187543869	0.015059617348015308
AL356423.1	13	99155296	99158256	-	0.2134794294834137	0.40763500332832336	0.039382968097925186
STK24-AS1	13	99229498	99231084	+	0.9711273908615112	0.5062512159347534	0.25743141770362854
SLC15A1	13	99336898	99404908	-	0.21112608909606934	0.001585736870765686	0.0010409976821392775
AL139035.1	13	100139216	100149026	-	0.3232312500476837	0.9325003623962402	1.4622973203659058
RP11-214F16.3	13	100143537	100144751	-	0.11807070672512054	0.5354561805725098	0.6492378115653992
NALCN-AS1	13	101360579	101711638	+	0.06325418502092361	0.27234238386154175	0.49740639328956604
FAM155A-IT1	13	108440690	108487799	-	0.16923055052757263	0.4072599411010742	0.010457600466907024
TNFSF13B	13	108903588	108959385	+	0.4186791181564331	1.9260560274124146	0.09655836969614029
COL4A1	13	110801311	110959496	-	146.413330078125	66.50888061523438	40.16558074951172
COL4A2	13	110958159	111165374	+	192.00843811035156	63.38045120239258	53.368160247802734
COL4A2-AS1	13	111154922	111160526	-	0.030794788151979446	0.003926056902855635	0.4165788889312744
ARHGEF7-AS2	13	111766621	111768922	-	1.402665376663208	0.2114022970199585	0.19533661007881165
SOX1	13	112721913	112726020	+	31.3973388671875	3.81164813041687	3.9636571407318115
LINC00404	13	112760409	112761196	-	5.051648139953613	0.24053093791007996	0.036708999425172806
LINC00403	13	112761433	112762329	+	14.014612197875977	3.306852102279663	1.0059322118759155
F10	13	113777128	113803843	+	2.744900703430176	0.30146872997283936	0.023689502850174904
GRTP1	13	113978544	114018446	-	5.948182106018066	1.0076944828033447	0.8105472922325134
FAM70B	13	114462216	114514926	+	0.8432604074478149	0.6097663044929504	0.7210381031036377
GAS6-AS1	13	114518603	114542321	+	0.06954944133758545	0.33025968074798584	0.7955767512321472
AL589743.1	14	19650018	19718563	+	0.13323959708213806	1.0135111808776855	0.9310904145240784
RP11-496I2.3	14	19687688	19887497	-	0.07110628485679626	0.3540955185890198	0.8276508450508118
CTD-2314B22.3	14	19854098	19925348	-	0.14657647907733917	1.3395116329193115	1.1258013248443604
AL589182.1	14	19858667	19941024	-	0.012452174909412861	0.5014649033546448	0.08543898165225983
RPPH1	14	20811207	20811844	-	453.90032958984375	20476.271484375	6837.63623046875
RP11-203M5.8	14	20942948	20945248	-	0.019800327718257904	0.0	1.2117353677749634
RP11-84C10.4	14	21463996	21467322	-	0.030492018908262253	0.015937669202685356	0.31344419717788696
SLC39A2	14	21467414	21470030	+	0.11858955770730972	0.021340321749448776	0.022388417273759842
TPPP2	14	21492268	21504435	+	0.14077770709991455	0.0027283651288598776	9.78445284999907E-4
SALL2	14	21989232	22005350	-	100.0522689819336	24.517871856689453	22.795089721679688
TRD1	14	22919081	22919131	+	6.356022834777832	51.279396057128906	68.59419250488281
TRDC	14	22931924	22934779	+	8.849953651428223	61.98394012451172	72.69988250732422
MMP14	14	23305766	23318236	+	29.873340606689453	118.99632263183594	93.04300689697266
REM2	14	23352374	23356895	+	2.118565320968628	0.17703445255756378	0.21336455643177032
AL132780.10	14	23388665	23392610	+	0.04547376558184624	0.06400585919618607	0.5407740473747253
JUB	14	23440383	23451851	-	44.984764099121094	7.188560962677002	12.668028831481934
RP11-298I3.4	14	23451907	23468287	+	1.7999317646026611	0.9721782803535461	0.6795508861541748

CMTM5	14	23846017	23848981	+	0.08176762610673904	3.585994005203247	6.9521989822387695
MYH7	14	23881947	23904927	-	0.6252244114875793	2.68953537940979	3.344985246658325
DHRS2	14	24099324	24114848	+	0.16533437371253967	1.172922968864441	1.4358172416687012
AL136419.1	14	24407940	24409196	+	0.0	0.0	0.4469708502292633
ADCY4	14	24787555	24804299	-	0.20088036358356476	0.18497295677661896	0.004289616364985704
NFATC4	14	24834879	24848810	+	16.538236618041992	6.898326873779297	5.089154243469238
NYNRIN	14	24867992	24888494	+	19.05226707458496	3.6043992042541504	1.2805709838867188
RP11-80A15.1	14	24970800	24977894	+	0.5836090445518494	0.6411845684051514	0.09798651188611984
RP11-314P15.2	14	26305064	26612511	-	1.5979478359222412	0.225651353597641	0.0
RP11-483C6.2	14	27067618	27275673	+	0.11381173878908157	0.9855379462242126	1.6728748083114624
RP11-626P14.2	14	27278623	27305664	+	0.09272677451372147	0.37460657954216003	0.6157986521720886
RP11-966I7.1	14	29198289	29234483	-	0.31561121344566345	1.2957525253295898	4.1744608879089355
FOXG1	14	29235050	29238870	+	2.5649924278259277	25.98697280883789	69.53546142578125
C14orf23	14	29241910	29282493	+	0.7376383543014526	1.9378381967544556	15.060406684875488
RP11-966I7.2	14	29252697	29254993	-	0.020579759031534195	1.3052313327789307	0.641188383102417
RP11-116N8.1	14	36367188	36532949	+	0.16034908592700958	0.9876973032951355	0.9432926177978516
RP11-259K15.3	14	36539633	36634494	+	0.03975975513458252	1.0170444250106812	0.3739445209503174
RP11-259K15.2	14	36683813	36704814	+	0.03280344977974892	0.421326607465744	0.5609991550445557
SLC25A21	14	37147636	37642071	-	1.6769583225250244	0.2076747715473175	0.26704829931259155
RP11-537P22.1	14	37641093	37643016	+	3.021235942840576	0.3961101174354553	0.7420331835746765
FOXA1	14	38059189	38069245	-	0.07192441821098328	0.07644530385732651	2.4312191009521484
RP11-566K8.2	14	39218545	39417477	-	0.5520346760749817	0.2902466356754303	2.105195999145508
RP11-129M6.1	14	41424103	41445082	+	3.011800527572632	0.24377363920211792	0.0
RP11-479H16.1	14	48234157	48264295	-	0.588944137096405	0.15626764297485352	0.14385537803173065
RN7SL1	14	50053297	50053596	+	977.8927612304688	89577.2109375	46421.640625
RP11-649E7.5	14	50087533	50090198	-	0.18688495457172394	0.15094655752182007	1.5792268514633179
RP11-247L20.4	14	50793244	50794627	-	1.2548332214355469	3.157174587249756	3.6167380809783936
RP11-218E20.6	14	51350294	51353947	-	0.022169236093759537	0.3163850009441376	0.055669527500867844
RP11-218E20.5	14	51378944	51380076	+	0.0	0.0043618204072117805	0.3229120373725891
RP11-218E20.3	14	51423044	51428720	-	0.0773378238081932	0.5956515073776245	0.7453920245170593
RP11-463J10.3	14	52433721	52436518	-	0.13039787113666534	0.0	4.180883884429932
PTGER2	14	52781023	52795324	+	0.29442185163497925	0.5462919473648071	2.818621873855591
RP11-841O20.2	14	53107557	53108284	+	0.01717378944158554	0.09452386945486069	0.5222788453102112
LGALS3	14	55590828	55612126	+	7.974390029907227	28.225242614746094	44.1954345703125
RP11-108M12.3	14	57532978	57579378	-	0.3169594705104828	0.04594546929001808	0.0
SLC35F4	14	58030640	58448912	-	0.060499005019664764	0.01005637738853693	0.009494380094110966
C14orf38	14	59971801	60043549	-	0.07568762451410294	0.35885369777679443	0.27562469244003296
RP11-701B16.3	14	60007401	60031208	-	0.050217363983392715	0.2943507432937622	0.21938113868236542
LRRRC9	14	60386431	60530277	+	0.6745467185974121	0.1641184687614441	0.07441431283950806
SIX6	14	60975669	60979568	+	0.1252637356519699	0.039153121411800385	0.37971070408821106
TMEM30B	14	61744088	61748558	-	0.6697221994400024	0.020650891587138176	0.0
RP11-355I22.6	14	62581071	62584284	+	0.031297408044338226	0.5204793214797974	0.4841894209384918
RP11-355I22.3	14	62584197	62596352	+	0.07704468816518784	1.833530306816101	1.4740219116210938
CTD-2302E22.2	14	64065592	64065966	+	0.008066842332482338	0.007917636074125767	1.2079862356185913
ESR2	14	64550950	64804830	-	0.26639652252197266	0.8139002919197083	0.8238735198974609
SPTB	14	65213002	65346601	-	0.05226041004061699	0.6805837154388428	0.6499723196029663
RP11-840I19.3	14	65548752	65560930	+	0.0	0.0	0.3513941466808319
TMEM229B	14	67913801	68000456	-	0.8239439129829407	5.480937480926514	6.481345176696777
CTD-2325P2.4	14	69093883	69095162	-	0.041151516139507294	0.5152223110198975	0.2876250743865967
RP11-363J20.2	14	69705883	69727284	-	1.6554937362670898	0.13699068129062653	0.11992543935775757

GALNTL1	14	69725994	69821183	+	12.335633277893066	1.3020962476730347	4.33333969116211
PLEKHD1	14	69951409	69995215	+	0.15891478955745697	0.030649814754724503	0.038762640208005905
C14orf162	14	70037483	70038032	-	5.493614673614502	0.578830361366272	0.03228788077831268
SMOC1	14	70320848	70499083	+	53.9866943359375	11.992609977722168	15.311189651489258
RP11-486O13.2	14	70653840	70696904	+	0.17784829437732697	0.017551233991980553	0.00658199330791831
RP11-718G2.4	14	70833571	70839810	+	0.00705238152295351	0.0	0.35321271419525146
C14orf55	14	70935598	70950473	-	0.2687039375305176	0.3508705198764801	0.05691380426287651
ADAM20	14	70989078	71001732	-	0.14699628949165344	0.40281471610069275	0.03410099819302559
TTC9	14	71108504	71142077	+	12.852858543395996	2.8620550632476807	3.077277421951294
MAP3K9	14	71194831	71276223	-	5.046688079833984	1.253973126411438	1.3989968299865723
RP6-65G23.3	14	71276922	71282120	+	5.319027900695801	0.3744676411151886	1.1351370811462402
ACOT4	14	74058410	74063200	+	0.4355986416339874	0.13859182596206665	0.14357160031795502
VSX2	14	74706175	74729441	+	8.832605361938477	0.014181505888700485	0.0
RP3-449M8.6	14	74940710	74941567	-	0.5756420493125916	0.21314233541488647	0.13445958495140076
PGF	14	75408537	75422487	-	5.161407947540283	1.310072898864746	0.7371950745582581
RP11-950C14.3	14	75471422	75475184	-	0.0741719976067543	0.503468930721283	0.7072948813438416
RP11-950C14.7	14	75593856	75603633	+	0.6938878893852234	0.3854557275772095	0.04408964514732361
RP11-361H10.2	14	76620530	76673228	-	0.0037000260781496763	0.0019282487919554114	0.35927847027778625
ESRRB	14	76776957	76968178	+	0.5805144906044006	0.1298508197069168	0.1546071320772171
NOXRED1	14	77860364	77889860	-	0.4092715382575989	0.23996783792972565	0.1556660532951355
DIO2	14	80663873	80854100	-	1.0713105201721191	1.7637484073638916	0.32836583256721497
RP11-299L17.3	14	81908331	81916501	-	0.06802285462617874	0.685638427734375	0.616549551486969
RP11-497E19.1	14	85991477	85996332	-	1.8149669170379639	0.07998863607645035	0.10161374509334564
RP11-497E19.2	14	85994943	85995730	+	0.3234694302082062	0.02331957407295704	0.03283146396279335
FLRT2	14	85996488	86095034	+	23.28103256225586	0.9254485368728638	1.9540605545043945
CTD-2341M24.1	14	86401054	86596117	+	0.005741152912378311	0.3345140814781189	0.27302685379981995
RP11-507K2.3	14	89017941	89018837	+	0.22034122049808502	0.7124428749084473	1.150748610496521
CTD-3035D6.2	14	91288709	91294472	-	0.16070730984210968	1.13198721408844	0.5362928509712219
GPR68	14	91698876	91720269	-	0.4206189215183258	0.9134242534637451	1.4433296918869019
C14orf86	14	94371076	94393412	-	1.7431275844573975	0.30527549982070923	0.4236871302127838
FAM181A	14	94385240	94395954	+	11.65536880493164	1.2297043800354004	3.2197012901306152
IFI27	14	94571182	94583033	+	1.7729732990264893	0.43607965111732483	0.3959708511829376
PPP4R4	14	94612465	94746072	+	1.9044760465621948	0.7644438147544861	0.3343684673309326
SERPINA3	14	95058395	95090983	+	1.0462963581085205	8.888496398925781	4.9940185546875
GSC	14	95234553	95236562	-	0.035296399146318436	3.75885009765625	2.971557140350342
RP11-185P18.1	14	96342729	96391908	+	6.108875274658203	0.4044007658958435	0.007305891718715429
C14orf132	14	96505661	96560417	+	35.99753952026367	9.420387268066406	14.12341594696045
CYP46A1	14	100150641	100193638	+	1.3309615850448608	0.16707895696163177	0.21359212696552277
RP11-638I2.6	14	100757453	100760993	+	0.1436322182416916	0.04937249794602394	2.350315570831299
RP11-638I2.8	14	100800127	100820398	+	0.008771729655563831	0.00645882822573185	1.0741221904754639
BEGAIN	14	101003486	101053750	-	2.0180392265319824	0.792134165763855	8.47955322265625
RP11-566J3.2	14	101142267	101146221	-	0.04550309479236603	0.20436042547225952	0.9342392086982727
RP11-123M6.2	14	101300769	101327363	-	0.0	0.0	2.7917938232421875
DIO3OS	14	102018558	102026768	-	1.4623892307281494	0.12986932694911957	0.002993664238601923
DIO3	14	102027688	102029789	+	9.715944290161133	1.013235330581665	0.0
RP11-1029J19.4	14	102095321	102098867	-	0.002042667008936405	0.8046729564666748	0.32353296875953674
RP11-1029J19.5	14	102100791	102197445	-	0.004247289150953293	0.7943686842918396	0.31739526987075806
LINC00239	14	102196774	102198859	+	0.041914861649274826	1.2553586959838867	0.3748069107532501
RP11-1017G21.4	14	102502652	102532565	-	0.09345365315675735	0.004231779836118221	0.5354463458061218
RP11-365N19.2	14	103399911	103403514	+	0.09335509687662125	0.0	0.5397210717201233

TNFAIP2	14	103589779	103603776	+	2.348527669906616	9.580047607421875	17.875003814697266
RP11-894P9.1	14	104148699	104150352	-	0.04589569568634033	0.01399927120655775	0.2666469216346741
KIF26A	14	104605060	104647231	+	4.747765064239502	1.7436848878860474	0.2564578950405121
RP11-982M15.2	14	105235686	105236608	+	0.7499963641166687	0.22052715718746185	5.874017238616943
JAG2	14	105607318	105635161	-	2.0261974334716797	1.9640942811965942	0.7544375061988831
RP11-521B24.5	14	105934130	105936954	-	0.036538757383823395	0.035363003611564636	3.1966469287872314
TMEM121	14	105992940	105996539	+	3.4791293144226074	5.069126129150391	14.135424613952637
RP11-69H14.6	15	22278010	22413497	+	0.0	0.08139986544847488	0.05950959771871567
MAGEL2	15	23888691	23891175	-	6.673802375793457	0.43532541394233704	0.7027488350868225
NDN	15	23930565	23932450	-	89.42597961425781	3.5929172039031982	20.91900634765625
C15orf2	15	24920541	24928593	+	0.06362248212099075	0.0031517818570137024	0.0
RP11-701H24.2	15	25277020	25281637	+	13.003361701965332	6.8630452156066895	3.960710287094116
RP11-680F8.1	15	29967194	29973161	+	0.43891942501068115	0.1502680778503418	3.049301862716675
RP11-680F8.4	15	30020390	30021735	-	0.6284141540527344	1.0228575468063354	0.17500245571136475
AC135731.1	15	30502611	30503009	+	0.536877453327179	0.11778941005468369	0.017475193366408348
CHRNA7	15	30875128	32464722	+	0.8185998201370239	0.35976889729499817	0.12233710289001465
OTUD7A	15	31775329	32162992	-	0.4440428614616394	0.1182970330119133	0.1458646059036255
SCG5	15	32933877	32989299	+	1.195294737815857	3.7247350215911865	5.820167541503906
RYR3	15	33603163	34158303	+	4.435088634490967	1.2795320749282837	0.19375085830688477
RP11-3D4.3	15	34147101	34149010	-	2.5350449085235596	0.5615931153297424	0.6790348887443542
RP11-3D4.2	15	34150918	34157026	-	3.276463508605957	0.769282877445221	0.6244759559631348
ACTC1	15	35080297	35088340	-	0.9732025861740112	0.034802548587322235	0.1451019048690796
AC114546.1	15	35270552	35272268	+	0.023286188021302223	0.005248080473393202	1.207808494567871
RP11-702M1.1	15	35838396	36151202	+	0.17151057720184326	0.5322417616844177	0.5095343589782715
AC019016.1	15	37090798	37110707	-	0.0674830824136734	0.002005982445552945	0.0
RP11-128A17.1	15	37391540	37392374	+	0.21264931559562683	0.39230847358703613	0.9984638690948486
RP11-346D14.1	15	38431796	38519088	-	0.023261548951268196	0.14638358354568481	0.11938927322626114
THBS1	15	39873280	39891667	+	82.8854751586914	64.41993713378906	14.162086486816406
RP11-325N19.3	15	40213243	40218081	+	0.01727205142378807	0.07294127345085144	0.07008593529462814
BMF	15	40380091	40401093	-	8.317049980163574	2.5169308185577393	3.0104756355285645
C15orf52	15	40623653	40633168	-	2.930833101272583	4.367551803588867	18.7746524810791
RP11-64K12.8	15	40756392	40758925	-	0.009039275348186493	0.00511369900777936	0.3990481197834015
RP11-111A22.1	15	40780240	40850183	+	0.0	0.0012298552319407463	0.18804407119750977
SPINT1	15	41136241	41150405	+	5.486791133880615	0.41178619861602783	0.2828548848628998
DLL4	15	41221538	41231237	+	1.0446122884750366	0.14343205094337463	0.05285625532269478
CHAC1	15	41245160	41248710	+	8.163874626159668	1.754491925239563	3.019699811935425
ITPKA	15	41785591	41795749	+	1.9549998044967651	2.059518575668335	9.577221870422363
LTK	15	41795783	41806085	-	0.099307119846344	0.5958806276321411	1.6604419946670532
RP11-616K22.3	15	44580909	44581547	-	0.13552333414554596	0.041134994477033615	0.5965911149978638
RP11-516C1.1	15	44694883	44719342	-	0.0339195132255542	0.003733718767762184	0.9439821839332581
B2M	15	45003675	45011075	+	69.16658020019531	173.81480407714844	207.3184814453125
DUOX1	15	45422131	45457774	+	0.0050965272821486	0.005841292906552553	0.07398173958063126
SHF	15	45459411	45493373	-	15.157054901123047	3.7617175579071045	3.3177406787872314
GATM	15	45653322	45694416	-	3.954397678375244	10.212233543395996	15.894036293029785
SLC24A5	15	48413169	48434869	+	0.018710236996412277	0.6740372180938721	0.22174754738807678
RP11-562A8.4	15	50789392	50790941	-	0.11830653250217438	0.06458618491888046	0.6208281517028809
CYP19A1	15	51500254	51630807	-	0.009749457240104675	0.07625064998865128	0.11438006907701492
LYSMD2	15	52015208	52043782	-	3.2662298679351807	4.354681491851807	11.798616409301758
RP11-56B16.4	15	52201099	52201839	-	0.014058760367333889	0.0047183167189359665	0.7613239288330078
CTD-2184D3.5	15	52348872	52392720	-	0.0	0.511688768863678	0.20915091037750244

CTD-2184D3.6	15	52408771	52414328	+	0.0	0.0	0.39108729362487793
RP11-209K10.3	15	53042223	53043800	-	6.368925094604492	0.2560923397541046	0.033559367060661316
ONECUT1	15	53049186	53083273	-	3.566211223602295	0.47669073939323425	0.10996861010789871
RP11-209K10.2	15	53093811	53097139	-	3.366859197616577	0.011751874350011349	0.0
PRTG	15	55903744	56035288	-	74.29640197753906	15.439255714416504	1.2529338598251343
MNS1	15	56720929	56757335	-	1.6683632135391235	3.221518039703369	7.2463884353637695
RP11-30K9.4	15	59107471	59109927	+	0.2234586477279663	0.439389169216156	0.0
RP11-429D19.1	15	59558919	59563361	-	0.2741950452327728	0.4096238911151886	0.0
RP11-356M20.3	15	59640847	59652088	-	0.1726299524307251	0.791476309299469	0.0070146904326975346
FOXB1	15	60296421	60353929	+	2.9921810626983643	0.4254661202430725	0.010635699145495892
RP11-82L7.4	15	60365867	60410519	-	0.5362449884414673	0.07581598311662674	0.017951911315321922
RP11-643M14.1	15	62352718	62354636	+	0.02802451327443123	0.22319690883159637	0.15347705781459808
C2CD4A	15	62359176	62361103	+	0.17783644795417786	4.380465030670166	0.8444350361824036
RP11-1069G10.2	15	63188011	63191742	+	0.32386767864227295	0.04994382709264755	0.09001825749874115
TPM1	15	63334831	63364114	+	62.30794143676758	14.28917121887207	21.561458587646484
RP11-244F12.3	15	63338233	63341586	-	0.01096466463059187	0.03243345022201538	0.08134917914867401
RP11-244F12.2	15	63362224	63364110	-	0.07115412503480911	0.0	1.1954569816589355
SNX22	15	64443914	64449680	+	1.4647736549377441	9.487812995910645	12.516641616821289
RBPMS2	15	65032091	65067786	-	36.603572845458984	3.334564685821533	3.248004913330078
CILP	15	65488337	65503826	-	8.858516693115234	0.13970617949962616	0.22309920191764832
IGDCC3	15	65619465	65670378	-	71.64137268066406	5.2386555671691895	1.409135341644287
MEGF11	15	66187634	66546085	-	1.9295456409454346	3.332214832305908	8.516439437866211
ITGA11	15	68594050	68724502	-	9.736156463623047	14.91778564453125	1.5066066980361938
PAQR5	15	69591286	69700119	+	3.3934969902038574	0.7020207643508911	0.10246489197015762
RP11-279F6.1	15	69755365	69863775	+	0.05292326211929321	0.13251584768295288	0.24353820085525513
GRAMD2	15	72452148	72490136	-	0.14355120062828064	0.09236840903759003	0.003629151498898864
HCN4	15	73612200	73661605	-	2.620680570602417	0.09512972086668015	0.12592758238315582
AC010931.2	15	74418714	74421619	-	1.4683218002319336	0.1440170407295227	0.10475686937570572
ISLR2	15	74421699	74429143	+	6.888294696807861	0.5207982659339905	2.2385756969451904
ISLR	15	74466012	74469213	+	28.7903995513916	6.2260518074035645	1.085989236831665
SEMA7A	15	74701630	74726300	-	6.5924272537231445	13.233320236206055	23.45094871520996
ARID3B	15	74833518	74890472	+	21.05975341796875	2.466322183609009	2.488650321960449
CSPG4	15	75966663	76005189	-	9.328409194946289	66.12628936767578	104.8906201118164
AC105020.1	15	75970672	75973093	+	1.0788570642471313	0.6501967310905457	0.2967424988746643
ISL2	15	76629065	76634817	+	0.3659476339817047	1.8781511783599854	4.232920169830322
PSTPIP1	15	77285700	77329673	+	0.14814963936805725	0.0350467711687088	0.01654685288667679
ACSBG1	15	78459810	78538030	-	0.7783446907997131	5.25958776473999	6.459939479827881
CRABP1	15	78632666	78640572	+	101.37223815917969	16.790626525878906	1.8113168478012085
ADAMTS7	15	79051546	79103805	-	33.941078186035156	6.747894287109375	8.571328163146973
KIAA1199	15	81071684	81244117	+	11.672698974609375	1.824105143547058	2.488645553588867
C15orf26	15	81299374	81441516	+	0.0336107574403286	0.36727750301361084	0.5863144993782043
IL16	15	81451916	81605104	+	0.007097797002643347	0.42771509289741516	0.3587830662727356
RP11-276M12.1	15	82245644	82288007	-	0.3156861662864685	0.027763284742832184	0.042027756571769714
RPS17	15	82821158	82824972	-	7.976626873016357	1.5786709785461426	1.42933988571167
SH3GL3	15	84115980	84287495	+	0.6264203786849976	0.04645800217986107	0.053506311029195786
CSPG4P5	15	84953014	84966399	-	0.6341087818145752	0.522278904914856	0.20263555645942688
ALPK3	15	85359911	85416713	+	0.5335859060287476	0.280925989151001	0.12691673636436462
RP11-815J21.2	15	86122277	86123409	-	0.00995564367622137	0.017854494974017143	0.26426005363464355
RP11-815J21.1	15	86244340	86246002	+	0.2634708285331726	0.8855658769607544	0.025681480765342712
RP11-158M2.3	15	86287340	86293512	-	6.120311260223389	2.2902417182922363	2.224320411682129

RP11-158M2.4	15	86293567	86296132	-	2.6227288246154785	0.9525172114372253	0.8290764093399048
RP11-158M2.5	15	86298172	86298802	-	1.015604019165039	0.27646705508232117	0.23227250576019287
NCRNA00052	15	88120160	88122917	+	1.8011045455932617	0.006582941394299269	0.021022075787186623
RLBP1	15	89753098	89764922	-	1.239723801612854	10.948448181152344	26.945804595947266
MESP1	15	90291892	90294541	-	0.38572457432746887	1.0514756441116333	2.100093364715576
MESP2	15	90303822	90321982	+	0.046063054352998734	0.21415580809116364	0.23449651896953583
GABARAPL3	15	90890819	90892669	-	0.16545939445495605	0.013304656371474266	0.006792202591896057
AC068831.15	15	91463448	91464416	-	0.0909639298915863	0.04265066981315613	1.6267197132110596
AC068831.6	15	91495469	91498455	-	0.03545740246772766	0.040784161537885666	0.1489941477755737
ST8SIA2	15	92937058	93015640	+	21.1973876953125	2.229557752609253	0.22538144886493683
C15orf32	15	93014884	93044347	+	0.08361432701349258	0.015068985521793365	0.0
FAM174B	15	93160673	93353114	-	2.7501871585845947	0.9464690089225769	0.7473825812339783
RP11-266O8.1	15	93855786	94112712	+	3.6543612480163574	1.164664626121521	0.9042484760284424
RP11-739G5.1	15	94133096	94136588	+	2.2816689014434814	0.5953441858291626	0.3942760229110718
CTD-3049M7.1	15	94261771	94614049	-	0.13941457867622375	0.9905949234962463	0.9042905569076538
MCTP2	15	94774767	95027180	+	0.2413063496351242	0.6883706450462341	0.42405375838279724
CTD-2536I1.1	15	95819690	95870358	-	0.4962148368358612	0.21735991537570953	0.0
CTD-2054N24.2	15	100347228	100417353	+	0.924737274646759	0.7022975087165833	0.26069730520248413
RP11-526I2.3	15	101093557	101100057	-	0.658631443977356	0.18345746397972107	0.21200014650821686
RP11-66B24.2	15	101389766	101404501	+	9.874823736026883E-4	0.046121224761009216	0.10464882850646973
LRRK1	15	101459420	101610317	+	0.19952645897865295	0.6197818517684937	1.768798828125
PCSK6	15	101840818	102065405	-	1.741626262664795	5.474352836608887	5.630305290222168
CTD-2611K5.6	15	102291235	102334505	+	0.20617236196994781	0.1204526498913765	0.03325747698545456
HBQ1	16	230452	231180	+	1.5982494354248047	1.7635520696640015	0.3950570225715637
WFIKKN1	16	680932	684116	+	4.058405876159668	0.3504406213760376	0.8642328977584839
CCDC78	16	772582	776954	-	1.180137276649475	2.937291145324707	6.517383575439453
HAGHL	16	776936	779733	+	5.987940311431885	5.809695720672607	21.57421112060547
NME3	16	1820321	1821710	-	9.670949935913086	10.639554977416992	44.6340217590332
C16orf73	16	1883984	1934295	-	0.019658703356981277	3.6731584072113037	0.15805865824222565
NPW	16	2069521	2070755	+	0.3413282334804535	1.0032033920288086	5.220046043395996
RAB26	16	2198145	2204141	+	0.5775201916694641	1.7217597961425781	2.367715358734131
AC009065.1	16	2303738	2312343	+	0.4398524761199951	0.03832520917057991	6.005570888519287
NTN3	16	2521500	2524146	+	1.7914196252822876	0.5969997048377991	0.47062477469444275
CEMP1	16	2577081	2581420	-	0.02552681788802147	0.0264632236212492	0.26747259497642517
CLDN9	16	3062457	3064506	+	0.006409932393580675	0.0959266722202301	0.094695545732975
CLDN6	16	3064713	3070072	-	1.062766194343567	0.025428365916013718	0.14741168916225433
MMP25	16	3096682	3110703	+	0.3579849302768707	0.1633625328540802	0.048708125948905945
VASN	16	4421849	4433529	+	26.1225643157959	2.650479555130005	8.605831146240234
C16orf89	16	5094123	5116111	-	2.4137775897979736	0.5067448019981384	0.12545731663703918
ATF7IP2	16	10479912	10577495	+	2.8164687156677246	0.2001439332962036	0.12471505254507065
FAM18A	16	10855083	10912621	-	1.4658788442611694	0.17831705510616302	0.21391618251800537
CIITA	16	10971039	11023624	+	0.6640355587005615	0.9130410552024841	0.7120165824890137
AC099489.1	16	11536047	11585611	-	1.5146965980529785	0.1486356109380722	0.036630451679229736
RP11-166B2.1	16	12021230	12070500	-	1.4055660963058472	0.2707364857196808	0.33775803446769714
MPV17L	16	15489611	15503543	+	0.6159284710884094	3.1048357486724854	1.844860315322876
MYH11	16	15796992	15950890	-	5.506728172302246	0.018402067944407463	0.08273938298225403
SYT17	16	19179571	19279652	+	4.762575149536133	13.981366157531738	16.155105590820312
GPRCSB	16	19868616	19896832	-	38.19332504272461	78.16699981689453	127.51400756835938
GPR139	16	20042989	20085089	-	0.01069281529635191	4.809898853302002	3.3150691986083984
ERN2	16	23701630	23724821	-	0.12182385474443436	0.009353294037282467	0.0018468634225428104

PRKCB	16	23847322	24231932	+	0.16840843856334686	5.098024845123291	4.5610480308532715
HS3ST4	16	25703347	26149009	+	0.8965623378753662	0.0022618642542511225	0.0
IL21R	16	27413686	27463362	+	0.29790517687797546	0.3600900173187256	0.3192780613899231
GSG1L	16	27798850	28074830	-	0.012715728022158146	2.2880654335021973	0.9765926003456116
RP11-57A19.2	16	28296206	28303385	-	1.618123292929736	0.9892566204071045	0.5150425434112549
SBK1	16	28303840	28335170	+	36.62436294555664	5.897677898406982	13.31038761138916
APOBR	16	28505993	28510242	+	0.2456316351890564	0.02058492787182331	0.05469546839594841
SULT1A2	16	28603264	28608430	-	0.15985693037509918	0.07078533619642258	0.014319438487291336
SULT1A1	16	28616903	28634907	-	2.465280294418335	2.0109848976135254	0.35893377661705017
SNX29P2	16	29262829	29519817	+	0.06790788471698761	0.23205184936523438	0.020564602687954903
SLX1B	16	29465822	29469540	+	0.11297337710857391	1.934643030166626	0.3775170147418976
QPRT	16	29674600	29709325	+	37.878448486328125	22.856523513793945	6.123149871826172
AC009133.1	16	29821214	29823359	-	0.6053683161735535	0.20697425305843353	6.3591156005859375
AC120114.1	16	29875155	29879374	+	0.05711255967617035	0.4423940181732178	0.29573294520378113
ASPHD1	16	29911700	29930953	+	2.991438627243042	4.336882591247559	14.142327308654785
TBX6	16	30097082	30103208	-	0.10185864567756653	0.720168948173523	0.9405956268310547
BOLA2B	16	30204256	30205627	-	1.449793815612793	0.2931027412414551	0.42995578050613403
PRSS8	16	31142754	31147151	-	7.644030570983887	0.029961513355374336	0.024759441614151
ITGAM	16	31271288	31344213	+	0.15768906474113464	0.02721274085342884	0.011860298924148083
ITGAX	16	31366509	31394318	+	0.005463550798594952	0.16046632826328278	0.021345358341932297
SLC5A2	16	31494439	31502089	+	0.04477580636739731	0.029184957966208458	0.3441835641860962
ZNF423	16	49524522	49860918	-	40.03404235839844	4.549429893493652	1.7227237224578857
NOD2	16	50727514	50766987	+	0.017570527270436287	0.1552983522415161	0.06323970854282379
TOX3	16	52471918	52581714	-	24.53798484802246	6.828643321990967	7.70796758178711
CTD-3032H12.2	16	54968825	54988577	+	0.41576239466667175	0.14783188700675964	0.07550356537103653
MMP2	16	55512883	55540603	+	183.7079620361328	49.20331573486328	63.685123443603516
MT3	16	56623184	56625000	+	2.5788869857788086	25.80304718017578	41.69874954223633
MT2A	16	56642111	56643409	+	29.18707847595215	99.54407501220703	120.27244567871094
MT1M	16	56666534	56667897	+	0.434514582157135	2.742380380630493	2.529301166534424
MT1A	16	56672578	56673997	+	0.15387339890003204	2.4279253482818604	0.5139719247817993
MT1X	16	56716336	56718108	+	10.143622398376465	41.20805358886719	54.63149642944336
PLLP	16	57290009	57318599	-	4.796332359313965	11.034502029418945	33.31079864501953
CDH8	16	61685917	62070739	-	7.102668762207031	0.38227578997612	0.007475752383470535
CDH5	16	66400533	66438686	+	6.705308437347412	13.280783653259277	0.49901676177978516
AC132186.2	16	66516775	66519747	-	0.11207739263772964	0.12713780999183655	0.01548187155276537
CES4A	16	67022573	67043661	+	0.6316138505935669	0.04004496708512306	0.26187190413475037
FBXL8	16	67193834	67199718	+	1.23892080783844	3.3371026515960693	4.8398356437683105
HSF4	16	67197288	67203848	+	1.390644907951355	5.411505699157715	6.584842205047607
EXOC3L1	16	67218282	67224107	-	1.3020014762878418	0.1345735490322113	0.07168695330619812
KCTD19	16	67323393	67360661	-	0.016088441014289856	0.2602575123310089	0.04853564873337746
TPPP3	16	67423712	67427438	-	4.0982985496521	27.54978370666504	19.19890594482422
HSD11B2	16	67465041	67471456	+	1.3491649627685547	0.9049306511878967	0.23319277167320251
ESRP2	16	68259871	68270487	-	0.05655340850353241	0.026185400784015656	0.29452913999557495
CDH3	16	68678151	68732971	+	3.8793537616729736	0.5180531144142151	0.32424065470695496
AC009060.1	16	70192860	70207351	-	0.045005667954683304	0.009919687174260616	0.6000868082046509
AC020763.1	16	70789036	70807145	+	0.06757259368896484	1.0667636394500732	0.6083192825317383
CHST4	16	71560036	71572491	+	0.22613020241260529	0.040069062262773514	0.009917373768985271
ZFH3	16	72816784	73093597	-	13.440384864807129	4.382379531860352	3.8013358116149902
FAZH	16	74746853	74808730	-	0.034179999434948	0.9504513144493103	1.7257963418960571
AC099508.1	16	75142499	75144610	-	0.03552256524562836	0.09403662383556366	0.16531527042388916

CNTNAP4	16	76311176	76593135	+	0.7046659588813782	0.24624693393707275	0.015813859179615974
ADAMTS18	16	77316025	77469011	-	1.7138437032699585	0.6133360862731934	0.04125237837433815
VAT1L	16	77822483	78014003	+	38.34797286987305	4.836334228515625	11.23751163482666
AC092718.1	16	81110924	81112455	+	0.1701827496290207	0.19472606480121613	0.019148990511894226
HSD17B2	16	82068866	82132139	+	0.4335044026374817	0.17697688937187195	0.08077127486467361
OSGIN1	16	83982672	83999937	+	1.6548653841018677	4.1624627113342285	11.936936378479004
SLC38A8	16	84043389	84075762	-	0.13385501503944397	0.08068715780973434	0.010686306282877922
COTL1	16	84599200	84651683	-	676.4916381835938	130.01280212402344	197.12368774414062
AC092275.1	16	85319914	85337002	-	0.31201785802841187	0.01811935566365719	0.0
C16orf74	16	85741123	85784689	-	1.8154977560043335	4.152710437774658	7.024166107177734
AC009108.1	16	86508135	86542466	-	8.172181551344693E-4	0.5147848725318909	0.27582433819770813
FOXF1	16	86544144	86548076	+	0.042613159865140915	3.113633871078491	7.299780368804932
FOXC2	16	86600857	86602539	+	1.260628581047058	0.5304766297340393	12.032699584960938
JPH3	16	87635441	87731762	+	2.993365526199341	0.3453132212162018	0.27253103256225586
AC010536.2	16	87727144	87729753	-	1.772372841835022	1.2531682252883911	0.5445076823234558
ZNF469	16	88493879	88507165	+	0.8791088461875916	1.2251555919647217	6.377742290496826
CYBA	16	88709698	88717457	-	18.14752769470215	11.816022872924805	2.6702721118927
SNAI3	16	88744090	88752882	-	0.158466637134552	0.02809285745024681	0.036498915404081345
CBFA2T3	16	88941266	89043401	-	0.6395511627197266	0.34747833013534546	0.036235492676496506
AC135782.1	16	89112580	89119373	-	0.0015370356850326061	0.11654714494943619	0.0614451989531517
DBNDD1	16	90071273	90086526	-	14.472497940063477	20.53622055053711	53.195156097412111
GAS8	16	90086069	90111383	+	3.5693671703338623	8.58885669708252	14.728034973144531
NXN	17	702581	883010	-	76.81095123291016	19.656278610229492	25.1864070892334
TUSC5	17	1182957	1204281	+	0.22921109199523926	0.02420400269329548	0.003306424943730235
SCARF1	17	1537152	1549042	-	1.5869598388671875	0.2904193103313446	0.19822175800800323
SERPINF1	17	1665253	1680859	+	13.728170394897461	57.80295944213867	54.18603515625
SPATA22	17	3343308	3417146	-	1.167978286743164	2.256293773651123	0.19310694932937622
ASPA	17	3377404	3406713	+	0.1636456400156021	0.7947067618370056	0.03595031425356865
P2RX5	17	3575748	3599698	-	0.5467194318771362	4.072746276855469	6.403766632080078
CAMKK1	17	3763609	3796338	-	1.9719409942626953	2.234654664993286	8.794320106506348
ATP2A3	17	3822869	3867736	-	0.2383246272802353	0.7762174010276794	1.5033276081085205
CXCL16	17	4636828	4643223	-	2.324575901031494	10.051039695739746	8.15731430053711
AC109333.10	17	4922509	4923388	-	0.043078456073999405	0.058282747864723206	1.337017297744751
USP6	17	5019733	5078329	+	0.004916002042591572	0.022868596017360687	0.02730555646121502
SLC13A5	17	6588032	6616740	-	7.100778102874756	0.15941831469535828	0.04143776372075081
MIR497HG	17	6919137	6922949	-	0.28625866770744324	3.2249577045440674	7.608046531677246
BCL6B	17	6926369	6933219	+	0.013998350128531456	0.03178168833255768	0.04746592789888382
CLEC10A	17	6977857	6983600	-	0.14930656552314758	0.0	0.0
ASGR1	17	7076750	7082883	-	7.490922927856445	0.9759886860847473	1.6595640182495117
SLC2A4	17	7185053	7191576	+	6.190079212188721	0.8862465023994446	0.635938823223114
YBX2	17	7191571	7197876	-	6.948670864105225	0.8059513568878174	1.3214795589447021
ACAP1	17	7239848	7254797	+	0.29672330617904663	0.06720927357673645	0.08412956446409225
TNK1	17	7284365	7293092	+	3.23108172416687	0.24189506471157074	0.15066511929035187
FGF11	17	7342689	7348256	+	19.92365264892578	12.400505065917969	4.218457221984863
SOX15	17	7491498	7493488	-	0.2741774618625641	0.4191623032093048	1.1632159948349
SHBG	17	7531287	7536701	+	3.191197156906128	0.29174622893333435	0.349735826253891
TMEM88	17	7758384	7759415	+	5.446108341217041	1.7867155075073242	1.07978088798523
KCNAB3	17	7825177	7832753	-	1.841342806816101	4.595421314239502	6.465658664703369
ALOXE3	17	7999218	8022234	-	0.15533192455768585	0.05426771938800812	0.013400360010564327
HES7	17	8023908	8027410	-	0.7319725155830383	1.392279863357544	3.267282485961914

MYH10	17	8377523	8534079	-	148.01914978027344	39.257102966308594	46.386714935302734
RCVRN	17	9799637	9808684	-	0.012905169278383255	0.22269469499588013	0.07403011620044708
GAS7	17	9813926	10101868	-	3.065767765045166	90.93085479736328	36.98701858520508
PIRT	17	10725792	10741418	-	0.18451547622680664	1.4429783821105957	1.2028099298477173
DNAH9	17	11501748	11873485	+	0.23769183456897736	5.467850685119629	4.47826623916626
HS3ST3B1	17	14204400	14252721	+	22.451438903808594	5.723877429962158	4.856388092041016
AC005863.1	17	14670900	14683520	-	1.1121171712875366	0.13924044370651245	0.0
TEKT3	17	15207128	15244958	-	0.2951560318470001	0.18082009255886078	0.08850736916065216
CDRT4	17	15339332	15466899	-	6.948736190795898	2.382772922515869	2.1694371700286865
CDRT1	17	15468798	15502111	-	0.050121136009693146	0.09745828062295914	0.24693800508975983
RP11-385D13.1	17	15474805	15554967	-	2.8332269191741943	4.322081565856934	10.250205993652344
TRIM16	17	15531274	15587613	-	9.059066772460938	12.598371505737305	29.542282104492188
TRPV2	17	16318888	16340317	+	7.353462219238281	3.614262104034424	11.286035537719727
PLD6	17	17104309	17109646	-	0.5643884539604187	7.861580848693848	14.339954376220703
RASD1	17	17397751	17399707	-	1.876220464706421	2.1218199729919434	27.567134857177734
MYO15A	17	18012020	18083116	+	0.08044140040874481	0.05152665078639984	0.03036580979824066
AC107983.1	17	18414535	18445234	-	0.25098252296447754	0.9594724178314209	0.9406529664993286
FAM106A	17	18427880	18430160	-	0.0711996778845787	0.3416583240032196	0.2546130418777466
TRIM16L	17	18601311	18639432	+	4.792821884155273	10.07562255859375	22.348243713378906
FAM83G	17	18872102	18908117	-	0.736324667930603	0.9458152055740356	5.000917911529541
GRAP	17	18923997	18950439	-	3.0110666751861572	0.28286293148994446	0.10200045257806778
SLC47A1	17	19437141	19482347	+	0.5827850103378296	8.790812492370605	9.576835632324219
ALDH3A1	17	19641297	19651746	-	0.2118542641401291	0.30986595153808594	7.7790045738220215
CCDC144NL	17	20739760	20799453	-	0.41624632477760315	0.039192862808704376	0.043595150113105774
AC090774.1	17	20771810	20901341	+	11.550382614135742	1.3982772827148438	1.8366484642028809
AC087393.1	17	20978869	20993928	+	0.1162748709321022	2.442255735397339	0.987881600856781
C17orf103	17	21142183	21156722	-	10.867269515991211	2.6175966262817383	4.023049354553223
MTRNR2L1	17	22022437	22023991	+	0.78801029920578	21.68316650390625	2.597489595413208
NOS2	17	26083792	26127555	-	0.0485342592009613	21.577978134155273	10.446013450622559
SEBOX	17	26691290	26697373	-	1.7349498271942139	0.18945981562137604	0.3047136962413788
CTB-96E.2	17	26691310	26694888	-	0.47433117032051086	0.0569583922624588	0.07657691091299057
VTN	17	26694297	26700110	-	1.9532309770584106	0.312156081199646	0.38568124175071716
SPAG5-AS1	17	26925808	26944393	+	0.13042953610420227	0.13269895315170288	0.7865102887153625
SEZ6	17	27281919	27333458	-	4.6123528480529785	11.473873138427734	32.84408950805664
CRYBA1	17	27573877	27581512	+	1.4850963354110718	0.4092954993247986	0.036588624119758606
EVI2A	17	29643428	29648767	-	0.17081324756145477	1.1144165992736816	1.9414100646972656
AC005899.1	17	30748305	30772564	-	0.020139317959547043	0.02933635003864765	0.2379300445318222
MYO1D	17	30819628	31203902	-	6.7392048835754395	2.7731614112854004	0.08754915744066238
TMEM98	17	31254928	31268667	+	106.09211730957031	8.622923851013184	6.097925662994385
TMEM132E	17	32907942	32966337	+	0.6825184226036072	1.1543580293655396	0.0702066719532013
SLFN12	17	33738079	33760218	-	11.205671310424805	1.144031286239624	3.4915244579315186
SLFN13	17	33762115	33775856	-	1.2746143341064453	0.11940164119005203	0.834416389465332
GAS2L2	17	34071530	34079897	-	0.07824110984802246	0.010328958742320538	0.023227261379361153
MRM1	17	34958001	34965397	+	3.3040010929107666	4.693017482757568	11.704291343688965
GPR179	17	36481493	36499730	-	0.011891198344528675	0.07363948971033096	0.04194818064570427
AC124789.1	17	36606675	36608643	-	10.046018600463867	1.6696549654006958	3.4645774364471436
SRCIN1	17	36686259	36762183	-	4.159564018249512	2.501168727874756	0.9352439045906067
CISD3	17	36886510	36891858	+	6.276386737823486	6.554970741271973	21.155284881591797
STAC2	17	37366789	37382040	-	0.3355465531349182	4.058171272277832	5.609128475189209
PNMT	17	37824234	37826728	+	0.4314051568508148	0.07466446608304977	0.022549018263816833

ERBB2	17	37844393	37884915	+	38.9820556640625	13.717774391174316	11.784258842468262
GRB7	17	37894187	37903545	+	0.20115900039672852	0.02968067117035389	0.027839601039886475
NR1D1	17	38249040	38256978	-	3.18670654296875	13.189576148986816	18.2734317779541
IGFBP4	17	38599702	38613983	+	88.85316467285156	24.17232894897461	17.911558151245117
JUP	17	39775692	39943183	-	36.71620178222656	7.754595756530762	10.021852493286133
ZNF385C	17	40177594	40215096	-	0.6514261960983276	0.19433552026748657	0.0878356322646141
KCNH4	17	40308910	40333296	-	0.054983820766210556	0.25003406405448914	1.4893958568572998
GHDC	17	40341106	40346550	-	4.692326068878174	7.382147312164307	17.768749237060547
STAT5A	17	40439565	40463961	+	1.635911464691162	1.5770753622055054	6.746298313140869
WNK4	17	40932649	40949061	+	0.39918962121009827	1.2166224718093872	3.3303608894348145
CNTD1	17	40950854	40963604	+	0.03466685116291046	0.23640483617782593	0.5862250328063965
CD300LG	17	41924516	41940994	+	0.061694685369729996	0.002682178746908903	0.0
AC003043.2	17	42396996	42397584	+	0.0992438942193985	0.008920164778828621	3.2939343452453613
FZD2	17	42634827	42636907	+	53.584716796875	6.040285110473633	20.271724700927734
C1QL1	17	43037061	43045644	-	40.58317947387695	30.169843673706055	42.958099365234375
MAPT	17	43971748	44105703	+	2.254239559173584	11.945351600646973	7.539244174957275
WNT3	17	44841694	44896082	-	16.856952667236328	3.3760547637939453	5.035594463348389
WNT9B	17	44910621	44964096	+	0.5601475834846497	0.2752719819545746	0.09688224643468857
MYL4	17	45286428	45301045	+	0.38000500202178955	0.0540156327188015	0.012683229520916939
ITGB3	17	45331208	45421658	+	2.72722644805908	38.52061080932617	15.247150421142578
RP11-290H9.2	17	45331263	45421658	+	2.9067084789276123	39.250587463378906	14.898714065551758
TBX21	17	45810610	45823485	+	0.13127227127552032	0.6523119807243347	1.0427521467208862
SP6	17	45922280	45933240	-	0.1123361736536026	0.25198376178741455	0.45474332571029663
HOXB2	17	46618256	46623441	-	0.6384276747703552	1.5015745162963867	11.167437553405762
RP11-357H14.12	17	46620017	46628610	+	0.06254313886165619	0.6215605139732361	5.353480339050293
HOXB3	17	46626232	46667634	-	0.762857973575592	2.953641653060913	15.543938636779785
RP11-357H14.17	17	46632895	46682274	-	0.13944707810878754	1.315445899963379	8.041522026062012
RP11-357H14.16	17	46656992	46659621	-	0.05137602984905243	0.11498243361711502	0.13068190217018127
HOXB5	17	46668619	46671323	-	0.30771416425704956	0.09422120451927185	4.322273254394531
HOXB7	17	46684590	46710934	-	0.18998731672763824	2.823533058166504	9.895974159240723
RP11-357H14.19	17	46684989	46716647	-	0.024564405903220177	0.49669989943504333	1.6930938959121704
HOXB8	17	46688446	46692653	-	0.08564629405736923	0.189734548330307	1.4496865272521973
HOXB9	17	46698518	46703839	-	0.02651415579020977	0.6689270734786987	1.9744089841842651
HOXB13-AS1	17	46800530	46802819	+	0.0011888344306498766	0.22375544905662537	0.6085311770439148
HOXB13	17	46802125	46806540	-	0.0	0.9944160580635071	1.1484196186065674
TTL6	17	46839593	46894576	-	0.01777837797999382	0.3897056579589844	0.5641401410102844
GIP	17	47035916	47045958	-	0.4111807942390442	0.0	0.105059914290905
RP11-501C14.5	17	47072628	47074854	-	1.803310513496399	0.14091061055660248	0.0
IGF2BP1	17	47074774	47133012	+	77.87921905517578	4.666553974151611	0.3879063129425049
RP11-1079K10.4	17	47481443	47482559	+	0.11754558980464935	0.019129684194922447	3.336009979248047
NGFR	17	47572655	47592379	+	3.0367467403411865	7.696044921875	13.424067497253418
FAM117A	17	47787694	47866542	-	11.112638473510742	3.4862382411956787	3.6799962520599365
DLX3	17	48067369	48072588	-	0.22161532938480377	0.11515621095895767	0.019483143463730812
SAMD14	17	48187404	48207246	-	12.890323638916016	3.191645383834839	4.8967976570129395
AC002401.1	17	48212951	48223541	+	0.04756957292556763	0.020472146570682526	1.26201593875885
RP11-893F2.13	17	48235694	48238637	-	0.25873473286628723	1.7185707092285156	1.7201560735702515
SGCA	17	48241575	48253292	+	1.189980149269104	0.023608164861798286	0.09547638148069382
RP1-117B12.4	17	48473799	48475249	+	0.2072359323501587	0.03654840961098671	1.1501672267913818
MYCBPAP	17	48585745	48608862	+	0.03295644745230675	0.20692342519760132	0.23848563432693481
WFIKN2	17	48912011	48919709	+	1.3000514507293701	0.010464822873473167	0.12619763612747192

RP11-1018N14.5	17	49517014	49523163	+	0.12430598586797714	0.40571922063827515	0.5936514139175415
HLF	17	53342321	53402426	+	0.1935613602399826	1.4632742404937744	1.0317027568817139
BZRAP1	17	56378598	56406152	-	2.4679009914398193	0.5083310604095459	1.0665184259414673
RNF43	17	56429861	56494480	-	0.7624502778053284	0.42499467730522156	0.005956230219453573
AC005702.2	17	58042457	58074333	+	0.05511010065674782	0.0628165602684021	0.21360789239406586
RGS9	17	63133456	63223819	+	2.59916090965271	0.523021936416626	0.2893643081188202
AXIN2	17	63524685	63557765	-	21.814027786254883	4.168253421783447	8.041630744934082
SLC16A6	17	66263167	66287405	-	4.796598434448242	5.839419841766357	0.6309103965759277
ABCA5	17	67240576	67323323	-	4.020101070404053	3.9199087619781494	1.3778668642044067
KCNJ16	17	68071426	68131744	+	1.0832189321517944	7.0185723304748535	9.582146644592285
AC007639.1	17	70380443	70588943	-	7.16494607925415	24.191524505615234	44.92176055908203
AC080037.2	17	70594180	70636611	-	0.014678014442324638	0.8037105202674866	0.37514567375183105
SSTR2	17	71161160	71168060	+	4.498820781707764	0.2995302677154541	1.0713554620742798
SDK2	17	71330523	71640227	-	14.461617469787598	1.6112589836120605	0.7084664106369019
BTBD17	17	72352555	72357958	-	29.223329544067383	1.7109942436218262	1.6269108057022095
C17orf28	17	72946837	72969261	-	7.735292911529541	1.4697343111038208	2.2369654178619385
SLC16A5	17	73084055	73102246	+	0.39337223768234253	0.28719499707221985	0.03480950742959976
SLC25A19	17	73269062	73285530	-	3.8116202354431152	5.705225467681885	12.52379322052002
C17orf109	17	73629514	73637484	+	0.10259737074375153	0.2873598039150238	0.3703077733516693
ITGB4	17	73713474	73753898	+	7.8005051612854	1.9501718282699585	20.508365631103516
AC087289.1	17	73814896	73818071	-	0.012929095886647701	0.04970264434814453	0.051613882184028625
TRIM47	17	73870247	73874656	-	6.2817301750183105	22.820295333862305	37.376705169677734
TRIM65	17	73885041	73893084	-	9.916083335876465	14.280855178833008	32.92878723144531
EVPL	17	74002927	74023507	-	0.001812848262488842	0.04310491308569908	0.1743236929178238
ZACN	17	74075263	74078885	+	0.14574302732944489	0.00548061728477478	1.287075161933899
FOXJ1	17	74132425	74137380	-	5.666255950927734	1.2270913124084473	1.764672875404358
AANAT	17	74449433	74466198	+	0.050719037652015686	0.014600194059312344	0.007734654936939478
RHBDF2	17	74466976	74497508	-	1.2461704015731812	3.4834539890289307	5.438813209533691
PRCD	17	74523871	74541458	+	0.15672427415847778	0.20727166533470154	0.639904797071719
ST6GALNAC2	17	74561461	74582145	-	0.5631893873214722	1.7709459066390991	3.749973535377197
LINC00338	17	75084755	75091068	+	7.528083801269531	18.262826919555664	26.620296478271484
AC021593.1	17	76103480	76106416	-	1.434556245803833	0.1723848581314087	0.33362719416618347
AC087645.1	17	76257430	76274573	-	0.4337850511074066	0.23693086206912994	1.296887755393982
AC061992.2	17	76311810	76343879	+	0.06443065404891968	0.1884792447090149	0.2786025106906891
DNAH17	17	76419778	76573476	-	0.0036675671581178904	0.03245958313345909	0.030534757301211357
AC100791.3	17	77889984	77900524	-	0.026353251188993454	0.14585565030574799	0.11430289596319199
AC127496.1	17	78977135	78978932	+	1.0921400785446167	2.055756092071533	5.418020725250244
RP13-766D20.2	17	79481073	79494802	+	1.2054396867752075	0.27415114641189575	0.44853314757347107
TSPAN10	17	79609349	79615779	+	0.4863739013671875	0.4214528501033783	1.9882533550262451
AC139099.1	17	81174666	81188573	+	0.060005947947502136	0.26721981167793274	0.4655541479587555
ADCYAP1	18	904414	912173	+	0.16047413647174835	0.0055293976329267025	0.0
TMEM200C	18	5890184	5892103	-	20.19586181640625	3.306443452835083	5.966054916381836
ARHGAP28	18	6729821	6915715	+	5.748344898223877	0.47093379497528076	1.4396244287490845
LAMA1	18	6941743	7117813	-	31.664031982421875	2.8451173305511475	1.6023218631744385
PTPRM	18	7567817	8406859	+	24.020751953125	6.015865325927734	3.4282712936401367
APCDD1	18	10454625	10488698	+	24.55512237548828	9.436723709106445	9.153665542602539
PIEZO2	18	10670238	11148761	-	18.20186996459961	1.3486573696136475	0.006917055696249008
GNAL	18	11689184	11885684	+	9.341293334960938	1.6847047805786133	0.5406231880187988
MCSR	18	13825543	13826861	+	0.008157789707183838	0.235754132270813	0.29028788208961487
GREB1L	18	18822203	19102791	+	24.840099334716797	6.300731658935547	0.6733618378639221

ANKRD29	18	21178890	21242849	-	0.09781152009963989	0.4834997355937958	0.6946117281913757
ACO22884.1	18	22208146	22242162	+	0.00623741140589118	0.13391736149787903	0.11569763720035553
ZNF521	18	22641888	22932214	-	32.502357482910156	12.735505104064941	11.768730163574219
AQP4	18	24432002	24445749	-	2.806398868560791	10.081501007080078	14.392401695251465
CHST9-AS1	18	24445272	24515910	+	0.08247750997543335	0.044597022235393524	0.8050591349601746
DSC3	18	28570052	28622781	-	3.1669979095458984	0.0026841023936867714	0.04844905808568001
DSC2	18	28645940	28682378	-	4.946274757385254	0.3806956112384796	0.10045450925827026
ACO21224.1	18	29992145	29993199	+	0.04824830964207649	0.0	1.543221354484558
ACO12123.1	18	30349758	30354376	+	0.25944948196411133	0.2840532958507538	0.0881623774766922
C18orf34	18	30517367	31020685	-	0.16140036284923553	0.1020318940281868	0.0521702766418457
ASXL3	18	31158541	31327377	+	3.038543701171875	0.6873289942741394	0.1081741452217102
RIT2	18	40323192	40695657	-	0.296937272491455	1.1637823581695557	12.386384010314941
SLC14A1	18	43304092	43332485	+	0.14127126336097717	5.595394611358643	5.868892669677734
ST8SIA5	18	44259081	44337132	-	6.625653266906738	11.353564262390137	49.537845611572266
KATNAL2	18	44526787	44628613	+	1.9646168947219849	3.026981830596924	5.797138214111328
ZBTB7C	18	45553640	45935663	-	0.2378351092338562	1.1680129766464233	1.3359225988388062
LIPG	18	47088427	47119278	+	31.6185302734375	5.857167720794678	10.409071922302246
MRO	18	48321491	48351754	-	0.5253602862358093	0.9370318651199341	3.4662036895751953
ACO22031.1	18	53443958	53448952	-	0.09696697443723679	1.3604001998901367	0.8780910968780518
ACO90324.1	18	55686021	55686293	-	0.47029027342796326	0.04561518877744675	0.008870519697666168
RNF152	18	59475296	59560992	-	13.90228271484375	1.0355597734451294	0.6292367577552795
TNFRSF11A	18	59992520	60054899	+	0.1822272396087646	0.4299069941043854	0.8521597981452942
CDH19	18	64168320	64271409	-	0.012271140702068806	3.974684000015259	3.272918224334717
AC114689.1	18	65183783	65566853	+	0.2668631374835968	0.0173603855073452	0.029068175703287125
ACO91305.1	18	68047378	68243317	-	0.00842982903122902	0.10312753915786743	0.4732271432876587
CBLN2	18	70203915	70211774	-	4.89909553527832	0.022715410217642784	0.0
CNDP1	18	72201675	72252261	+	0.044534921646118164	3.095188617706299	0.7482670545578003
TSHZ1	18	72922710	73001905	+	5.6420464515686035	17.442834854125977	26.029102325439453
ACO34110.2	18	74327169	74337889	+	0.18633224070072174	0.055461615324020386	0.025377409532666206
GALR1	18	74962505	74980858	+	0.018311787396669388	1.6843202114105225	6.0439043045043945
SALL3	18	76740275	76757397	+	1.4395010471343994	15.147167205810547	19.468887329101562
NFATC1	18	77155772	77289325	+	2.1137850284576416	3.0251009464263916	7.1536335945129395
PPAP2C	19	281048	291435	-	2.4204092025756836	5.455266952514648	23.89932632446289
FSTL3	19	676389	683392	+	26.03862762451172	11.055213928222656	9.107836723327637
MIR3187	19	812518	821967	-	21.03433609008789	1.9533072710037231	1.272405743598938
AZU1	19	825097	832017	+	0.3395506739616394	0.14205823838710785	0.009871897287666798
PRTN3	19	840985	848180	+	0.02914154902100563	0.6070857048034668	0.19035296142101288
ELANE	19	852291	856242	+	0.0387338362634182	1.0924277305603027	0.0842505469918251
KISS1R	19	917342	921014	+	2.312195301055908	0.644662618637085	0.317168203353882
ARID3A	19	926037	972781	+	19.73048210144043	3.7793307304382324	4.009618759155273
GRIN3B	19	1000418	1009731	+	0.37108874320983887	0.12280457466840744	0.05102377384901047
CNN2	19	1026298	1039060	+	211.49069213867188	37.54463577270508	55.669105529785156
ACO05329.6	19	1385158	1389650	-	0.056510016322135925	0.0	0.16760091483592987
ONECUT3	19	1752372	1780987	+	2.5290677547454834	1.5468223136849701E-4	2.7220802307128906
LINGO3	19	2289774	2308156	-	0.05414816364645958	0.6881771087646484	0.696511447429657
TMPRSS9	19	2389769	2426086	+	0.0319758765399456	0.31943267583847046	0.12932470440864563
ZNF556	19	2867333	2878501	+	0.19837969541549683	0.37513986229896545	0.32108816504478455
TLE2	19	2997637	3045786	-	4.170070648193359	19.633142471313477	14.204313278198242
NFIC	19	3359616	3463603	+	6.9630231857299805	64.62176513671875	60.58962631225586
C19orf29-AS1	19	3611566	3619189	+	0.2067604511976242	0.1572951376438141	0.9989015460014343

AC016586.1	19	4041127	4043154	-	0.1073441281914711	0.7430866956710815	0.43610358238220215
TMIGD2	19	4292237	4302428	-	1.083654761314392	0.3269195258617401	0.12672285735607147
AC005594.1	19	4679294	4685960	+	0.008257505483925343	0.009887509979307652	0.15666957199573517
TICAM1	19	4815939	4831737	-	1.381666898727417	5.08616304397583	11.788443565368652
SLC25A41	19	6426050	6433790	-	0.8006298542022705	0.33725303411483765	0.22217285633087158
CD70	19	6583135	6591163	-	3.414318084716797	1.7705962657928467	18.2959041595459
CAMSAP3	19	7660788	7683194	+	5.336117744445801	0.577046275138855	0.669028639793396
OR7D2	19	9296279	9299493	+	0.7694417834281921	0.08672983199357986	0.09001853317022324
ZNF812	19	9800600	9811452	-	0.14206308126449585	0.026995407417416573	0.008996737189590931
OLFM2	19	9964395	10047070	-	60.39236068725586	18.09299087524414	21.85207748413086
ICAM5	19	10400655	10407453	+	1.2919983863830566	5.866186141967773	4.3154449462890625
PDE4A	19	10527449	10580305	+	1.790993571281433	5.284334182739258	8.561319351196289
S1PR5	19	10623419	10628668	-	0.6227976679801941	0.6860220432281494	1.9096711874008179
CNN1	19	11649579	11661138	+	19.728309631347656	1.654294729232788	2.723062515258789
ACP5	19	11685477	11689801	-	0.8407942652702332	4.661936283111572	0.09146083146333694
ZNF69	19	11998599	12025144	+	11.629289627075195	3.4364774227142334	4.148453712463379
DNASE2	19	12986023	12992335	-	13.976144790649414	22.305509567260742	45.432708740234375
DAND5	19	13080432	13085567	+	0.04259105771780014	0.13626374304294586	0.0864587351679802
NFIX	19	13106584	13209610	+	8.56924819946289	81.98883819580078	79.2763900756836
LYL1	19	13209848	13213681	-	1.7171094417572021	0.23523126542568207	0.10312870889902115
MRI1	19	13875337	13885096	+	7.519218444824219	14.895188331604004	28.27837562561035
CC2D1A	19	14016956	14041693	+	12.302896499633789	20.890859603881836	44.95022201538086
AC022098.1	19	14183348	14185873	+	1.4267292022705078	2.557344436645508	5.404852390289307
CD97	19	14492213	14519531	+	11.097646713256836	44.567264556884766	74.27641296386719
AC020911.1	19	15050246	16748905	+	0.002277875519539118	0.0	0.23910853266716003
NOTCH3	19	15270445	15311792	-	71.72997283935547	22.09870719909668	24.71672248840332
CYP4F3	19	15751695	15773634	+	0.10687816143035889	0.009807991795241833	0.004979148507118225
CYP4F11	19	16023180	16045676	-	0.03981227055191994	1.2412999868392944	0.6991614699363708
KLF2	19	16435651	16438337	+	2.039569616317749	3.9898548126220703	8.789868354797363
F2RL3	19	16999826	17002830	+	0.00504844356328249	0.1783497929573059	0.303635658336487
CPAMD8	19	17003758	17137625	-	4.927720069885254	0.3037910461425781	0.019145270809531212
USHBP1	19	17360838	17375573	-	0.4551626741886139	0.07727130502462387	0.013201949186623096
PLVAP	19	17462264	17488148	-	2.1251890659332275	0.0540371872484684	0.011157535947859287
JAK3	19	17935589	17958880	-	0.7857353687286377	0.7538941502571106	0.19172972440719604
KCNN1	19	18062111	18110893	+	2.272482681274414	1.0268962383270264	0.5115382075309753
ARRDC2	19	18111944	18124903	+	1.8532627820968628	4.808461666107178	6.173069000244141
RAB3A	19	18307594	18314839	-	15.601480484008789	6.9549689292907715	15.390976905822754
LRRC25	19	18501955	18508415	-	0.11013788729906082	0.006566216703504324	0.02143969014286995
ISYNA1	19	18545198	18549111	-	108.98468017578125	24.067237854003906	28.935287475585938
CRLF1	19	18704037	18717660	-	2.636648654937744	1.4679397344589233	0.07890905439853668
NR2C2AP	19	19312224	19314220	-	9.403667449951172	13.097404479980469	27.741817474365234
TM6SF2	19	19375174	19384074	-	2.6574177742004395	1.3570088148117065	0.7157174348831177
TSSK6	19	19623230	19626838	-	1.3505384922027588	1.2521519660949707	4.594687461853027
LPAR2	19	19734468	19739739	-	17.865997314453125	2.4010114669799805	3.7076544761657715
AC011477.2	19	19945686	20008579	-	0.003730644239112735	0.0025831719394773245	0.2628161311149597
AC010615.2	19	21634858	21646686	-	1.0803439617156982	0.10402865707874298	0.0
VSTM2B	19	30017491	30055226	+	0.05016208440065384	3.697967052459717	12.169049263000488
ZNF536	19	30863328	31048965	+	2.9464118480682373	1.526368260383606	0.04053875803947449
RGS9BP	19	33166313	33169206	+	0.09135929495096207	0.549888551235199	0.588369965532837
SLC7A9	19	33321421	33360683	-	0.37489405274391174	0.06370184570550919	0.08642374724149704

CEBPA	19	33790840	33793470	-	0.7833958864212036	1.6677873134613037	3.1281402111053467
CHST8	19	34112861	34264413	+	0.2813994586467743	4.919912815093994	3.82315993309021
SCN1B	19	35521592	35531352	+	2.0071535110473633	6.352108955383301	13.008888244628906
HPN	19	35531410	35557475	+	0.055500378012657	0.18491974472999573	0.17320065200328827
FXYD3	19	35606732	35615227	+	0.0020829036366194487	1.0523570775985718	0.34398210048675537
LGI4	19	35615417	35633355	-	0.2915484309196472	1.3391883373260498	1.2664463520050049
FXYD5	19	35645633	35660787	+	3.031301975250244	14.35963249206543	20.433334350585938
HSPB6	19	36245470	36247930	-	1.5883785486221313	10.597591400146484	26.963224411010742
LOC147976	19	38320191	38322797	+	0.6198996305465698	0.08016732335090637	0.10175999253988266
PPP1R14A	19	38741877	38747231	-	6.1847920417785645	5.767687797546387	1.7227178812026978
SPINT2	19	38755098	38783253	+	11.98369026184082	0.5210741758346558	0.22178815305233002
KCNK6	19	38810482	38819640	+	5.572237491607666	0.623494029045105	0.3085431158542633
AC011443.1	19	39574945	39602080	+	0.009939603507518768	0.24309231340885162	1.2227119207382202
LRFN1	19	39797208	39805976	-	1.2684602737426758	4.258288383483887	6.952503204345703
GMFG	19	39819010	39826726	-	1.7946231365203857	0.5614261627197266	0.3295170068740845
TTC9B	19	40721965	40724306	-	3.7043163776397705	1.4070074558258057	4.484419345855713
HIPK4	19	40885179	40896094	-	0.1370222568511963	0.03851790726184845	0.021479124203324318
CYP2G1P	19	41396731	41406413	+	0.08707031607627869	0.1436852067708969	0.02025989443063736
B3GNT8	19	41931265	41934635	-	1.1060348749160767	0.09288039058446884	0.09201871603727341
CEACAM21	19	42041702	42093197	+	0.5727128982543945	0.00901655200868845	0.0
CTC-378H22.2	19	42656721	42661675	+	4.7154974937438965	0.42276594042778015	0.004801205825060606
ZNF575	19	44029649	44040282	+	0.5356689691543579	0.237060546875	1.935139536857605
LYPD5	19	44300080	44324808	-	0.21461080014705658	0.6578024625778198	1.015156626701355
AC011508.1	19	44326226	44331358	-	0.015781957656145096	0.07790142297744751	0.11794838309288025
BCL3	19	45250962	45263301	+	2.739664316177368	7.584645748138428	23.273530960083008
CBLC	19	45281126	45303891	+	0.13575078547000885	0.00752175273373723	0.005222815088927746
EXOC3L2	19	45715879	45737469	-	2.5592153072357178	0.23545138537883759	0.18749888241291046
FOSB	19	45971253	45978414	+	6.339420318603516	13.839489936828613	2.1365439891815186
PPM1N	19	45992035	46005768	+	0.47372931241989136	1.0464574098587036	1.3896633386611938
GPR4	19	46093025	46105466	-	0.7781183123588562	0.04274742677807808	0.003170877927914262
GIPR	19	46171502	46185704	+	0.5303410291671753	0.7889342904090881	2.027179002761841
FOXA3	19	46367518	46377054	+	0.04871170222759247	0.4542973041534424	0.34674325585365295
HIF3A	19	46800303	46846690	+	1.5129849910736084	0.10739830881357193	0.032686103135347366
CCDC8	19	46913629	46916841	-	23.0373592376709	9.320569038391113	8.896810531616211
CCDC114	19	48799714	48825130	-	0.0685194805264473	0.3030790090560913	0.2512620985507965
CTC-241F20.2	19	48807338	48825151	-	0.047268353402614594	0.46394482254981995	0.19845247268676758
SULT2B1	19	49055429	49102683	+	0.08528578281402588	0.6487302184104919	0.35285818576812744
NTN5	19	49164666	49176264	-	0.07216571271419525	0.27934548258781433	0.2040797472000122
TULP2	19	49384222	49401990	-	0.0051865833811461926	0.04185144230723381	0.05181005597114563
AC026803.14	19	49414187	49422148	-	0.050898171961307526	0.008030989207327366	1.9574755430221558
LHB	19	49519237	49520347	-	0.02542923018336296	0.24073685705661774	0.39413511753082275
AC008687.1	19	49559050	49568333	-	0.4057702124118805	0.07189272344112396	0.09182389825582504
NTF4	19	49564397	49567124	-	0.6335579752922058	0.08309144526720047	0.055291954427957535
HRC	19	49654458	49658681	-	1.0974187850952148	0.13250064849853516	0.1495315134525299
SLC6A16	19	49792897	49828474	-	5.085487365722656	0.9301109910011292	0.8289783596992493
AC011450.1	19	49831424	49843559	-	7.087606906890869	2.3637049198150635	2.1410470008850098
DKKL1	19	49867042	49878371	+	2.866853829193115	0.5733656287193298	0.5877881050109863
MYH14	19	50706885	50813802	+	1.475385069847107	7.327288627624512	15.433709144592285
NAPSA	19	50861735	50868931	-	0.03115113452076912	0.15058037638664246	0.30776840448379517
ASPDH	19	51014858	51017947	-	0.08691012859344482	0.2907921075820923	0.7136400938034058

CLEC11A	19	51226605	51228979	+	14.2692289352417	9.210680961608887	5.557435512542725
AC010325.1	19	51320937	51322131	+	0.10585758090019226	0.10668648034334183	0.5691215991973877
KLK14	19	51580574	51587502	-	0.16723580658435822	0.09932088851928711	0.6565236449241638
CTU1	19	51600863	51611647	-	3.21601939201355	2.949228525161743	12.7034912109375
SIGLEC14	19	52145823	52150054	-	0.1261024922132492	0.0042047640308737755	0.0
AC008440.5	19	54377880	54379303	-	0.00515588978305459	0.0	2.1778512001037598
CACNG7	19	54412589	54447195	+	74.6634750366211	13.215198516845703	29.421236038208008
CACNG6	19	54495542	54515923	+	2.4425344467163086	0.8965362310409546	0.6841622591018677
AC012314.8	19	54622891	54628722	-	0.22552384436130524	0.08232328295707703	0.8719329833984375
NLRP2	19	55476438	55512510	+	10.261907577514648	0.36392390727996826	6.753402412869036E-4
TNNT1	19	55644162	55660606	-	1.2584774494171143	5.789943695068359	8.100119590759277
TNNI3	19	55663138	55669100	-	1.4287420511245728	0.41068267822265625	0.30054500699043274
FAM71E2	19	55866277	55874620	-	0.09995309263467789	0.021363163366913795	0.012324265204370022
TMEM238	19	55890613	55895627	-	0.08151740580797195	0.23728132247924805	0.49026402831077576
AC008735.15	19	56052023	56056315	-	0.2917637825012207	0.07105723768472672	0.0126700634136796
NLRP11	19	56296770	56348128	-	0.11598659306764603	0.25856080651283264	0.7463089823722839
ZIM2	19	57285920	57352097	-	1.898127794265747	11.698919296264648	18.306190490722656
MIMT1	19	57352270	57359922	+	0.015583737753331661	0.5367326736450195	2.003718376159668
ZNF154	19	58208735	58220579	-	2.9822146892547607	0.564342737197876	0.32517194747924805
ZNF587	19	58331094	58376485	+	9.388079643249512	9.110674858093262	10.481547355651855
AL034548.1	20	306269	309372	-	0.20056433975696564	0.17497669160366058	2.559734582901001
C2orf46	20	1161205	1166059	-	3.1471176147460938	0.33302435278892517	0.20322035253047943
C2orf202	20	1184098	1188918	+	0.027590136975049973	0.07941776514053345	0.10350921005010605
PDYN	20	1959403	1974732	-	0.15954414010047913	0.008612149395048618	0.0
CPXM1	20	2774715	2781283	-	97.13945007324219	13.718833923339844	26.803634643554688
CDC25B	20	3767578	3786762	+	36.566917419433594	61.171382904052734	113.49966430664062
ADRA1D	20	4201329	4229721	-	0.45602062344551086	0.5415276288986206	3.469663143157959
LRRN4	20	6021424	6034695	-	0.12585802376270294	0.0011533910874277353	0.0046561178751289845
FERMT1	20	6055492	6104191	-	0.4565965235233307	6.754870891571045	3.5965070724487305
BMP2	20	6748311	6760910	+	1.041237235069275	3.832406997680664	5.055309295654297
C2orf103	20	9495008	9511171	+	2.052314043045044	17.493867874145508	7.332300186157227
RP4-742J24.2	20	11890052	11899325	-	0.011662156321108341	0.00657454552128911	0.1274493783712387
OTOR	20	16729003	16750707	+	0.014850311912596226	1.4135687351226807	2.23942494392395
PCSK2	20	17206752	17465223	+	0.3048909306526184	1.7817449569702148	1.8308683633804321
LINC00237	20	21074190	21086975	-	0.006928492337465286	0.8325321674346924	0.5374149084091187
NKX2-2	20	21491648	21494664	-	0.014720766805112362	18.98500633239746	20.005956649780273
NKX2-2-AS1	20	21492085	21492947	+	0.0	0.1243763417005539	0.7219504117965698
VSX1	20	25051521	25062996	-	0.39442095160484314	0.07679487764835358	0.0564555823802948
RP4-738P15.1	20	25121425	25129894	-	0.06728339940309525	0.017904307693243027	0.0
RP11-348I14.4	20	29638246	29641792	+	0.07869144529104233	0.42878663539886475	0.33546289801597595
HM13-IT1	20	30150969	30151879	+	2.204193353652954	2.892214059829712	2.4151062965393066
FOXS1	20	30432103	30433420	-	12.307334899902344	2.15370512008667	0.4574861526489258
XKR7	20	30555805	30586256	+	1.0231784582138062	0.021758748218417168	0.0338982492685318
DNMT3B	20	31350191	31397162	+	28.726364135742188	5.478832244873047	3.723595142364502
PXMP4	20	32294512	32308125	-	3.4682769775390625	5.674112796783447	11.372159004211426
ASIP	20	32848171	32857150	+	1.1582400798797607	0.4859935939311981	0.1281229704618454
GDF5	20	34021145	34042568	-	3.771700859069824	0.2382689267396927	14.08910846710205
C2orf118	20	35504534	35522638	+	0.033315058797597885	0.021460961550474167	0.1792994886636734
RP11-425M5.5	20	36120874	36137633	-	1.653723955154419	0.5879071354866028	0.35137054324150085
PPP1R16B	20	37434348	37551667	+	5.795236587524414	0.9891191124916077	0.45990490913391113

LPIN3	20	39969560	39989222	+	1.540239691734314	0.8124816417694092	1.0279183387756348
JPH2	20	42740335	42816218	-	6.6386518478393555	0.3590359389781952	1.6662105321884155
RIMS4	20	43380449	43438979	-	3.375967264175415	13.150091171264648	29.646469116210938
MATN4	20	43922085	43937169	-	0.019096096977591515	0.021386118605732918	0.2349856495872388
TP53TG5	20	44002526	44036529	-	0.00624035252581816	0.056999411433935165	0.04814724251627922
WFDC3	20	44376583	44420571	-	0.07519356906414032	0.31601130962371826	0.29592353105545044
C20orf123	20	45169585	45179213	-	0.7662296295166016	0.09980665892362595	0.0
EYA2	20	45523263	45817492	+	1.6078470945358276	14.60983657836914	6.454461574554443
CTD-2653D5.1	20	46306645	46315041	+	0.019022703170776367	0.013238901272416115	0.21469680964946747
RP1-66N13.3	20	46983957	46999372	+	0.03208935633301735	0.0	0.0
PTGIS	20	48123992	48184683	-	4.699717044830322	2.3080525398254395	1.6996351480484009
RP11-112L6.4	20	48789087	48793096	+	0.7404913306236267	0.6485774517059326	0.6219701766967773
RP11-290F20.3	20	48884023	48896332	+	0.01123366691172123	0.1833488494157791	0.12649564445018768
RP4-530I15.9	20	49187512	49194578	-	0.0066413008607923985	0.009395897388458252	0.10662973672151566
NFATC2	20	50003494	50179339	-	0.46596744656562805	4.814950942993164	7.047116756439209
SALL4	20	50400581	50419014	-	16.36014747619629	2.236417055130005	0.2508491277694702
TSHZ2	20	51588946	52107617	+	1.292754054069519	3.3420727252960205	4.2952165603637695
AC005220.3	20	52556699	52559047	+	0.943812370300293	0.28721386194229126	0.211038738489151
CYP24A1	20	52769988	52790512	-	0.0023188255727291107	0.016440333798527718	0.05245180055499077
RP4-800J21.3	20	55959216	55968118	-	0.006688092835247517	0.007342365104705095	0.13685809075832367
PMEPA1	20	56223448	56286592	-	5.306637287139893	9.606691360473633	31.558557510375977
EDN3	20	57875482	57901047	+	0.0070024533197283745	0.1017579734325409	0.30044710636138916
HRH3	20	60790026	60795323	-	0.9967570900917053	0.13593192398548126	0.16479036211967468
RP11-157P1.4	20	60880488	60881452	-	0.9843448996543884	1.8000670671463013	6.308049201965332
RP11-157P1.5	20	60928066	60931536	+	0.03538408875465393	0.16456107795238495	0.49760621786117554
RP11-93B14.6	20	61272071	61274656	-	0.0	0.09509143978357315	0.04172348603606224
SLCO4A1	20	61273797	61317137	+	1.063699722290039	16.234195709228516	26.1413631439209
RP11-93B14.5	20	61294371	61298076	-	0.017801444977521896	26.671201705932617	18.909793853759766
NTSR1	20	61340189	61394123	+	0.931817352771759	4.093211650848389	22.975345611572266
RP11-93B14.4	20	61363918	61366699	-	0.02446681261062622	0.35537484288215637	0.2463228851556778
COL9A3	20	61447596	61472511	+	20.46074867248535	28.23877716064453	96.66793823242188
SLC17A9	20	61584052	61599949	+	1.401873230934143	1.5503532886505127	0.00604672638367672
RP5-963E22.4	20	61798149	61812255	-	3.7644600868225098	0.840041995048523	0.024102814495563507
COL20A1	20	61924538	61966203	+	0.8010551929473877	9.846563339233398	56.04401779174805
ZBTB46	20	62375019	62462597	-	8.711276054382324	2.6082844734191895	2.0266952514648438
SOX18	20	62679076	62680994	-	0.22442248463630676	0.48033639788627625	2.140777111053467
C20orf201	20	62714733	62715712	-	0.16827385127544403	0.24787932634353638	1.7742670774459839
LINC00266-1	20	62921738	62944485	+	0.01404266431927681	0.07502160966396332	0.07675579935312271
RBM11	21	15588451	15600693	+	0.3721141219139099	0.07950106263160706	0.004586164839565754
AP000473.5	21	18003146	18013002	+	5.9577317237854	1.7155970335006714	1.9720396995544434
C21orf37	21	18811208	18821503	+	0.141354039311409	0.7740500569343567	0.44457200169563293
CHODL	21	19165801	19639690	+	5.979264736175537	0.497694730758667	0.19437362253665924
AP000459.4	21	24733426	24757182	-	6.9525032034345703	0.05455595627427101	0.0
AP000221.2	21	26825507	26839042	-	0.32371610403060913	0.048461999744176865	0.10073195397853851
AP000221.1	21	26887785	26890650	-	0.17680126428604126	0.03405197337269783	0.01765158586204052
MIR155HG	21	26934221	26947480	+	0.12365658581256866	3.1183106899261475	4.969179153442383
CYYR1	21	27838528	27945603	-	14.80187702178955	0.7350050806999207	0.12337110936641693
LINC00189	21	30565801	30660526	+	0.1446051001548767	2.189279317855835	0.0074125779792666435
C21orf119	21	33765439	33766269	+	2.705501079559326	8.879715919494629	10.576308250427246
C21orf63	21	33784314	33887707	+	1.05516517162323	1.1063376665115356	3.8955283164978027

C21orf77	21	33944548	33948191	-	0.3288692533969879	0.07060196995735168	0.08477956056594849
AP000282.2	21	34285957	34443410	-	0.1355401873588562	0.41563811898231506	0.7765519618988037
OLIG2	21	34398153	34401504	+	7.687301158905029	53.553165435791016	71.69047546386719
OLIG1	21	34442450	34444726	+	19.84880828857422	46.62980270385742	90.16947937011719
AP000295.7	21	34636178	34638565	-	0.010538161732256413	0.030789194628596306	0.5124537944793701
LINC00310	21	35552978	35562220	+	0.94122314453125	0.4775443971157074	0.3374837338924408
CLIC6	21	36041688	36090525	+	0.23393721878528595	0.07937578111886978	0.9526205658912659
RUNX1	21	36160098	37357047	-	1.417220950126648	7.001194000244141	11.737520217895508
AP000688.14	21	37441940	37498938	-	0.01023780182003975	0.07722678035497665	0.20458562672138214
AP000688.29	21	37477179	37481988	+	0.0	0.09947596490383148	0.28177449107170105
AP000689.1	21	37502670	37648524	-	0.04666187986731529	0.6378031373023987	0.4539214074611664
AP000689.8	21	37504065	37528605	-	0.13906730711460114	0.6754186153411865	0.9879575967788696
CBR3	21	37507210	37518864	+	5.657521724700928	12.824921607971191	24.749645233154297
AP000696.2	21	38004979	38009331	-	0.0	0.23955382406711578	0.07011429220438004
SIM2	21	38071433	38131815	+	0.3528952896595001	4.2877583503723145	1.863720178604126
DSCR6	21	38378450	38391959	+	1.0720508098602295	0.10405391454696655	0.034816790372133255
AP001432.11	21	38559967	38566227	-	0.00966784916818142	0.0	0.3459160625934601
AP001432.14	21	38593720	38610045	+	0.16550028324127197	0.7487006187438965	0.3932761251926422
KCNJ6	21	38996789	39288749	-	3.0278372764587402	2.293771505355835	0.5523793697357178
DSCR8	21	39493545	39560110	+	0.0023348552640527487	1.4340405464172363	0.0490095317363739
KCNJ15	21	39529128	39673748	+	0.03793409466743469	0.6073874235153198	1.3152390718460083
ERG	21	39751949	40033704	-	0.16942735016345978	0.004603610374033451	0.031497254967689514
BRWD1-IT1	21	40589019	40591731	-	0.1831810474395752	0.4983796775341034	0.014863970689475536
PCP4	21	41239243	41301322	+	1.5964674949645996	0.43995001912117004	4.042114734649658
DSCAM	21	41382926	42219065	-	0.23352962732315063	7.688416481018066	6.875464916229248
MX1	21	42792231	42831141	+	2.398641586303711	0.7066329717636108	0.34749260544776917
TMPRSS2	21	42836478	42903043	-	0.2784220576286316	0.025213805958628654	0.001737841870635748
RIPK4	21	43159529	43187266	-	0.1922416388988495	0.8319181799888611	2.990041732788086
AP001619.1	21	43313829	43315499	-	0.4799843430519104	0.7440066933631897	0.16411656141281128
UMODL1	21	43483068	43563105	+	0.0018033465603366494	0.05290504917502403	0.017295580357313156
ICOSLG	21	45642874	45660849	-	1.1903423070907593	3.310258388519287	0.270896852016449
LRRC3	21	45875369	45878739	+	7.4456400871276855	0.9197483658790588	0.01555529236793518
AP001065.15	21	45905460	45910171	+	1.8366761207580566	0.15076078474521637	0.04417404532432556
TSPEAR-AS1	21	45926690	45935738	+	1.226934790611267	0.07152044773101807	0.0
C21orf90	21	45937099	45945835	+	0.7153223752975464	0.23594608092931213	0.023048242554068565
FTCD	21	47556176	47575481	-	0.10859551280736923	0.2026458978652954	0.749294638633728
S100B	21	48018875	48025121	-	64.7813491821289	190.15310668945312	209.4020538330078
AP000525.1	22	16157306	16157938	-	0.1853637397289276	1.3592857122421265	1.463229775428772
CECR7	22	17517460	17539682	+	0.10873553901910782	4.749743461608887	2.9589381217956543
CECR6	22	17597189	17602257	-	8.266493797302246	2.1026735305786133	3.149301528930664
CECR2	22	17840837	18033845	+	13.512438774108887	11.515745162963867	2.3156328201293945
DGCR5	22	18958027	19018742	+	2.026543378829956	0.6067624688148499	0.5879508852958679
AC023490.1	22	20378814	20380440	+	0.41071146726608276	0.17892315983772278	1.5234782695770264
P2RX6	22	21369316	21383119	+	1.0605418682098389	3.7280168533325195	5.967090129852295
HIC2	22	21771693	21805752	+	19.881555557250977	3.8020169734954834	4.904972076416016
PRAME	22	22890123	22901768	-	0.024676358327269554	16.570077896118164	0.07959438860416412
AP000344.3	22	23775751	23777258	+	0.03518204018473625	0.026530491188168526	0.40101584792137146
RGL4	22	24030323	24041363	+	0.004750906489789486	0.0	0.17866472899913788
VPREB3	22	24094930	24096655	-	0.0895269513130188	0.3340964615345001	0.4281463027000427
C22orf15	22	24105208	24108048	+	0.6118099689483643	0.04278528317809105	0.05123690515756607

CHCHD10	22	24108021	24110630	-	10.726861953735352	11.197243690490723	35.01468276977539
GSTT2B	22	24299601	24303373	-	0.3728141784667969	0.6937332153320312	3.6704647541046143
DDTL	22	24309089	24314721	+	0.27430567145347595	0.3913934528827667	1.1064115762710571
GSTT2	22	24322339	24326106	+	0.4894510805606842	2.0947749614715576	6.690800189971924
GGT5	22	24615622	24641110	-	5.26803731918335	1.7947026491165161	0.06543594598770142
CRYBB2	22	25615489	25627836	+	0.3597659468650818	0.07892356067895889	0.10707344859838486
ADRBK2	22	25960816	26118985	+	14.419827461242676	4.50484561920166	5.080124378204346
MYO18B	22	26138111	26427007	+	0.004525788128376007	0.030365025624632835	0.036216169595718384
SEZ6L	22	26565440	26779562	+	4.7669806480407715	20.873611450195312	23.191234588623047
CTA-373H7.7	22	27063656	27068617	-	0.4125165343284607	0.24523897469043732	1.3060325384140015
RP1-90L6.2	22	27254597	27261749	+	0.08473310619592667	0.1275690346956253	0.0177800040692091
CTA-929C8.6	22	27706612	27713417	+	0.196624755859375	0.007825147360563278	0.0
MN1	22	28144265	28197486	-	33.106201171875	4.057916164398193	8.32593822479248
ZNRF3-IT1	22	29388709	29414608	+	0.22366786003112793	1.0679292678833008	0.04995805397629738
EMID1	22	29601840	29655586	+	8.41667366027832	2.806602954864502	0.8643559813499451
GAS2L1	22	29702572	29708774	+	9.476778984069824	7.520101547241211	31.101398468017578
NEFH	22	29876181	29887379	+	1.6586871147155762	3.5933749675750732	0.1376226246356964
CABP7	22	30116073	30127828	+	0.10719287395477295	2.8960702419281006	5.082639217376709
CTA-85E5.10	22	30404731	30476469	-	0.1383393257856369	1.1088331937789917	0.6532313227653503
SEC14L6	22	30920465	30942669	-	0.7867168188095093	0.26722753047943115	0.02331484667956829
MORC2-AS1	22	31318295	31328436	+	0.04559175297617912	0.2264801263809204	0.19526894390583038
RP3-400N23.6	22	31688485	31734007	+	0.05904458835721016	0.2799890637397766	0.24166469275951385
RP11-247I13.11	22	31850237	31860190	+	0.19297803938388824	0.13119487464427948	0.6073835492134094
C22orf24	22	32329507	32341504	-	0.8485071659088135	0.2056332379579544	0.24581758677959442
SLC5A4	22	32614465	32651328	-	0.19250769913196564	0.47981947660446167	0.02459280751645565
RFPL3-AS1	22	32755893	32767063	-	0.959413468837738	0.46841177344322205	0.32182377576828003
SYN3	22	32908539	33454358	-	0.02477451041340828	1.0262107849121094	0.5051261782646179
RP4-633O19_A.1	22	36784671	36792562	+	0.41702812910079956	0.06833020597696304	0.027606932446360588
PVALB	22	37196728	37215523	-	1.040594458580017	0.6040691137313843	0.0
IL2RB	22	37515126	37571094	-	0.3547978103160858	1.0228434801101685	0.20487816631793976
RAC2	22	37621301	37640488	-	0.0733247920870781	1.4357901811599731	5.3285698890686035
CYTH4	22	37678068	37711389	+	0.0029568977188318968	0.05000564828515053	0.2224019467830658
RP1-63G5.5	22	37735624	37823505	-	0.015660542994737625	0.12098859250545502	0.24591515958309174
PPP1R29	22	37764000	37823505	-	0.07566936314105988	0.7542681097984314	1.3378905057907104
LGALS1	22	38071615	38075813	+	139.1940155029297	363.1617126464844	436.1228942871094
SOX10	22	38366693	38383429	-	0.012748172506690025	49.49991226196289	27.679723739624023
DMC1	22	38914954	38966291	-	0.29965412616729736	0.48539575934410095	0.06265914440155029
RP3-508I15.10	22	39062513	39064755	-	0.3023596405982971	0.19434678554534912	0.06534552574157715
RP3-508I15.9	22	39063835	39077825	-	4.079395294189453	2.1305155754089355	1.4955253601074219
NPTXR	22	39214457	39239987	-	3.301800489425659	7.781880855560303	14.957425117492676
PDGFB	22	39619364	39640756	-	14.459493637084961	1.641901969909668	0.7066876292228699
CACNA1I	22	39966758	40085742	+	0.17621321976184845	0.04636655002832413	0.00737352529540658
MCHR1	22	41074754	41078818	+	2.303369989318848	5.379910469055176	8.467619895935059
CHADL	22	41625517	41636938	-	0.7985190749168396	2.616713523864746	4.833224773406982
CSDC2	22	41956767	42069998	+	3.5757622718811035	0.8934451341629028	0.6767856478691101
MEI1	22	42095503	42195460	+	0.0280254278331995	0.029772987589240074	0.008395143784582615
SEPT3	22	42372276	42394225	+	55.82106399536133	24.64822006225586	18.513896942138672
FAM109B	22	42470255	42475445	+	3.8564889430999756	1.0020049810409546	1.3593724966049194
SERHL	22	42896585	42908566	+	0.0037999218329787254	0.052323050796985626	0.11496010422706604
BIK	22	43506754	43525718	+	0.691649317741394	0.06753415614366531	0.15737293660640717

SCUBE1	22	43599229	43739394	-	1.7251880168914795	0.00757552869617939	0.002509484300389886
MPPED1	22	43807202	43902800	+	1.4467464685440063	0.0611053928732872	0.009381255134940147
SULT4A1	22	44220389	44258398	-	4.737260341644287	1.6366736888885498	0.5155594348907471
PARVB	22	44395091	44565106	+	2.246553897857666	11.433631896972656	10.735003471374512
PARVG	22	44568836	44615413	+	0.010547366924583912	0.05701148882508278	0.001801942358724773
SMC1B	22	45739944	45809500	-	0.001933627063408494	0.39589008688926697	0.6048957705497742
FBLN1	22	45898118	45997015	+	57.97481918334961	9.008790969848633	7.9452900886535645
WI2-85898F10.1	22	46271879	46283628	-	0.3209715783596039	0.008545394986867905	0.0
WNT7B	22	46316242	46373009	-	3.7657458782196045	2.7347519397735596	17.913463592529297
CITF22-92A6.1	22	46409486	46411378	+	0.20060758292675018	1.2480794191360474	1.7473305463790894
RP6-109B7.3	22	46449585	46453090	+	1.0435810089111328	3.68135404586792	6.731281757354736
RP6-109B7.2	22	46451620	46454040	-	0.06908634305000305	0.4402996003627777	0.2603525221347809
RP11-191L9.4	22	48027423	48251349	+	0.0	0.8314456939697266	0.025622284039855003
MLC1	22	50497820	50524331	-	37.95964431762695	81.32203674316406	132.8352508544922
MOV10L1	22	50528308	50600119	+	0.10507090389728546	0.02299046888947487	0.04160738363862038
ODF3B	22	50968139	50971009	-	0.9134544134140015	0.3535294234752655	0.08601043373346329
GYG2	X	2746829	2800859	+	40.266666412353516	5.968665599822998	5.541637897491455
ARSD-AS1	X	2822945	2824122	+	0.034988392144441605	0.008407892659306526	0.3052440285682678
HDHD1	X	6966961	7066231	-	39.94028091430664	9.00590705871582	10.533770561218262
KAL1	X	8496915	8700227	-	1.3498111963272095	2.976353645324707	0.3706445097923279
GPR143	X	9693386	9754337	-	2.4149115085601807	1.3067628145217896	0.06687842309474945
AC002365.1	X	9935392	9936134	+	0.17535480856895447	0.42300963401794434	0.042976267635822296
MID1	X	10413350	10851773	-	45.15104293823242	11.641470909118652	16.053306579589844
ASB11	X	15298053	15333778	-	0.002670253161340952	1.495283603668213	0.2277987152338028
RAI2	X	17818171	17879457	-	5.078697204589844	0.09494243562221527	0.5533080101013184
RP3-389A20.4	X	17819784	17855852	-	3.8676321506500244	0.0485367551445961	0.2767014801502228
RP3-410B11.1	X	17988317	18122764	-	0.9963262677192688	0.009494452737271786	0.0
CDKL5	X	18443703	18671749	+	7.132518768310547	1.9907493591308594	2.9525303840637207
PPEF1	X	18694029	18846039	+	1.3178242444992065	0.2993452847003937	0.5524729490280151
GPR64	X	19007427	19140755	-	0.0857105478644371	0.008157964795827866	0.6356863975524902
SH3KBP1	X	19552083	19905719	-	14.085860252380371	33.710731506347656	42.945457458496094
MAP7D2	X	20024831	20135114	-	0.6208295822143555	0.6050323843955994	0.19897912442684174
AC117517.1	X	23093708	23096495	-	0.02020191214978695	0.015785494819283485	0.26637163758277893
PTCHD1	X	23352133	23422489	+	0.1958773136138916	0.9821926951408386	1.8009980916976929
RP11-268G12.3	X	27177022	27194415	-	0.8681887984275818	0.9715185761451721	0.05201557278633118
RP11-268G12.1	X	27193037	27417114	-	0.4107327461242676	0.5455031991004944	0.030370665714144707
MAGEB2	X	30233677	30238206	+	0.7676107883453369	1.5519858598709106	0.0
NROB1	X	30322323	30327715	-	0.01792326755821705	2.856191635131836	3.4520440101623535
DMD	X	31132808	33357558	-	8.27441120147705	1.9916565418243408	1.252939224243164
TMEM47	X	34645181	34675405	-	50.400413513183594	12.339996337890625	13.795628547668457
Cxorf22	X	35937851	36008269	+	0.056474704295396805	0.019903576001524925	0.0
MID1IP1-AS1	X	38660821	38663136	-	0.19859881699085236	1.1696175336837769	1.0113933086395264
AC092198.1	X	39868529	39871435	+	4.305711269378662	0.596753716468811	0.0701311007142067
RP3-326I13.1	X	43036243	43085847	+	0.6571000814437866	0.07807714492082596	0.04322129860520363
MAOA	X	43515467	43606068	+	3.409716844558716	3.086371898651123	13.743949890136719
MAOB	X	43625858	43741693	-	0.988065779209137	10.531681060791016	40.69032669067383
EFHC2	X	44007128	44202923	-	0.3001468777656555	1.3316385746002197	1.2242852449417114
RP5-1158E12.3	X	45707328	45710920	-	0.5449110269546509	0.48691171407699585	0.10877066850662231
RGN	X	46937775	46952712	+	0.21994954347610474	0.2765750586986542	0.9244876503944397
SLC38A5	X	48316920	48328644	-	0.5722330212593079	1.2414977550506592	8.977119445800781

WAS	X	48534985	48549818	+	0.3531981110572815	1.573347568511963	2.0706498622894287
AF196970.3	X	48557354	48595570	-	0.14030499756336212	0.2173452377319336	0.44325798749923706
PCSK1N	X	48689504	48694035	-	15.891712188720703	81.03522491455078	75.38494873046875
MAGIX	X	49019061	49024822	+	0.3230046331882477	0.3168499171733856	1.0154247283935547
PLP2	X	49028273	49031588	+	23.392465591430664	69.78245544433594	112.82141876220703
PRICKLE3	X	49031151	49042845	-	0.881786048412323	3.243614435195923	6.074945449829102
CCNB3	X	49967364	50094909	+	0.331068515775879	2.1570706367492676	2.151735305786133
DGKK	X	50108408	50213737	-	0.09683109819889069	0.0023823732044547796	0.004291357006877661
FAM156B	X	52920336	52937587	+	0.8274082541465759	0.6788421869277954	2.619178056716919
FAM156A	X	52976462	53024651	-	0.5472748279571533	0.7791668772697449	2.6354787349700928
ITH5L	X	54775332	54824673	-	0.00846987683326006	7.650201797485352	8.193355560302734
KLF8	X	56258854	56314322	+	0.6988340616226196	0.16916456818580627	0.1382083296775818
SPIN2A	X	57160963	57164058	-	0.23845739662647247	0.02545524388551712	0.0013168419245630503
ASB12	X	63444076	63450511	-	0.7157922983169556	0.033207837492227554	0.004198350943624973
MTMR8	X	63444187	63615333	-	1.5645380020141602	0.23195020854473114	0.047147467732429504
ZC3H12B	X	64708615	64727767	+	2.9261553287506104	0.5915746092796326	1.1101665496826172
EDA	X	68835911	69259319	+	0.373999830722809	0.5285494327545166	0.05035015940666199
IGBP1-AS2	X	69368432	69369504	-	0.0066824303939938545	0.0	0.4613613188266754
SLC7A3	X	70145432	70150975	-	5.17434549331665	0.921587347984314	0.4646426737308502
GJB1	X	70435044	70445366	+	0.0	2.8980276584625244	1.2846788167953491
NHSL2	X	71130938	71363424	+	14.199254989624023	2.760005235671997	0.3159371316432953
CITED1	X	71521488	71527037	-	7.852598667144775	15.201482772827148	27.305191040039062
PHKA1	X	71798664	71934167	-	5.009618282318115	12.282411575317383	15.02439022064209
NAP1L2	X	72432135	72434684	-	2.5162415504455566	0.5131039619445801	0.8231614828109741
RP13-216E22.4	X	73168808	73169393	+	3.9632391929626465	4.5749053955078125	0.7548244595527649
FGF16	X	76709648	76712769	+	0.21799319982528687	0.003881077980622649	0.007379201706498861
PABPC5-AS1	X	90669877	90689998	-	0.44828590750694275	0.15127898752689362	0.0
PABPC5	X	90689594	90693583	+	5.501062393188477	0.8789181113243103	0.8318164348602295
PCDH11X	X	91034260	91878229	+	0.39678770303726196	0.3873926103115082	0.013904108665883541
NAP1L3	X	92925929	92928567	-	25.71414566040039	3.0345258712768555	4.0674943923950195
FAM133A	X	92929012	92967273	+	0.3314468562602997	0.05262591317296028	1.343558669090271
PCDH19	X	99546642	99665271	-	18.81426239013672	3.134671211242676	0.43872541189193726
TMSB15A	X	101768604	101771712	-	165.0126495361328	24.875532150268555	39.18503189086914
NXF3	X	102330738	102348157	-	0.16980034112930298	0.0073528289794921875	0.26852095127105713
BEX2	X	102564274	102565974	-	10.50076675415039	2.5045623779296875	3.643320083618164
IL1RAPL2	X	103810996	105012102	+	0.04195241257548332	0.2046542763710022	1.1957197189331055
NRK	X	105066536	105202602	+	0.2810293734073639	0.01307337824255228	0.028347410261631012
Cxorf57	X	105855160	105922672	+	4.095411777496338	9.050716400146484	14.060039520263672
RNF128	X	105937024	106040223	+	0.6246936917304993	14.280555725097656	19.7560977935791
NUP62CL	X	106366657	106449670	-	2.560640335083008	0.5568068623542786	0.1489894539117813
FRMPD3	X	106765680	106848481	+	3.542665958404541	1.889882206916809	0.7082512974739075
COL4A6	X	107386780	107682727	-	15.615777015686035	1.4014757871627808	2.9369096755981445
COL4A5	X	107683074	107940775	+	52.94981002807617	8.893641471862793	15.786755561828613
IRS4	X	107975712	107979651	-	0.7536875605583191	0.0779123455286026	0.015481032431125641
RP6-24A23.3	X	107979770	107982133	+	0.6502339243888855	0.08590131253004074	0.027242308482527733
GUCY2F	X	108616135	108725301	-	0.05221937969326973	0.009029866196215153	0.007609770633280277
AL138968.1	X	108975929	108978188	+	1.3561445474624634	0.3019125461578369	0.5087582468986511
CHRD1	X	109917084	110039286	-	8.83659839630127	46.81150817871094	64.78608703613281
IL13RA2	X	114238538	114254540	-	1.88303804397583	9.802411079406738	75.25593566894531
RP4-562J12.2	X	117973519	117991849	+	0.0303892120718956	0.15538185834884644	0.13076214492321014

LONRF3	X	118108581	118156888	+	0.5513688921928406	1.6641221046447754	2.123384952545166
ANKRD58	X	118892576	118894164	+	0.2594870626926422	0.012192136608064175	0.044472403824329376
FAM70A	X	119392505	119445411	-	1.7419639825820923	20.310409545898438	25.50564193725586
GLUD2	X	120181462	120183794	+	3.2465169427979053	1.6292108297348022	0.7747443914413452
RP5-931E15.2	X	122867024	122868144	+	0.15986694395542145	0.28418266773223877	0.8530512452125549
SH2D1A	X	123480194	123507005	+	0.15892209112644196	0.032173458486795425	0.04417635127902031
DCAF12L2	X	125298337	125300080	-	1.548815369606018	0.053026583045721054	0.0
APLN	X	128779240	128788933	-	40.07115173339844	11.934260368347168	2.8324594497680664
XPNPEP2	X	128872950	128903514	+	0.20572277903556824	0.019092027097940445	0.008045448921620846
IGSF1	X	130407480	130533677	-	5.110023498535156	0.015850599855184555	0.004942911211401224
MST4	X	131157293	131209971	+	32.446449279785156	2.915438413619995	3.9660227298736572
FRMD7	X	131211021	131262048	-	0.3140566647052765	0.017719771713018417	0.0024607342202216387
HS6ST2	X	131760038	132095423	-	25.69879722595215	6.898029327392578	8.628731727600098
GPC4	X	132434131	132549518	-	148.2464470214844	10.108917236328125	19.51076316833496
GPC3	X	132669773	133119922	-	14.16882038116455	1.7507432699203491	0.2910994589328766
CCDC160	X	133371077	133380237	+	17.36281394958496	0.46427276730537415	0.7121294140815735
HPRT1	X	133594183	133654543	+	11.074956893920898	20.096769332885742	45.3638916015625
AC004383.5	X	133684003	133693953	+	0.20905214548110962	0.39911404252052307	1.1986958980560303
LINC00087	X	134229015	134232654	-	3.2898313999176025	0.38351234793663025	0.6615291237831116
LINC00086	X	134555868	134559682	+	9.776313781738281	0.8673885464668274	1.4438894987106323
ZIC3	X	136648301	136659850	+	3.56840443611145	0.2722286581993103	0.0
FGF13	X	137713735	138304939	-	24.203136444091797	2.810114622116089	2.4219839572906494
RP1-260J9.2	X	137793614	137798779	+	0.9016011953353882	0.040199700742959976	0.026694614440202713
MCF2	X	138663929	138790386	-	0.8031727075576782	0.05907478556036949	0.12569287419319153
SOX3	X	139585152	139587225	-	42.85342025756836	2.5974490642547607	3.1771674156188965
RP1-177G6.2	X	139791932	139854839	+	5.1801981925964355	2.9279632568359375	0.36540985107421875
SLITRK4	X	142710596	142723596	-	1.0131969451904297	0.29069840908050537	0.028531931340694427
SLITRK2	X	144899350	144907360	+	1.1182879209518433	9.065448760986328	14.038458824157715
Cxorf1	X	144908928	144911368	+	0.06361240893602371	0.7422328591346741	0.798740804195404
AFF2	X	147582139	148082193	+	0.7943940162658691	0.08555952459573746	0.02030019275844097
MAMLD1	X	149529689	149682448	+	3.5213615894317627	8.225075721740723	16.963335037231445
GPR50	X	150345056	150349937	+	2.843492269515991	0.006655517499893904	0.0
GABRA3	X	151334706	151620337	-	0.13203667104244232	1.4595898389816284	3.9567244052886963
GABRQ	X	151806637	151825999	+	1.8524219989776611	16.334699630737305	31.047748565673828
U52111.14	X	153001080	153031933	-	0.4425842761993408	0.9451786279678345	1.8737815618515015
PLXNB3	X	153029651	153044801	+	4.530733585357666	17.705228805541992	30.4772891998291
SRPK3	X	153041867	153051187	+	1.748871922492981	9.218385696411133	13.178374290466309
IRAK1	X	153275951	153285431	-	33.570301059082	48.19385528564453	118.06088256835938
TKTL1	X	153524024	153558713	+	0.3678812086582184	0.0414511039853096	0.06463362276554108
GAB3	X	153903529	153979858	-	0.18600870668888092	1.7020783424377441	1.4745956659317017
F8A2	X	154611749	154613449	+	0.013050617650151253	0.1096065565943718	0.06446915119886398
F8A3	X	154686576	154688276	-	0.2984468936920166	0.3916606307029724	2.860555648803711

APÊNDICE B - Tabela com os IncRNAs utilizados no presente estudo ($P \leq 0,05$ filtrados para no valores $\geq 1.5 \log_2$ fold change) e o nível de expressão médio (em RPKM) de cada grupo.

Probe	Chr	Start	End	Probe Strand	NSC	GBM-SC+	GBM-SC-
Inc-OR4F29-7	1	131337	140566	-	1.1157306432724	0.06455443799495697	0.13016626238822937
Inc-OR4F16-8	1	564462	569343	-	0.09362474828958511	0.054425302892923355	0.704496443271637
Inc-SAMD11-14	1	565020	566063	+	2.2468771934509277	11.35391616821289	24.371253967285156
Inc-SAMD11-13	1	566464	568843	+	34.360374450683594	237.95803833007812	104.55897521972656
Inc-OR4F16-3	1	684693	689194	-	4.141695499420166	2.928840398788452	1.4099054336547852
Inc-SAMD11-4	1	756056	758975	+	0.24731048941612244	0.022707287222146988	0.05558177828788757
Inc-DVL1-2	1	1288072	1293927	-	27.998273849487305	4.134555816650391	1.7034991979599
Inc-DVL1-1	1	1290384	1290892	-	7.705037593841553	0.985349178314209	1.2223199605941772
Inc-TMEM240-2	1	1405941	1447395	-	0.6713991165161133	0.7567103505134583	2.1786365509033203
Inc-NADK-1	1	1710596	1711896	-	0.28786763548851013	0.9107311964035034	0.796245813369751
Inc-WRAP73-4	1	3406876	3412578	-	7.399569988250732	0.43298250436782837	0.35704728960990906
Inc-RNF207-4	1	6052733	6067720	+	0.2275489866733551	0.4602043628692627	0.7513181567192078
Inc-PHF13-1	1	6663213	6665864	+	0.1231476292014122	0.15948356688022614	0.022606080397963524
Inc-UTS2-1	1	7860921	7887402	-	0.016789041459560394	0.0	0.019485557451844215
Inc-CA6-3	1	8953468	8954210	+	1.8075097799301147	0.019697001203894615	0.016301192343235016
Inc-NMNAT1-3	1	9908376	9910212	+	0.055139489471912384	0.0028059659525752068	0.4626818597316742
Inc-DFFA-2	1	10439246	10440072	-	0.12809821963310242	0.023275958374142647	1.4356412887573242
Inc-CENPS-CORT-1	1	10516603	10520093	+	0.024441251531243324	0.018008269369602203	0.49104127287864685
Inc-MAD2L2-3	1	11710329	11710682	-	11.413721084594727	0.069449262828145981	3.4093222618103027
Inc-C1orf167-1	1	11890792	11891086	+	1.230486273765564	2.1274373531341553	0.3835428059101105
Inc-DHRS3-1	1	12678906	12679250	-	0.3019412159919739	3.032395601272583	3.5586600303649902
Inc-CASP9-8	1	14923166	14924613	-	0.9433503105939941	0.1298794001340866	0.069333516061306
Inc-CASP9-1	1	15725614	15736301	-	0.031007012352347374	0.028914522379636765	0.08655350655317307
Inc-CELA2B-3	1	15865353	15868124	+	0.14648501574993134	0.31450194120407104	0.04293699190020561
SLC25A34-AS1	1	16066546	16076391	-	0.04409819468855858	0.06364499777555466	0.002067658817395568
LINC01783	1	16859035	16863483	-	0.6907914876937866	0.3900083303451538	0.030310392379760742
Inc-CROCC-8	1	16933805	16953310	+	0.02569212019443512	0.0030993344262242317	0.11400189995765686
Inc-CROCC-1	1	16946910	16951432	+	0.005064451135694981	0.00157797837164253	0.07801208645105362
Inc-NBPF1-6	1	17027307	17029285	-	0.028255382552742958	0.292174756526947	0.09425168484449387
Inc-PADI1-4	1	17197440	17200587	+	0.46129289269447327	0.29315638542175293	0.01258587371557951
Inc-MFAP2-1	1	17300997	17307116	-	36.47977066040039	2.732701301574707	5.016635894775391
Inc-PADI1-1	1	17516278	17525079	+	0.011932536028325558	0.26768386363983154	0.05583133175969124
Inc-PADI6-2	1	17733256	17733878	+	0.12423128634691238	0.0	2.187389850616455
Inc-ARHGEF10L-1	1	17757837	17874245	+	0.24586017429828644	0.7050939202308655	0.05626268312335014
Inc-ACTL8-5	1	17916769	17949060	+	0.3627077043056488	0.3533015847206116	0.02906128577888012
Inc-AKR7A3-2	1	19597027	19597763	-	0.5446113348007202	0.5146365761756897	0.11777698248624802
Inc-AKR7A2-2	1	19673335	19675427	-	1.4855067729949951	1.1945866346359253	0.515608549118042
Inc-MINOS1-1	1	19811007	19858467	+	0.2864309251308441	0.19241446256637573	0.05889912694692612
Inc-TMCO4-1	1	19918296	19924155	-	0.03504142910242081	0.12179595232009888	0.3591519892215729
Inc-PLA2G2E-1	1	20301931	20306107	-	0.011179253458976746	1.1195286512374878	1.184973120689392
Inc-PLA2G2F-4	1	20354863	20396907	+	0.0	0.9147946834564209	0.26061001420021057
Inc-PLA2G2C-5	1	20489585	20513011	-	0.02681095153093338	0.010827969759702682	0.0014792871661484241
UBXN10-AS1	1	20510735	20513151	-	0.26031729578971863	0.06984327733516693	0.018290115520358086
LINC01141	1	20686294	20757727	-	0.005182723049074411	0.9034509062767029	0.015999972820281982
Inc-CAMK2N1-3	1	20812970	20813811	-	0.5987451672554016	0.537245512008667	2.3993003368377686
Inc-PINK1-2	1	21069480	21070455	+	0.08556398004293442	0.0	1.3149389028549194
Inc-EIF4G3-4	1	21602543	21604868	-	0.19126486778259277	0.24276912212371826	0.02061212621629238

Inc-ALPL-2	1	21785552	21790267	+	0.19844339787960052	0.5016918778419495	0.04150946065783501
CDC42-IT1	1	22385690	22390692	+	0.25035110116004944	0.5604532957077026	0.07760889083147049
Inc-CDC42-2	1	22427106	22427853	+	0.44974708557128906	0.7397549152374268	0.11188390105962753
Inc-WNT4-2	1	22443798	22445419	-	0.4924643337726593	0.058668941259384155	0.046734437346458435
Inc-CDC42-3	1	22470160	22475268	+	0.03080885112285614	0.02836209163069725	0.0021161604672670364
Inc-ASAP3-1	1	23748217	23749993	-	0.3109970688819885	0.452462375164032	0.04876505583524704
Inc-ID3-3	1	23875630	23877406	-	0.05213036760687828	0.17285126447677612	0.3012237846851349
RCAN3AS	1	24822420	24829609	-	0.0	0.09185653179883957	0.0656542107462883
Inc-STPG1-3	1	24863138	24882515	-	0.0	0.0	0.32705914974212646
Inc-NCMAP-1	1	24865207	24865735	+	2.2847297191619873	10.560690879821777	8.6179780960083
Inc-RHD-2	1	25574328	25574812	+	0.20853449404239655	0.40965020656585693	0.5996100902557373
Inc-MACO1-1	1	25725203	25725771	+	1.0942676067352295	0.22527869045734406	0.3114299774169922
Inc-AUNIP-1	1	26158404	26158625	-	0.9473698735237122	1.1442800760269165	3.0849449634552
Inc-C1orf232-1	1	26496438	26498323	-	0.04120703041553497	0.0017936773365363479	0.43758833408355713
Inc-ZNF593-1	1	26498925	26500021	+	0.6589813232421875	0.2831375300884247	0.17866283655166626
Inc-PIGV-2	1	27090115	27090393	+	0.38252943754196167	0.8956757187843323	0.050863202661275864
Inc-TRNP1-1	1	27364505	27391197	+	0.021335402503609657	0.2565067708492279	0.06119898706674576
Inc-MAP3K6-1	1	27633257	27634278	-	0.01929616928100586	0.0	1.4721972942352295
Inc-AHDC1-3	1	27859426	27861820	-	0.18050752580165863	0.840531051158905	0.027324790135025978
Inc-RPA2-3	1	28169445	28170513	-	0.013172420673072338	0.005805396009236574	0.7255789041519165
Inc-PTAFR-3	1	28358397	28358691	-	0.5970615744590759	0.6260556578636169	0.09005413204431534
Inc-RCC1-4	1	28780052	28780445	+	0.6787973642349243	0.8557776212692261	0.09493149816989899
Inc-PHACTR4-3	1	28835071	28835274	+	287.18896484375	1833.1160888671875	1447.1859130859375
Inc-TAF12-2	1	28835514	28837109	-	0.017060143873095512	0.0037439779844135046	0.7504270076751709
Inc-TAF12-5	1	29069582	29076435	-	0.07774026691913605	0.005227857269346714	1.866255283355713
Inc-OPRD1-1	1	29194087	29198224	+	0.30728769302368164	3.193560838699341	1.1053757667541504
MATN1-AS1	1	31198567	31199211	+	0.14666222035884857	0.792600691318512	0.5072996020317078
Inc-ZCCHC17-10	1	31342423	31343866	+	0.4940215051174164	0.024738823994994164	2.576104164123535
Inc-SNRNP40-1	1	31653387	31654523	-	38.18470001220703	7.879549503326416	10.91698932647705
Inc-FABP3-1	1	31805914	31819646	-	0.04664461314678192	0.01427689753472805	1.1324889659881592
Inc-PEF1-3	1	32118112	32138827	-	2.0815670490264893	5.690255641937256	10.204384803771973
Inc-ADGRB2-4	1	32149309	32155569	-	2.3817741870880127	6.4269490242004395	11.044647216796875
Inc-ADGRB2-3	1	32152902	32153248	-	0.04020040109753609	1.061197280883789	0.5674595832824707
Inc-KHDRBS1-3	1	32403485	32406255	+	0.21655461192131042	0.08702382445335388	1.0935981273651123
Inc-PTP4A2-1	1	32517892	32541396	-	0.014816206879913807	0.005727260839194059	0.18474949896335602
Inc-FAM167B-1	1	32705835	32708623	+	0.16515181958675385	0.3139103651046753	0.7418389916419983
Inc-MARCKSL1-2	1	32802372	32803026	-	0.1781463325023651	0.01920722983777523	0.04172757267951965
Inc-TSSK3-5	1	32860245	32863088	+	0.16600733995437622	0.25485366582870483	0.011630439199507236
Inc-FNDC5-1	1	33327869	33330320	-	4.358065605163574	1.8300895690917969	1.3822132349014282
Inc-TMEM54-1	1	33360195	33366834	-	3.465029239654541	13.57560920715332	24.691268920898438
Inc-TRIM62-1	1	33603694	33606476	-	0.404877245426178	0.641573429107666	0.06371237337589264
Inc-AZIN2-6	1	33750116	33750576	+	0.3677690923213959	0.3287060558795929	0.05153185874223709
Inc-A3GALT2-1	1	33818814	33820504	-	5.16511917114258	15.024614334106445	16.54319953918457
Inc-PHC2-4	1	33832894	33896653	-	5.405538082122803	11.191916465759277	21.331350326538086
Inc-PHC2-1	1	34258098	34285409	-	0.9594257473945618	5.117164134979248	5.271915912628174
Inc-SMIM12-3	1	35370766	35391095	-	2.3905766010284424	0.28092390298843384	0.5104520916938782
ZMYM4-AS1	1	35824423	35831678	-	0.0	0.0	0.6421533823013306
Inc-TRAPP3-2	1	36688707	36689705	-	0.12755461037158966	0.3620587885379791	0.022443007677793503
Inc-CSF3R-1	1	37315549	37319288	-	1.007710576057434	9.934712409973145	13.21652603149414
Inc-YRDC-1	1	38265174	38266737	-	0.11787568032741547	0.14844577014446259	0.9525212645530701

Inc-AKIRIN1-15	1	39339226	39339960	+	0.637755999565125	1.3724418878555298	0.14967301487922668
Inc-PP1E-1	1	40254648	40275358	+	0.0013917156029492617	0.03496379777789116	0.041997771710157394
Inc-EDN2-2	1	41944798	41950344	-	0.16457267105579376	0.04015960544347763	0.6173479557037354
Inc-EDN2-3	1	41972263	41974050	-	0.8097851872444153	3.9911954402923584	9.33217716217041
Inc-EDN2-4	1	41979233	41990535	-	0.9832159280776978	4.203282833099365	10.654348373413086
Inc-HIVEP3-1	1	42312860	42501596	-	1.909804105758667	6.114434719085693	11.443145751953125
Inc-GUCA2B-4	1	42501818	42502987	+	0.044011782854795456	0.22479946911334991	0.3430598974227905
SLC2A1-AS1	1	43424717	43662177	+	0.34862852096557617	0.312764048576355	0.08250317722558975
Inc-FAM183A-3	1	43610070	43610856	+	0.4784837067127228	0.03013785183429718	0.0
Inc-ELOVL1-1	1	43817280	43824455	-	0.06392953544855118	0.2972921133041382	0.19414176046848297
Inc-MED8-4	1	43916824	43919580	-	3.387855052947998	3.614135265350342	12.45039176940918
Inc-SLC6A9-6	1	44438106	44440486	-	0.04598435014486313	0.08614590764045715	0.7852292060852051
Inc-KLF18-9	1	44587825	44588184	-	1.5598856210708618	0.24701867997646332	0.42509782314300537
Inc-DMAP1-4	1	44876825	44877115	+	0.5719503164291382	0.6703163981437683	0.05237337946891785
Inc-C1orf228-5	1	45046855	45052453	+	0.08205430954694748	0.40313905477523804	0.017309438437223434
Inc-C1orf228-4	1	45047311	45049479	+	0.056690022349357605	0.2187470644712448	0.015254119411110878
Inc-ZSWIM5-1	1	45553747	45771881	-	2.8850786685943604	2.144577980041504	0.7759957909584045
Inc-POMGNT1-5	1	46538644	46539209	-	0.9510371088981628	1.3305985927581787	0.22716765105724335
Inc-TEX38-3	1	47070124	47073443	+	0.08847987651824951	0.07314098626375198	0.0068393005058169365
FOX2-AS1	1	47897805	47900313	-	0.7465921640396118	2.9780960083007812	2.7495687007904053
Inc-FOX2-10	1	47903426	47908205	+	0.29354462027549744	0.29803067445755005	0.1900789737701416
Inc-SPATA6-8	1	48231308	48459884	-	0.27932092547416687	0.2595093548297882	0.042582977563142776
Inc-FAF1-1	1	51442717	51443912	-	0.03997641056776047	0.5474945902824402	1.030136227607727
Inc-CDKN2C-1	1	51443233	51480063	+	0.1910572201013565	1.994110107421875	3.9142227172851562
LINC01562	1	51658190	51701867	-	0.04810476303100586	0.031949978321790695	0.007108352612704039
Inc-TTC39A-4	1	51702358	51702565	-	0.13108843564987183	0.06131848320364952	1.26116943359375
Inc-TXNDC12-2	1	52625933	52626272	-	2.5960235595703125	0.08905472606420517	0.17697931826114655
Inc-GPX7-1	1	53019228	53025306	+	0.28014102578163147	0.3684729337692261	0.0830659419298172
Inc-CPT2-2	1	53686335	53689930	+	0.07504219561815262	0.12611815333366394	0.013023431412875652
Inc-HSPB11-1	1	54377676	54378843	-	0.421830415725708	0.3773006796836853	0.0949898287653923
Inc-TCEANC2-2	1	54492301	54495431	+	0.0011754032457247376	7.657813839614391E-4	0.12103238701820374
Inc-LDLRAD1-9	1	54498816	54500553	-	0.4832593500614166	0.5677492618560791	0.09894905239343643
Inc-C8B-4	1	57460452	57462521	-	15.511499404907227	1.7302579879760742	4.408290863037109
Inc-C8B-2	1	57611090	57773036	-	6.398107051849365	0.7366456389427185	1.41571843624115
Inc-OMA1-4	1	58291743	58349757	-	1.1972399950027466	0.07598356157541275	0.0
Inc-HOOK1-6	1	59938748	59940449	+	0.04649663344025612	0.20376838743686676	0.006893728859722614
Inc-DOCK7-8	1	62899020	62901929	-	0.13849304616451263	0.4077112674713135	0.037618834525346756
Inc-KANK4-4	1	63106793	63107338	-	0.4989016354084015	0.7124596834182739	0.05162323638796806
Inc-ATG4C-2	1	63154153	63176365	+	0.904191792011261	0.9045827388763428	0.18396316468715668
FOX3-AS1	1	63785321	63790112	-	0.06435397267341614	0.619056761264801	1.032018780708313
Inc-FOX3-4	1	63790370	63790797	+	0.05826634168624878	0.3495344817638397	0.5999020338058472
Inc-EFCAB7-4	1	64121414	64121716	+	0.16100116074085236	0.6141558289527893	0.32921451330184937
Inc-ITGB3BP-12	1	65304898	65306008	-	0.41397759318351746	0.43732643127441406	0.09694444388151169
LINC01359	1	65437908	65468172	-	0.08115169405937195	0.25346294045448303	0.012900936417281628
Inc-JAK1-2	1	65527309	65533429	-	0.6648790240287781	2.781344175338745	0.16882824897766113
Inc-SGIP1-1	1	67240729	67241261	+	0.24154038727283478	0.01399947889149189	0.012015394866466522
Inc-RPE65-4	1	68790544	68849937	-	0.3558443486690521	4.989142417907715	4.426029205322266
Inc-GADD45A-2	1	68851157	68857667	+	0.7846716642379761	0.57648766040802	6.174715042114258
Inc-SRSF11-1	1	70607065	70610047	+	0.24571570754051208	0.005880462005734444	0.023485882207751274
Inc-CTH-10	1	70996209	70997175	+	0.16376011073589325	0.001182879670523107	0.0

Inc-ZRANB2-4	1	72163619	72169088	-	3.1954965591430664	0.6557009816169739	0.20104114711284637
Inc-FPGT-6	1	73020892	73023568	+	0.6326470375061035	0.11664997786283493	0.0
Inc-SLC44A5-4	1	76103852	76189696	-	0.04964030534029007	0.04117308184504509	0.0014026479329913855
Inc-ST6GALNAC3-3	1	77102562	77103024	+	0.23735608160495758	0.03442399948835373	0.0
Inc-ST6GALNAC5-1	1	77533605	77544167	+	4.460951805114746	0.1543586403131485	0.23944397270679474
Inc-AK5-1	1	77685167	77724568	+	0.4559459686279297	0.21367284655570984	0.07331819832324982
Inc-ADGRL2-4	1	81771845	82201015	+	2.8957083225250244	1.0227991342544556	0.046437665820121765
Inc-ADGRL2-5	1	82458560	82462214	+	0.7325873970985413	0.38512080907821655	0.08609770238399506
LINC01361	1	83439565	83451891	-	0.07178717851638794	0.006179350428283215	0.0
Inc-TTLL7-17	1	83482779	83484800	-	0.6207584738731384	0.05438286438584328	0.0
Inc-TTLL7-16	1	83485247	83487109	-	1.2023296356201172	0.14844639599323273	0.0
Inc-SAMD13-2	1	84551424	84551916	+	0.6695377230644226	1.725447177886963	0.1656477153301239
Inc-GNG5-9	1	84736208	84764934	-	0.06276656687259674	0.34355971217155457	0.27378734946250916
Inc-CTBS-4	1	85061919	85086717	-	0.017227495089173317	0.258995563030243	0.18450883030891418
Inc-LPAR3-1	1	85392109	85395527	-	0.011141318827867508	1.7184951305389404	0.713370144367218
Inc-MCOLN2-1	1	85431232	85462796	-	0.03742741793394089	1.7784533500671387	0.5756390690803528
Inc-SYDE2-1	1	85618178	85619886	-	0.7663346529006958	0.49635812640190125	0.1979427933692932
Inc-C1orf52-2	1	85639995	85642563	-	1.4105349779129028	0.33225181698799133	0.3197075128555298
Inc-ZNHIT6-1	1	85947964	86043933	-	2.6826038360595703	0.6392494440078735	0.18050017952919006
Inc-WDR63-5	1	86048985	86049386	+	117.97985076904297	34.00474548339844	27.905582427978516
Inc-GTF2B-6	1	89150234	89271951	-	0.052812445908784866	0.008507336489856243	0.4981817901134491
Inc-LRRC8C-4	1	90001692	90008050	+	0.11529307812452316	0.34489500522613525	0.02699127607047558
Inc-HFM1-2	1	91726323	91818194	-	2.8881590366363525	1.0807288885116577	0.561861515045166
Inc-TMED5-5	1	93543458	93583977	-	0.007602134253829718	0.013647214509546757	0.07082533091306686
Inc-DNTTIP2-5	1	94057863	94114378	-	13.046093940734863	3.4692654609680176	3.105971574783325
Inc-DNTTIP2-4	1	94124008	94124591	-	0.15868578851222992	0.3353872299194336	0.0
Inc-FNBP1L-2	1	94312318	94320424	+	0.5470626950263977	0.212326779961586	0.16455593705177307
Inc-ARHGAP29-7	1	94998662	95007315	-	8.92271614074707	30.15113067626953	32.36986541748047
Inc-RWDD3-9	1	95712881	95717500	+	0.2935263514518738	0.39259231090545654	0.09379485994577408
Inc-PTBP2-11	1	98011495	98012708	+	2.5606589317321777	0.1469942033290863	0.8202553987503052
LINC01776	1	98518791	98862438	+	0.24450555443763733	0.09523491561412811	0.034492406994104385
Inc-FRRS1-5	1	99456412	99470040	-	0.6152411699295044	3.1177217960357666	2.628476619720459
Inc-SNX7-4	1	99473774	99474030	+	2.297842502593994	0.2645666301250458	0.055217254906892776
LINC01708	1	99886004	100066551	-	0.031321216374635696	0.006470914464443922	0.002168765291571617
Inc-GPR88-1	1	100894403	100944288	+	0.07432344555854797	0.20117101073265076	0.013948379084467888
Inc-VCAM1-3	1	101388697	101405132	+	0.1124277338385582	0.42850130796432495	0.013067096471786499
Inc-DPH5-1	1	101693048	101702172	-	0.196842223405838	0.022156773135066032	0.003242908278480172
Inc-AMY1B-4	1	103565699	103566260	-	1.0816689729690552	0.4659174680709839	0.0
Inc-AMY1B-1	1	103820969	104068139	-	0.0731557566623688	0.11584372073411942	0.023030303418636322
Inc-PRMT6-9	1	106434361	106436139	+	7.198543071746826	2.903240919113159	1.8591989278793335
Inc-PRMT6-5	1	107685698	107690922	+	1.1052988767623901	0.38964036107063293	4.573431491851807
Inc-NTNG1-2	1	108047825	108048070	+	18.860021591186523	3.1657965183258057	3.959285020828247
Inc-AKNAD1-1	1	109358520	109363200	-	0.23839403688907623	0.9035843014717102	1.072232961654663
Inc-TAF13-3	1	109648673	109656457	-	0.7366021275520325	0.04958634451031685	0.04805321991443634
Inc-SORT1-3	1	109835137	109849617	-	0.08948057889938354	0.3725329637527466	0.3523924648761749
Inc-GNAT2-1	1	110171039	110172927	-	0.00935652107000351	0.0	0.9854769706726074
Inc-ALX3-4	1	110552609	110554132	-	0.003066267352551222	0.0	0.24282650649547577
Inc-PROK1-4	1	111050813	111268442	+	0.0064871059730648994	0.05055918172001839	0.05227328836917877
Inc-KCNA3-2	1	111146618	111148986	-	1.2575619220733643	11.878440856933594	10.091717720031738
Inc-DENND2D-1	1	111727037	111727683	-	0.030317654833197594	0.04761406406760216	1.3676156997680664

Inc-WNT2B-2	1	112938881	112941439	+	0.753162145614624	0.8889591693878174	0.23554596304893494
Inc-FAM19A3-7	1	113399850	113401156	+	0.01139966119080782	0.32070234417915344	0.05207133665680885
Inc-SYCP1-2	1	115124437	115131728	+	0.2567478120326996	0.5795276165008545	0.0696028396487236
Inc-DENND2C-1	1	115168319	115213043	-	0.6802864074707031	0.15840984880924225	0.09247183799743652
Inc-FAM46C-3	1	118036137	118037628	+	0.25806480646133423	0.32959213852882385	0.0756407231092453
Inc-ZNF697-3	1	120111655	120149695	-	0.04711546376347542	0.7997374534606934	0.17700199782848358
LINC00622	1	120140325	120141914	-	0.04476264491677284	0.5274897813796997	0.2923252582550049
Inc-HMGCS2-1	1	120269622	120286835	-	0.022411495447158813	0.002913509728386998	0.32435470819473267
Inc-FAM72B-7	1	121131126	121137722	-	0.05221615731716156	0.10568702965974808	0.7382445335388184
Inc-SRGAP2C-15	1	121260910	121313686	+	0.6344953775405884	0.1329861581325531	0.12547114491462708
Inc-FAM72B-6	1	121484057	121485434	-	1.692172884941101	17.51235008239746	2.869183301925659
Inc-SRGAP2C-16	1	121484330	121485434	+	4.093502521514893	31.42312240600586	8.13101577758789
Inc-NUDT4B-1	1	143687097	147908049	+	0.00771688111264229	0.05587424337863922	0.07102828472852707
Inc-PPIAL4F-12	1	143913617	143916100	+	1.4166828393936157	3.6222803592681885	4.742267608642578
LINC00623	1	144298162	149616643	-	0.10615942627191544	0.15989547967910767	0.42832690477371216
Inc-PPIAL4A-2	1	144456641	144491882	-	0.040108222514390945	0.11476043611764908	0.004675992764532566
Inc-NUDT4B-9	1	145111802	145114568	-	0.007586679887026548	0.016794173046946526	0.39509743452072144
Inc-PQLR3GL-48	1	145202141	145208963	-	0.02581881545484066	0.24411694705486298	0.5688549876213074
Inc-NBPF10-1	1	145213108	145213374	+	1.3988046664118164	3.784466505050659	0.37622031569480896
Inc-PEX11B-2	1	145524969	145529320	+	1.3253434896469116	2.643277168273926	6.046760082244873
Inc-ANKRD35-1	1	145541593	145542229	+	0.5784739255905151	0.7528067827224731	3.3055272102355957
Inc-PPIAL4G-54	1	147830374	147830815	-	0.13233332335948944	0.6233899593353271	0.4287848174571991
Inc-FAM72D-8	1	148194808	148196107	+	0.2718709111213684	0.2879074215888977	3.262995481491089
Inc-HIST2H3C-1	1	149802876	149804110	-	0.05381593853235245	0.3279978334903717	0.37258216738700867
Inc-HIST2H4A-1	1	149814608	149815100	+	0.4122351109981537	0.679247260093689	1.605688214302063
Inc-SF3B4-1	1	149901566	149903484	-	3.334491729736328	12.233601570129395	11.322015762329102
Inc-ANP32E-1	1	150130000	150131841	-	0.21893152594566345	0.008417165838181973	1.090977668762207
Inc-PLEKHO1-1	1	150132926	150153463	+	2.533693313598633	0.566904604434967	0.5855091214179993
Inc-ADAMTSL4-4	1	150517238	150520797	+	0.007746747229248285	0.021391771733760834	0.03253212198615074
Inc-ADAMTSL4-5	1	150552352	150576669	+	0.6983824968338013	1.9709901809692383	0.1237531304359436
Inc-ARNT-1	1	150853712	150854159	-	0.07253511250019073	0.06800898164510727	0.8957479596138
Inc-SETDB1-1	1	150937721	150938439	+	0.28590020537376404	0.36100369691848755	4.154721736907959
Inc-SEMA6C-1	1	151102536	151104086	-	2.498814105987549	0.9445427060127258	0.6171802282333374
Inc-ZNF687-1	1	151313124	151314442	+	0.0	0.0	0.8162310123443604
Inc-CELF3-2	1	151670319	151670850	-	0.0062232608906924725	0.0	0.9258431792259216
Inc-OAZ3-6	1	151728017	151732387	+	0.07027710974216461	0.021183082833886147	0.8990128040313721
Inc-S100A11-2	1	151955643	151966305	-	71.12638854980469	175.1788330078125	496.2071228027344
Inc-S100A5-1	1	153507569	153508467	-	51.86553192138672	327.7577819824219	1437.69970703125
Inc-S100A13-1	1	153615538	153618305	-	0.009627190418541431	0.0	1.2629131078720093
Inc-GATAD2B-1	1	153719327	153724652	-	0.013154096901416779	0.005676088854670525	0.6571753025054932
Inc-C1orf189-3	1	154159734	154164543	-	0.5093351602554321	0.023633532226085663	0.07231561839580536
Inc-C1orf43-3	1	154213643	154214184	-	0.004212022293359041	0.0	0.683570921421051
Inc-UBE2Q1-1	1	154533690	154540253	-	0.1779695600271225	0.03618176281452179	0.017713624984025955
Inc-ADAR-6	1	154675205	154680702	-	1.0277149672726611	0.8629764318466187	0.2366807907819748
Inc-PMVK-3	1	154880039	154883076	-	0.09064600616693497	0.11130180954933167	0.015091274864971638
Inc-HCN3-2	1	155243394	155244243	+	0.07275983691215515	0.42976704239845276	0.1664766222385406
Inc-PKLR-1	1	155279829	155280381	-	0.7111214399337769	0.148149773478508	6.793792724609375
Inc-YY1AP1-3	1	155582215	155584720	-	0.13504177331924438	0.14577460289001465	0.7000730633735657
Inc-RAB25-2	1	156071168	156071719	+	2.3761396408081055	1.3482905626296997	0.48660168051719666
Inc-RHBG-1	1	156358018	156365401	+	0.013836006633937359	0.033210210502147675	0.0013541642110794783

Inc-INSRR-1	1	156784290	156786552	-	0.20222140848636627	0.007485631853342056	0.0
KIRREL1-IT1	1	157995340	158000956	+	0.4081183075904846	1.386458396911621	0.11484211683273315
Inc-AIM2-3	1	158964324	158985400	-	0.007280897349119186	0.04810715094208717	0.06682323664426804
Inc-AIM2-2	1	159026258	159029238	-	0.2521900236606598	0.09382294118404388	0.0017952116904780269
Inc-OR10J3-2	1	159050923	159051585	-	0.265880823135376	0.014289889484643936	0.0
Inc-SLAMF9-1	1	159909951	159911014	-	0.4294028878211975	0.15238012373447418	0.026032237336039543
Inc-PIGM-2	1	160010261	160012085	-	3.749654769897461	25.08570098876953	25.045059204101562
Inc-KCJ9-1	1	160032278	160049611	+	0.03662453964352608	0.21769607067108154	0.25965896248817444
Inc-NCSTN-3	1	160254155	160256745	+	0.3233875632286072	0.07402464747428894	0.009535850957036018
Inc-LY9-3	1	160864700	160865965	+	30.857563018798828	4.310513496398926	7.453413963317871
Inc-F11R-2	1	160955474	160958847	-	0.32488182187080383	0.03719078749418259	0.0
Inc-B4GALT3-1	1	161123550	161129139	-	0.7283768057823181	0.7920904755592346	5.637380123138428
Inc-B4GALT3-2	1	161134650	161136060	-	0.048445019870996475	0.16757120192050934	0.4610385000705719
Inc-CFAP126-4	1	161359219	161359715	-	0.10050918906927109	0.6663374304771423	0.323075532913208
Inc-CFAP126-5	1	161403234	161410786	-	0.0	0.6712823510169983	0.5797968506813049
Inc-FCGR2B-2	1	161571027	161575446	+	0.01762690208852291	1.9466572999954224	2.1886792182922363
Inc-FCRLB-3	1	161699937	161701570	+	0.05687667801976204	0.9108243584632874	0.7632125020027161
Inc-SPATA46-1	1	162286642	162287584	-	0.07687500864267349	1.00242280960083	0.2096768319606781
Inc-RGS5-1	1	163080911	163291722	-	0.6025695204734802	0.8067776560783386	0.2234717160463333
Inc-LRRC52-9	1	164595273	164651720	+	0.5693886876106262	1.2190841436386108	0.1641576588153839
Inc-LRRC52-5	1	164797673	164799189	+	0.15105204284191132	0.2101830393075943	0.009192620404064655
Inc-TMCO1-1	1	165860032	165869920	-	0.0029778587631881237	0.002613733522593975	0.41887006163597107
Inc-ILDR2-1	1	166864948	166877317	-	0.8195765018463135	0.7336918711662292	2.918499231338501
Inc-RCS1-4	1	167348345	167350237	+	0.7194739580154419	2.034783363342285	0.18532481789588928
Inc-SELE-1	1	169660822	169677597	-	0.022893348708748817	0.08557065576314926	1.1081846952438354
Inc-MYOC-2	1	171137243	171220933	-	0.012639114633202553	0.489919513463974	0.2855473756790161
Inc-MYOCOS-1	1	171461550	171461858	+	0.6302399039268494	2.051656723022461	0.11000397056341171
Inc-SLC9C2-3	1	173438987	173440608	-	0.11213396489620209	0.3843957781791687	0.004880233202129602
Inc-TEX50-5	1	173606879	173609431	+	0.5753758549690247	0.08939886093139648	0.0
Inc-ZBTB37-2	1	173834367	173835344	+	0.2961975932121277	0.2098882794380188	1.768454670906067
RC3H1-IT1	1	173978405	173986779	-	0.4722508490085602	1.5012916326522827	0.0941040962934494
Inc-CACYBP-2	1	175079003	175081354	+	0.07541634887456894	0.008914395235478878	0.0
Inc-KIAA0040-2	1	175126123	175162079	-	0.4929775595664978	3.3109254837036133	9.229388236999512
Inc-KIAA0040-4	1	175284333	175289747	-	0.45844584703445435	2.8362958431243896	0.8256912231445312
Inc-COP1-3	1	175889660	175891315	-	0.9113967418670654	0.42742225527763367	0.29944589734077454
Inc-COP1-7	1	176900640	176901214	-	0.010370614938437939	0.47734734416007996	0.2895568609237671
Inc-COP1-8	1	176980696	176982901	-	0.011625412851572037	0.5443285703659058	0.05542539432644844
Inc-FAM20B-2	1	178794733	178802277	+	0.07007329165935516	0.1337737888097763	0.005505517590790987
Inc-TOR3A-1	1	179070798	179074885	+	0.006084806751459837	0.0022176012862473726	0.31143590807914734
Inc-TOR1AIP1-2	1	179831573	179833589	+	0.014507106505334377	0.0	0.42535266280174255
Inc-ACBD6-2	1	180150090	180167167	-	0.029453426599502563	0.0010873296996578574	1.3982399702072144
Inc-STX6-8	1	181044752	181057637	-	0.5602277517318726	0.20242072641849518	0.089316226541996
Inc-ZNF648-1	1	182031812	182038388	-	0.016422219574451447	0.245799720287323	0.1480724960565567
Inc-DHX9-1	1	182858285	182858915	+	0.8627912402153015	1.4438889026641846	0.13887549936771393
Inc-RGS8-5	1	182911250	182911539	-	4.683166980743408	0.5896745920181274	1.3201557397842407
Inc-EDEM3-7	1	184587249	184599610	-	0.030609391629695892	0.022870289161801338	0.3506961762905121
Inc-C1orf21-1	1	184632075	184642635	+	0.008590729907155037	0.047121524810791016	0.09054818749427795
Inc-EDEM3-4	1	184792784	184837692	-	0.5830413103103638	3.9980008602142334	4.801008224487305
Inc-EDEM3-5	1	184856873	184859319	-	0.4407360553741455	3.4419357776641846	3.377882242202759
Inc-IVNS1ABP-3	1	185261516	185263504	-	1.8031108379364014	1.7364245653152466	0.6781690716743469

LINC01036	1	187039832	187655754	+	0.020210277289152145	0.4503219723701477	0.12392625957727432
lnc-PLA2G4A-19	1	187997092	188355856	+	0.012134638614952564	0.0011894248891621828	0.11497154086828232
lnc-UCHL5-108	1	192136916	192894934	-	0.007392366882413626	0.05570448189973831	0.032214853912591934
lnc-CDC73-7	1	193426728	193434850	+	0.09552989900112152	0.022113732993602753	0.028968535363674164
lnc-ZBTB41-1	1	197043245	197173181	-	0.20223680138587952	0.33919957280158997	0.04447411373257637
lnc-ZBTB41-7	1	197715881	197716581	-	0.265908807516098	0.2384326308965683	0.01036873273551464
lnc-ATP6V1G3-4	1	198771347	198990166	-	0.8767495155334473	4.323607921600342	0.3178893029689789
lnc-NR5A2-12	1	199901364	199912523	+	3.113680868409574E-4	0.09307123720645905	0.01849625073373177
lnc-INAVA-1	1	200993059	201012201	+	1.395256519317627	0.14179690182209015	0.02984539544582367
lnc-NAV1-1	1	201508268	201557780	+	1.3229986429214478	3.1027235984802246	6.631047248840332
lnc-NAV1-2	1	201522903	201524552	+	0.24409572780132294	0.6977469325065613	0.054298870265483856
lnc-LMOD1-4	1	201964824	201965480	-	0.010059276595711708	0.05367954447865486	0.5889831185340881
lnc-LGR6-8	1	202099159	202100553	+	0.5100507736206055	5.918374061584473	5.074183464050293
lnc-LGR6-2	1	202101763	202102716	+	0.25592610239982605	3.13177227973938	2.9289515018463135
lnc-SYT2-3	1	202743758	202776333	-	28.561311721801758	16.27877426147461	9.445642471313477
lnc-ADORA1-1	1	203045131	203046109	+	0.8987212181091309	7.135738372802734	2.789781093597412
lnc-CHI3L1-1	1	203148059	203151262	-	2.0461108684539795	38.92501449584961	26.46391487121582
lnc-LAX1-4	1	203609003	203623191	+	0.14009234309196472	0.4724655747413635	0.03486325219273567
lnc-ETNK2-7	1	203769301	203769971	-	0.0	0.0	0.43652138113975525
lnc-GOLT1A-1	1	204212248	204214131	-	7.035628795623779	1.8871684074401855	2.191959857940674
lnc-GOLT1A-2	1	204218358	204226607	-	10.270156860351562	3.7721424102783203	2.7227330207824707
lnc-MDM4-8	1	204372518	204373870	+	0.01650821603834629	0.0	0.5797811150550842
lnc-MDM4-12	1	204381217	204385797	+	0.45563897490501404	0.2027037888765335	0.11852290481328964
lnc-CDK18-1	1	205425057	205438152	+	0.25881245732307434	0.31340292096138	0.037902798503637314
lnc-MFSD4A-1	1	205685228	205719310	+	0.2727236347198486	0.05560394749045372	7.549108505249023
lnc-SLC41A1-4	1	205739289	205744568	-	6.8653035163879395	25.541271209716797	23.22439956665039
lnc-SLC41A1-3	1	205740190	205744337	-	3.8546652793884277	10.902495384216309	12.950248718261719
lnc-RHEX-6	1	205867857	205874914	+	0.9481404423713684	0.2605171799659729	0.084906667470932
lnc-RHEX-4	1	206121543	206125746	-	0.13691236078739166	0.43529564142227173	0.03452932462096214
lnc-FAM72A-3	1	206136916	206154164	+	2.2688982486724854	3.577082872390747	6.683030128479004
lnc-RHEX-1	1	206277869	206306131	-	0.27136486768722534	0.0	0.004947884473949671
lnc-1KBKE-1	1	206576565	206577294	+	0.9170919060707092	1.7455893754959106	0.24705524742603302
MIR29B2CHG	1	207936271	208052441	-	0.2528918385505676	0.4474935829639435	0.06308922171592712
lnc-PLXNA2-8	1	208061164	208070937	-	5.090451240539551	0.8175404071807861	0.5301318764686584
lnc-LAMB3-4	1	209441143	209441568	-	0.3945136070251465	0.0	0.010153855197131634
SERTAD4-AS1	1	210403649	210407502	-	0.7798822522163391	0.15660342574119568	5.718445777893066
lnc-RD3-3	1	211649864	211665373	-	0.027716614305973053	7.298667915165424E-4	0.002673852490261197
lnc-BATF3-6	1	212730817	212733073	-	0.15499821305274963	0.37382328510284424	1.230678915977478
lnc-BATF3-8	1	212773423	212781822	-	0.06881333887577057	0.10031810402870178	0.016644859686493874
lnc-BATF3-4	1	212859760	212872097	-	0.8920630216598511	2.5308656692504883	4.206671237945557
PROX1-AS1	1	213986137	214161851	-	0.1341053694486618	0.73021000623703	0.6824902892112732
LINC00538	1	214098092	214099997	-	0.014817789196968079	0.18589645624160767	0.17092294991016388
lnc-USH2A-1	1	215740146	215740734	-	0.36872076988220215	0.3880370855331421	1.1053751707077026
lnc-ESRRG-3	1	217649646	217651906	-	0.13049465417861938	0.2570599317550659	0.01822989620268345
lnc-ESRRG-5	1	217675117	217682607	-	0.22008514404296875	0.49617573618888855	0.016116367653012276
lnc-LYPLAL1-6	1	219389723	219390304	+	0.21310950815677643	0.5952520966529846	0.023960832506418228
lnc-LYPLAL1-7	1	219443345	219478226	+	0.2992604374885559	0.35839328169822693	0.10556791722774506
lnc-RAB3GAP2-1	1	220281670	220304728	-	0.0	0.0	0.8982970714569092
lnc-MARC2-2	1	220972826	220975156	+	0.5740537643432617	0.4310038089752197	0.1717498004436493
lnc-AIDA-2	1	222897536	222946483	-	0.004371801856905222	5.891689215786755E-4	0.031140876933932304

Inc-WDR26-1	1	224789942	224804952	-	0.0320608988404274	0.31071528792381287	1.1222292184829712
Inc-WDR26-2	1	224905206	224918364	-	0.03018002212047577	1.6427466869354248	0.412288635969162
Inc-CNIH3-1	1	224954058	224967057	+	0.032470397651195526	0.5849804878234863	0.5956213474273682
Inc-LBR-1	1	225617887	225653046	-	0.06299372762441635	0.22734516859054565	0.017479674890637398
Inc-DNAH14-2	1	225652723	225661539	+	1.1347543001174927	0.4357195496559143	0.07153215259313583
Inc-SRP9-3	1	225982863	225988676	+	0.10244830697774887	0.19100961089134216	0.03144986182451248
Inc-EPHX1-3	1	226112153	226113589	+	0.09718288481235504	0.49364688992500305	0.01589643582701683
Inc-H3F3A-7	1	226187317	226188044	+	0.4189383387565613	0.9439875483512878	0.1278382837723694
Inc-SDE2-1	1	226231726	226250212	-	0.38385090231895447	0.44858285784721375	0.13926605880260468
Inc-PSEN2-4	1	226793666	226796180	+	0.7504100799560547	1.1885148286819458	0.25785404443740845
ITPKB-AS1	1	226841291	226889097	+	0.005746250040829182	0.009820641949772835	0.0011498547391965985
Inc-CDC42BPA-5	1	226920314	226922612	-	0.5360148549079895	1.5325578451156616	0.1762392669916153
Inc-COQ8A-1	1	227179841	227180907	+	0.0	0.011779636144638062	0.5084745287895203
Inc-ITPKB-3	1	227295185	227297275	-	0.4926777780056	1.9816681146621704	0.14345715939998627
Inc-TRIM11-8	1	228458144	228462098	-	0.8582020998001099	0.10766755789518356	0.1362990140914917
Inc-TRIM11-7	1	228462285	228463767	-	0.8940531015396118	0.2356920838356018	0.1290370374917984
Inc-RNF187-1	1	228688983	228697976	+	0.09430399537086487	0.20771099627017975	0.3337078392505646
Inc-PGBD5-1	1	230416058	230417639	-	0.13644899427890778	0.003334823762997985	3.4783153533935547
Inc-GALNT2-4	1	230562237	230577797	+	0.19782903790473938	0.09480204433202744	0.007712074089795351
Inc-AGT-6	1	230846444	230945072	-	0.08336064219474792	2.305994749069214	6.4851908683776855
Inc-CAPN9-1	1	231004365	231014885	+	1.0774829387664795	0.2763018012046814	0.38164958357810974
Inc-SPRTN-2	1	231499503	231504855	+	0.1311998814344406	0.2891385555267334	0.45238348841667175
Inc-SIPA1L2-3	1	232730260	232734148	-	0.30838724970817566	0.9778140783309937	0.0506063774228096
Inc-SIPA1L2-12	1	233159551	233175573	-	0.17008623480796814	0.19951961934566498	0.05096510052680969
Inc-TARBP1-6	1	234492450	234492887	-	6.981935024261475	0.2811634838581085	1.8140751123428345
Inc-COA6-1	1	234492752	234504496	+	0.004867968149483204	0.0599745474755764	0.03298293426632881
Inc-B3GALNT2-3	1	235472935	235473313	-	0.2979176938533783	1.3052239418029785	0.0489884577691555
Inc-NID1-5	1	236035315	236035994	-	0.16169020533561707	4.468480110168457	2.2508914470672607
LINC01139	1	238639876	238649336	-	1.7098379135131836	0.264418363571167	0.0049757398664951324
Inc-RYR2-3	1	238648745	238701605	+	0.11631137132644653	0.0015581769403070211	0.03425068035721779
Inc-CHRM3-1	1	239549865	240049896	+	1.2230027914047241	2.1552817821502686	5.066997051239014
Inc-FH-1	1	241505195	241513514	-	0.011357598938047886	0.055269673466682434	0.0
Inc-BECN2-10	1	242310816	242372431	+	0.4363035261631012	0.10395387560129166	0.05576736852526665
Inc-BECN2-2	1	242366857	242374129	+	0.30174556374549866	0.07640770822763443	0.014791619963943958
Inc-CEP170-6	1	243430559	243431421	-	0.03518371284008026	0.22819648683071136	0.2353144735097885
Inc-CEP170-12	1	243787968	243788358	-	0.24991092085838318	0.7035599946975708	0.008916370570659637
Inc-ADSS-3	1	244558278	244558962	-	0.25814247131347656	0.3786449134349823	0.03921375051140785
Inc-EFCAB2-7	1	245748218	245750561	+	0.03675156831741333	0.07905048877000809	0.0
Inc-TFB2M-1	1	246830009	246831638	-	0.0033614961430430412	0.0	0.2899113595485687
LINC01341	1	246934563	246956015	+	1.5311957597732544	1.0806421041488647	0.48293188214302063
Inc-NLRP3-11	1	247289712	247335813	+	0.0	0.45970502495765686	0.4561997950077057
Inc-NLRP3-7	1	247336346	247337751	+	0.11515693366527557	0.6283735632896423	0.4174943268299103
Inc-NLRP3-6	1	247338558	247338827	+	0.16229891777038574	1.4920880794525146	0.7558859586715698
Inc-NLRP3-5	1	247341434	247343515	+	0.002196460496634245	0.23309719562530518	0.14479555189609528
Inc-NLRP3-4	1	247353145	247372435	+	0.01814504712820053	0.01857454888522625	0.5335121154785156
Inc-SH3YL1-2	2	285939	287345	-	4.699349880218506	0.22596199810504913	0.08501186221837997
Inc-ACP1-1	2	286419	301515	+	0.39938288927078247	0.16945137083530426	0.07962410151958466
Inc-ALKAL2-2	2	305111	314367	-	0.10335315763950348	0.008779077790677547	0.0
LINC01865	2	317912	342118	+	0.9250233769416809	0.03875463828444481	0.312059223651886
Inc-SNTG2-3	2	680081	697855	+	0.08786483108997345	0.003331882180646062	0.012206284329295158

Inc-SNTG2-9	2	683318	687632	+	0.21511583030223846	0.0	0.011912242509424686
Inc-RNASEH1-7	2	3664890	3665347	-	0.3917027413845062	0.055602069944143295	0.0690552219748497
Inc-CMPK2-34	2	5664661	5748757	-	0.14627420902252197	0.02104131318628788	0.03623858094215393
Inc-SOX11-2	2	5866581	5872315	+	0.928178608417511	0.08150991797447205	0.03296320512890816
Inc-CMPK2-22	2	7464879	7465193	-	0.38025370240211487	0.0	0.011847397312521935
Inc-IAH1-3	2	9778884	9793596	+	0.0038580370601266623	0.04664287716150284	0.15933500230312347
Inc-KLF11-1	2	10169474	10183287	+	0.00636822497472167	0.03127797320485115	0.011053849011659622
LINC01954	2	10984368	11041868	+	0.00566891860216856	0.14664573967456818	0.2199334353208542
Inc-ROCK2-6	2	11237417	11237939	-	0.0	0.6420410871505737	0.29044413566589355
Inc-ROCK2-5	2	11238419	11238772	-	0.027988946065306664	2.9734315872192383	4.829199314117432
Inc-ROCK2-3	2	11239126	11272947	-	0.019734397530555725	0.19567163288593292	0.7884376645088196
Inc-E2F6-8	2	11620992	11622921	-	0.16905546188354492	0.019047653302550316	0.03903191164135933
Inc-LPIN1-4	2	11739037	11740905	+	0.4968966543674469	0.33546778559684753	0.012221653014421463
Inc-LPIN1-10	2	11906199	12635925	+	0.2548985183238983	0.2687728703022003	0.029877502471208572
MIR3681HG	2	11988748	12738777	+	0.09543535858392715	1.1636300086975098	0.4128046929836273
Inc-NTSR2-4	2	12877017	13066803	-	0.206773579120636	1.082110047340393	3.464157819747925
Inc-NTSR2-7	2	13024364	13064589	-	0.022774605080485344	0.23751814663410187	0.2035999447107315
Inc-NTSR2-5	2	13106530	13147138	-	2.366774559020996	9.899062156677246	11.343175888061523
Inc-DDX1-1	2	15703525	15713992	+	0.49914175271987915	1.0423649549484253	0.010345106944441795
GACAT3	2	16190549	16225923	+	0.22315287590026855	0.2511516809463501	0.015423746779561043
Inc-RDH14-1	2	18728652	18729470	-	0.07782837748527527	0.2350424975156784	0.2880227267742157
Inc-WDR35-1	2	20194098	20197614	-	6.679542541503906	0.4835827052593231	0.46059247851371765
Inc-GDF7-1	2	20877569	20879005	+	0.6807172894477844	0.5336218476295471	0.1122138649225235
Inc-ATAD2B-6	2	23724795	23727929	-	0.014933466911315918	0.04217173159122467	0.12295106798410416
Inc-RAB10-4	2	26045338	26045819	+	0.24390870332717896	0.0	0.02573661133646965
Inc-OST4-2	2	27207337	27237480	-	0.0369584746658802	0.08352553099393845	0.0039008178282529116
Inc-PREB-1	2	27324985	27327227	-	1.097988486289978	10.434240341186523	11.367192268371582
Inc-SLC5A6-2	2	27476715	27480688	-	0.1457901895046234	0.5135743021965027	0.9329390525817871
Inc-SLC5A6-3	2	27480865	27481912	-	0.19995608925819397	0.39931634068489075	1.4242531061172485
Inc-MRPL33-1	2	27928653	27989051	+	0.004808436613529921	0.04461997002363205	0.026051247492432594
Inc-TOGARAM2-1	2	29285135	29313187	+	0.018258195370435715	0.005805852822959423	0.9281851053237915
Inc-ALK-1	2	30273932	30369192	-	0.05053263157606125	0.08543401956558228	0.014446253888309002
Inc-CAPN13-1	2	30670139	30864109	-	0.003663527313619852	0.0012780388351529837	0.7220273017883301
Inc-SRD5A2-1	2	31605948	31607261	-	0.02097779698699104	0.030959563329815865	0.8853359224121209
Inc-NLRC4-6	2	32500843	32502864	-	0.48593974113464355	0.2096189558506012	0.11488146334886551
Inc-YIPF4-2	2	32546707	32548071	+	0.1775650680065155	0.30210041999816895	0.049138154834508896
LINC00486	2	33050394	33171203	+	0.049513548612594604	0.013323502615094185	0.0014460659585893154
Inc-VIT-3	2	36611650	36611850	+	0.4015825092792511	1.1743104457855225	0.0
Inc-QPCT-1	2	37552039	37554017	+	0.042962752282619476	0.26600295305252075	0.09796283394098282
Inc-ATL2-1	2	38630972	38742882	-	0.005018207710236311	0.11850780993700027	0.02011142671108246
Inc-HNRNPLL-6	2	38708916	38709916	-	0.3809352517127991	0.032072871923446655	3.258549213409424
Inc-DHX57-7	2	39250017	39250964	-	20.589981079101562	19.977176666259766	19.964881896972656
Inc-CDKL4-3	2	39511169	39511421	-	2.964738368988037	1.705681562423706	0.361384779214859
Inc-MAP4K3-3	2	39988505	39993352	-	2.1542882919311523	4.228282928466797	5.647761821746826
Inc-SLC8A1-4	2	39997157	40006380	-	2.242894411087036	5.086969375610352	6.51129674911499
Inc-HAAO-1	2	43028634	43038968	-	0.5631063580513	0.12656494975090027	0.17276063561439514
Inc-HAAO-7	2	43186100	43251311	-	0.0015793577767908573	0.04430234059691429	0.010723274201154709
LINC02580	2	43297542	43370253	-	0.3549262285232544	0.12225010991096497	0.043835368007421494
LINC01833	2	45146522	45166518	-	1.9265365600585938	0.01988218165934086	0.014079754240810871
SIX3-AS1	2	45167293	45169813	-	0.6659094095230103	0.028874142095446587	0.013280102983117104

Inc-SIX3-1	2	45181803	45195901	+	0.8660377264022827	0.019879741594195366	0.008219597861170769
LINC01820	2	46559655	46656225	-	0.06657636165618896	0.26964813470840454	0.034219931811094284
Inc-PIGF-3	2	46726369	46727385	-	0.06334599107503891	1.1126402616500854	0.6022582054138184
Inc-EPCAM-2	2	47452932	47468722	+	0.20564396679401398	0.1302616000175476	0.0
Inc-CALM2-11	2	47566664	47569195	-	0.6298803091049194	1.1852307319641113	0.18096689879894257
Inc-KCNK12-2	2	47739991	47746533	-	0.6468191742897034	0.07787653058767319	0.04596985504031181
Inc-FOXN2-6	2	48274643	48317508	+	2.8078866004943848	0.2157135009765625	0.0
Inc-FOXN2-5	2	48340114	48345384	+	0.022421689704060555	0.04866644740104675	0.002422578865662217
Inc-CHAC2-9	2	52797786	52799660	+	0.06313097476959229	0.0	0.0
Inc-C2orf73-3	2	54756359	54756978	+	0.5152781009674072	2.73750901222229	0.11741410940885544
Inc-RTN4-3	2	54888148	54907182	-	0.04270600154995918	9.254406904801726E-4	0.5909184217453003
Inc-RTN4-1	2	55196736	55199154	-	0.5860957503318787	1.257866382598877	0.18390120565891266
Inc-CFAP36-5	2	55646412	55648361	+	0.007692510262131691	0.0291978120803833	0.1589302271604538
Inc-CCDC88A-1	2	55662292	55662758	-	11.372979164123535	0.07983323186635971	0.4714488983154297
MIR217HG	2	56183727	56274461	-	0.49264298869537354	0.029998838901519775	8.516770321875811E-4
Inc-FANCL-4	2	58478017	58479810	-	0.018048597499728203	0.0	0.7219014167785645
Inc-PUS10-5	2	60679289	60755670	-	0.16658955812454224	0.7511165738105774	0.5338123440742493
Inc-USP34-8	2	61220343	61225631	-	0.05903085321187973	0.19027404487133026	0.013645391911268234
Inc-EHBP1-2	2	62817389	62893417	+	0.1556582897901535	0.029880130663514137	0.003478205529972911
Inc-MDH1-1	2	63911439	63911844	+	1.0203779935836792	0.0	0.0
LGALS1-DT	2	64617975	64682012	-	0.3904545307159424	0.23305462300777435	0.09573698788881302
Inc-SPRED2-22	2	65497022	65498897	-	0.15198884904384613	0.04833647236227989	5.563414573669434
LINC01812	2	67755207	68052748	-	9.512381511740386E-4	0.15590305626392365	0.26415133476257324
Inc-PNO1-1	2	68406965	68407664	+	0.6485745310783386	0.9164475798606873	2.0826523303985596
Inc-ANTXR1-1	2	69614516	69615694	+	0.16798537969589233	0.5154919624328613	0.04412233829498291
Inc-NFU1-3	2	69698059	69701735	-	1.2364788055419922	0.7906354069709778	0.36516955494880676
Inc-C2orf42-7	2	70307136	70307886	-	0.32331594824790955	0.6888993382453918	0.09183207899332047
Inc-PCYOX1-4	2	70437337	70438027	+	0.02160661853849888	0.0	0.3737925589084625
Inc-ADD2-2	2	70683498	70780958	-	0.557685375213623	7.754879951477051	6.017689228057861
Inc-VAX2-6	2	70889265	70889954	+	0.004798224661499262	0.0	1.8636046648025513
Inc-VAX2-4	2	71030289	71030558	+	1.797759771347046	0.008642866276204586	0.5007073879241943
Inc-CD207-1	2	71063565	71088005	-	0.06052342802286148	0.6370991468429565	0.4571231007575989
LINC01143	2	71115001	71117114	+	0.0056618270464241505	0.18553169071674347	0.2506294250488281
Inc-PAIP2B-4	2	71680218	71681576	-	0.42033976316452026	0.0015097727300599217	0.0
Inc-DYSF-12	2	72402069	72405839	+	0.02764372155070305	0.0011191916419193149	0.6402148604393005
Inc-ALMS1-3	2	73898157	73912212	+	0.3758624494075775	0.10104837268590927	0.07182464748620987
Inc-DUSP11-1	2	73988396	73988908	-	0.49822476506233215	1.2948191165924072	0.08270443230867386
Inc-DUSP11-3	2	74065982	74084468	-	0.014660164713859558	8.915390935726464E-4	0.4079959988594055
Inc-TET3-5	2	74357710	74362522	+	0.025613926351070404	0.18544957041740417	0.42836013436317444
Inc-MOB1A-3	2	74475482	74477914	-	0.7466442584991455	0.26411640644073486	0.17471379041671753
Inc-M1AP-1	2	74881379	74909182	-	0.0065734731033444405	0.0	0.3476976156234741
Inc-SUCLG1-5	2	85066191	85076680	-	0.4298863410949707	1.9793726205825806	1.2507413625717163
Inc-TRABD2A-7	2	85329512	85329817	-	0.39857184886932373	0.015158015303313732	0.012360068038105965
Inc-RETSAT-1	2	85628295	85641141	-	5.421453952789307	8.080254554748535	27.573959350585938
Inc-RGPD1-1	2	87389080	87400078	+	0.24971714615821838	0.530931293964386	1.3995161056518555
Inc-RGPD1-6	2	87423637	87425429	+	0.052823685109615326	0.1733386218547821	0.18478864431381226
Inc-SMYD1-2	2	88316307	88320972	+	0.06237445026636124	0.08712853491306305	0.007179527077823877
Inc-RPIA-30	2	91963368	91970623	+	0.3690412938594818	1.22274911403656	1.4840227365493774
Inc-TRIM43B-7	2	96074639	96080044	-	0.009399193339049816	0.0013830766547471285	0.23216578364372253
Inc-TRIM43B-1	2	96186444	96192487	-	0.15035216510295868	0.3047080338001251	2.4254238605499268

Inc-TRIM43-1	2	96190841	96198235	+	0.16512703895568848	0.48570215702056885	2.0674173831939697
Inc-TRIM43-2	2	96203717	96204217	+	0.08442918211221695	0.3144485652446747	2.0452072620391846
Inc-TRIM43-9	2	96477742	96480574	+	0.04750766605138779	0.035705383867025375	0.8716476559638977
Inc-STARD7-1	2	96841667	96845511	-	0.07767412066459656	0.184554785490036	0.01228579692542553
Inc-KANSL3-2	2	97163414	97165215	-	0.015484836883842945	0.1313665807247162	0.19191288948059082
Inc-ARID5A-2	2	97260750	97261170	+	0.0	0.0	1.167062759399414
Inc-KIAA1211L-1	2	99377526	99389383	-	8.710272377356887E-4	0.28923657536506653	0.01932622864842415
Inc-MFSD9-20	2	103124398	103130672	-	0.10038696229457855	0.007686270400881767	0.32043883204460144
Inc-POU3F3-5	2	105022962	105035698	+	0.07396367192268372	0.33502915501594543	0.43105486035346985
LINC01159	2	105476881	105490941	-	1.9034514427185059	0.5124058723449707	0.5561993718147278
Inc-TGFBRAP1-3	2	105713510	105720606	-	0.01926964521408081	9.964550845324993E-4	0.358982115983963
Inc-UXS1-4	2	106462990	106473633	-	0.03471355885267258	0.006514404434710741	0.31542637944221497
Inc-UXS1-3	2	106509525	106510705	-	0.12201336026191711	0.0010069055715575814	1.5283945798873901
Inc-EDAR-11	2	109063296	109065553	-	0.124300017952919	0.18676872551441193	0.039168477058410645
Inc-MALL-5	2	110339915	110342057	-	0.13470472395420074	0.5164816379547119	0.03133141249418259
Inc-ACOXL-3	2	111435802	111453782	+	0.00986576545983553	0.08948011696338654	0.03159186244010925
Inc-BCL2L11-6	2	111953948	112124991	+	0.003543965285643935	0.0018366279546171427	0.09503676742315292
Inc-BCL2L11-8	2	112186899	112187197	+	0.03712732717394829	0.011476702988147736	0.7174450755119324
Inc-ANAPC1-4	2	112249520	112252388	-	1.7720850706100464	2.922429084777832	0.2913599908351898
Inc-RGPD8-56	2	113299233	113299789	-	0.26428231596946716	0.6423054337501526	1.3628830909729004
Inc-CKAP2L-1	2	113399272	113403368	-	0.7228958010673523	0.8056709170341492	2.1767728328704834
Inc-IL37-4	2	113597905	113601772	+	0.0755285993218422	0.14786578714847565	0.013149004429578781
LINC01961	2	114261181	114273062	+	0.014232384040951729	0.19785597920417786	0.11774129420518875
Inc-FOXO4L1-4	2	114299104	114329873	+	0.0037358005065470934	0.2590045630931854	0.11442285776138306
Inc-ACR3-2	2	114721287	114721962	+	0.6828140020370483	0.9524954557418823	0.09191052615642548
LINC01191	2	114728117	114764912	+	0.255703330039978	0.23787525296211243	0.04254894703626633
Inc-INSIG2-13	2	119067812	119068894	+	0.03780752792954445	0.18581591546535492	0.10560675710439682
Inc-TMEM177-3	2	120461352	120491105	+	0.0329817458987236	0.17577572166919708	0.11676736921072006
Inc-RALB-8	2	120975056	120977718	+	0.0054091401398181915	0.0	0.25432291626930237
Inc-NIFK-8	2	122524506	122524867	-	0.0	0.0	0.6655917167663574
Inc-ERCC3-1	2	127975143	127976209	-	0.45530495047569275	0.24470755457878113	0.10869879275560379
Inc-SAP130-3	2	129016428	129017549	-	0.663074254989624	0.5300405025482178	2.3268697261810303
Inc-RAB6C-5	2	130750462	130751613	+	0.7332165241241455	0.0334697887301445	0.06052878499031067
Inc-POTEF-6	2	130769638	130813180	-	0.4576551616191864	1.334363579750061	0.0036485076416283846
Inc-CCDC74B-1	2	130896860	130900601	-	1.5341256856918335	1.4164682626724243	7.507983684539795
Inc-MZT2B-5	2	130959899	130961986	+	0.7635251879692078	0.3054872453212738	3.234846591949463
Inc-CCDC115-3	2	131112185	131113509	-	0.08952175825834274	0.11797637492418289	0.2356567084789276
Inc-POTEI-2	2	131174326	131199254	-	0.04728842154145241	0.3105260133743286	0.3228001594543457
Inc-FAM168B-3	2	131958715	131960514	-	0.8439666628837585	0.46536388993263245	0.0
Inc-POTEE-1	2	131967129	131969113	+	0.43486565351486206	0.8900235295295715	0.0
Inc-PLEKHB2-1	2	132036863	132118467	+	1.1907639503479004	0.9252715706825256	0.0
Inc-RAB6D-16	2	132109787	132110812	-	0.5599750876426697	0.0	0.0
Inc-MZT2A-19	2	132176498	132182503	-	0.2723134756088257	0.06625690311193466	0.07375505566596985
Inc-RAB6D-1	2	132243997	132249544	-	21.956356048583984	16.24711036682129	79.1837387084961
Inc-CCDC74A-4	2	132494125	132508336	+	0.6970688700675964	1.0709816217422485	2.5052907466888428
Inc-CCDC74A-9	2	132515604	132524680	+	0.25305548310279846	0.3071049153804779	1.5753597021102905
Inc-ANKRD30BL-7	2	133067740	133104929	-	0.05598314478993416	0.43410545587539673	0.6323956847190857
Inc-GPR39-6	2	133110240	133112412	+	0.130595400929451	0.6488543152809143	1.8218905925750732
Inc-ACMSD-6	2	134924891	134928661	+	0.05186949297785759	0.42662474513053894	0.01032645720988512
Inc-TMEM163-2	2	135206835	135209310	-	0.061465341597795486	0.02579648233950138	1.7907171249389648

Inc-UBXN4-11	2	136295976	136297132	+	0.1734425127506256	0.8353453278541565	0.03442412614822388
Inc-GTDC1-26	2	142562933	142567970	-	0.45160359144210815	3.269577980041504	1.6043143272399902
Inc-LRP1B-1	2	142888747	142895399	-	0.19240929186344147	1.371921420097351	0.5168918967247009
Inc-ZEB2-14	2	144883649	144885151	-	0.08835447579622269	0.3437873423099518	0.011991526931524277
Inc-GTDC1-12	2	145251832	145254445	-	0.9513385891914368	2.5139572620391846	0.0890302062034607
Inc-MMADHC-5	2	149925110	149925424	-	0.822540283203125	0.0	0.0
Inc-RIF1-1	2	152228517	152228798	+	0.03605765849351883	0.5838907361030579	0.18483966588974
Inc-ERMN-3	2	158067359	158068051	-	0.18795542418956757	0.006261488422751427	0.03362967446446419
Inc-DAPL1-4	2	159404937	159405736	+	0.39574509859085083	1.2708231210708618	0.08193995803594589
PKP4-AS1	2	159514849	159591514	-	5.749260890297592E-4	0.0024486237671226263	0.04907228797674179
Inc-CD302-1	2	160407008	160407977	-	0.24737460911273956	0.6556180119514465	0.05597292631864548
Inc-ITGB6-3	2	161193683	161194716	-	0.1620183289051056	0.5149931907653809	0.007710030768066645
Inc-SLC38A11-2	2	165685630	165688230	-	0.14981576800346375	0.3037824332714081	0.01230053324252367
Inc-SCN2A-7	2	166543821	166545916	+	7.283796787261963	1.8975415229797363	2.4571242332458496
Inc-XIRP2-1	2	168149511	168414843	+	1.232472538948059	2.1129910945892334	4.0927815437316895
Inc-STK39-2	2	168663738	168797690	-	0.01109747588634491	0.014184615574777126	0.05211097374558449
Inc-SPC25-5	2	168905962	168909108	-	0.12751998007297516	0.5222828388214111	0.018879171460866928
Inc-SPC25-4	2	168987160	168993811	-	0.20695948600769043	0.4272099733352661	0.03220893070101738
CERS6-AS1	2	169628461	169643471	-	0.03501241281628609	0.01599743217229843	0.8226650357246399
Inc-CCDC173-6	2	170558307	170573900	-	0.005990668665617704	6.291845347732306E-4	0.03337489068508148
Inc-KLHL23-1	2	170634159	170634825	+	0.45393484830856323	0.4930282235145569	0.030474616214632988
Inc-METTL5-2	2	170933734	170934804	-	0.5242480039596558	0.009328375570476055	0.0
LINC01124	2	171475138	171627278	-	0.01628219522535801	0.11936423182487488	0.053536903113126755
Inc-ERICH2-1	2	171626760	171638904	+	0.24796900153160095	1.5262778997421265	2.1715879440307617
DLX2-DT	2	172967734	172974710	+	0.05664673447608948	0.13759106397628784	0.3169633448123932
Inc-CIR1-1	2	175197325	175198448	-	0.34275364875793457	0.15571825206279755	1.3067045211791992
Inc-CIR1-3	2	175301034	175310150	-	3.3223559856414795	14.709232330322266	18.999910354614258
Inc-WIPF1-2	2	175347601	175351728	-	3.076308250427246	12.674799919128418	14.409221649169922
Inc-GPR155-5	2	175445868	175462532	-	4.229612827301025	9.8731689453125	17.4057559967041
HOXD-AS2	2	176986339	177001826	-	0.003659006202459335	0.794180154800415	3.0520546436309814
Inc-HOXD3-2	2	177001340	177005118	+	0.0	2.627941370010376	1.3718143701553345
HAGLR	2	177028779	177053690	-	0.00331340963202092075	2.591221570968628	3.8439877033233643
HAGLROS	2	177042438	177043874	+	0.007527526933699846	0.10262349992990494	0.48429399728775024
LINC01117	2	177465229	177690269	+	0.005362476222217083	0.15720508992671967	0.11841025203466415
LINC01116	2	177475748	177502914	-	0.004413095768541098	0.8443496227264404	0.9246929287910461
Inc-TTC30B-2	2	178107103	178111509	-	0.7945699691772461	2.2531442642211914	0.2602185010910034
Inc-PDE11A-1	2	178487979	178491033	-	0.22647221386432648	0.03374912962317467	0.012501748278737068
Inc-UBE2E3-4	2	181696809	181972525	+	0.14602327346801758	0.1271989494562149	0.04536791890859604
LINC01934	2	181950803	182274048	+	0.03286336362361908	0.014170773327350616	0.001554094604216516
Inc-CERKL-4	2	182409455	182545392	-	0.18730700016021729	1.0836869478225708	0.9615910053253174
Inc-NEUROD1-3	2	183005210	183006354	-	2.4928016662597656	0.2583313584327698	0.0
Inc-FRZB-4	2	183129091	183387465	-	12.111868858337402	2.4326534271240234	0.037220299243927
Inc-DUSP19-3	2	183652825	183653162	+	0.39320361614227295	0.40918633341789246	0.07777909934520721
Inc-NCKAP1-5	2	185458304	185463775	-	0.08193151652812958	0.056175027042627335	0.3057534396648407
Inc-FSIP2-5	2	186289743	186411619	+	0.5090959668159485	0.0432339683175087	0.0954703688621521
LINC01473	2	186814841	187350882	-	0.1713295578956604	0.5369799137115479	0.05552847310900688
Inc-ORMDL1-1	2	190728385	190734541	-	0.005954991560429335	0.0016934729646891356	0.09376126527786255
Inc-NEMP2-4	2	191287142	191302276	-	0.07610038667917252	0.12436982989311218	0.47822144627571106
Inc-NEMP2-1	2	191541670	191573442	-	0.0	0.0	0.4155540466308594
Inc-STAT1-1	2	191798138	191800014	-	0.026108883321285248	0.024739662185311317	1.0600754022598267

Inc-STAT4-2	2	192018844	192020796	-	0.10633133351802826	0.03405728563666344	0.012745937332510948
Inc-NABP1-18	2	194367511	194461614	+	0.46953046321868896	0.0981832966208458	0.0
Inc-STK17B-1	2	197122460	197143403	-	5.863917350769043	1.532568335533142	0.7504984140396118
Inc-SF3B1-2	2	198244425	198245616	-	4.673149585723877	0.20904241502285004	0.13839082419872284
Inc-COQ10B-3	2	198299956	198305148	+	0.21740449965000153	0.5338355898857117	0.05358196049928665
Inc-BOLL-1	2	198570094	198572227	-	0.0130485290800333	0.00857938639819622	0.36223354935646057
Inc-FTCDNL1-3	2	200320776	200329890	-	0.8302820324897766	2.077094554901123	4.222888946533203
SATB2-AS1	2	200321753	200341658	+	0.5541040301322937	2.4355154037475586	5.4100542068481445
Inc-FTCDNL1-1	2	200527510	200715899	-	0.10851866751909256	0.747194766998291	0.6681628227233887
Inc-KCTD18-1	2	201292200	201343184	-	0.13632811605930328	0.008857263252139091	0.7652061581611633
Inc-CASP10-2	2	202098188	202107648	+	0.026668567210435867	0.49416133761405945	0.15201424062252045
Inc-MPP4-3	2	202643291	202645574	-	1.3382675647735596	1.3092825412750244	0.47806283831596375
Inc-SUMO1-1	2	203043383	203066644	-	2.085902452468872	0.1717211902141571	0.23793356120586395
Inc-FAM117B-7	2	203385124	203385712	+	0.6819868087768555	1.0160136222839355	0.18760325014591217
Inc-NRP2-8	2	206189491	206191161	+	0.06475336104631424	0.18570123612880707	0.0
Inc-NRP2-2	2	206481246	206482916	+	7.872433185577393	2.323808193206787	1.390604853630066
Inc-EEF1B2-1	2	206980271	206987047	+	0.0	0.002999496180564165	0.364493727684021
Inc-ZDBF2-1	2	207180240	207195663	+	0.24126370251178741	0.16122029721736908	0.04025330767035484
Inc-CPO-2	2	207731519	207733013	+	0.28714895248413086	0.21342161297798157	0.013888143934309483
Inc-CPO-1	2	207744136	207799719	+	0.3390228748321533	0.0770701915025711	0.05271682143211365
Inc-MAP2-3	2	210043528	210046742	+	0.23933307826519012	0.09652995318174362	0.007496508304029703
Inc-SPAG16-11	2	214053163	214087212	+	0.19003289937973022	0.009220950305461884	0.0038626985624432564
Inc-ATIC-8	2	215886722	215950211	+	0.028719443827867508	0.038744546473026276	0.006028410978615284
Inc-ABCA12-3	2	216225589	216228363	-	73.72830963134766	145.34326171875	41.22560501098633
Inc-ABCA12-5	2	216232402	216237205	-	134.0373992919922	379.12701416015625	110.7181625366211
LINC00607	2	216475717	216713606	-	0.17058472335338593	0.050838224589824677	0.032558467239141464
Inc-IGFBP2-4	2	217661116	217670058	+	0.014904218725860119	0.03002808429300785	0.002560095861554146
Inc-DIRC3-2	2	218625270	218626014	-	0.3495534062385559	0.05629190430045128	0.011018424294888973
Inc-AAMP-1	2	219142524	219144804	-	2.521313190460205	13.81820297241211	16.754552841186523
Inc-SLC11A1-1	2	219263426	219264793	+	1.1448801755905151	0.6151854991912842	4.734867095947266
Inc-RNF25-3	2	219608321	219610057	-	0.0	0.017688563093543053	0.15740543603897095
Inc-CHPF-1	2	220346795	220381599	-	0.006684130989015102	1.7941534519195557	0.6235321164131165
Inc-CHPF-4	2	220353705	220363455	-	0.25413161516189575	1.0760823488235474	1.216742753982544
Inc-OBSL1-2	2	220435180	220436581	-	4.0928544998168945	4.7035932540893555	12.312187194824219
Inc-SLC4A3-11	2	220507809	220510353	+	0.12242721766233444	1.0336155891418457	1.0504077672958374
Inc-MRPL44-2	2	224811811	224813835	+	0.17935003340244293	0.04438943415880203	0.01353277824819088
Inc-IRS1-2	2	226545266	227050334	-	0.19587619602680206	0.03145202249288559	0.025726759806275368
Inc-C2orf83-1	2	228549966	228551622	-	0.06833823770284653	1.7496205568313599	1.0875920057296753
Inc-C2orf83-3	2	228566323	228582715	-	0.0090259974822402	0.9959203004837036	0.5294254422187805
Inc-C2orf83-2	2	228573101	228575446	-	0.004129056353121996	0.4143027067184448	0.04414139315485954
Inc-SP110-8	2	231305150	231378009	-	0.001126030460000381	0.006021579261869192	0.017979424446821213
Inc-SPATA3-1	2	231808457	231823061	+	0.09419765323400497	0.010368920862674713	0.023705417290329933
SPATA3-AS1	2	231849083	231860763	-	0.016935819759964943	0.17487198114395142	0.3273652195930481
Inc-C2orf72-4	2	231916755	231917352	+	0.28921377658843994	4.100856781005859	3.2075767517089844
Inc-B3GNT7-1	2	232253687	232259764	+	0.3423798084259033	1.963260531425476	2.894083023071289
Inc-PTMA-5	2	232526767	232535286	+	0.01785076968371868	0.041011180728673935	0.0019835091661661863
Inc-TIGD1-1	2	233445658	233476681	-	0.018548572435975075	0.0029654894024133682	0.1484750658273697
Inc-SPP2-10	2	235405852	235409112	+	0.016795841977000237	0.0626119077205658	0.05040125921368599
LINC01173	2	235591312	235632163	+	3.4132041931152344	0.6704950928688049	0.43460655212402344
Inc-AGAP1-4	2	235887344	235888542	+	0.4701441824436188	1.0884524583816528	0.09927713125944138

Inc-AGAP1-2	2	235904747	235905261	+	0.476357638835907	1.5354098081588745	0.13156792521476746
Inc-COL6A3-5	2	238483333	238484527	-	0.06723477691411972	0.652622640132904	0.5165964961051941
Inc-RAB17-2	2	238672595	238674103	-	0.007170149590820074	0.0021481183357536793	0.5543583631515503
Inc-TRAF3IP1-3	2	239197768	239208826	+	0.018513048067688942	0.07172668725252151	0.051899172365665436
Inc-PER2-5	2	239359013	239360879	-	0.017682652920484543	6.372413481585681E-4	0.978895366191864
LINC01940	2	239840778	239869669	-	6.985155632719398E-4	0.035765618085861206	0.007159157656133175
Inc-NDUFA10-2	2	240115027	240117153	-	0.05870728939771652	1.130267858505249	0.20238465070724487
Inc-ANKMY1-2	2	241388732	241396131	-	0.27065661549568176	0.030771614983677864	0.050179749727249146
Inc-PASK-3	2	242198935	242201083	-	0.2669481933116913	0.6230621933937073	0.04835912212729454
Inc-HDLBP-1	2	242290755	242292519	-	0.046317823231220245	0.0	1.478144645690918
Inc-DTYMK-1	2	242658394	242662203	-	0.006978632416576147	1.6264243458863348E-4	0.191345676779747
Inc-PDCD1-2	2	242740331	242741322	-	0.0	0.2930591404438019	0.872347354888916
Inc-NEU4-1	2	242762411	242763015	+	0.01012379676103592	0.53233402967453	1.9724708795547485
Inc-RTP5-1	2	242786241	242788669	+	0.01010106410831213	0.4732891023159027	0.5451921224594116
Inc-RTP5-5	2	242802203	242806177	+	0.0026525116991251707	0.10552125424146652	0.12876825034618378
LINC01237	2	242823514	243020873	+	0.07548877596855164	0.4081841707229614	0.3092357814311981
Inc-RTP5-9	2	242831201	242833651	+	0.02575337141752243	0.9216568470001221	1.1211638450622559
Inc-RTP5-6	2	242844704	242850330	+	0.010968800634145737	0.27916762232780457	0.09523401409387589
LINC01238	2	242912834	242919427	+	0.33503955602645874	0.8720116019248962	1.0398250818252563
Inc-CNTN6-4	3	2140612	2141457	+	0.43320074677467346	0.03320092707872391	0.06555971503257751
Inc-SETMAR-2	3	3841380	3886263	+	60.747135162353516	7.614444732666016	15.364985466003418
Inc-LRRN1-1	3	3890621	3891518	+	14.11636734008789	2.5087323188878174	2.4469239711761475
BHLHE40-AS1	3	4938493	5022059	-	0.20110085606575012	0.1710752695798874	1.0075044631958008
Inc-SUMF1-18	3	5024918	5025592	-	0.0033820976968854666	0.012775921262800694	1.5157082080841064
Inc-SUMF1-19	3	5026301	5028590	-	0.02913263626396656	0.028403671458363533	0.2286614626646042
Inc-GRM7-2	3	6532166	6779804	+	0.04895728453993797	0.01327536255121231	0.0
Inc-THUMP3-4	3	9429771	9432288	+	0.22720351815223694	0.35880285014801	0.8330022096633911
Inc-THUMP3-5	3	9439665	9439935	+	0.9308575987815857	3.5408341884613037	0.1910780370235443
Inc-SRGAP3-6	3	9592296	9593991	-	0.2399270385503769	0.8088820576667786	0.6284263730049133
Inc-PRRT3-3	3	9972957	9975316	-	0.9187237620353699	0.8884077668190002	3.426971435546875
Inc-FANCD2OS-1	3	10123001	10149915	-	0.008826518431305885	0.0	0.6034340858459473
Inc-GHRL-4	3	10290416	10291118	-	0.35475683212280273	0.3532382845878601	1.7395174503326416
Inc-VGLL4-9	3	11244156	11267604	-	0.03719024360179901	0.22929780185222626	1.5423170328140259
Inc-TAMM41-5	3	11741020	11766484	-	0.8120478987693787	0.9952126145362854	2.5890910625457764
Inc-TSEN2-3	3	12600274	12602296	+	0.3479289412498474	0.6431954503059387	0.08189714699983597
Inc-RPL32-3	3	13082509	13083921	-	0.896662712097168	0.9742587804794312	0.21156248450279236
LINC00620	3	13667222	13793914	+	0.02327572926878929	0.005098865367472172	0.0010175161296501756
Inc-CHCHD4-3	3	13858242	13859396	-	2.0017988681793213	0.5426638722419739	0.013098460622131824
Inc-CHCHD4-2	3	13905165	13918717	-	1.1893653869628906	0.3415546119213104	0.0
Inc-XPC-7	3	14182943	14186009	-	0.13788188993930817	0.12555497884750366	2.753664016723633
Inc-TMEM43-1	3	14186320	14193157	+	0.1457294076681137	0.22147271037101746	0.7221378087997437
Inc-LSM3-5	3	14460378	14461632	+	0.27818745374679565	0.8053296208381653	0.020388547331094742
Inc-METTL6-5	3	15354690	15357518	-	0.13482636213302612	0.20239955186843872	0.002469052094966173
Inc-METTL6-2	3	15491673	15492386	-	1.8157371282577515	0.45732980966567993	0.41953036189079285
Inc-METTL6-3	3	15516735	15519093	-	0.48212024569511414	0.15419155359268188	0.10110852867364883
Inc-METTL6-4	3	15520097	15520881	-	0.42717093229293823	0.2880195081233978	0.06035146489739418
Inc-BTD-2	3	15780022	15780315	+	280.5092468261719	2685.7958984375	1696.1041259765625
Inc-HACL1-9	3	15822944	15839486	-	13.392960548400879	8.820697784423828	4.500865459442139
Inc-GALNT15-2	3	16326370	16326579	+	0.5650097727775574	1.1726479530334473	0.10690386593341827
Inc-PLCL2-8	3	17506642	17507002	+	0.8018706440925598	0.0	0.0

Inc-PLCL2-3	3	18004064	18310408	+	0.19420559704303741	0.06491465866565704	0.003887920407578349
SATB1-AS1	3	18475294	18968786	+	0.03838897496461868	0.07427510619163513	0.008818281814455986
Inc-UBE2E2-1	3	23634971	23643659	+	0.17147062718868256	0.6097214818000793	0.04965578019618988
Inc-THRB-6	3	23983561	23986667	-	0.011812161654233932	0.13413746654987335	0.05945706367492676
Inc-SLC4A7-2	3	27320179	27326392	-	1.2329483032226562	0.4675295352935791	0.3117579221725464
Inc-SLC4A7-1	3	27350648	27410687	-	0.8071783185005188	0.423888919353485	0.15526646375656128
Inc-CMC1-8	3	27527584	27529320	+	0.17338795959949493	0.10490504652261734	0.02745492197573185
LINC02084	3	27753781	27755876	+	0.043983716517686844	0.050561048090457916	0.6297010779380798
LINC01980	3	27839054	27973070	+	0.28496649861335754	0.006334515288472176	0.0
Inc-GADL1-11	3	30645381	30647839	-	0.06387816369533539	0.0019314041128382087	0.013319925405085087
Inc-TGFBR2-1	3	30737008	30741068	+	1.0693156719207764	0.43020355701446533	0.17498467862606049
Inc-STT3B-2	3	31494324	31497386	+	0.12583525478839874	0.011139131151139736	0.0043473741970956326
Inc-GPD1L-2	3	32303234	32305396	+	0.057047199457883835	0.17965078353881836	0.004835369065403938
Inc-DYNC11L1-4	3	32676714	32677046	-	3.1067681312561035	0.0	0.011206996627151966
Inc-GLB1-3	3	32828867	32859435	-	0.47031134366989136	0.05341165512800217	0.00914067750110626
Inc-TRIM71-2	3	32938576	32939318	+	25.452083587646484	2.368788242340088	1.1233625411987305
Inc-SUSD5-1	3	33185596	33189213	-	0.229980930685997	0.10601890832185745	2.163879156112671
Inc-FBXL2-1	3	33488087	33495643	+	22.63782501220703	0.645983874797821	0.30717194080352783
Inc-CLASP2-9	3	33820121	33822642	-	0.004179195035248995	0.09322074800729752	0.15631528198719025
Inc-FBXL2-3	3	33843989	33844380	+	0.33175554871559143	0.4769226610660553	0.036329299211502075
Inc-CLASP2-8	3	34917287	35435515	-	0.5957479476928711	0.025415774434804916	0.0
Inc-MLH1-1	3	37176149	37176593	+	2.7898926734924316	0.15687629580497742	0.5294284224510193
Inc-ITGA9-5	3	37297354	37297961	+	0.41430482268333435	1.8271970748901367	0.08128321915864944
Inc-LRRFIP2-1	3	37400868	37408234	-	0.0	0.0	0.16068477928638458
Inc-ITGA9-1	3	37864199	37867773	+	2.7697243690490723	0.4706375300884247	0.394727885723114
Inc-PLCD1-2	3	38048987	38049826	-	47.96827697753906	7.838497161865234	8.431732177734375
Inc-ACAA1-4	3	38061720	38066067	-	10.547980308532715	1.6073822975158691	2.6193768978118896
Inc-ACVR2B-1	3	38532215	38534633	+	20.75789451599121	7.445104122161865	4.59918212890625
Inc-GORASP1-1	3	39072958	39093435	-	0.1309680938720703	0.15865390002727509	0.023723836988210678
Inc-ULK4-1	3	41262338	41266542	-	0.22987690567970276	0.07527071982622147	1.2237937450408936
Inc-VIPR1-6	3	42056196	42115985	+	0.20098194479942322	0.520855188369751	0.05210209637880325
Inc-CCDC13-2	3	42734155	42775036	-	0.049932654947042465	0.3827587366104126	0.2869162857532501
Inc-ANO10-5	3	44035032	44040641	-	0.022229034543630447	0.13735634088516235	0.4731403589248657
Inc-TCAIM-2	3	44482424	44486946	+	0.0077463435009121895	0.0	0.25596919655799866
Inc-KLHL18-7	3	47180552	47260609	+	0.05172140151262283	0.10617142915725708	0.0137092974036932
Inc-KLHL18-4	3	47263633	47264866	+	0.1408803015947342	0.2036280483007431	0.019630413502454758
Inc-PTPN23-2	3	47575529	47580118	+	0.009948108345270157	0.13938380777835846	0.0468231737613678
Inc-DHX30-2	3	47705116	47705424	+	2.8601362705230713	0.044448766857385635	0.0
Inc-NME6-2	3	48309404	48312995	-	0.011185181327164173	0.01665606163442135	0.21885766088962555
Inc-ATRIP-9	3	48647174	48652039	+	0.28241050243377686	0.5038768649101257	0.07908976823091507
Inc-WDR6-2	3	49037962	49038301	+	0.4104967415332794	0.6510818600654602	0.07645964622497559
Inc-TCTA-1	3	49460379	49461864	+	0.15238456428050995	0.6205250024795532	0.8118334412574768
Inc-NICN1-4	3	49568232	49573021	-	0.2792072594165802	0.020543979480862617	3.8026914596557617
Inc-RNF123-1	3	49761652	49762945	+	0.13040272891521454	0.2875223457813263	1.3043160438537598
RBM5-AS1	3	50137035	50138421	-	0.02281947247684002	0.0	0.4383470118045807
SEMA3F-AS1	3	50153455	50193518	-	0.02919371798634529	0.004139226861298084	0.6173216104507446
Inc-TMEM115-1	3	50400286	50403213	-	4.185001373291016	0.3330609562725067	0.5351248383522034
Inc-DCAF1-1	3	51428782	51431933	-	0.47288960218429565	0.09718252718448639	2.2255589962005615
Inc-RAD54L2-5	3	51534397	51537223	+	0.09288039058446884	0.22241689264774323	0.016090620309114456
Inc-TEX264-1	3	51676525	51677449	+	0.12407559156417847	0.22843550145626068	0.019484611228108406

Inc-IQCF6-2	3	51696435	51705106	-	0.018092941492795944	0.016171393916010857	0.27279746532440186
Inc-PPM1M-1	3	52279002	52279536	+	0.4267556667327881	1.1063389778137207	1.5375272035598755
Inc-SEMA3G-1	3	52485455	52486007	-	3.6399219036102295	0.14996159076690674	0.13508644700050354
Inc-ITH4-2	3	52844728	52846754	-	0.25632086396217346	0.06800412386655807	0.0674228962361145
Inc-ERC2-3	3	55503416	55504169	-	27.12864112854004	5.394683837890625	9.42794132232666
Inc-WNT5A-3	3	55542339	55733546	-	2.572338104248047	0.18578775227069855	0.278728723526001
Inc-FAM208A-3	3	56183016	56207927	-	1.5026514530181885	0.20367488265037537	0.051907364279031754
Inc-FAM208A-1	3	56467817	56501162	-	3.7104086875915527	0.8477359414100647	0.3328731060028076
Inc-IL17RD-2	3	56785377	57112843	-	2.7104640007019043	10.36345386505127	8.634176254272461
Inc-SPATA12-2	3	57112971	57114129	+	0.021869879215955734	0.1782737672328949	0.2692897319793701
Inc-FLNB-3	3	57886576	57887872	+	0.40754854679107666	1.2056806087493896	0.07777831703424454
Inc-SLMAP-5	3	57995878	57996391	+	0.1761796623468399	0.3854673504829407	0.013565373606979847
Inc-ABHD6-3	3	58126250	58126499	+	0.6676186919212341	0.758911669254303	0.11744759976863861
FLNB-AS1	3	58148274	58157971	-	0.033768024295568466	0.009024996310472488	0.6758692264556885
Inc-DNAse1L3-2	3	58277993	58280451	-	0.0	5.739167681895196E-4	0.19879338145256042
Inc-FAM107A-3	3	58517037	58519552	-	1.4567736387252808	0.13848622143268585	0.2380009889602661
Inc-FAM107A-2	3	58519785	58522899	-	1.5760583877563477	0.17507486045360565	0.27814701199531555
Inc-FAM107A-1	3	58549847	58613337	-	3.5306098461151123	0.24500226974487305	0.9637763500213623
Inc-C3orf67-4	3	59735428	60066566	-	0.1983218789100647	0.8387953639030457	1.414862871170044
Inc-FEZF2-9	3	60521543	61237086	-	0.33087021112442017	0.9174278378486633	1.1461492776870728
Inc-FHIT-4	3	61546090	61547088	-	0.9991104602813721	0.42214736342430115	0.17377978563308716
Inc-ADAMTS9-7	3	65344943	65345392	-	3.145139217376709	0.4400293231010437	0.4593946039676666
MAGI1-IT1	3	65858490	65940233	-	0.0720219761133194	0.404397189617157	0.02105296403169632
Inc-FAM19A4-3	3	69031888	69037010	-	8.161506652832031	2.367966651916504	2.313405990600586
Inc-LMOD3-2	3	69355558	69370133	-	0.6256839632987976	3.1783056259155273	1.9255304336547852
Inc-LMOD3-3	3	69383112	69482280	-	0.4087580442428589	1.3197165727615356	1.9298503398895264
Inc-EIF4E3-4	3	71345236	71409911	-	0.8054788708686829	0.6325394511222839	0.18382373452186584
Inc-SHQ1-3	3	73446203	73447965	-	0.7222804427146912	0.6370882391929626	0.028058722615242004
LINC00960	3	75721413	75739217	+	0.0652417317032814	0.005632230546325445	0.0
Inc-CADM2-3	3	84002775	84177730	+	0.023990565910935402	0.3386170566082001	0.19801215827465057
Inc-VGLL3-11	3	85550742	85554137	-	0.7189417481422424	0.01102975383400917	0.0
Inc-CHMP2B-1	3	87138184	87207605	+	0.016075074672698975	0.05954593047499657	0.12326385080814362
Inc-ARL13B-1	3	93795186	93800665	+	0.5094921588897705	0.47391754388809204	0.09505604207515717
Inc-ARL6-1	3	97478367	97480376	+	0.09529337286949158	0.0011838102946057916	0.0
LINC00973	3	98680771	98717691	+	0.25890979170799255	0.80591881275177	6.191732406616211
Inc-COL8A1-3	3	99357319	99422462	+	2.058267593383789	0.42886364459991455	0.5856105089187622
Inc-FILIP1L-9	3	99871353	99980192	-	0.2147226631641388	0.30398914217948914	0.06420470774173737
Inc-ABI3BP-1	3	100383894	100384320	-	1.2933436632156372	0.027308009564876556	0.062038604170084
Inc-SENP7-1	3	101291690	101292849	-	0.1440148949623108	0.369228333234787	0.034431587904691696
Inc-CD47-8	3	105565135	105569968	-	0.397062748670578	0.724789559841156	0.03972810134291649
Inc-CBLB-5	3	106403340	106436193	-	0.1809108555316925	0.032279446721076965	0.0314742773771286
Inc-CD47-7	3	106967221	106970678	-	0.014170912094414234	0.008463644422590733	0.12487000226974487
Inc-CIP2A-3	3	108174654	108180759	-	0.1415098011493683	0.21987895667552948	1.1380318403244019
Inc-DPPA4-1	3	109043198	109079671	-	28.38652992248535	0.6322652101516724	0.0
Inc-C3orf85-4	3	109056587	109101875	+	0.04361904785037041	0.005651322193443775	2.6479436201043427E-4
Inc-ZBED2-5	3	110607231	110612323	-	4.141995906829834	1.2419863939285278	0.46037498116493225
NECTIN3-AS1	3	110612555	110790400	-	0.7389149069786072	0.25263553857803345	0.21106675267219543
Inc-ZBED2-3	3	111575527	111578270	-	0.6500138640403748	0.06801814585924149	0.07986878603698823
Inc-PLCXD2-2	3	111615806	111619675	+	0.4995774030685425	0.2501104772090912	0.03940287232398987
TBILA	3	111852270	111854206	+	0.38497647643089294	0.35760459303855896	1.3427133560180664

Inc-ATG3-2	3	112243034	112244048	-	0.11590424180030823	0.2574751675128937	0.01746540516614914
Inc-CCDC80-5	3	112315641	112320816	-	10.580154418945312	6.673130035400391	2.539977550506592
Inc-CCDC80-4	3	112415171	112416522	-	0.348447322845459	0.7534942626953125	1.9174875020980835
Inc-NAA50-3	3	113518425	113529901	-	0.019831448793411255	0.0	0.6484211683273315
Inc-ZNF80-3	3	114252449	114264980	-	0.11592939496040344	0.6303917169570923	0.01716645061969757
Inc-ZBTB20-2	3	115521222	115524018	-	5.6557698249816895	19.396472930908203	29.28790855407715
Inc-ZBTB20-8	3	115529123	115561344	-	11.215225219726562	38.277854919433594	36.54644775390625
Inc-POPDC2-2	3	119354373	119354997	-	0.19216307997703552	0.0	0.0
Inc-NR112-7	3	119820668	119823090	+	0.3875054717063904	0.734099805355072	0.13266533613204956
Inc-NDUFB4-2	3	120005001	120008319	+	0.0077234432101249695	0.06440415978431702	0.039842259138822556
Inc-RABL3-3	3	120371462	120401116	-	0.9296606183052063	0.15330228209495544	0.025006508454680443
Inc-HSPBAP1-1	3	122662278	122746613	-	29.285015106201172	3.844958782196045	1.7718616724014282
Inc-HACD2-7	3	123071297	123138056	-	0.7382005453109741	0.16744664311408997	0.1877816617488861
Inc-HACD2-2	3	123329581	123330850	-	0.808027982711792	0.2287924885749817	0.09470638632774353
Inc-HACD2-3	3	123335199	123342925	-	2.9412498474121094	0.9767059087753296	0.6174209713935852
Inc-HACD2-6	3	123411582	123412462	-	10.29423713684082	9.747289657592773	3.537339925765991
Inc-KALRN-1	3	124442635	124445172	+	5.488637447357178	0.45773956179618835	1.1219699382781982
Inc-MUC13-7	3	124509966	124511951	-	0.4057215750217438	0.41171443462371826	0.034586552530527115
Inc-MUC13-5	3	124580941	124582164	-	0.13742752373218536	0.22460468113422394	0.008786587044596672
Inc-MUC13-3	3	124693094	124694370	-	0.2997923493385315	0.46774786710739136	0.0647004246711731
Inc-MUC13-4	3	124695070	124695827	-	0.29851922392845154	0.24500462412834167	0.027986394241452217
Inc-SLC12A8-4	3	124965120	124970132	-	0.191974475979805	0.9314075708389282	0.0626746192574501
Inc-TPRA1-8	3	127338877	127347800	-	0.22519199550151825	0.16336078941822052	1.0471237897872925
Inc-TPRA1-3	3	127467623	127476731	-	0.4896685481071472	1.1768722534179688	0.03914808854460716
Inc-TPRA1-4	3	127489412	127495999	-	0.662772834009949	0.9865428805351257	0.013392897322773933
Inc-MGLL-5	3	127789162	127790503	-	0.7126716375350952	0.38201674818992615	5.064701080322266
GATA2-AS1	3	128206924	128260671	+	0.017656192183494568	0.18433421850204468	0.09558125585317612
Inc-RAB43-3	3	128690167	128697158	-	6.704466342926025	1.5448126792907715	0.7797335982322693
Inc-RAB43-1	3	128719320	128720388	-	1.605857253074646	0.15220296382904053	0.06597612053155899
Inc-GP9-4	3	128735053	128737275	+	1.7678008079528809	0.20922639966011047	0.045015864074230194
Inc-GP9-3	3	128738017	128739351	+	0.2686115503311157	0.10871028900146484	0.00562760466709733
Inc-GP9-2	3	128739482	128742657	+	0.29910704493522644	0.08040817826986313	0.006346421781927347
Inc-KIAA1257-4	3	128744196	128745537	-	0.01909133605659008	0.352795273065567	0.19816094636917114
Inc-HMCES-4	3	129053429	129053917	+	0.3764258921146393	0.09877228736877441	0.08808715641498566
Inc-HMCES-5	3	129064254	129065007	+	0.3370037376880646	0.052850380539894104	0.03964658081531525
Inc-IFT122-2	3	129100141	129112992	+	0.022510159760713577	0.004707201849669218	0.1884935349225998
LINC02021	3	129831339	129872436	+	1.002497911453247	0.8839768767356873	0.15246300399303436
Inc-COL6A5-6	3	129933073	129969881	+	0.11317134648561478	0.22067029774188995	0.0055052232928574085
Inc-PIK3R4-3	3	130567827	130612765	-	0.13790249824523926	0.2408968210220337	0.04273206740617752
Inc-MRPL3-1	3	131173970	131177442	-	3.0129387378692627	2.0998384952545166	1.0645469427108765
Inc-TMEM108-1	3	132757235	132838228	+	0.747951328754425	2.22713041305542	2.62510085105896
BFPSP2-AS1	3	133052221	133209990	-	0.002935143420472741	0.02647787518799305	0.02189166285097599
Inc-CEP63-4	3	133923876	134075740	+	0.016184767708182335	0.0	0.30659887194633484
Inc-AMOTL2-3	3	134070694	134075403	-	37.401451110839844	9.310905456542969	13.392251014709473
Inc-ANAPC13-2	3	134086496	134093404	-	50.15261459350586	15.145157814025879	18.738765716552734
Inc-KY-3	3	134318765	134320752	-	0.14779706299304962	2.4141573905944824	0.7192760705947876
Inc-KY-2	3	134979870	135158730	-	1.8011765480041504	0.23416833579540253	0.05602513998746872
IL20RB-AS1	3	136664424	136701038	-	0.012190098874270916	0.0	0.8109170794487
Inc-ARMC8-2	3	138067749	138069264	+	2.456589937210083	1.07687509059906	0.6162068247795105
Inc-FOXL2NB-10	3	138553908	138555667	+	0.07254602760076523	0.198015034198761	0.009243794716894627

Inc-FOXL2-5	3	138591971	138634872	-	0.13629451394081116	0.18863137066364288	0.04223835468292236
Inc-MRPS22-5	3	139213566	139214164	+	1.529235601425171	0.5944522619247437	0.3711550235748291
Inc-MRPS22-7	3	139258655	139264018	+	0.12133772671222687	0.16596108675003052	0.03764661028981209
Inc-CLSTN2-1	3	140290548	140296239	+	1.9596887826919556	3.3941683769226074	0.32357916235923767
Inc-SPSB4-1	3	140691586	140692097	+	0.36846089363098145	0.9070742130279541	0.08904853463172913
Inc-ZBTB38-3	3	140977260	140977621	+	0.27540889382362366	0.5255627036094666	0.0
Inc-TFDP2-10	3	141319118	141319421	-	1.7665871381759644	0.25108665227890015	0.06195308640599251
Inc-RNF7-2	3	141382041	141439916	+	0.010209178552031517	0.26719042658805847	0.05554281920194626
Inc-TFDP2-6	3	141655549	141657389	-	0.057810988277196884	0.09137783199548721	0.01566115766763687
Inc-ATP1B3-2	3	141666275	141669388	+	0.01827785186469555	0.0	0.3417532742023468
Inc-PLSCR4-1	3	145790344	145791444	-	9.048620223999023	24.864084243774414	25.389076232910156
Inc-ZIC1-1	3	147139114	147228122	+	2.3925888538360596	2.0014681816101074	0.20863135159015656
Inc-HLTF-5	3	148891271	148894501	-	1.8920223712921143	2.1315958499908447	0.522638201713562
Inc-HLTF-6	3	148902950	148905883	-	4.179041385650635	5.920713424682617	0.795262937774048
Inc-TM4SF1-3	3	149047715	149051115	-	4.5816330909729	0.13972225785255432	0.14494618773460388
Inc-P2RY1-3	3	152365935	152457738	+	0.00850242841988802	0.14420869946479797	0.06701391190290451
Inc-RAP2B-5	3	153101578	153108386	+	0.013749709352850914	0.04839253053069115	0.0015222859801724553
Inc-SLC33A1-1	3	155582652	155588114	-	0.3204968571662903	0.12263450771570206	0.07785186916589737
Inc-SSR3-5	3	156252855	156254690	-	1.9315276145935059	3.1173696517944336	0.6781769394874573
LINC02029	3	156799575	156806336	+	0.011087925173342228	0.13898903131484985	0.02786961942911148
Inc-LXN-1	3	158260873	158288858	-	0.005063395015895367	0.0044499170035123825	0.1547699123620987
Inc-RSRC1-1	3	158290246	158301620	+	0.06475625932216644	0.30174317955970764	0.0
Inc-NMD3-2	3	160980940	161015792	+	0.3517732620239258	0.2990337014198303	0.0854218602180481
Inc-ZBBX-1	3	167034793	167099134	-	0.9208912253379822	0.33044540882110596	0.19138449430465698
Inc-SERPINI1-11	3	167383478	167393922	+	0.00112626189365983	2.3268185032065958E-4	0.02278478629887104
Inc-WDR49-3	3	167412143	167412430	-	1.1047582626342773	2.154078960418701	0.23858870565891266
Inc-SERPINI1-23	3	167613736	167642407	+	0.6330177187919617	0.0038179131224751472	0.0
Inc-SERPINI1-15	3	168384347	168385211	+	0.3422314524650574	0.4190210998058319	0.10317222774028778
Inc-MYNN-11	3	168645263	168645707	+	1.0394281148910522	0.4239473044872284	0.19676581025123596
Inc-ACTRT3-7	3	168838676	168840460	-	1.2180421352386475	2.2813456058502197	4.3671345710754395
Inc-ACTRT3-6	3	168849202	168849668	-	0.24670261144638062	0.7247923612594604	1.318129062652588
Inc-SEC62-2	3	169755987	169795759	+	0.007999489083886147	0.04137411341071129	0.10416742414236069
Inc-GPR160-1	3	169805598	169807378	+	0.00684074591845274	0.022167302668094635	0.3932152986526489
Inc-SLC2A2-3	3	170670639	170671686	-	0.1194203644990921	0.0010913313599303365	0.009917770512402058
Inc-TNIK-7	3	171482919	171489175	-	0.4401882290840149	0.27170777320861816	0.0062478515319526196
Inc-TMEM212-5	3	171883636	171955497	+	0.329627126455307	0.9751651287078857	0.023229246959090233
Inc-NAALADL2-4	3	173946184	173947804	+	0.06085125356912613	0.27082061767578125	0.0021507099736481905
LINC01208	3	176185371	176634756	-	0.03393150493502617	0.06287460774183273	0.007320445496588945
Inc-TBL1XR1-11	3	176728507	176728855	-	0.5082845091819763	0.8270999789237976	0.05319950357079506
Inc-ZMAT3-3	3	177919838	178103205	-	0.024112524464726448	0.006877634674310684	0.0017790402052924037
Inc-KCNMB3-2	3	178954479	178955163	-	0.20045392215251923	0.20600585639476776	0.748671293258667
Inc-MFN1-1	3	179114749	179116979	+	0.23694837093353271	0.47820690274238586	1.3761529922485352
Inc-MRPL47-3	3	179289293	179294683	-	0.2738681733608246	0.38897231221199036	0.8199794292449951
Inc-MRPL47-2	3	179301050	179301550	-	0.5957905650138855	1.1112948656082153	1.8057178258895874
Inc-CCDC39-8	3	180326232	180327035	-	0.01789665035903454	0.0	0.35703662037849426
Inc-DNAJC19-6	3	180490538	180491702	-	0.23749513924121857	0.007933523505926132	0.013767462223768234
Inc-DNAJC19-2	3	181091678	181160296	-	0.0038203701842576265	1.7105696201324463	0.20952266454696655
Inc-DNAJC19-3	3	181251965	181418399	-	0.004538414999842644	0.1013081967830658	0.05400596186518669
Inc-DCUN1D1-9	3	182574372	182642990	-	0.012149658054113388	0.02880670875310898	0.11141686886548996
Inc-HTR3D-2	3	183735891	183736609	+	0.023360978811979294	0.36206379532814026	0.1384386122226715

Inc-EHHADH-2	3	185000754	185010864	-	0.013079199008643627	0.0	1.074681282043457
Inc-ETV5-1	3	185842934	185844199	-	0.0	0.44071903824806213	0.12875472009181976
Inc-ETV5-2	3	185975553	185979748	-	0.028275450691580772	1.409861445426941	0.4425451457500458
Inc-ETV5-3	3	185985397	185993442	-	0.0714520663022995	3.3110523223876953	1.0984976291656494
Inc-ETV5-4	3	185996923	185999048	-	0.202450230717659	1.6385222673416138	3.3492653369903564
Inc-ETV5-5	3	186024497	186038277	-	0.0826406478881836	2.462160110473633	0.9277449250221252
Inc-RTP4-6	3	187455924	187463250	+	0.01890012063086033	0.057764194905757904	0.14633074402809143
Inc-TPRG1-1	3	187896331	187898596	+	0.2803630828857422	0.9280185103416443	0.033785250037908554
Inc-CLDN16-4	3	190231885	190236819	+	2.381535053253174	5.657664775848389	8.18287181854248
Inc-CLDN16-7	3	190342384	190342958	+	0.10736868530511856	0.7870913147926331	0.21771793067455292
Inc-CLDN16-8	3	190359952	190360292	+	0.08567439764738083	1.0458693504333496	0.3678446114063263
Inc-PYDC2-7	3	191089936	191090896	+	1.586362361907959	3.6005399227142334	0.3485068678855896
Inc-MB21D2-1	3	192390755	192445376	-	0.0038529462181031704	1.4141000509262085	2.258490800857544
Inc-HRASLS-5	3	192953647	192961761	+	0.21994926035404205	1.6786878108978271	0.6536605954170227
Inc-ATP13A4-6	3	193030490	193041801	-	0.0	0.1584220826625824	0.03546721115708351
Inc-ATP13A5-2	3	193151649	193156884	-	0.14467620849609375	1.1456258296966553	0.697471559047699
LINC02036	3	193917551	193967942	-	0.3829151391983032	0.0740029439330101	0.032012443989515305
Inc-HES1-7	3	193923695	193924596	+	0.36820927262306213	0.17800408601760864	0.0026847580447793007
LINC00887	3	194005113	194040615	-	0.011373830959200859	0.027106940746307373	0.20329143106937408
LINC00884	3	194206705	194247373	+	0.052648235112428665	0.1302027851343155	0.18213807046413422
Inc-XXYLT1-5	3	195042533	195044507	-	0.40105757117271423	0.7473153471946716	0.0837421864271164
Inc-MUC20-71	3	195270298	195277400	+	0.30962827801704407	0.23094046115875244	0.05925578996539116
Inc-FBXO45-4	3	196181233	196197996	+	0.475540429353714	0.1978604644536972	1.4694424867630005
Inc-NCBP2-1	3	196573904	196594621	-	0.07023607194423676	0.13762784004211426	0.020447080954909325
Inc-NCBP2-AS2-5	3	196707037	196707692	+	0.05406087636947632	0.17520588636398315	0.18520383536815643
Inc-NCBP2-AS2-6	3	196708205	196709014	+	0.06958785653114319	0.26740896701812744	0.19224023818969727
Inc-PIGZ-2	3	196728613	196729319	-	1.4685947895050049	1.8176778554916382	4.94198751449585
Inc-RUBCN-10	3	197241134	197242732	-	1.0802924633026123	1.5849982500076294	5.54936408996582
Inc-RUBCN-8	3	197265538	197282848	-	1.332467794418335	2.145137071609497	6.165963649749756
Inc-RUBCN-6	3	197281242	197282547	-	0.12334225326776505	0.48829296231269836	0.477659672498703
Inc-BDH1-4	3	197307215	197307500	-	0.9161745309829712	0.2793581485748291	0.24080073833465576
Inc-FYTTD1-7	3	197339130	197340893	+	0.0	0.0016397705767303705	0.28165867924690247
Inc-IQCG-1	3	197603466	197609382	-	0.02211465872824192	0.07658828794956207	0.058314692229032516
Inc-LMLN-3	3	197946977	197947847	+	0.22965121269226074	0.011712605133652687	0.021360769867897034
Inc-ZNF732-4	4	248108	260058	-	0.2490263730287552	0.06350129842758179	0.0
Inc-ZNF732-10	4	299097	331423	-	0.18511533737182617	0.06612178683280945	0.03223109990358353
Inc-ZNF732-3	4	319734	331376	-	0.15687300264835358	0.06288853287696838	0.03353453800082207
Inc-PDE6B-1	4	570296	617100	+	0.7627454996109009	0.07057240605354309	0.10501895099878311
Inc-CPLX1-11	4	744922	746968	-	0.11068172752857208	0.7516028881072998	0.3643999993801117
Inc-CPLX1-4	4	753969	754335	-	0.20245537161827087	2.108959913253784	0.4869459569454193
Inc-RNF212-3	4	1018694	1020686	-	0.433531790971756	0.03614962846040726	3.2419772148132324
Inc-SPON2-1	4	1165171	1202750	-	0.6067403554916382	0.53117835521698	0.1369713544845581
Inc-NKX1-1-2	4	1384099	1385606	-	0.0024690425489097834	0.006473386660218239	0.20621426403522491
Inc-TMEM129-1	4	1740307	1742710	-	0.0951240137219429	0.38726332783699036	2.178295373916626
Inc-TMEM129-4	4	1745224	1765279	-	0.00576674472540617	0.05186781287193298	0.14300629496574402
Inc-MXD4-1	4	2272645	2273478	-	0.3582581579685211	1.2948259115219116	2.90822434425354
Inc-MXD4-2	4	2317926	2318233	-	0.0	0.5337181687355042	0.29786190390586853
Inc-MXD4-3	4	2344308	2345251	-	0.21184104681015015	0.9399611353874207	1.4504598379135132
Inc-FAM193A-5	4	2508070	2508276	+	1.1284128427505493	1.3301844596862793	0.32464906573295593
Inc-TNIP2-1	4	2837616	2839958	-	0.016153251752257347	0.03508806973695755	0.23063544929027557

Inc-MSANTD1-4	4	3314239	3314789	+	0.6749064922332764	0.5454491376876831	0.1876150369644165
LINC01587	4	5526296	5529528	+	0.0	0.6019077301025391	0.14602991938591003
Inc-WFS1-4	4	6255189	6288314	+	0.0931813195347786	0.12071174383163452	0.0114470357053336
Inc-PPP2R2C-2	4	6288322	6292558	-	0.01684332825243473	5.680560716427863E-4	0.08799789100885391
Inc-CCDC96-1	4	7032281	7047958	-	0.045073337852954865	0.003333732020109892	0.8073658347129822
Inc-ACOX3-1	4	8356817	8362270	-	1.6354902982711792	0.9271344542503357	0.5215293169021606
Inc-ACOX3-5	4	8365860	8367485	-	2.0003504753112793	1.4220365285873413	0.51800137758255
Inc-TRMT44-1	4	8483997	8517061	+	0.3408985137939453	0.2576274573802948	0.0927322655916214
Inc-DEFB131A-4	4	9534032	9603214	+	0.5485257506370544	0.0	0.0
Inc-WDR1-1	4	10069713	10074643	-	3.2141366004943848	1.0211374759674072	1.2709027528762817
Inc-DRD5-4	4	10171656	10419950	+	0.008314285427331924	0.018226981163024902	1.4750921400263906E-4
Inc-DRD5-23	4	11075206	11400577	+	0.18444497883319855	0.16183966398239136	0.5561261177062988
Inc-DRD5-29	4	11430729	11446567	+	0.03221222385764122	0.03183634579181671	0.19417233765125275
LINC01097	4	13527943	13535959	-	0.07626588642597198	0.017398856580257416	0.0
LINC01182	4	13655958	14094956	+	0.5083642601966858	0.17337025701999664	0.1389419138431549
Inc-FBXL5-7	4	15565321	15565876	-	0.49088504910469055	0.7355166673660278	0.17573334276676178
Inc-FGFBP2-1	4	15961871	15973568	-	32.849849700927734	4.138518333435059	3.7566275596618652
Inc-FGFBP2-2	4	15987134	15987660	-	32.761592864990234	6.179874897003174	2.732194662094116
Inc-TAPT1-2	4	16077598	16085281	-	9.612886428833008	1.2497721910476685	1.6669062376022339
Inc-QDPR-2	4	17632547	17634062	-	0.9822705388069153	3.3783223628997803	3.758582592010498
KCNIP4-IT1	4	21844963	21854811	-	0.5597730875015259	0.2633880376815796	0.004064132459461689
Inc-CCDC149-2	4	24564818	24565084	-	0.6303039789199829	1.7891908884048462	0.1566876918077469
LINC02473	4	24661479	24673191	+	0.002564028836786747	1.0425440073013306	0.3774849474430084
Inc-CCKAR-1	4	26861238	26862284	-	0.12862887978553772	0.6513255834579468	0.44889140129089355
Inc-CCKAR-7	4	26875183	26875971	-	1.1986923217773438	0.003346768207848072	0.0
Inc-CCKAR-11	4	26924195	26994351	-	0.0	0.06496626138687134	0.014546000398695469
Inc-CCKAR-16	4	28824866	28825833	-	0.14551565051078796	0.0122905932366848	0.0
Inc-DTHD1-1	4	36245738	36277083	+	0.012555429711937904	0.10912124067544937	0.10180407762527466
Inc-NWD2-1	4	37612257	37614793	+	0.013294463977217674	0.048240527510643005	0.2610344886779785
LINC01258	4	38422283	38524801	-	0.21086657047271729	0.02121107652783394	0.006862147245556116
Inc-TMEM156-1	4	39114297	39128438	-	0.006747667677005196	0.009978183545172215	0.644856870174408
Inc-TMEM156-2	4	39137133	39183826	-	0.004548285156488419	0.01400804053992033	0.04523264616727829
Inc-UGDH-1	4	39599081	39604927	-	0.14217998087406158	0.3673721253871918	0.03280429542064667
Inc-SMIM14-2	4	39955059	39959114	-	0.20288395881652832	0.7226709723472595	0.04971248283982277
Inc-N4BP2-1	4	40168127	40169451	+	2.616569995880127	0.9908970594406128	0.644573986530304
Inc-N4BP2-3	4	40198609	40244872	+	0.378475546836853	0.06961818784475327	0.0
Inc-APBB2-4	4	40434720	40468662	-	0.20377130806446075	2.6644227504730225	1.8214603662490845
Inc-APBB2-3	4	40544540	40631546	-	0.037724047899246216	0.22705385088920593	0.15928731858730316
Inc-PHOX2B-1	4	41688965	41711919	-	0.0	0.031277500092983246	0.01247264351695776
LINC02475	4	44018877	44024095	+	0.006463073194026947	0.399368017911911	0.19274483621120453
Inc-TEC-2	4	48333059	48344353	-	1.1307971477508545	0.4355737566947937	0.31539013981819153
Inc-OCIAD2-2	4	48887399	48908954	-	2.6895649433135986	12.062090873718262	23.498170852661133
Inc-OCIAD2-6	4	49221527	49221803	-	1.489061713218689	0.0	0.0
Inc-OCIAD2-8	4	49231590	49497113	-	2.3521647453308105	0.3462199568748474	0.31690341234207153
Inc-CWH43-6	4	49552049	49559417	+	0.33159497380256653	0.020503055304288864	0.009114513173699379
Inc-CWH43-7	4	49563496	49564166	+	0.2272445112466812	0.0	0.0
Inc-CWH43-8	4	49581850	49582206	+	4.879345893859863	0.8066250085830688	0.0748741626739502
Inc-CWH43-9	4	49590789	49591546	+	0.4287017285823822	0.016349846497178078	0.0
Inc-ERVMER34-1-3	4	53578483	53579126	-	0.10254727303981781	0.041875556111335754	0.4828125834465027
Inc-ERVMER34-1-1	4	53588785	53617807	-	0.49086931347846985	0.08352161943912506	0.09014826267957687

Inc-CHIC2-5	4	55164137	55168055	-	0.0	0.0010332833044230938	0.23799163103103638
LINC02283	4	55199037	55224233	+	0.18203230202198029	0.8717765212059021	9.231571197509766
Inc-KDR-3	4	55988831	55992629	-	2.978545665740967	0.07235638797283173	0.0202921275049448
Inc-SRD5A3-1	4	56244392	56254858	+	0.5484119057655334	0.13322530686855316	0.07437139004468918
Inc-NMU-1	4	56461484	56502865	-	19.411396026611328	3.6089842319488525	2.2703588008880615
Inc-EXOC1-3	4	56828901	56829220	+	1.7904056310653687	1.6021857261657715	0.4680805802345276
Inc-KIAA1211-1	4	57222301	57223098	+	6.182121276855469	0.25396719574928284	0.6239914894104004
Inc-POLR2B-1	4	57815289	57816376	+	0.13167443871498108	0.3257642090320587	0.013905075378715992
Inc-POLR2B-11	4	62077370	62077921	+	0.7395689487457275	4.249570369720459	0.10105220973491669
Inc-POLR2B-15	4	62682057	62710578	+	0.11570140719413757	0.9281100034713745	0.025781480595469475
Inc-TECRL-1	4	64328225	64359996	-	0.02719601429988747	0.02964545600116253	0.0
Inc-CENPC-1	4	68283023	68333969	-	0.18615016341209412	0.12684890627861023	0.05848515778799835
Inc-CENPC-2	4	68297040	68309355	-	0.5757150053977966	0.5456939339637756	0.20156610012054443
Inc-GRSF1-1	4	71655927	71659273	-	0.049627434462308884	0.005147236865013838	0.7117212414741516
Inc-RUFY3-1	4	71705935	71709162	+	0.47667956352233887	0.2589554786682129	0.06628663837909698
Inc-ALB-9	4	73672984	73673909	+	0.1157884767899323	0.002589267212897539	0.01167163997888565
Inc-ALB-6	4	74140715	74152137	+	0.18331654369831085	0.7873209714889526	0.03604762628674507
Inc-MTHFD2L-4	4	74904630	74920471	+	0.12577275931835175	0.02482364885509014	0.009862429462373257
Inc-THAP6-3	4	75973296	75975323	+	8.341147422790527	0.9793941378593445	0.7077929377555847
Inc-G3BP2-2	4	76521264	76522324	-	1.5161019563674927	0.23038524389266968	0.0
Inc-NAAA-1	4	76867721	76868819	-	0.268738329410553	0.37778037786483765	0.06972751766443253
Inc-CCDC158-4	4	77227063	77228241	-	0.5470874905586243	0.7151310443878174	1.9099432229995728
Inc-STBD1-5	4	77507293	77566798	+	1.50755774974823	0.2793715298175812	0.05826418474316597
Inc-CNOT6L-4	4	78782922	78783874	-	0.12062191218137741	0.32024380564689636	0.010974714532494545
LINC01094	4	79567001	79612146	+	0.25851935148239136	0.07831339538097382	0.0550464391708374
Inc-ANXA3-7	4	79786362	79823361	+	0.34990260004997253	0.4478442370891571	0.054843295365571976
Inc-COQ2-2	4	84213615	84216036	-	0.17063143849372864	3.70554780960083	1.4113057851791382
Inc-NKX6-1-5	4	85446628	85504668	-	0.013178995810449123	2.4370783648919314E-4	0.0
Inc-NKX6-1-8	4	85667156	85670292	-	0.14254441857337952	0.44560351967811584	0.01590944081544876
Inc-NKX6-1-10	4	85770826	85781716	-	12.464552879333496	13.17320728302002	4.177810192108154
Inc-SLC10A6-1	4	86933449	86935027	-	3.406428337097168	1.2870590686798096	0.5255827307701111
Inc-SLC10A6-7	4	86988977	87010702	-	22.625614166259766	9.366353034973145	4.392940998077393
Inc-SLC10A6-6	4	87016288	87023075	-	21.136539459228516	7.007994651794434	3.2749147415161133
Inc-SLC10A6-5	4	87024062	87038919	-	8.713679313659668	2.8883776664733887	1.948686122894287
Inc-SLC10A6-4	4	87085599	87515272	-	14.963982582092285	4.741786479949951	2.5937981605529785
Inc-ABCG2-3	4	88917428	88928611	-	0.3031913936138153	0.25320422649383545	0.09962278604507446
Inc-ABCG2-1	4	89187405	89188619	-	0.9592957496643066	0.6719150543212891	0.166828915476799
Inc-HERC5-1	4	89444961	89446142	+	0.29744651913642883	0.22529371082782745	0.061948902904987335
Inc-MMRN1-12	4	90332320	90647654	+	0.241885706782341	0.011872343719005585	0.01401735283434391
SNCA-AS1	4	90757552	90763142	+	0.06663212180137634	0.008417238481342793	0.008308060467243195
Inc-METAP1-3	4	100010011	100023944	+	0.8924649357795715	0.8555284142494202	0.2842167913913727
Inc-METAP1-11	4	100082941	100202398	+	0.4291262626647949	0.11442093551158905	0.07701200991868973
Inc-C4orf17-53	4	100212093	100222455	+	2.058901786804199	0.1290704309940338	0.1893734186887741
Inc-SC9B1-3	4	103747142	103747491	-	2.9661738872528076	4.702038764953613	0.5667057633399963
LINC02428	4	104177316	104375642	+	0.05951958894729614	0.002302381442859769	0.0
Inc-CISD2-9	4	104493246	104495239	+	0.20948098599910736	0.056578200310468674	0.0018967807991430163
TET2-AS1	4	106089354	106274105	-	0.049998484551906586	0.0569140687584877	0.011808752082288265
Inc-PPA2-5	4	106279607	106285763	-	0.1509651392698288	0.1681293249130249	0.04451696574687958
Inc-PPA2-7	4	106447753	106448554	-	1.3102471828460693	0.0	0.0
Inc-PAPSS1-2	4	108743851	108745959	-	0.1028931513428688	0.04208245873451233	0.0033061178401112556

Inc-OSTC-1	4	109590009	109592299	+	0.9283390641212463	0.6208718419075012	0.13325613737106323
Inc-OSTC-2	4	109592411	109602985	+	1.0609811544418335	0.437834233045578	0.30775997042655945
SEC24B-AS1	4	110266760	110354973	-	0.48994722962379456	0.28817737102508545	0.15586106479167938
Inc-SEC24B-2	4	110594999	110595280	+	2.338411331176758	0.2841654121875763	0.11625829339027405
Inc-ELOVL6-2	4	111173027	111173255	-	17.768749237060547	0.01851601153612137	0.01888883113861084
Inc-ELOVL6-5	4	111542315	111558167	-	0.2618982493877411	0.22141198813915253	4.884743690490723
Inc-ZGRF1-1	4	113567632	113571207	-	0.14975421130657196	0.0015394948422908783	1.0864357948303223
Inc-LARP7-2	4	113606211	113606659	+	1.30597722530365	0.0	0.0
Inc-ANK2-1	4	114793925	114799347	+	0.3416573405265808	0.0035958450753241777	0.00848665540764332
Inc-ARSI-1	4	115233102	115286113	-	1.631869912147522	0.06874466687440872	0.007176114711910486
Inc-NDST4-1	4	115634735	115636076	-	0.5668298602104187	0.01131257601082325	0.03631684556603432
Inc-USP53-1	4	120133742	120160496	+	0.889290988445282	0.7891055345535278	0.28650572896003723
Inc-USP53-4	4	120377505	120378432	+	0.41603726148605347	0.6867623329162598	0.1153269037604332
Inc-FABP2-2	4	120423545	120427090	-	3.5126149654388428	1.1957710981369019	0.34141337871551514
Inc-FABP2-3	4	120459936	120463157	-	1.222797155380249	0.3065599501132965	0.06720997393131256
Inc-FABP2-4	4	120549659	120549940	-	6.450096130371094	0.8281416296958923	0.28285694122314453
Inc-NDNF-2	4	121952576	121954272	-	0.9330533742904663	0.3071262836456299	0.0753418356180191
Inc-NDNF-1	4	121954487	121956383	-	2.9460904598236084	0.7700943946838379	0.20850305259227753
Inc-TMEM155-1	4	122680088	122686582	-	0.8233944177627563	0.008453549817204475	0.010272334329783916
Inc-SPATA5-6	4	123761498	123761845	+	0.567757248878479	1.4805607795715332	0.0517909899353981
Inc-SPATA5-5	4	123765151	123766807	+	0.2774229049682617	0.5947057008743286	0.06164458394050598
Inc-FAT4-6	4	125634212	125635798	+	0.10017601400613785	0.2990345060825348	0.023731285706162453
Inc-ANKRD50-5	4	127149785	127164167	-	0.9888039827346802	0.014645744115114212	0.0
Inc-MFSD8-1	4	128761353	128765195	-	0.059848345816135406	0.20519380271434784	0.018934257328510284
Inc-SCLT1-8	4	129530401	129556500	-	0.0030517952982336283	0.06593558192253113	0.06319427490234375
SLC7A11-AS1	4	138978618	139099331	+	0.007887838408350945	0.1330840289592743	0.11425552517175674
Inc-RAB33B-9	4	140652785	140654081	+	0.11104191839694977	0.015862492844462395	0.0034586512483656406
Inc-SETD7-6	4	140897780	140899933	-	0.049566496163606644	0.2109493613243103	0.0
Inc-CLGN-2	4	141023021	141026668	-	0.06814825534820557	0.5120195746421814	0.0
Inc-UCP1-1	4	141562345	141564234	-	0.30397313833236694	0.3298175036907196	0.008579600602388382
Inc-ELMOD2-4	4	141677369	141679907	+	0.5435211658477783	0.15533998608589172	0.16271062195301056
Inc-TBC1D9-4	4	141782330	141785342	-	11.149397850036621	5.52839469909668	2.951968193054199
Inc-SMARCA5-4	4	144480610	145109520	+	1.1458719968795776	0.062321729958057404	0.06846406310796738
SMAD1-AS1	4	146435730	146438346	-	0.01715736836194992	0.0	0.6623809933662415
Inc-TMEM184C-2	4	148407981	148413807	+	1.3965154886245728	0.3445144593715668	0.3957812786102295
Inc-PRMT9-1	4	148530703	148538396	-	0.21183934807777405	0.25050005316734314	0.028911720201206207
Inc-PRMT9-2	4	149115922	149289622	-	1.4751883745193481	0.20014800131320953	0.15459048748016357
Inc-ARHGAP10-5	4	149363864	149495900	+	0.0641879066824913	0.010079646483063698	0.0036135981790721416
Inc-SH3D19-2	4	152023903	152041963	-	6.427211284637451	4.138707637786865	34.2443962097168
Inc-LRBA-3	4	152096410	152096659	-	46.10922622680664	40.54594039916992	142.6774444580078
Inc-LRBA-7	4	152097709	152187398	-	9.106335639953613	11.021446228027344	30.92381477355957
FAM160A1-DT	4	152254927	152330179	-	0.03553665801882744	0.11665306985378265	0.362224280834198
Inc-FAM160A1-1	4	152586396	152591900	+	0.44196081161499023	0.8653473258018494	2.5007846355438232
Inc-FBXW7-5	4	153241696	153242196	-	0.26683756709098816	0.6065501570701599	0.03145895525813103
Inc-FBXW7-9	4	153549401	153562577	-	1.1356645822525024	2.2042040824890137	4.309332847595215
Inc-TIGD4-3	4	153717215	153717983	-	0.31030893325805664	0.0	0.0
Inc-TRIM2-1	4	154073494	154078324	+	1.3023607730865479	0.5472537279129028	0.2901947498321533
Inc-FGB-9	4	155058952	155063393	+	0.7162618637084961	0.6227423548698425	0.0
Inc-FGB-4	4	155122972	155190612	+	0.6689921021461487	0.7284832000732422	0.0
FAM198B-AS1	4	159093729	159122986	+	0.03372317552566528	0.08101151883602142	0.006001051515340805

Inc-PPID-1	4	159686817	159689976	-	0.05482454597949982	0.13468220829963684	0.008941409178078175
Inc-NPY5R-10	4	164088135	164091583	+	0.641190230846405	0.16996386647224426	0.1234036237001419
Inc-APELA-1	4	165816368	165820117	+	0.9273913502693176	0.07769861817359924	0.017108149826526642
Inc-TMEM192-4	4	165889739	165891154	-	1.100218653678894	0.2914961576461792	0.00801309384405613
Inc-MSMO1-1	4	166143201	166144207	+	0.255619615316391	0.34244343638420105	0.04696497321128845
Inc-CPE-1	4	166420526	166425300	+	0.2964087426662445	0.1757754385471344	0.033854831010103226
Inc-DDX60-2	4	169279212	169282590	-	0.7278362512588501	1.4652658700942993	2.575124740600586
Inc-ANXA10-4	4	169696570	169699622	+	0.13465958833694458	0.31524983048439026	0.03513667359948158
Inc-NEK1-3	4	170540751	170541523	-	0.026656072586774826	0.4089803695678711	0.16680409014225006
Inc-HAND2-2	4	174374164	174442111	-	0.0030953672248870134	0.07271165400743484	0.07327957451343536
Inc-SAP30-2	4	174428627	174434499	+	0.46613770723342896	0.04168843477964401	0.14570775628089905
HAND2-AS1	4	174451504	174512621	+	0.0019574291072785854	0.10241461545228958	0.19626843929290771
Inc-HAND2-5	4	174554879	174555522	-	6.3133463859558105	0.1471136212348938	1.6993420124053955
LINC02268	4	174986062	175141549	-	0.01943148300051689	0.11013521999120712	0.2699776589870453
Inc-HPGD-5	4	175169688	175174274	-	0.21805275976657867	0.29510238766670227	0.03474406898021698
Inc-WDR17-1	4	176711458	176754219	+	0.03506094589829445	1.8973309993743896	0.2844655215740204
Inc-DCTD-65	4	182795591	183066428	-	3.1495964527130127	1.1178743839263916	0.9044073820114136
Inc-WWC2-8	4	183125720	183132138	+	0.2337229698896408	0.8067762851715088	0.031056050211191177
Inc-DCTD-11	4	183802930	183803356	-	0.38415658473968506	0.19598530232906342	0.03740805760025978
WWC2-AS2	4	184013242	184020352	-	0.42077940702438354	0.039266642183065414	0.15402477979660034
Inc-DCTD-24	4	184013939	184020174	-	0.30432140827178955	0.0254337340593338	0.11064943671226501
Inc-TRAPPC11-2	4	184908831	184909903	+	1.7346265316009521	0.3467739522457123	0.5280450582504272
Inc-TRAPPC11-4	4	184940456	184944677	+	11.481135368347168	2.896493673324585	2.511009693145752
Inc-IRF2-8	4	185137715	185138855	-	0.055156026035547256	0.6688954830169678	0.212775400876999
LINC02427	4	185395886	185458712	-	0.1593581587076187	0.0877741351723671	0.03134885057806969
Inc-ACSL1-5	4	185632811	185643996	-	0.13552574813365936	0.4763088822364807	0.032330941408872604
Inc-PDLIM3-2	4	186508580	186510989	-	66.88966369628906	5.423867702484131	13.101734161376953
Inc-PDLIM3-3	4	186535780	186536376	-	36.11197280883789	4.149768352508545	7.327653408050537
Inc-PDLIM3-4	4	186545396	186548063	-	25.18996810913086	1.936397671699524	3.4523754119873047
Inc-PDLIM3-5	4	186567821	186578455	-	62.3681755065918	6.862685680389404	11.771944999694824
Inc-PDLIM3-6	4	186583360	186877522	-	7.024479866027832	0.8433263301849365	1.5664092302322388
Inc-MTNR1A-66	4	187543069	187544347	-	0.9583788514137268	1.147313117980957	0.15907543897628784
Inc-FAT1-7	4	187784182	187810298	-	0.4473453760147095	0.06459543108940125	0.0
Inc-F11-2	4	187810472	187987406	+	0.0625404566526413	0.004215538967400789	0.001243329606950283
Inc-FAT1-3	4	188225237	188426767	-	0.8175343871116638	0.04652579501271248	0.0
Inc-CCDC127-1	5	254489	271639	-	0.09905184805393219	0.06705129146575928	0.4485994577407837
Inc-TPPP-5	5	477487	483482	-	0.016135185956954956	0.014785941690206528	0.4758520722389221
Inc-EXOC3-12	5	649432	651694	+	0.030323833227157593	0.2294190376996994	0.12490849941968918
Inc-NKD2-2	5	1004860	1006738	+	0.09076222032308578	0.0675489753484726	0.009536389261484146
Inc-TERT-5	5	1074681	1076897	-	13.025964736938477	3.602731943130493	1.8643718957901
Inc-NDUFS6-15	5	1597165	1599943	+	0.009045722894370556	0.013538442552089691	0.13796454668045044
Inc-NDUFS6-19	5	1634153	1634943	+	0.09008058160543442	0.19720791280269623	0.5316061973571777
Inc-IRX4-5	5	2299956	2301118	-	2.4893810749053955	0.23006054759025574	0.0
Inc-IRX4-4	5	2303834	2312419	-	2.5920064449310303	0.24779830873012543	0.0
Inc-IRX2-10	5	3470267	3595824	-	0.4934086799621582	0.12948967516422272	0.03147812560200691
Inc-PAPD7-2	5	6766004	6788574	+	0.03978975489735603	0.24517948925495148	0.38857659697532654
Inc-MTRR-7	5	7851299	7862131	+	3.0563337802886963	0.443783164024353	0.27699097990989685
LINC02226	5	8191979	8510671	-	0.0466865673661232	0.924872100353241	0.6306309700012207
Inc-FASTKD3-6	5	8445062	8445648	-	0.026811392977833748	2.5065839290618896	0.4540574550628662
MIR4458HG	5	8450856	8487505	+	0.22204940021038055	1.6893967390060425	3.334153652191162

Inc-SEMA5A-11	5	8456059	8456671	-	0.031603991985321045	0.8725531101226807	0.2678880989551544
Inc-SEMA5A-10	5	8460226	8460932	-	0.0	0.2912183701992035	0.374411016702652
Inc-SEMA5A-2	5	8785154	8785580	-	0.02138563059270382	5.021247386932373	0.17703695595264435
Inc-SEMA5A-1	5	8835495	8840502	-	0.089007668197155	4.910491466522217	0.9037931561470032
LINC02199	5	8839844	8881637	+	0.0846566859074402	1.1367509365081787	1.2092187404632568
Inc-TAS2R1-13	5	9294797	9295210	-	0.4247937500476837	1.4401417970657349	0.0716562420129776
Inc-TAS2R1-9	5	9361865	9362388	-	0.27512452006340027	1.069130539894104	0.05198569968342781
LINC02112	5	9629558	9903985	-	0.021280499175190926	0.02439694292843342	0.005770693531225395
Inc-CMBL-5	5	10264709	10267780	-	0.1473437249660492	0.07396845519542694	1.4023462533950806
Inc-CMBL-8	5	10435418	10441963	-	0.04310448467731476	0.02282443828880787	0.3845275044441223
Inc-CTNND2-6	5	10707563	10708090	-	0.18942570686340332	1.917447566986084	0.026164857670664787
Inc-CTNND2-7	5	10710690	10711099	-	0.22835345566272736	1.3240751028060913	0.01760544255375862
Inc-CTNND2-2	5	10752439	10754446	-	0.3240237236022949	0.7671287059783936	0.07201918214559555
Inc-FAM105A-1	5	14610447	14615116	+	4.002267837524414	0.24871905148029327	0.9951274991035461
Inc-ANKH-1	5	14651740	14664713	-	3.740053653171041	1.0484273433685303	1.10843825340271
Inc-OTULIN-10	5	15675993	15677600	+	0.2768591642379761	0.5508108735084534	0.031089387834072113
Inc-ZNF622-2	5	16483106	16508795	-	0.9508994817733765	5.822936058044434	6.15178580524902
Inc-BASP1-6	5	16615996	16630078	+	0.014362705871462822	0.09386356920003891	0.09483014047145844
Inc-MYO10-4	5	16616188	16617147	-	1.445821762084961	4.4335198402404785	8.146650314331055
BASP1-AS1	5	17112888	17217561	-	0.28218165040016174	0.004969275556504726	0.011907059699296951
Inc-MYO10-6	5	17183137	17270156	-	0.02578769251704216	0.0027017334941774607	0.0
LINC02223	5	17684693	17955966	+	0.4532258212566376	0.00968477688729763	0.0
LINC02100	5	18514967	18746311	-	0.009318200871348381	0.24251630902290344	0.06774041801691055
Inc-CDH18-17	5	18566688	18674504	-	5.52225683350116E-4	0.013579774647951126	0.0014920142712071538
Inc-CDH18-7	5	19467102	19471509	-	0.07344480603933334	0.0018308645812794566	0.0
Inc-CDH12-8	5	19839081	20575972	-	0.8655528426170349	0.1950235366821289	0.0
Inc-PRDM9-14	5	21565130	21586320	+	2.581916093826294	0.7774085402488708	0.6289501786231995
Inc-PRDM9-11	5	21581201	21582529	+	0.08418416231870651	0.1774883270263672	0.0018221609061583877
PURPL	5	27472376	27496508	+	13.963438034057617	1.1496586799621582	2.21197509765625
Inc-CDH6-22	5	27497127	27497768	+	0.9763463139533997	0.1267516016960144	0.17983600497245789
Inc-DROSHA-9	5	30788835	30850162	-	0.4083830714225769	0.16718073189258575	3.5819168090820312
Inc-SUB1-1	5	32522864	32523971	+	0.3575071394443512	0.25701069831848145	0.062327321618795395
Inc-TARS-2	5	33478707	33481094	+	0.07590634375810623	0.1462433636188507	0.01946362480521202
Inc-SLC45A2-2	5	33523641	33525271	-	23.521282196044922	2.7603418827056885	8.940376281738281
Inc-SLC45A2-1	5	33997149	33997829	-	0.3574735224246979	0.31831759214401245	0.03448447585105896
Inc-RAD1-3	5	34647476	34656266	-	0.17324939370155334	0.061903003603219986	0.056554682552814484
Inc-RANBP3L-5	5	36581903	36606967	-	0.03677332401275635	0.38439929485321045	0.38597533106803894
Inc-SLC1A3-1	5	36907214	36912362	+	0.23292191326618195	1.2827863693237305	0.059616997838020325
Inc-Corf42-1	5	37071723	37072811	-	0.4059523642063141	0.49371665716171265	0.1217793681621552
LINC02119	5	38148582	38153817	+	0.002377802971750498	0.6132542490959167	5.274809837341309
Inc-OSMR-1	5	38783604	38793270	+	0.03790835663676262	0.02938425913453102	0.307186484336853
Inc-SELENOP-4	5	42908310	42908769	-	0.20974987745285034	0.007183726876974106	0.009403352625668049
Inc-SELENOP-6	5	42949534	42950728	-	0.003912333864718676	0.0934692993760109	0.050688937306404114
Inc-ZNF131-11	5	43007960	43014593	+	0.01899934746325016	0.0705701932311058	0.1596936732530594
Inc-ZNF131-7	5	43020319	43034737	+	0.20580114424228668	0.6497325897216797	1.4173659086227417
Inc-HMGCS1-3	5	43174379	43191910	-	0.03083459474146366	0.07359522581100464	1.0296151638031006
Inc-NIM1K-3	5	43192173	43245464	+	0.5963116884231567	4.693767070770264	7.660858154296875
Inc-HMGCS1-1	5	43287801	43289456	-	4.908064365386963	3.5185015201568604	1.6299468278884888
Inc-CCL28-2	5	43293836	43295959	-	261.4762878417969	81.09815979003906	79.24455261230469
Inc-NNT-5	5	43571510	43577741	+	0.003443427151069045	0.004022547509521246	0.21904247999191284

Inc-MOCS2-9	5	49692315	49692643	-	16.538530349731445	1.497593879699707	0.0
Inc-EMB-6	5	49699090	49739082	-	14.676172256469727	2.634453296661377	0.019427472725510597
Inc-PARP8-6	5	49719495	49779441	+	0.22560490667819977	0.0	0.020251605659723282
Inc-ITGA2-4	5	52251187	52255037	+	1.6916894912719727	0.35763847827911377	0.28379902243614197
Inc-ITGA1-1	5	52286944	52290794	+	0.10792163759469986	0.3568187654018402	0.015574590303003788
LINC01033	5	53606543	53720247	+	0.02376035414636135	0.1551683396100998	0.08605962991714478
Inc-ESM1-3	5	53985117	54034945	-	0.047382354736328125	0.06728220731019974	0.009021756239235401
Inc-CCNO-1	5	54516935	54523090	-	0.19102810323238373	0.2858233153820038	1.6047303676605225
LINC01948	5	55744362	55777773	-	0.10476216673851013	0.4299354553222656	0.45282483100891113
Inc-C5orf67-2	5	55807130	55828960	-	0.020304907113313675	0.5393508076667786	0.9911500215530396
Inc-ANKRD55-8	5	55832410	55841007	-	0.006195384543389082	0.2545938789844513	0.3768764138221741
Inc-NDUFAF2-6	5	60642953	60643543	+	0.9357038736343384	3.322049379348755	0.17773890495300293
Inc-ZSWIM6-6	5	60933535	61086886	+	0.21702972054481506	0.11358485370874405	0.03154600039124489
Inc-SLC30A5-5	5	67519517	67537478	+	0.5516107082366943	0.7670521140098572	0.061350107192993164
Inc-CCDC125-22	5	67595896	67597636	-	0.03337223455309868	0.009202134795486927	0.5387806296348572
LINC02198	5	68263568	68339851	-	0.027373269200325012	0.14066733419895172	0.3982776701450348
Inc-CCDC125-2	5	68408939	68455323	-	0.10672026127576828	0.4987877309322357	0.6682797074317932
Inc-AK6-3	5	68577172	68619674	-	0.5654651522636414	2.253350257873535	2.554083824157715
Inc-RAD17-3	5	68629756	68630076	+	3.547553062438965	0.18016177415847778	0.923184335231781
Inc-GTF2H2C-3	5	68929917	68932312	+	0.384841650724411	0.04987834393978119	0.032649166882038116
Inc-PTCD2-8	5	71448584	71451067	+	0.5278916358947754	2.027562141418457	0.03772977739572525
Inc-PTCD2-3	5	71663446	71664222	+	1.3682178258895874	1.9949861764907837	1.3804247379302979
Inc-ZNF366-1	5	71735726	71738214	-	0.04800451919436455	0.0656115859746933	0.0
Inc-FCHO2-3	5	72165555	72168159	+	1.2740519046783447	3.0221197605133057	0.29875776171684265
Inc-FOXO1-3	5	72491117	72570767	-	0.05888919532299042	1.2956465482711792	1.7426607608795166
Inc-TMEM174-1	5	72509763	72590761	+	0.0	0.051682304590940475	1.1087827682495117
Inc-BTF3-4	5	72678211	72706336	+	0.744907796382904	0.0023289229720830917	0.0
Inc-FOXO1-9	5	72740654	72742815	-	1.6643565893173218	3.6056883335113525	10.733339309692383
Inc-ANKRA2-8	5	72743514	72743830	-	8.18210220336914	20.79539680480957	43.843505859375
LINC01385	5	72747323	72749220	+	0.012518111616373062	0.049953412264585495	0.2892496585845947
Inc-NSA2-6	5	74161707	74163679	+	0.4336800572563477	0.05983949080109596	0.13395385444164276
LINC01336	5	74213551	74350277	-	1.8830645084381104	0.4989411532878876	0.5127824544906616
Inc-GCNT4-2	5	74337140	74341142	-	0.5802844762802124	0.23608914017677307	0.054118771106004715
Inc-SV2C-2	5	75672500	75672974	+	4.022397041320801	4.260786533355713	0.6699444055557251
Inc-F2RL2-2	5	75987264	76012040	-	0.2231748402118683	0.02290918678045273	0.053130462765693665
Inc-HOMER1-3	5	78657784	78659412	-	0.10892177373170853	0.7155608534812927	0.41519618034362793
Inc-CMYA5-4	5	79287147	79304207	+	1.006581425666809	1.2348742485046387	0.36086225509643555
Inc-SERINC5-1	5	79348197	79379488	-	0.025194579735398293	0.0897756649255753	0.08146994560956955
Inc-ANKRD34B-6	5	79703373	79703693	-	0.04668915644288063	0.9437422752380371	0.31021663546562195
Inc-ACOT12-6	5	80569140	80633134	-	0.09189777076244354	0.48665082454681396	0.025010572746396065
Inc-ACOT12-9	5	80813191	80815724	-	0.08925385773181915	0.4136510193347931	0.024999186396598816
Inc-EDIL3-6	5	82937051	82937306	-	2.251983880996704	8.434107780456543	7.1817827224731445
Inc-EDIL3-5	5	83016572	83017020	-	1.0852397680282593	5.079244136810303	3.6711244583129883
Inc-HAPLN1-3	5	83402478	83477060	-	22.840635299682617	14.695562362670898	7.933172225952148
Inc-VCAN-1	5	83678216	83846241	+	0.7384076714515686	0.14612095057964325	0.10810086876153946
Inc-RASA1-2	5	86263138	86543838	+	0.0	0.7028033137321472	1.0965272188186646
Inc-CCNH-1	5	86361561	86370138	-	0.004483367316424847	0.6964020133018494	0.4802113175392151
Inc-RASA1-9	5	86451721	86579589	+	0.09101053327322006	0.630691409111023	0.014843733981251717
LINC02488	5	86957859	86974964	+	0.003345002420246601	0.8837412595748901	0.8951379060745239
Inc-TMEM161B-13	5	87234603	87439381	-	0.021553855389356613	0.35255321860313416	0.1503017395734787

Inc-RASA1-28	5	87437639	87438254	+	0.05971897765994072	1.131649136543274	0.1167764812707901
Inc-TMEM161B-4	5	87566341	87583994	-	0.0029683969914913177	0.001778034376911819	0.07469291239976883
LINC02060	5	87704799	87734907	-	0.015596332959830761	0.06440936774015427	0.042955655604600906
Inc-RASA1-21	5	87960264	87962665	+	0.017209623008966446	0.029357600957155228	2.589689254760742
Inc-RASA1-6	5	87970840	88063654	+	0.11318638175725937	0.3017313778400421	0.3822135031223297
Inc-RASA1-29	5	87974457	87979756	+	0.06827589869499207	0.7103556990623474	0.2912868559360504
Inc-RASA1-22	5	87980870	87982939	+	0.1460598111152649	1.629301905632019	0.5831041932106018
Inc-RASA1-23	5	87985149	87987344	+	0.13812413811683655	0.7460736632347107	0.5892605185508728
Inc-RASA1-5	5	87987574	87988676	+	0.02103133499622345	0.3424297571182251	0.10813544690608978
Inc-MEF2C-1	5	87987625	87989867	-	0.38942962884902954	0.47129276394844055	0.6456952095031738
Inc-ADGRV1-8	5	90664553	90666789	+	0.02825777232646942	0.017941005527973175	0.7486079335212708
Inc-FAM172A-7	5	91737154	92023961	-	0.5418534278869629	0.11465752869844437	0.18103370070457458
Inc-SPATA9-2	5	94946081	94955781	-	0.09302990138530731	0.03269396722316742	0.01886816695332527
Inc-ELL2-4	5	95190871	95252451	-	0.1893412127294342	0.4577775597523267	0.0
Inc-GLRX-5	5	95242228	95297491	-	12.082106590270996	5.274572849273682	4.143624782562256
MIR583HG	5	95297705	95979959	+	0.028310811147093773	0.023103324696421623	0.002935689175501466
Inc-PCSK1-2	5	95726040	95768952	-	2.8317482471466064	0.8146374225616455	0.1287083476781845
Inc-CAST-4	5	96113354	96115686	+	0.9519683122634888	0.9891269207000732	0.35785728693008423
Inc-LIX1-1	5	96364997	96367586	-	0.005992281716316938	0.005043966695666313	0.20143239200115204
Inc-LNPEP-6	5	96518501	96775325	+	0.17625589668750763	0.22730693221092224	0.036424990743398666
Inc-LNPEP-8	5	96840399	97258399	+	0.7096351385116577	0.15354585647583008	0.09318402409553528
Inc-CHD1-221	5	98128565	98131470	-	0.14161095023155212	0.06651901453733444	0.9068042635917664
Inc-RGMB-4	5	98169086	98169415	+	1.2208210229873657	0.006059016566723585	0.007338338997215033
Inc-RGMB-6	5	98290098	98290676	+	0.29550087451934814	0.5258759260177612	0.06562568992376328
Inc-ST8SIA4-10	5	99384692	99386354	-	0.18453316390514374	0.0	0.005830766633152962
Inc-SLCO4C1-5	5	100206203	100207715	-	0.6921828389167786	0.10161837935447693	0.058864906430244446
Inc-SLCO4C1-4	5	100222056	100226586	-	14.727595329284668	2.0356216430664062	2.02982234954834
Inc-FAM174A-6	5	100239114	100343278	+	0.013778657652437687	0.005422483664005995	0.00208854372613132
Inc-FBXL17-3	5	106716685	106724254	-	27.60591697692871	3.732640504837036	5.7941765785217285
Inc-FER-7	5	107929310	107929668	+	17.60845947265625	0.48817697167396545	0.08243761211633682
Inc-FER-1	5	108061406	108063994	+	0.03501284494996071	0.0283668152987957	0.13018476963043213
Inc-MAN2A1-7	5	108093530	108095437	+	0.20148606598377228	0.3804704546928406	0.039146602153778076
Inc-MAN2A1-9	5	108803054	108803653	+	0.03963860869407654	0.3182435929775238	0.18409042060375214
Inc-MAN2A1-11	5	108804805	108812483	+	0.1268734186887741	1.1115334033966064	1.0385571718215942
Inc-MAN2A1-2	5	108806544	108807287	+	0.02443203143775463	0.3804037868976593	0.18491272628307343
Inc-PJA2-4	5	109035201	109035535	-	1.1620478630065918	3.332157611846924	0.09631149470806122
Inc-TMEM232-4	5	109624934	110074753	-	0.6451526284217834	0.29511159658432007	0.1863083392381668
STARD4-AS1	5	111039572	111067878	+	1.3783183097839355	0.08087363094091415	0.39205482602119446
Inc-STARD4-4	5	111066339	111093330	-	120.6979751586914	28.419748306274414	20.809926986694336
Inc-NREP-2	5	111500698	111519084	-	13.315595626831055	2.3938796520233154	4.1752705574035645
Inc-NREP-3	5	111531358	111541759	-	12.397863388061523	2.410034418106079	3.3391973972320557
Inc-NREP-4	5	111570331	111584887	-	14.923651695251465	2.8887898921966553	3.4047679901123047
Inc-NREP-5	5	111610936	111643099	-	7.845375061035156	1.692203402519226	2.0089502334594727
LINC02200	5	111964133	111967797	+	0.2536148726940155	0.02422962337732315	0.012941592372953892
Inc-AP3S1-15	5	114598614	114599161	+	1.3328512907028198	0.6110120415687561	0.4453226923942566
Inc-AP3S1-4	5	114937754	114956116	+	0.04759660363197327	0.13211439549922943	0.31066182255744934
Inc-ATG12-1	5	115148879	115150178	-	16.3763484954834	3.449679374694824	3.9310450553894043
Inc-AP3S1-124	5	115150892	115152356	+	0.1224176436662674	0.0055181002244353294	0.010470383800566196
Inc-AP3S1-1	5	115166259	115167054	+	0.06194804981350899	0.007433861959725618	0.7938405275344849
Inc-ATG12-8	5	115887966	115890185	-	0.39728844165802	1.0698751211166382	0.28965795040130615

Inc-DMXL1-7	5	118309491	118309817	+	67.36357879638672	3.409830093383789	11.38787841796875
Inc-DTWD2-14	5	118586475	118604297	-	0.08449368178844452	0.11685298383235931	0.022131778299808502
Inc-DMXL1-8	5	118677271	118680524	+	0.04950205609202385	0.13460895419120789	0.0032141683623194695
Inc-CEP120-7	5	122801815	122847678	-	0.7781533598899841	0.2851625382900238	0.24110107123851776
Inc-CEP120-4	5	122844192	122847678	-	1.1838070154190063	0.4473005533218384	0.3171369135379791
Inc-CEP120-2	5	124070311	124070868	-	0.41730552911758423	1.7750502824783325	0.06672050803899765
LINC02240	5	124144674	124937937	+	0.027418062090873718	0.023095248267054558	8.69459705427289E-4
Inc-ZNF608-20	5	124736142	124748974	-	0.04748240485787392	0.051116280257701874	0.009063375182449818
Inc-MARCH3-3	5	126381051	126409172	-	0.16174842417240143	0.4823495149612427	1.1783087253570557
Inc-CCDC192-3	5	127292491	127397273	+	0.002027507871389389	0.0054296934977173805	0.12131180614233017
Inc-C5orf63-6	5	127781769	127873916	-	41.94449996948242	3.71197509765625	9.864968299865723
Inc-CDC42SE2-6	5	130971091	130971446	+	0.27468234300613403	0.6186277866363525	0.03793051466345787
Inc-IL3-2	5	131339285	131342715	+	0.10156525671482086	0.35520270466804504	0.31293803453445435
MIR3936HG	5	131670527	131712627	-	1.9802563190460205	0.6283674836158752	0.48228028416633606
Inc-RAD50-4	5	131826707	131828507	+	0.08109680563211441	0.1164325401186943	0.0019357585115358233
TH2LCRR	5	131966281	131999964	-	0.006064787972718477	0.011285289190709591	0.26025763154029846
Inc-KIF3A-66	5	132014777	132018321	-	0.12265657633543015	0.026307107880711555	0.014425667002797127
Inc-SAR1B-1	5	134061117	134063509	-	0.002594597404822707	0.0	0.4735410511493683
Inc-C5orf24-2	5	134148488	134148868	+	0.2454901486635208	0.37995243072509766	0.0
Inc-PITX1-5	5	134258993	134259739	-	0.20143836736679077	0.015330487862229347	0.027387017384171486
Inc-PITX1-4	5	134262345	134264016	-	218.50173950195312	4.827132225036621	10.438532829284668
Inc-H2AFY-5	5	134364977	134367700	-	0.15020973980426788	4.455330848693848	16.156723022460938
Inc-CATSPER3-2	5	134369072	134693909	+	0.018176216632127762	0.24036799371242523	0.457235634269348
Inc-CATSPER3-4	5	134370211	134371584	+	0.009454714134335518	0.2618584632873535	0.06608493626117706
Inc-DCANP1-3	5	134712989	134713303	-	0.5949708819389343	1.4007400274276733	0.05627741292119026
Inc-TGFB1-1	5	135522563	135524381	+	0.4860614538192749	0.9608752131462097	0.08890639990568161
Inc-KDM3B-1	5	137667682	137672835	+	0.7083185911178589	0.5325881242752075	0.19196832180023193
Inc-CDC25C-1	5	137682716	137685330	-	0.033194396644830704	0.0	0.44559118151664734
SNHG4	5	138609441	138619166	+	4.6233229637146	12.448954582214355	16.217086791992188
Inc-PAIP2-5	5	138640944	138641274	+	0.45251110196113586	2.7749404907226562	0.0734730213880539
Inc-SLC23A1-1	5	138700366	138705406	-	0.07033460587263107	0.001722657703794539	1.0382781028747559
Inc-UBE2D2-2	5	139012920	139014711	+	0.368677020072937	0.6416645646095276	0.0719897598028183
Inc-PFDN1-5	5	139248984	139251388	-	0.5410280823707581	1.2334558963775635	2.129526138305664
Inc-PFDN1-2	5	139713109	139714715	-	24.995624542236328	12.523606300354004	8.796791076660156
Inc-PFDN1-3	5	139715476	139722647	-	23.252714157104492	7.697602272033691	7.24222993850708
Inc-HARS-1	5	140085012	140091097	-	0.060375310480594635	0.03065095655620098	0.7422767877578735
Inc-HARS-3	5	140165144	140175769	-	1.0876551866531372	0.14108075201511383	0.09840217232704163
Inc-HARS-6	5	140168042	140249953	-	0.9033424854278564	0.17418749630451202	0.17910003662109375
Inc-HARS-7	5	140254931	140255507	-	0.3826318085193634	0.023942051455378532	0.034661054611206055
Inc-TAF7-6	5	140425676	140476962	-	0.05371268093585968	0.02229403704404831	0.29812464118003845
Inc-PCDHB2-1	5	140464292	140466988	+	0.059493497014045715	0.2904151380062103	1.108971118927002
Inc-TAF7-1	5	140516265	140624948	-	0.02060260996222496	0.04215383902192116	0.14238525927066803
Inc-TAF7-18	5	140562976	140580969	-	0.0	0.004158046096563339	0.48425328731536865
Inc-TAF7-3	5	140602915	140605611	-	0.00907920952886343	0.016282131895422935	0.22079555690288544
Inc-DIAPH1-2	5	140797766	140892510	-	0.24743489921092987	0.2161325067281723	8.986992835998535
Inc-PCDHGC4-1	5	140858883	140859190	+	0.5265195965766907	2.990895986557007	4.78220796585083
Inc-GNPDA1-2	5	141330386	141349304	-	0.19535990059375763	1.5039280652999878	1.3644633293151855
Inc-NDPIP1-2	5	141615466	141616011	+	0.4920552372932434	0.050040245056152344	0.0
Inc-KCTD16-1	5	143861871	143865249	+	0.23834730684757233	0.0838305875658989	1.1510308980941772
STK32A-AS1	5	146546786	146614441	-	0.027386970818042755	0.5395019054412842	0.24910736083984375

Inc-SPINK5-1	5	147328351	147391287	+	0.39811453223228455	0.020514974370598793	0.0
Inc-SPINK9-1	5	147809722	147810370	+	0.5720817446708679	0.38277244567871094	0.14003582298755646
CARMN	5	148786252	148812512	+	3.9465818405151367	0.2607300579547882	0.07513903826475143
Inc-IL17B-6	5	148924946	148925373	-	1.8039875030517578	2.9495432376861572	0.5172044038772583
Inc-SLC26A2-1	5	149232600	149234584	+	0.5172449350357056	3.719914197921753	3.006356716156006
Inc-TIGD6-1	5	149362622	149365756	-	0.03124040551483631	0.0276645440608263	0.2634119391441345
Inc-CSF1R-1	5	149493405	149494521	-	31.72820427217285	5.584855079650879	6.791043758392334
Inc-CSF1R-2	5	149503733	149505083	-	8.175338745117188	3.9433958530426025	2.982062816619873
Inc-CSF1R-3	5	149513258	149513673	-	16.39395523071289	7.948766231536865	5.133596897125244
Inc-PDGFRB-1	5	149516571	149535435	-	19.666168212890625	4.905084609985352	2.5776572227478027
Inc-NDST1-1	5	149828968	149829258	+	0.035173095762729645	0.008754684589803219	1.161607265472412
LINC01933	5	151329132	151650010	+	0.05730147659778595	0.00659254752099514	0.01563798263669014
Inc-HAND1-3	5	153798764	153799256	-	0.5730389952659607	0.755484402179718	4.676061630249023
Inc-SGCD-4	5	154870673	154873158	+	0.07818623632192612	3.234671021346003E-4	0.0
Inc-FNDC9-2	5	156686454	156693711	-	0.3079195022583008	0.12159896641969681	0.07975810766220093
Inc-ITK-2	5	156696385	156698586	+	0.5377036929130554	0.5588563084602356	0.05197179317474365
Inc-SOX30-4	5	156997454	157002765	-	3.8951973915100098	5.728964805603027	18.611528396606445
Inc-EBF1-3	5	158122910	158124276	-	8.888535499572754	1.3728817701339722	1.3990007638931274
Inc-RNF145-5	5	158125649	158135017	-	7.693788051605225	1.22880220413208	1.2430521249771118
LINC02202	5	158526989	158544496	+	0.9317951798439026	0.14548440277576447	0.09216869622468948
Inc-NUDCD2-2	5	161851048	162864332	-	0.030972030013799667	0.04742257669568062	0.00798810925334692
Inc-PANK3-5	5	167364722	167380474	-	0.26756587624549866	0.014241624623537064	0.009851980023086071
Inc-WWC1-4	5	167555861	167557427	+	0.3191167116165161	0.3843030631542206	0.03934847190976143
Inc-PANK3-24	5	167712403	167718412	-	0.06898591667413712	0.010337162762880325	0.001966040814295411
Inc-PANK3-14	5	168110971	168123316	-	5.725492477416992	0.06586660444736481	1.0381501913070679
Inc-KCNMB1-5	5	169674576	169678696	-	0.020643092691898346	0.09198624640703201	0.28290629386901855
Inc-GABRP-2	5	170323933	170331465	+	0.21451039612293243	0.17235615849494934	0.013033811934292316
Inc-TLX3-8	5	170507601	170508562	+	0.25002145767211914	0.25145772099494934	0.015175532549619675
Inc-TLX3-2	5	170678870	170679986	+	0.1267906278371811	0.22133594751358032	0.0
Inc-STK10-1	5	171681422	171682443	-	0.37876826524734497	1.1378244161605835	0.09545833617448807
Inc-DUSP1-2	5	172111835	172124723	-	0.00862851645797491	0.010517132468521595	0.0742325559258461
Inc-ERGIC1-2	5	172189983	172209337	+	0.10182148963212967	0.01847081631422043	0.01306544616818428
Inc-ATP6V0E1-2	5	172484347	172487458	+	1.2497905492782593	1.4818936586380005	0.3466604948043823
LINC01411	5	173763298	173959460	+	0.009597321040928364	0.43244579434394836	0.13542425632476807
Inc-MSX2-8	5	173988779	173989066	+	7.410264492034912	1.770622730255127	1.925873041152954
Inc-ARL10-2	5	175735016	175736018	+	1.8420588970184326	1.1465107202529907	0.5825419425964355
Inc-FAM193B-2	5	177022262	177023910	-	0.40313494205474854	0.02371605671942234	2.309971809387207
Inc-FAM153A-3	5	177039806	177099278	-	4.001304626464844	2.4632949829101562	1.0949034690856934
Inc-CLK4-3	5	177950506	177989727	-	0.6862035989761353	0.4886891841888428	0.012796622700989246
Inc-HNRNPH1-5	5	178953962	178958270	-	0.34086620807647705	0.04548787325620651	0.018574142828583717
Inc-HNRNPH1-6	5	178966083	178977523	-	0.34544306993484497	0.44849082827568054	0.07791298627853394
Inc-CANX-5	5	178999157	178999742	+	0.5042738318443298	1.0097200870513916	0.10302601009607315
Inc-CANX-1	5	179084763	179103282	+	0.3559643030166626	0.26165536046028137	0.1285056471824646
Inc-CBY3-3	5	179155088	179159574	-	0.3247838318347931	0.09489565342664719	4.38046932220459
Inc-TBC1D9B-2	5	179341389	179345714	-	4.727574384449707	1.33659029006958	1.1400630474090576
Inc-TBC1D9B-1	5	179345911	179347229	-	4.877477169036865	1.4302383661270142	1.3538269996643066
Inc-TBC1D9B-3	5	179366457	179367132	-	0.1318042129278183	0.16241855919361115	0.005157249979674816
Inc-SCGB3A1-1	5	180030089	180038716	-	4.669863224029541	0.6514074802398682	0.005146029405295849
Inc-SCGB3A1-2	5	180039403	180040393	-	2.815112590789795	0.41275855898857117	0.0
LINC00847	5	180256956	180267133	+	0.4733206629753113	1.4139717817306519	1.868385672569275

Inc-RACK1-3	5	180630118	180630820	-	1.0933138132095337	2.2761430740356445	5.124382972717285
Inc-RACK1-1	5	180649869	180657685	-	0.19330930709838867	0.09682025015354156	0.7192560434341431
Inc-OR4F3-5	5	180708367	180755196	+	2.046731472015381	0.5517669916152954	0.17277149856090546
Inc-EXOC2-15	6	350248	354323	-	0.00604546582326293	0.0	0.15348657965660095
LINC01622	6	958563	1132009	-	6.508148508146405E-4	0.04638618975877762	0.006190576124936342
Inc-WRNIP1-34	6	2370339	2376003	+	0.08795087039470673	0.27379661798477173	0.02181962877511978
Inc-SERPINB1-1	6	2771262	2822143	-	0.0025305335875600576	0.0014070942997932434	0.033820416778326035
Inc-SERPINB9-3	6	2877747	2894368	-	0.5653310418128967	0.19756613671779633	0.06002356484532356
LINC02525	6	3179838	3196007	-	4.449792861938477	2.3303914070129395	0.7771779298782349
Inc-SLC22A23-1	6	3261780	3266383	-	0.005363932345062494	0.030517157167196274	0.0919419601559639
Inc-TUBB2B-3	6	3308907	3313510	-	1.0855145454406738	3.1385457515716553	0.23880892992019653
Inc-TUBB2B-4	6	3318979	3319627	-	1.0494892597198486	2.970735549926758	0.1945374757051468
Inc-TUBB2B-7	6	3381593	3383155	-	0.10579095780849457	0.6946057677268982	0.008140601217746735
Inc-TUBB2B-13	6	3409765	3413119	-	0.3149922788143158	0.835322916507721	0.09887846559286118
Inc-SLC22A23-2	6	3445788	3466840	-	0.07631439715623856	0.004694176837801933	0.36151185631752014
Inc-PXDC1-15	6	3884439	3913082	-	0.36647337675094604	1.686279535293579	1.7425910234451294
Inc-ECI2-2	6	4341685	4347396	-	0.06237301975488663	0.019853543490171432	8.034803322516382E-4
Inc-RIOK1-2	6	7183316	7185520	+	0.3268703520298004	0.9066622853279114	0.048029035329818726
Inc-TFAP2A-3	6	10404854	10419892	-	0.2624475061893463	7.483480930328369	3.0013675689697266
Inc-ERVFRD-1-1	6	11208751	11209248	-	0.7110079526901245	0.6076142191886902	0.06917156279087067
Inc-TMEM170B-5	6	11587120	11623995	+	0.11571626365184784	0.03254745155572891	0.0029673753306269646
Inc-TMEM170B-4	6	11607785	11608214	+	0.2773188054561615	0.009543167427182198	0.01553083211183548
Inc-GFOD1-2	6	13290250	13290722	-	1.9795396327972412	1.0595061779022217	0.3794824481010437
Inc-DTNBP1-16	6	14406874	15090618	-	0.0016483137151226401	0.014611303806304932	0.00626746192574501
Inc-CD83-4	6	14513058	14514697	+	0.03061007149517536	0.13186201453208923	0.11809927225112915
E2F3-IT1	6	20429320	20441479	+	0.39191216230392456	1.8931264877319336	0.11038856953382492
Inc-PRL-15	6	21528970	21595824	-	0.08335814625024796	0.017665168270468712	0.2207692265510559
Inc-PRL-13	6	21594374	21610695	-	0.24387508630752563	0.09462938457727432	1.5489742755889893
NBAT1	6	22124694	22222873	-	0.012681828811764717	0.165239617228508	0.09107737988233566
Inc-ACOT13-3	6	24720594	24720866	+	0.2969507873058319	0.1399824023246765	2.9283812046051025
Inc-GMNN-2	6	24742530	24752149	+	0.004098592791706324	0.008589356206357479	0.33397141098976135
Inc-C6orf229-2	6	24828250	24829127	-	4.957905292510986	0.7352772951126099	0.4685600697994232
Inc-C6orf229-3	6	24904924	24907159	-	0.5957594513893127	0.4269137978553772	0.015755629166960716
Inc-GMNN-5	6	25003672	25034369	+	0.05316859111189842	0.006306069903075695	0.002533599501475692
Inc-RIPOR2-1	6	25015180	25042398	-	5.182220458984375	0.3393144905567169	0.0914594978094101
Inc-HIST1H1A-3	6	25983758	25992771	-	0.005356515292078257	0.024710342288017273	0.055930424481630325
Inc-HIST1H1T-1	6	26086519	26091804	-	0.01610771007835865	0.05843645706772804	0.11255703121423721
Inc-HIST1H4C-2	6	26096615	26097056	+	0.38181042671203613	0.7820817232131958	2.5445878505706787
Inc-ZNF322-3	6	26630782	26632007	-	0.220708429813385	0.28444555401802063	0.03129594027996063
Inc-POM121L2-3	6	27198168	27198419	-	25.569599151611328	71.72728729248047	1.193455457687378
Inc-ZNF184-2	6	27371789	27374743	-	0.11036001890897751	0.7094746828079224	0.7781517505645752
Inc-ZKSCAN3-2	6	28303482	28306510	+	0.7197871208190918	0.7579841613769531	0.23189108073711395
Inc-ZSCAN12-2	6	28304677	28321981	-	0.04186883196234703	0.3883730471134186	0.8931695818901062
Inc-ZKSCAN3-3	6	28367632	28391617	+	0.027230452746152878	0.054671816527843475	0.08548575639724731
Inc-RNF39-9	6	29909852	29910844	-	0.23577290773391724	0.02211076207458973	0.8780712485313416
Inc-POU5F1-9	6	31116937	31125971	-	0.202089324593544	0.19217155873775482	0.7299790382385254
Inc-POU5F1-3	6	31238876	31239867	-	8.20018196105957	5.630650043487549	61.167030334472656
Inc-BAG6-1	6	31606805	31620170	-	0.192923441529274	0.046617016196250916	1.1164360046386719
Inc-DDAH2-1	6	31694815	31698039	-	7.478999614715576	0.24901659786701202	1.1211081743240356
Inc-NUDT3-2	6	34360305	34361774	-	0.5264700651168823	0.2830832600593567	2.249056816101074

Inc-C6orf106-1	6	34544035	34544433	-	0.36937087774276733	0.4366762936115265	0.02066873386502266
Inc-C6orf222-3	6	36166404	36168729	-	0.004732271656394005	0.0	0.10508060455322266
Inc-TMEM217-4	6	37105084	37105518	-	0.7103727459907532	0.10956387966871262	0.08212926983833313
Inc-MTCH1-3	6	37185418	37186265	-	1.2527073621749878	0.35496068000793457	0.17009148001670837
Inc-ZFAND3-1	6	38129773	38132113	+	0.17202793061733246	0.3450064957141876	0.03720558062195778
Inc-KCNK5-2	6	39151701	39154463	-	0.06447170674800873	0.056487660855054855	0.0
Inc-MOCS1-6	6	39837662	39847030	-	0.055878154933452606	0.020842086523771286	0.0017472646431997418
Inc-MOCS1-1	6	39849580	39867847	-	0.11351963132619858	0.04775669798254967	0.013813624158501625
Inc-MOCS1-3	6	39926153	39926572	-	37.611328125	18.37549591064453	8.041175842285156
Inc-OARD1-1	6	40846474	41074451	-	0.1870662420988083	0.06551899015903473	0.038374800235033035
Inc-UNC5CL-4	6	41010108	41020099	-	0.24074631929397583	0.32299476861953735	0.06513870507478714
Inc-FRS3-1	6	41763707	41764356	-	11.522356986999512	2.730232000350952	3.8031387329101562
Inc-MED20-1	6	41869817	41870532	-	0.2229243665933609	0.8127264380455017	0.04827038571238518
Inc-PEX6-2	6	42929295	42929645	-	0.831332802772522	0.5231816172599792	0.14816243964552277
Inc-CUL7-3	6	43001635	43002143	-	1.4130492210388184	0.4571778476238251	0.5121653079986572
Inc-DNPH1-4	6	43112731	43115192	-	0.01635565608739853	0.0	0.3689657747745514
Inc-C6orf223-4	6	43980806	43981873	+	0.0	0.25284406542778015	0.12809407711029053
Inc-TMEM63B-3	6	44042792	44061228	+	0.0	0.20140664279460907	0.01579805091023445
Inc-AARS2-4	6	44340401	44355830	-	0.4454984962940216	0.2948015034198761	0.13965435326099396
Inc-CLIC5-3	6	45218692	45345160	-	4.788414001464844	1.5900616645812988	1.5698806047439575
Inc-ENPP4-4	6	45540498	45545853	+	0.023683473467826843	0.06350593268871307	0.0
Inc-PTCHD4-2	6	48056025	48064207	-	1.3100254535675049	2.885422706604004	0.3051269054412842
Inc-TMEM14A-2	6	52505019	52506123	+	0.1525326818227768	1.6316850185394287	1.0522407293319702
Inc-FBXO9-1	6	52860413	52860749	+	866.5103149414062	135507.421875	50636.84765625
Inc-KLHL31-2	6	53597577	53659072	-	0.274869829416275	0.18021294474601746	0.08566982299089432
Inc-BMP5-5	6	55300217	55304526	-	1.1496661901474	0.004376349039375782	0.0
Inc-BMP5-2	6	55921389	55956486	-	1.6975979804992676	0.07527998834848404	1.5596184730529785
Inc-COL21A1-6	6	56514507	56514967	-	0.3093973994255066	1.204262614250183	0.04601667448878288
Inc-COL21A1-9	6	56522859	56525410	-	0.5418230295181274	1.7894480228424072	0.0668453574180603
Inc-BEND6-3	6	56894265	56896604	+	0.0693541169166565	9.065830381587148E-4	0.0019971721339970827
Inc-PRIM2-7	6	58287716	58764642	+	0.04554758965969086	0.3962589204311371	0.1743098646402359
Inc-RAB23-5	6	58776071	58779106	-	0.071402907371521	0.10398443788290024	0.004971246235072613
Inc-PRIM2-13	6	58776263	58780161	+	0.11555588990449905	0.5265932679176331	0.022476669400930405
Inc-KHDRBS2-1	6	62340138	62390954	-	2.7565176486968994	0.23120389878749847	0.03486545756459236
Inc-EYS-2	6	64280910	64282313	-	1.3359642028808594	0.31891149282455444	0.3642544448375702
Inc-EYS-1	6	64395270	64423895	-	0.1705242544412613	0.1137748435139656	1.0824302434921265
Inc-EYS-3	6	66546777	66547298	-	4.7530837059021	0.1373983770608902	0.15719285607337952
Inc-COL9A1-3	6	70415179	70416052	-	0.3236744701862335	0.4222222864627838	0.04200690612196922
Inc-KHDC1-1	6	73983862	74020088	-	0.36464008688926697	0.9546497464179993	3.280317544937134
Inc-KHDC3L-7	6	74020919	74023885	+	0.189139261841774	0.6345481276512146	0.9668813943862915
Inc-MYO6-1	6	76359931	76362390	+	0.2339501827955246	0.8714801669120789	0.06979980319738388
Inc-HTR1B-1	6	77613110	78078862	-	0.06230533495545387	0.004467199090868235	2.7872034115716815E-4
Inc-PHIP-3	6	79550527	79579739	-	0.22323185205459595	0.5286357402801514	0.07669620215892792
Inc-HMGN3-6	6	79777409	79777855	-	0.42838311195373535	0.8441841006278992	0.007799331098794937
Inc-SH3BGR12-2	6	80129867	80196367	+	0.008440105244517326	0.11022080481052399	0.05184794217348099
Inc-SH3BGR12-7	6	80262511	80262877	+	0.5445751547813416	0.8616301417350769	0.036393776535987854
Inc-SH3BGR12-5	6	80283594	80285247	+	0.6854794025421143	0.7193672060966492	0.2240009754896164
Inc-BCKDHB-1	6	81128031	81175644	+	1.6977245807647705	0.514154851436615	0.4844250977039337
Inc-BCKDHB-5	6	81150447	81150889	+	1.922877311706543	0.5330836772918701	0.3153754472732544
Inc-BCKDHB-2	6	81176675	81178797	+	1.0781733989715576	0.34605318307876587	0.3657827079296112

Inc-TPBG-10	6	82462554	82477170	+	0.010137292556464672	0.025850141420960426	0.0031812351662665606
LINC02542	6	82553501	82811405	-	0.08799147605895996	0.08520080149173737	0.011396992951631546
Inc-PGM3-1	6	83829572	83848040	-	0.021936247125267982	0.004991426598280668	0.14286570250988007
Inc-ME1-3	6	84284900	84290225	-	0.6174266338348389	0.11510781198740005	0.07612834125757217
Inc-CEP162-3	6	85139302	85140520	-	0.4500153660774231	0.01851484179496765	0.03201016038656235
Inc-NT5E-3	6	86385141	86388112	+	0.044085025787353516	0.015515360981225967	4.273040771484375
LINC01590	6	88032306	88109459	+	1.5378872156143188	0.7039512395858765	0.48492908477783203
Inc-C6orf163-2	6	88089751	88100391	+	0.30556532740592957	0.2830005884170532	0.06384755671024323
Inc-CFAP206-1	6	88113939	88131899	+	0.5033970475196838	0.18512573838233948	0.12066560238599777
Inc-SRSF12-2	6	89790435	89790740	-	0.1693333089351654	0.1960681974887848	0.8770695924758911
Inc-PM20D2-1	6	89830998	89853352	+	1.4426215887069702	0.7036152482032776	0.30193495750427246
Inc-ANKRD6-3	6	90062727	90065420	+	0.0767451748251915	0.1197931170463562	0.010364072397351265
Inc-MDN1-2	6	90717809	90718546	-	6.041588306427002	1.3239456415176392	1.6069313287734985
Inc-MAP3K7-3	6	90798680	91006461	-	3.456141710281372	1.5215827226638794	1.0331915616989136
UFL1-AS1	6	96806250	96969576	-	0.2161516696214676	0.39225074648857117	0.06738986074924469
Inc-GPR63-1	6	96996506	97142303	-	0.0	0.0	0.13290071487426758
Inc-KLHL32-4	6	97731168	98847748	+	0.06560353934764862	0.2943730652332306	0.21277113258838654
Inc-GRIK2-7	6	100978152	100978928	+	0.13931627571582794	0.0	0.0
Inc-LIN28B-6	6	105141052	105141773	+	0.45479118824005127	0.07417155057191849	0.010314499959349632
LIN28B-AS1	6	105312339	105389322	-	0.19957870244979858	0.03336726129055023	0.0
Inc-PRDM1-6	6	105530416	105531203	+	22.34447479248047	1.0079814195632935	1.6887303590774536
Inc-POPDC3-2	6	105750328	105750698	-	0.24268771708011627	0.6640177369117737	0.0
Inc-LIN28B-10	6	105851143	105930108	+	0.11760647594928741	0.036740899085998535	0.020033415406942368
Inc-QRSL1-3	6	107120137	107120581	+	0.2922651171684265	0.32449397444725037	0.0793816074289658
Inc-OSTM1-1	6	108443540	108487058	-	0.010925154201686382	0.3036760985851288	0.4593934118747711
Inc-FOXO3-5	6	109179550	109197014	+	0.16124626994132996	0.23883600533008575	0.04155348986387253
Inc-CEP57L1-4	6	109612204	109629423	+	0.04547706991434097	0.8348978757858276	0.43151259422302246
Inc-SMPD2-93	6	109630473	109657620	+	0.018595727160573006	0.3388960659503937	0.23650172352790833
Inc-SMPD2-6	6	109665190	109676266	+	0.026757460087537766	0.3108261525630951	0.2555398941040039
Inc-FIG4-1	6	110147724	110150269	+	0.2236526906490326	0.10931883752346039	0.0686776265501976
Inc-CDK19-7	6	111291284	111303180	-	0.2865425646305084	0.41739946603775024	0.05735192820429802
Inc-RFPL4B-4	6	113201574	113204294	+	3.3811378479003906	0.15174101293087006	0.0
Inc-MARCKS-16	6	113902703	113903149	+	19.520368576049805	0.19243083894252777	0.20187358558177948
LINC02541	6	113934014	113975724	-	0.08734923601150513	0.03932313621044159	0.025000644847750664
Inc-MARCKS-1	6	114225284	114250750	+	0.1403905302286148	0.03661263361573219	0.025954877957701683
Inc-HS3ST5-5	6	114288014	114288226	-	0.41246795654296875	1.2516851425170898	0.050256021320819855
HDAC2-AS2	6	114290865	114861884	+	0.26516860723495483	0.11385837942361832	0.06760275363922119
Inc-MARCKS-9	6	114332244	114349499	+	0.046302180737257004	0.07636455446481705	0.0
Inc-NT5DC1-2	6	116601362	116691436	+	0.45930007100105286	0.32979148626327515	0.10408538579940796
Inc-TSPYL1-3	6	116671499	116692002	-	0.16628581285476685	0.034092433750629425	0.03319534659385681
Inc-CALHM6-1	6	116682130	116684599	+	0.052687179297208786	0.1527937948703766	0.01222749799489975
Inc-DSE-1	6	116765323	116766023	+	0.9441437721252441	0.25791609287261963	0.20648621022701263
Inc-RWDD1-1	6	116919072	116922756	+	0.29204413294792175	0.2212238907814026	0.09472289681434631
Inc-ZUFSP-4	6	116999461	117002349	-	0.5972049236297607	0.12949730455875397	0.18677857518196106
Inc-MCM9-1	6	119312344	119312956	-	0.38332056999206543	0.3395084738731384	0.026984279975295067
Inc-HSF2-4	6	122238491	122283567	+	0.9216970205307007	0.014886642806231976	0.014344406314194202
Inc-HSF2-1	6	122907064	122910009	+	3.8820507526397705	0.10236629098653793	0.0
Inc-SMPDL3A-3	6	123390819	123394062	+	0.7942750453948975	0.10500212758779526	0.00839611142873764
Inc-HDDC2-10	6	125271088	125325872	-	0.06293413788080215	0.06708847731351852	0.010034778155386448
Inc-HDDC2-2	6	125691180	125766329	-	0.01243159081786871	0.29444044828414917	0.045557234436273575

Inc-HDC2-5	6	125896558	126070541	-	0.013326676562428474	0.32657888531684875	0.21151532232761383
Inc-CENPW-2	6	126754697	126802340	+	0.47671955823898315	0.07718679308891296	0.08571642637252808
Inc-CENPW-3	6	127041184	127042967	+	0.5597995519638062	0.08956718444824219	0.003678908571600914
Inc-ECHDC1-5	6	127584546	127587938	-	0.2477325201034546	0.17019236087799072	0.052809808403253555
Inc-RNF146-3	6	127664756	127666472	+	1.5129199028015137	2.6291873455047607	0.5506090521812439
Inc-RNF146-4	6	127694677	127695126	+	0.17933796346187592	0.3429494798183441	0.017359653487801552
Inc-THEMIS-2	6	128768543	128770446	-	0.11087124794721603	0.4306849241256714	0.01569829136133194
Inc-PTPRK-3	6	129250140	129251133	-	0.6805652976036072	0.009297196753323078	0.010693108662962914
Inc-AKAP7-1	6	131615561	131665827	+	0.01108776219189167	0.08229775726795197	0.04319631680846214
LINC01013	6	132448669	132490640	+	0.06293372809886932	0.24367091059684753	0.010780331678688526
Inc-SLC18B1-1	6	133125513	133134602	-	0.019671311601996422	0.21940146386623383	0.2094108909368515
Inc-EYA4-2	6	133861922	133862312	+	0.0910649374127388	1.4688166379928589	0.3977629542350769
Inc-SLC2A12-12	6	134227938	134274191	-	0.05705562233924866	0.14275698363780975	0.011957988142967224
Inc-SGK1-4	6	134435111	134438818	-	0.04908968135714531	0.2990381121635437	0.04810957983136177
Inc-MAP7-2	6	136901472	136905645	-	1.3829114437103271	4.175638675689697	6.456523895263672
Inc-IL22RA2-2	6	137325758	137366101	-	0.003063731826841831	0.0804184079170227	0.07005101442337036
Inc-SMIM28-1	6	138661322	138665748	+	0.32547003077698	4.823953151702881	3.3191628456115723
Inc-NHSL1-2	6	138925154	139018425	-	0.03374236822128296	0.64067542552948	0.3616943955421448
Inc-CCDC28A-1	6	139012748	139018766	+	3.9909675121307373	13.201072692871094	14.167498588562012
Inc-TXLNB-2	6	139613296	139645051	-	0.06717753410339355	0.3816840946674347	0.18185938894748688
LINC01625	6	139760855	139795737	-	0.35144466161727905	0.04940676689147949	0.09088262915611267
Inc-CITED2-4	6	140413889	140415734	-	0.3188287317752838	0.0	0.0
LINC01277	6	143287558	143400412	-	0.08396556228399277	0.036709632724523544	0.024400079622864723
Inc-PEX3-1	6	143811842	143827543	+	0.45548850297927856	0.2859283685684204	0.12141861766576767
HYMAI	6	144263762	144385677	-	3.8094840049743652	0.546450674533844	0.29236969351768494
Inc-UTRN-1	6	144606291	144609320	+	9.77306842803955	2.3757662773132324	1.74951171875
Inc-FBXO30-1	6	146156331	146160471	-	0.02152305282652378	0.07811886072158813	0.0
Inc-FBXO30-2	6	146216172	146218558	-	1.1682742834091187	1.1624995470046997	0.37238267064094543
Inc-STXBP5-4	6	147521754	147543821	+	0.2304452359676361	0.44459402561187744	0.02439439669251442
Inc-SHPRH-10	6	147523052	147524193	-	0.15403258800506592	0.13087895512580872	0.022041838616132736
Inc-SAMD5-2	6	148023514	148324506	+	0.00735459616407752	0.04520709812641144	0.001228848472237587
Inc-ZC3H12D-2	6	149341892	149353797	-	0.006880581378936768	0.09367841482162476	0.292459636926651
Inc-SUMO4-2	6	149704969	149707007	+	0.2610612213611603	0.9810253381729126	0.07637844979763031
Inc-PPIL4-1	6	149818931	149821744	-	3.5732553005218506	4.644498348236084	1.2039486169815063
Inc-KATNA1-2	6	149896601	149912000	-	0.0	0.0016379320295527577	0.16451114416122437
Inc-ULBP2-1	6	150260117	150262766	+	0.025911839678883553	0.02400687150657177	0.15181586146354675
Inc-ZBTB2-6	6	151546685	151547082	-	5.4376540184021	0.03618847206234932	0.07084455341100693
Inc-ARMT1-1	6	151640770	151641085	+	0.38597217202186584	0.8058602213859558	0.034970447421073914
Inc-IPCEF1-2	6	154475631	154480651	-	0.03735283762216568	0.5274013876914978	0.3122527003288269
Inc-CNKR3-4	6	154520857	154540323	-	0.06752268970012665	0.7281908392906189	0.4073055386543274
Inc-CNKR3-3	6	154544095	154568714	-	0.055197276175022125	0.5918006300926208	0.20142585039138794
Inc-SCAF8-6	6	154897443	154898213	+	0.5862398743629456	0.0	0.0
Inc-SCAF8-4	6	155226354	155271692	+	0.10815028846263885	0.25276699662208557	0.0280501376837492
Inc-CLDN20-6	6	155335072	155411513	+	0.9916481971740723	0.8564041256904602	0.2737705111503601
Inc-CLDN20-7	6	155635752	155636986	+	0.19729071855545044	0.30164018273353577	0.03331851214170456
Inc-SERAC1-3	6	158293603	158296242	-	0.0	0.0	0.22567184269428253
Inc-EZR-1	6	159262149	159278664	-	0.7747058272361755	0.0	0.0
Inc-SYTL3-2	6	159290971	159340137	+	0.006340646184980869	0.014794943854212761	0.08972577005624771
Inc-TCP1-6	6	160383962	160389934	-	0.2147882878780365	0.1043703481554985	0.05030559375882149
PACRG-AS2	6	163463589	163475193	-	0.16420413553714752	0.004966070409864187	0.0

PACRG-AS1	6	163730352	163745562	-	0.0	0.1221037432551384	0.019411811605095863
Inc-PRKN-23	6	163789408	163836297	-	0.10073187202215195	0.04669225588440895	0.5222466588020325
Inc-C6orf118-6	6	164714621	164758836	-	0.003238227916881442	16.690658569335938	18.160961151123047
Inc-C6orf118-1	6	165206864	165241153	-	0.017965996637940407	3.495656728744507	2.0729217529296875
Inc-QKI-4	6	165241238	165245119	+	0.0	0.07995284348726273	0.07758931815624237
Inc-PDE10A-2	6	165957021	166400091	-	0.4499255120754242	0.8308911323547363	0.08892641216516495
Inc-TBXT-5	6	166211147	166225268	-	0.014712843112647533	0.1774068921804428	0.0017835426842793822
LINC00473	6	166315365	166401536	-	1.020909070968628	1.5959923267364502	0.19046594202518463
Inc-GPR31-1	6	167647448	167655400	-	0.851588249206543	0.01936875842511654	0.01810683123767376
Inc-KIF25-5	6	168337887	168348030	+	1.5723835229873657	1.0037015676498413	0.5488556623458862
Inc-WDR27-1	6	169847481	169852561	-	0.032131049782037735	0.08530044555664062	0.0016155731864273548
Inc-THBS2-14	6	169866720	169868158	-	0.10504033416509628	0.14137817919254303	0.014016571454703808
Inc-TCTE3-2	6	170124178	170124570	-	2.0761594772338867	0.06270691007375717	9.167864799499512
LINC00574	6	170182679	170215208	+	0.33741146326065063	0.09138908237218857	0.1010955721282959
Inc-PSMB1-11	6	170603266	170604993	-	0.19947673380374908	0.14572983980178833	0.007908130995929241
Inc-PSMB1-6	6	170605317	170615649	-	0.7112365961074829	0.36685556173324585	0.23163878917694092
Inc-DLL1-8	6	170627408	170628113	-	0.027240674942731857	0.0	0.637869656085968
Inc-FAM120B-1	6	170723227	170730840	+	0.087365061044693	0.04653191938996315	0.026738250628113747
Inc-PDGFA-5	7	70972	96331	-	0.0022412457037717104	0.13463477790355682	0.10308847576379776
Inc-FAM20C-3	7	137315	165522	+	0.018537668511271477	0.08979519456624985	0.061736878007650375
Inc-PDGFA-8	7	180701	194180	-	0.16602498292922974	0.777270495891571	1.1247432231903076
Inc-FAM20C-8	7	302535	303422	+	0.7451211214065552	1.7325571775436401	4.178066730499268
Inc-FAM20C-7	7	465456	468067	+	0.03744463622570038	0.5201334357261658	0.24563011527061462
Inc-DNAAF5-3	7	558940	569948	+	0.13576264679431915	0.4379408657550812	1.0666576623916626
Inc-ZFAND2A-1	7	1131264	1133445	-	0.0515709964211273	0.4362442195415497	0.1504746526479721
Inc-ZFAND2A-4	7	1200601	1214735	-	0.008216587826609612	0.5159387588500977	0.20217858254909515
Inc-MAFK-2	7	1499554	1504228	+	0.02704770490527153	0.11424241214990616	0.1452172249555878
Inc-MICALL2-2	7	1500050	1507158	-	1.2357871532440186	1.8900288343429565	4.4949164390563965
Inc-PSMG3-1	7	1583450	1590566	-	0.02788285385541916	0.04741938039660454	0.1825593113899231
Inc-ELFN1-2	7	1715250	1751313	+	0.1247548907995224	0.22769148647785187	0.022789891809225082
ELFN1-AS1	7	1766990	1781946	-	0.0	0.6963223814964294	0.0032224671449512243
Inc-SNX8-3	7	2429795	2442927	-	0.03518722206354141	0.1332179605960846	0.09271571785211563
Inc-BRAT1-2	7	2652056	2657331	-	0.0896977037191391	0.04626968502998352	0.8580995798110962
Inc-RADIL-1	7	4807257	4811074	-	0.030020108446478844	0.05131376162171364	0.9359459280967712
Inc-MMD2-2	7	4936899	4938466	-	0.016967976465821266	0.5925307273864746	0.12004467099905014
Inc-FSCN1-2	7	5515435	5519442	+	0.005039101466536522	0.04809574410319328	0.5008744597434998
Inc-RNF216-2	7	5642594	5643009	-	0.7743858695030212	0.30851656198501587	3.813152551651001
Inc-GRID2IP-1	7	6618196	6629569	-	0.0398765429854393	0.04639904201030731	0.45953163504600525
Inc-GRID2IP-3	7	6631309	6634220	-	0.010342073626816273	0.0	1.2486456632614136
Inc-ZNF12-3	7	6863669	6865903	-	2.940861225128174	3.417119264602661	9.161979675292969
Inc-C1GALT1-1	7	7294785	7319295	+	0.05641432851552963	0.2068268060684204	0.1790347844362259
Inc-ICA1-3	7	9119830	9229487	-	5.823484971188009E-4	0.1550506204366684	0.10492561012506485
Inc-NDUFA4-6	7	11410062	11410947	-	1.6362906694412231	1.2197388410568237	8.930370330810547
Inc-NDUFA4-5	7	11414247	11419382	-	4.958132743835449	5.690289497375488	16.53632164001465
Inc-VWDE-10	7	11676239	11790979	-	3.2022199630737305	5.5703206062316895	12.583569526672363
Inc-ARL4A-8	7	13934333	13934794	+	0.0	0.002475854242220521	1.723435878753662
Inc-MEOX2-6	7	15433738	15436219	-	0.08625414222478867	0.4834277629852295	0.234877809882164
Inc-AGMO-1	7	15695225	15697004	-	0.0	1.284404993057251	0.1596154421567917
LINC02587	7	15728003	15736520	+	0.07490424811840057	0.8116822242736816	1.012820839881897
Inc-ANKMY2-1	7	16735496	16759523	-	0.005213509313762188	0.0049638221971690655	0.945132315158844

Inc-TSPAN13-3	7	17029804	17061251	+	0.6866077780723572	1.8010544776916504	0.1742730736732483
Inc-TSPAN13-6	7	17092504	17093105	+	1.5170457363128662	0.5683977007865906	0.06878276914358139
Inc-AHR-4	7	17381016	17472813	+	0.25068938732147217	2.3806331157684326	0.03504586219787598
Inc-HDAC9-1	7	19037466	19042039	+	1.0381666421890259	1.0153213739395142	3.5731523036956787
Inc-ITGB8-2	7	20256990	20262800	+	0.0047244299203157425	0.12587693333625793	0.10415671765804291
Inc-ABC85-3	7	20866917	20868017	+	11.353178977966309	0.9625961184501648	2.0278329849243164
Inc-STEAP1B-5	7	22348066	22395844	-	0.3112904727458954	5.376250743865967	3.442990779876709
Inc-STEAP1B-4	7	22395929	22396529	-	0.051469892263412476	0.7040299773216248	0.6344329714775085
Inc-IL6-7	7	22841791	22845468	+	0.004566740244626999	0.5790802240371704	0.7843562960624695
Inc-GSDME-3	7	24198618	24484879	-	0.006236173212528229	0.7319406867027283	0.09931014478206635
Inc-GSDME-7	7	24945754	24946213	-	0.035469744354486465	0.26091909408569336	0.2792353332042694
Inc-NPVF-2	7	25397859	25399527	-	0.010985447093844414	0.2632010281085968	0.05476287007331848
Inc-NPVF-11	7	25729200	25729579	-	0.2887610197067261	0.0	0.0063727679662406445
Inc-HNRNPA2B1-13	7	25895269	25901960	-	0.016195066273212433	0.1579018533229828	0.05011218786239624
Inc-NFE2L3-7	7	26141266	26166858	+	0.24051302671432495	0.07081731408834457	0.0
Inc-SNX10-4	7	26315815	26316226	+	0.5751789212226868	0.017479384317994118	0.019098365679383278
Inc-SKAP2-1	7	26638503	26657903	-	0.019425395876169205	0.2181951254606247	0.0950983464717865
Inc-SNX10-89	7	26707003	26708086	+	0.1520029604434967	0.0	0.9840080738067627
Inc-HOXA1-1	7	26883649	26904204	-	5.008581161499023	11.854254722595215	19.301603317260742
Inc-HOXA3-1	7	27150310	27192217	-	0.0	2.7034895420074463	4.0098876953125
HOXA-AS2	7	27153555	27173921	+	0.0	0.7056679725646973	6.545638084411621
Inc-HOXA10-1	7	27202057	27219880	-	0.01070234552025795	1.5773447751998901	6.125726222991943
HOXA10-AS	7	27208238	27211384	+	0.0	0.3228177262687683	2.880669593811035
Inc-HOXA11-2	7	27211552	27211799	-	0.12313823401927948	7.283303260803223	17.374937057495117
HOXA11-AS	7	27224967	27228912	+	0.0	0.4610910713672638	2.9393184185028076
Inc-HOXA13-2	7	27226192	27233067	-	0.0	0.12064269185066223	0.6399940848350525
Inc-HOXA13-1	7	27226866	27232305	-	0.0	0.11329294741153717	0.34309089183807373
Inc-HOXA13-3	7	27233122	27235219	-	0.004327325150370598	0.6514115929603577	1.5854016542434692
Inc-HOXA11-1	7	27235769	27235994	-	0.0	0.4553423523902893	2.273216962814331
Inc-HOXA11-3	7	27236499	27237972	-	0.0	2.9582295417785645	4.57336950302124
Inc-EVX1-15	7	27495996	27498410	+	0.0027389968745410442	0.003457677084952593	0.5806921124458313
Inc-WIPF3-2	7	29685551	29790346	+	0.002910993527621031	0.0059301289729774	0.4534696340560913
Inc-NTSC3A-3	7	32995572	32997444	-	0.3880184590816498	0.6275960206985474	1.2965606451034546
Inc-TBX20-3	7	35119601	35201687	-	0.2518448829650879	1.9890862703323364	3.2938506603240967
Inc-SEPT7-2	7	35985904	36013282	+	0.7536613345146179	0.6538796424865723	4.931265354156494
Inc-SFRP4-2	7	37309059	37488459	-	2.5516884326934814	0.28651484847068787	0.6131606698036194
Inc-SFRP4-1	7	37468860	37488553	-	1.3653744459152222	0.13509367406368256	0.30741891264915466
TRG-AS1	7	38347741	38418486	+	0.033825092017650604	0.18256635963916779	0.0017473956104367971
Inc-CDK13-9	7	39873268	39874298	+	12.799007415771484	2.853764533996582	4.27112340927124
Inc-INHBA-4	7	42159110	42159371	-	0.24770493805408478	0.8195286393165588	0.013306493870913982
Inc-STK17A-1	7	43670759	43683421	+	0.47349393367767334	1.4097216129302979	1.9461501836776733
Inc-COA1-3	7	43798910	43825344	-	0.05961371213197708	0.30386340618133545	0.3804607391357422
Inc-MYL7-1	7	44161687	44163095	-	3.3872594833374023	7.404300212860107	10.541219711303711
Inc-YKT6-3	7	44233876	44237836	+	0.024601273238658905	0.2390817552804947	0.15987829864025116
Inc-NUDCD3-1	7	44406739	44408891	-	0.06229901313781738	0.35580193996429443	0.3458770513534546
Inc-H2AFV-2	7	44837645	44837924	-	0.0	0.013313879258930683	0.9587582945823669
SNHG15	7	45017433	45039607	-	0.6927036643028259	1.8099044561386108	3.922849178314209
Inc-CCM2-2	7	45022562	45023645	+	0.0	0.00924912840127945	0.9751980304718018
Inc-TBRG4-6	7	45953372	45954924	-	26.673513412475586	107.72544860839844	84.65161895751953
Inc-TNS3-2	7	46713383	46799449	-	0.025527473539114	0.43208974599838257	0.3747932016849518

Inc-C7orf57-6	7	47009260	47071033	+	0.007613887079060078	0.03586389124393463	0.08783097565174103
LINC01447	7	47661537	47669491	+	0.00117162533570081	0.7587447166442871	0.015720054507255554
Inc-FIGNL1-3	7	50485641	50488510	-	0.010261145420372486	0.06435948610305786	0.04847100004553795
Inc-SEC61G-1	7	54874172	54879694	-	0.026548555120825768	17.443601608276367	1.1474233865737915
Inc-SEC61G-10	7	55060700	55062714	-	0.021737901493906975	0.15138104557991028	0.6214197278022766
EGFR-AS1	7	55239366	55256642	-	0.008582326583564281	0.01690012402832508	0.12203352153301239
Inc-EGFR-7	7	55280605	55284548	+	0.09074272960424423	0.35467827320098877	0.3073481619358063
ELDR	7	55303658	55323328	-	9.952705586329103E-4	0.04957018047571182	0.1497848629951477
Inc-LANCL2-1	7	55640256	55671715	+	0.031061749905347824	0.027464577928185463	0.1022866815328598
Inc-VOPP1-2	7	55748846	55750462	-	0.35911649465560913	6.697800636291504	6.159893035888672
Inc-SEPT14-5	7	55750468	55780945	-	0.38218432664871216	3.6110427379608154	3.7430319786071777
Inc-SEPT14-2	7	55840870	55841546	-	0.006092015653848648	0.00996979979355526	1.2101234197616577
Inc-SUMF2-9	7	56243327	56244105	+	0.32788410782814026	0.005133441649377346	0.003108667442575097
Inc-ZNF736-3	7	63767821	63774395	+	0.07929769158363342	0.6759760975837708	0.35990506410598755
Inc-ZNF736-4	7	63813369	63817011	+	0.8299786448478699	4.641945838928223	5.387531757354736
Inc-ZNF736-1	7	63831907	63836925	+	0.1608951985836029	0.7068963050842285	0.8988324403762817
Inc-ZNF117-1	7	64348905	64350478	-	0.23692089319229126	0.012259436771273613	0.027004141360521317
Inc-ZNF273-3	7	64408087	64409957	+	0.29016122221946716	0.6126635074615479	0.8284986615180969
Inc-GUSB-4	7	65617658	65619549	-	0.016629237681627274	0.0036481842398643494	1.5978859663009644
Inc-SBDS-27	7	66296695	66301783	-	0.17060089111328125	0.4172273278236389	0.966486394405365
Inc-SBDS-13	7	66304889	66309834	-	0.13431569933891296	0.271796852350235	0.5847968459129333
Inc-SBDS-1	7	66415756	66440289	-	0.005600771401077509	2.8667785227298737E-4	0.5228539705276489
Inc-AUTS2-6	7	68527383	68527838	+	0.23551572859287262	0.0	0.0
Inc-FKBP6-3	7	72712152	72716800	+	0.22156281769275665	0.6398802399635315	1.1110252141952515
Inc-BUD23-4	7	73093483	73095695	+	0.08385654538869858	0.2591187059879303	0.2483387440443039
Inc-DNAJC30-1	7	73115107	73119795	-	5.4253034591674805	8.161263465881348	17.959619522094727
Inc-CLDN3-1	7	73253911	73256846	-	0.6611238121986389	2.012042284011841	2.415668487548828
Inc-RFC2-5	7	73455278	73459294	-	0.0	0.11654416471719742	0.29144224524497986
ELN-AS1	7	73463074	73476631	-	0.08501945436000824	0.34219443798065186	0.3497912883758545
Inc-EIF4H-1	7	73624257	73629607	+	0.22637663781642914	0.2748742997646332	1.2814416885375977
Inc-LAT2-2	7	73645996	73646353	+	0.009981179609894753	0.014762407168745995	0.7746405601501465
Inc-GTF2IRD2-1	7	74103271	74143339	-	0.030700750648975372	0.0050459960475564	0.671978235244751
Inc-GTF2IRD2-5	7	74296151	74297681	-	4.6414713859558105	6.086872100830078	13.554974555969238
Inc-RCC1L-1	7	74440309	74445630	-	0.0037224486004561186	0.020351596176624298	0.03006945736706257
Inc-GTF2IRD2B-3	7	74508364	74510270	+	0.019258158281445503	0.06869805604219437	0.4713374674320221
Inc-HIP1-2	7	75103973	75115385	-	8.705955505371094	16.00313949584961	24.940454483032227
Inc-ZP3-4	7	76091026	76109764	+	0.5080947279930115	0.81017005443573	3.2583065032958984
Inc-FGL2-7	7	76682102	76688757	-	0.09203723818063736	0.16864299774169922	0.30687156319618225
Inc-FGL2-6	7	76941483	76961261	-	0.2360706627368927	4.256092548370361	5.985899448394775
Inc-FGL2-8	7	76980914	77001538	-	0.05771537125110626	1.6427749395370483	1.537481665611267
Inc-RSBN1L-2	7	77313168	77314645	+	0.03806719183921814	0.19783133268356323	0.9365477561950684
Inc-MAGI2-1	7	79085481	79096779	-	0.01061069790980339	0.0016331900842487812	0.09624745696783066
Inc-GNAI1-5	7	80231541	80276042	+	0.42743822932243347	0.8090389966964722	0.0
Inc-SEMA3D-5	7	83935698	84001607	-	0.7101618051528931	6.228579998016357	3.416707992553711
Inc-SEMA3A-2	7	84670394	84685081	-	0.5144433975219727	0.6736984252929688	0.012946642935276031
Inc-KIAA1324L-2	7	86404397	86405338	-	0.4074839651584625	0.004422786179929972	0.02011774852871895
Inc-KIAA1324L-1	7	86413542	86415986	-	0.45970797538757324	0.02275010384619236	0.05114908143877983
Inc-DMTF1-1	7	86738855	86740598	+	0.16492417454719543	0.012566589750349522	0.0
Inc-TMEM243-2	7	86792600	86812767	-	0.003147896146401763	0.0	0.7443417906761169
Inc-ABCBI-2	7	87229434	87342728	-	2.797626256942749	0.21836955845355988	0.0

Inc-ADAM22-2	7	87848472	88016727	+	0.05193053558468819	1.2024201154708862	0.3612687885761261
Inc-ZNF804B-1	7	88339945	88386039	+	0.0	0.1984512358903885	0.12489060312509537
Inc-ADAM22-6	7	88425570	88427301	+	0.0	0.07289782911539078	0.037986449897289276
Inc-MTERF1-5	7	90893679	90898027	-	0.12304316461086273	0.006176990456879139	1.7329113483428955
Inc-AKAP9-1	7	91510118	91519214	+	0.08329170942306519	0.7393098473548889	0.8117513656616211
Inc-FAM133B-3	7	92268536	92271607	-	0.4292218089103699	1.9626173973083496	0.12182135134935379
Inc-GNG11-3	7	93652118	93712579	+	0.011927851475775242	2.954258441925049	0.05510607361793518
Inc-ASB4-7	7	95025689	95034274	+	0.0011330927954986691	0.0023167559411376715	0.023746201768517494
Inc-ASB4-3	7	95225927	95249333	+	0.004847993608564138	0.0859714224934578	0.03215731680393219
Inc-SMURF1-2	7	98444172	98445351	-	3.650170087814331	0.4281783998012543	4.358027458190918
Inc-FAM200A-1	7	99172024	99174072	-	0.020588848739862442	0.0012438363628461957	1.0412696599960327
PCOLCE-AS1	7	100187024	100201829	-	0.2496149241924286	0.406905859708786	1.236183524131775
Inc-GIGYF1-1	7	100302327	100303524	-	0.2068793773651123	0.3179515302181244	0.04695301130414009
SLC12A9-AS1	7	100426935	100450259	-	0.1773354858160019	0.9206535816192627	0.6474758982658386
Inc-VGF-3	7	100781203	100781553	-	0.13551270961761475	0.2234230637550354	2.34322452545166
Inc-MOGAT3-2	7	100854916	100856836	-	17.641815185546875	62.340309143066406	72.2165298461914
Inc-CLDN15-2	7	100860704	100861647	-	3.2667124271392822	3.491253137588501	12.063382148742676
Inc-IFT22-1	7	100995310	100999006	-	0.13811926543712616	0.03830614313483238	0.0
Inc-NAPEPLD-1	7	102740223	102755787	-	3.5510447025299072	5.681441307067871	14.811901092529297
Inc-NAPEPLD-5	7	102815462	102921154	-	1.6421864032745361	3.399937391281128	5.665772438049316
LHFPL3-AS1	7	104379044	104444554	-	0.0042244805954396725	0.5812053084373474	0.04601014778017998
Inc-PUS7-1	7	105168412	105172516	-	0.06585876643657684	0.46948280930519104	0.3166027069091797
Inc-RINT1-2	7	105170656	105171118	+	0.5637964606285095	0.1259184628725052	0.14107318222522736
Inc-SYPL1-4	7	105891571	105894064	-	12.7228422164917	77.59477233886719	47.09858322143555
Inc-SYPL1-5	7	105908781	105909651	-	17.099679946899414	107.55007934570312	68.38967895507812
LINC02577	7	106415457	106436010	+	0.013040397316217422	1.0098345279693604	0.05201712250709534
SLC26A4-AS1	7	107294413	107302675	-	0.0	0.07998238503932953	0.2873489558696747
Inc-DLD-1	7	107582561	107583185	+	0.21899403631687164	0.3214591443538666	0.8848667144775391
Inc-THAP5-5	7	108634088	108635086	-	0.10153058916330338	0.0	0.0
Inc-IMMP2L-1	7	109748096	110174811	-	0.04710719361901283	0.025640912353992462	4.6597272739745677E-4
Inc-DOCK4-7	7	110902289	110902553	-	0.38861727714538574	1.8547532558441162	0.0
Inc-PPP1R3A-5	7	113723958	113725770	-	0.20136818289756775	0.04863131791353226	0.011085759848356247
Inc-TFEC-7	7	115849288	115851565	-	0.30274543166160583	0.04036164656281471	0.10384682565927505
Inc-TFEC-2	7	115875810	116139600	-	0.17628812789916992	0.10241818428039551	0.06068912148475647
Inc-CAV2-2	7	115893170	115895118	+	0.2839842736721039	0.029013922438025475	0.0
Inc-TFEC-5	7	116182772	116199667	-	0.0069748773239552975	0.003275032388046384	0.1425761878490448
Inc-TFEC-15	7	116199699	116200243	-	0.11227445304393768	0.031353775411844254	3.9461312294006348
Inc-FAM3C-3	7	121091087	121151324	-	0.8424200415611267	0.08631943166255951	0.07752279192209244
Inc-ZNF800-1	7	126720747	126752340	-	0.20591101050376892	0.0822741687297821	0.0115072475746274
Inc-LEP-1	7	127946702	127947731	+	0.0	0.0	0.42423298954963684
Inc-METTL2B-6	7	128166278	128170972	+	0.015537709929049015	0.0221552811563015	0.156013622879982
Inc-OPN1SW-1	7	128296016	128298845	-	0.0052021159790456295	0.002190721919760108	0.16645598411560059
FLNC-AS1	7	128490216	128522155	-	0.08090301603078842	0.05166306346654892	0.6410499215126038
Inc-CEP41-1	7	129959373	129982742	-	0.22179211676120758	0.03685120493173599	0.0
Inc-COPG2-19	7	130121236	130126045	-	0.2297523319721222	0.07539939880371094	0.14219322800636292
Inc-MKLN1-1	7	130737184	130794396	+	0.08510921895503998	0.385628879070282	0.23594407737255096
Inc-MKLN1-2	7	131582400	131811245	+	0.5312955975532532	2.6573193073272705	4.593495845794678
Inc-WDR91-1	7	134844635	134844913	-	2.890299081802368	18.211740493774414	8.643354415893555
Inc-NUP205-3	7	135129209	135129673	+	1.2282544374465942	0.006872314028441906	0.03787598758935928
Inc-SLC13A4-1	7	135392889	135414006	-	1.085869312286377	0.017206946387887	0.066701740026474

Inc-STMP1-8	7	135777673	136124693	+	0.02192690595984459	0.07036641985177994	0.25297340750694275
Inc-PTN-1	7	137029676	137039229	-	0.27315205335617065	3.3953018188476562	2.604846715927124
Inc-CHRM2-3	7	137065787	137068924	+	0.0015378196258097887	0.0025544450618326664	0.1065664142370224
Inc-DGKI-1	7	137665746	137668441	-	0.3082153797149658	1.0776034593582153	0.054421745240688324
Inc-SVOPL-1	7	138418933	138432420	-	0.02009340189397335	1.471792459487915	0.5011811256408691
Inc-ZC3HAV1L-2	7	138752751	138762812	-	1.723165512084961	5.002630710601807	4.456506729125977
Inc-KLRG2-2	7	139102208	139112272	-	0.07263348996639252	0.014333069324493408	0.8087071180343628
Inc-LUC7L2-1	7	139115033	139118197	+	0.1525450199842453	0.32614848017692566	0.04729746654629707
Inc-TBXAS1-3	7	139476850	139497283	+	1.7415850162506104	1.2790684700012207	7.063676357269287
Inc-CLEC2L-4	7	139639478	139646962	+	0.0029869815334677696	0.10130797326564789	0.0637245923280716
NDUFB2-AS1	7	140395136	140396915	-	0.5010604858398438	0.5777231454849243	1.4492087364196777
Inc-ADCK2-1	7	140399993	140400904	+	0.7930729985237122	2.4792864322662354	3.5250508785247803
Inc-SSBP1-2	7	141487615	141488440	+	0.9688707590103149	0.7803164124488831	0.1393597573041916
Inc-CLCN1-1	7	143058913	143063301	+	0.24924956262111664	1.0359972715377808	1.605332374572754
Inc-EPHA1-2	7	143087382	143088484	-	0.03507641702890396	0.013233901001513004	2.1801764965057373
Inc-EZH2-5	7	148614969	148638279	-	0.006903532426804304	0.24344787001609802	0.025178128853440285
Inc-CUL1-5	7	148638581	148660586	+	1.4100499153137207	1.3141440153121948	0.31862112879753113
ATP6V0E2-AS1	7	149555489	149744747	-	0.8342611789703369	2.137906312942505	3.811486005783081
Inc-ATP6V0E2-4	7	149587828	149588505	+	0.08736284077167511	0.7490174174308777	0.2926834523677826
Inc-ACR3C-2	7	149740901	149918381	-	0.025586837902665138	0.864258885383606	0.1528155505657196
Inc-ACR3C-4	7	150035408	150038749	-	7.4517621994018555	4.51099967956543	0.6694488525390625
Inc-RARRES2-2	7	150059716	150070385	-	0.14547109603881836	0.2003270387649536	0.6791890263557434
LINC00996	7	150130742	150145228	+	0.04072695970535278	0.08873290568590164	0.006666561588644981
Inc-GIMAP6-4	7	150209647	150210927	-	0.0864734798669815	0.07644163072109222	0.26538771390914917
Inc-FASTK-3	7	150767878	150768645	-	0.07929704338312149	0.0	2.536741256713867
Inc-FASTK-1	7	150771829	150773617	-	0.9155232310295105	0.7189609408378601	3.9979805946350098
Inc-WDR86-1	7	151072995	151093003	-	4.534480571746826	0.36875948309898376	0.5903554558753967
Inc-CRYGN-2	7	151105646	151107804	-	7.768139839172363	0.8437973260879517	1.8271100521087646
Inc-RHEB-3	7	151372505	151433264	-	5.948023319244385	0.7098304629325867	0.31188055872917175
Inc-KMT2C-4	7	151534354	151573873	-	0.0	0.4007361829280853	0.22212156653404236
PRKAG2-AS1	7	151574127	151576919	+	0.03633681312203407	0.6570373177528381	0.5891392827033997
LINC01003	7	152160871	152162634	+	4.547486782073975	7.636572360992432	16.38481330871582
Inc-ACR3B-3	7	152559223	152562648	+	0.21140027046203613	0.7290767431259155	0.8601119518280029
Inc-DPP6-2	7	154742936	154743898	+	0.38129910826683044	3.634396553039551	2.3478782176971436
Inc-DPP6-3	7	154748139	154748817	+	0.060219332575798035	0.8081927299499512	0.3816191256046295
Inc-INSIG1-2	7	155000588	155010565	+	0.0	0.030196281149983406	0.038860760629177094
Inc-EN2-6	7	155174771	155189051	+	1.1574040651321411	0.1136750802397728	0.0789077289867401
Inc-EN2-2	7	155192617	155194479	+	0.909461259841919	0.07486604154109955	0.03089430369436741
Inc-CNPY1-2	7	155266951	155437899	-	8.523296356201172	1.3417212963104248	1.866105079650879
Inc-RBM33-3	7	155679527	155695322	+	0.00487925810739398	0.1694619357585907	0.11694774031639099
Inc-RBM33-6	7	155755326	155759037	+	0.008617500774562359	0.8670151233673096	1.3148176670074463
Inc-LMBR1-4	7	156800233	156801985	-	0.01672062277938843	0.9781429171562195	0.3787243068218231
MNX1-AS1	7	156803499	156846466	+	0.01142113097012043	0.41128402948379517	0.16972219944000244
Inc-DNAJB6-6	7	156985062	156985526	+	1.0868641138076782	2.480165719985962	0.2128802090883255
Inc-DNAJB6-2	7	157258923	157292410	+	0.9751074314117432	0.08096035569906235	0.00910060852766037
Inc-TDRP-3	8	401917	403183	-	2.4299986362457275	0.5422408580780029	0.8671513795852661
Inc-ERICH1-9	8	563151	595468	-	1.2799897193908691	0.5291013121604919	0.23110084235668182
Inc-TDRP-1	8	675188	675877	-	0.17646481096744537	0.7436258792877197	0.5672128200531006
Inc-CSMD1-7	8	1918853	1922803	-	1.6677173376083374	0.7475060224533081	0.49099237346528625
Inc-CSMD1-1	8	2387147	2585992	-	0.02088964357972145	0.38583970069885254	0.3643943667411804

Inc-MYOM2-4	8	2584498	2788380	+	0.009291678667068481	0.4177650213241577	0.06104782223701477
Inc-DEFB105A-1	8	7748525	7750077	-	0.1808854341506958	0.0	0.0
Inc-PRAG1-3	8	7953877	8085905	-	0.12194494158029556	0.15631648898124695	0.030448781326413155
Inc-ERI1-8	8	8779795	8784966	+	0.021751902997493744	0.4566194713115692	0.14758175611495972
Inc-MFHAS1-2	8	8844846	8860681	-	0.01490775030106306	0.0030181240290403366	0.18858659267425537
Inc-CLDN23-8	8	8907328	8957733	+	0.0572529099881649	0.2817992568016052	0.40099406242370605
Inc-ERI1-2	8	9009252	9025646	+	0.018382852897047997	0.2747795581817627	0.28555038571357727
Inc-PRSS55-4	8	10183978	10269075	+	0.14456059038639069	1.1054731607437134	0.4090283215045929
Inc-PRSS51-2	8	10338909	10405095	-	0.006602293811738491	0.29725387692451477	0.06207240745425224
Inc-C8orf74-3	8	10708181	10727062	+	0.11402919143438339	0.025742530822753906	0.00427097687497735
Inc-PINX1-2	8	10713595	10716946	-	1.0290439128875732	0.3653750717639923	0.24569250643253326
Inc-PINX1-85	8	10980891	10983574	-	0.27945905923843384	1.6296864748001099	0.07694479823112488
Inc-PINX1-86	8	10984315	10987275	-	0.26151055097579956	1.0648261308670044	0.0818495899438858
Inc-XKR6-3	8	11036207	11205011	-	0.29389700293540955	1.24398934841156	0.10465420037508011
Inc-MTMR9-3	8	11058877	11061180	+	0.7639989852905273	0.21276420521736145	0.21378351747989655
Inc-FAM167A-4	8	11173368	11182938	-	0.0028906024526804686	0.001235869713127613	0.056865956634283066
Inc-FAM167A-3	8	11181376	11189666	-	0.0012786932056769729	0.0072672003880143166	0.19051161408424377
Inc-FAM167A-1	8	11281452	11332224	-	10.88560962677002	2.977128028869629	1.1794894933700562
Inc-XKR6-4	8	11302086	11324244	-	3.505621910095215	1.1790008544921875	0.3188718855381012
Inc-NEIL2-1	8	11647423	11648474	+	2.289764881134033	1.2962584495544434	0.5190114974975586
Inc-ZDHHC2-1	8	16988690	17007298	+	0.25476348400115967	0.41486358642578125	0.08898144960403442
Inc-CNOT7-4	8	17159711	17169182	-	1.804719090461731	0.094755157828331	0.02969311177305603
Inc-FGL1-3	8	17512073	17591756	-	7.202564239501953	2.6090028285980225	1.450372338294983
Inc-NAT1-6	8	17802258	17809798	+	0.20629779994487762	0.5298948884010315	0.030731163918972015
Inc-PSD3-7	8	18996673	18999040	-	6.247935816645622E-4	0.09045551717281342	0.06521078944206238
Inc-ATP6V1B2-2	8	19936710	19980277	+	0.006662748754024506	0.02289622649550438	0.03163560479879379
Inc-NPM2-3	8	21782308	21784476	+	0.3671480715274811	1.5494468212127686	0.11144306510686874
Inc-NUDT18-1	8	21972582	21975958	-	0.1336488425731659	10.112067222595215	13.420111656188965
Inc-NUDT18-2	8	21978356	21980203	-	0.17981673777103424	15.108091354370117	22.593242645263672
Inc-HR-1	8	21987984	21990897	-	0.02649368718266487	5.496819019317627	4.912719249725342
Inc-PHYHIP-1	8	22110022	22132686	-	0.005644555203616619	0.0	0.33931273221969604
Inc-PHYHIP-2	8	22277062	22280192	-	0.05179291218519211	0.010778325609862804	0.6755912899971008
Inc-BIN3-4	8	22398358	22402918	-	0.046070270240306854	1.8757680654525757	0.28670626878738403
Inc-BIN3-3	8	22423510	22424684	-	0.035487230867147446	0.0	1.3227145671844482
BIN3-IT1	8	22497884	22499722	-	0.36610981822013855	1.0707014799118042	0.11763805150985718
Inc-CCAR2-2	8	22547663	22656129	+	8.381092338822782E-4	0.023370793089270592	0.1014535129070282
Inc-TNFRSF10B-1	8	22928767	22932270	-	0.039048731327056885	0.2484797090291977	0.1806763857603073
Inc-NKX3-1-1	8	23536207	23540450	-	0.4302680492401123	2.32269024848938	3.4930806159973145
Inc-NEFL-6	8	24144669	24799468	-	0.5083581209182739	0.04017976298928261	0.06357225030660629
Inc-NEFL-2	8	24808467	24814126	-	102.64042663574219	2.682828187942505	10.622930526733398
Inc-NEFM-2	8	24814135	24814624	+	1.7384790182113647	0.02648630365729332	0.17601528763771057
Inc-NEFL-1	8	25035205	25042032	-	0.587516188621521	0.05883673205971718	0.232010617852211
Inc-NEFL-4	8	25038946	25039235	-	0.4741870164871216	0.03467641770839691	0.08598241955041885
Inc-PNMA2-1	8	26222806	26228645	-	0.04122837632894516	0.10827302187681198	0.4593592584133148
Inc-TRIM35-1	8	27093816	27115915	-	19.04269027709961	5.491024017333984	7.640566349029541
Inc-ESCO2-1	8	27555709	27613943	+	0.09347417205572128	0.11863940954208374	0.5821601748466492
Inc-KIF13B-2	8	28779448	28922453	-	0.03994177654385567	0.15168409049510956	0.29250937700271606
Inc-HMBOX1-2	8	28924796	28925971	+	0.0	0.07985228300094604	0.9496046304702759
Inc-TEX15-1	8	30717424	30770552	-	0.23530253767967224	1.7368733882904053	0.8194572925567627
Inc-WRN-9	8	31835223	31839342	+	0.006483788602054119	0.2143370807170868	0.07087064534425735

NRG1-IT1	8	31883252	31996993	+	0.013153526932001114	0.27624964714050293	0.14984023571014404
Inc-NRG1-2	8	32785484	32994917	+	4.066540718078613	2.167747974395752	1.2863842248916626
Inc-BRF2-3	8	37551395	37554156	-	0.09050704538822174	0.16928619146347046	0.6525909900665283
Inc-BRF2-1	8	37592279	37594944	-	0.19333931803703308	0.4442045986652374	0.5325196385383606
Inc-BRF2-2	8	37611184	37619998	-	0.06343678385019302	0.09020493924617767	0.45852369700531
Inc-ADGRA2-1	8	37694255	37710169	+	0.04610329866409302	0.2997360825538635	0.3643186688423157
Inc-ADRB3-1	8	37883276	37887888	-	0.019605236127972603	0.24259088933467865	0.0794043242931366
Inc-C8orf86-8	8	38398533	38399993	-	0.010314262472093105	0.16062629222869873	0.45975664258003235
Inc-C8orf86-1	8	38400075	38418395	-	0.018393784761428833	0.2575583755970001	0.4343602657318115
Inc-HTRA4-2	8	38826485	38828866	+	10.365559577941895	33.541690826416016	42.19816207885742
Inc-TM2D2-1	8	38827879	38830530	-	0.0	0.0	1.1519336700439453
Inc-HTRA4-1	8	38829135	38830081	+	9.330815315246582	25.463790893554688	37.874427795410156
Inc-ZMAT4-4	8	40377084	40377677	-	0.3922897279262543	0.08793321996927261	0.038580719381570816
Inc-SFRP1-4	8	40554515	40644301	-	7.365983486175537	1.2319220304489136	0.6321104168891907
Inc-SFRP1-3	8	40666042	40742463	-	2.654521942138672	0.4847255349159241	0.22252556681632996
Inc-SFRP1-2	8	41119468	41120004	-	61.18463134765625	14.263240814208984	12.519683837890625
Inc-NKX6-3-2	8	41397900	41402563	-	0.03665978088974953	0.01561359129846096	0.2636377215385437
Inc-NKX6-3-1	8	41467211	41479021	-	0.09638942033052444	0.00489600608125329	2.3740735054016113
Inc-AP3M2-3	8	41909785	41911731	+	0.09270798414945602	0.1226198822259903	0.011887185275554657
Inc-PLAT-4	8	42027128	42029225	-	0.04509841278195381	0.03472701832652092	1.5321916341781616
Inc-PLAT-3	8	42090729	42128768	-	0.006534190382808447	0.02570169046521187	0.011977465823292732
Inc-SPIDR-1	8	48100225	48108604	+	0.048111528158187866	0.38636988401412964	0.287185969685364
Inc-EFCAB1-7	8	49340703	49343386	-	0.37985607981681824	0.0401066355407238	0.0
Inc-PPDPFL-5	8	49468872	49700220	+	0.006207041908055544	0.07676457613706589	0.021444348618388176
Inc-EFCAB1-5	8	49623348	49647870	-	0.25033897161483765	0.06660126149654388	0.017090529203414917
Inc-PXDNL-2	8	52722670	52723241	-	0.4262698292732239	0.23536783456802368	0.0
Inc-ST18-4	8	53085073	53373519	-	0.1701505035161972	0.027278974652290344	0.010106888599693775
Inc-OPRK1-3	8	54307771	54436523	-	1.332576036453247	0.21022698283195496	0.43764054775238037
Inc-ATP6V1H-2	8	54406309	54408063	-	0.2552625834941864	0.029739437624812126	0.008453484624624252
Inc-ATP6V1H-3	8	54788710	54789209	-	1.3659816980361938	0.30282676219940186	0.09315758943557739
Inc-MRPL15-1	8	54811569	54821517	+	0.9175845980644226	1.6854455471038818	0.03528570383787155
Inc-LYPLA1-8	8	55046900	55047712	-	0.1069352850317955	0.4044026732444763	0.008940321393311024
Inc-TGS1-3	8	56438734	56446632	+	0.2898062765598297	2.6143503189086914	0.8279082179069519
Inc-CHCHD7-5	8	57500944	57501346	+	15.076128959655762	0.8160351514816284	0.7487133741378784
Inc-FAM110B-3	8	58658688	58662758	+	0.06472890824079514	0.3913971483707428	2.2592592239379883
Inc-TOX-2	8	59653264	59665163	-	0.0	0.3504444360733032	0.1794922798871994
LINC01301	8	61297147	61429354	-	0.17869092524051666	0.7138104438781738	1.1540391445159912
Inc-ASPH-5	8	61875638	61880334	-	0.0012243605451658368	0.532805323600769	0.2523899972438812
Inc-NKAIN3-9	8	63951482	63955955	+	0.16406232118606567	0.38053277134895325	0.5741623640060425
Inc-CYP7B1-6	8	64599737	65281134	-	2.5445306301116943	0.3705945909023285	0.0
Inc-CYP7B1-11	8	65282076	65282998	-	0.3458273112773895	0.04612473025918007	0.0
MIR124-2HG	8	65285775	65315070	+	6.209413051605225	1.3029195070266724	0.6130374670028687
Inc-ARMC1-5	8	66736265	66738758	-	0.3911967873573303	1.3203016519546509	0.08699311316013336
Inc-MTFR1-1	8	66754855	66755566	+	1.0105478763580322	0.3439583480358124	0.2791101932525635
RRS1-AS1	8	67111201	67344598	-	1.1032129526138306	0.10950905829668045	0.10856050252914429
Inc-ADHFE1-1	8	67383684	67388211	+	0.27091628313064575	0.05131912976503372	0.04368641972541809
Inc-VCPIP1-3	8	67624474	67625475	-	0.12358283996582031	0.21532633900642395	0.6608791947364807
Inc-MCMD2C-1	8	67836941	67838589	+	0.11862953007221222	0.03187386691570282	0.3198961615562439
Inc-C8orf34-4	8	70379052	70408085	+	6.139487266540527	0.3465522527694702	0.1000666543841362
Inc-C8orf34-5	8	70405067	70476112	+	4.426855087280273	0.33740517497062683	0.5302438139915466

Inc-PRDM14-1	8	71032114	71037863	-	0.7258941531181335	0.9299456477165222	0.08713501691818237
Inc-KCNB2-1	8	73859385	73862680	+	0.11382848024368286	0.0018199109472334385	0.004271703772246838
Inc-TERF1-1	8	73962120	73975296	+	0.7143972516059875	1.0729955434799194	0.2176947146654129
Inc-SBSPON-3	8	73973659	73975440	-	0.6189064383506775	0.015603859908878803	0.030154723674058914
Inc-SBSPON-2	8	73978767	74036323	-	3.00639271736145	0.0827869325876236	0.1289873570203781
Inc-RPL7-3	8	74420010	74445387	-	0.24360254406929016	0.728306233882904	0.06878353655338287
Inc-TMEM70-1	8	74791244	74816974	+	0.0723109245300293	0.07999702543020248	0.018883682787418365
Inc-GDAP1-1	8	75111631	75120676	+	0.00939203705638647	2.6610424518585205	0.8435532450675964
Inc-JPH1-1	8	75259992	75262285	-	0.6319206953048706	0.09859631955623627	0.0311165452003479
Inc-JPH1-12	8	75515377	75516469	-	7.683488845825195	0.4286530017852783	2.0159659385681152
CASC9	8	76135352	76236976	-	1.5822244882583618	0.5098257660865784	0.0
Inc-PEX2-3	8	77052709	77218705	-	0.043552543967962265	0.07815252989530563	0.0
Inc-PEX2-8	8	77315752	77317285	-	0.06095698103308678	0.0074473535642027855	0.7626771926879883
ZFHx4-AS1	8	77396022	77595738	-	0.6223258376121521	2.0854732990264893	2.630763053894043
Inc-ZC2HC1A-4	8	79640608	79642045	+	0.6650884747505188	0.5054510235786438	0.19745732843875885
Inc-MRPS28-2	8	80844162	80946527	-	0.092678003013134	0.8461561799049377	0.018063608556985855
Inc-TPD52-3	8	80949912	81143500	-	1.4915462732315063	11.59442138671875	10.630010604858398
Inc-PAG1-9	8	81557174	81557408	-	8.372751235961914	0.6817078590393066	0.25451111793518066
Inc-FABP5-2	8	82066164	82082444	+	0.005599307827651501	0.06531988084316254	0.018661605194211006
Inc-FABP5-5	8	82351671	82445510	+	0.0061636115424335	1.3304284811019897	0.143053337931633
Inc-FABP9-1	8	82390924	82395471	-	0.8109578490257263	0.2764208912849426	0.03220484033226967
Inc-DCAF4L2-2	8	88553063	88767946	-	0.010523634031414986	0.310612291097641	0.24013376235961914
Inc-CNBD1-3	8	88986393	89031341	+	0.03487825393676758	0.32731297612190247	0.1281071901321411
Inc-DCAF4L2-3	8	89044244	89046790	-	8.920663833618164	43.75001525878906	43.11717224121094
Inc-MMP16-4	8	89818678	90190568	-	0.2132718414068222	0.04332253336906433	0.04054180905222893
Inc-CALB1-1	8	91070836	91076696	-	14.796529769897461	0.6302275657653809	1.668461799621582
Inc-NBN-3	8	91081397	91107687	-	14.240743637084961	0.530352771282196	1.8141483068466187
Inc-OTUD6B-2	8	92075740	92082050	+	0.019860006868839264	0.00903394166380167	0.4304491877555847
Inc-PIP4P2-2	8	92968730	92970161	-	4.851348876953125	1.7095390558242798	1.4976987838745117
Inc-TRIQK-9	8	93021874	93107712	-	1.4981826543807983	1.390198826789856	0.3887327313423157
Inc-FAM92A-2	8	94753421	94756762	+	0.44705531001091003	0.2633949816226959	0.06846985965967178
Inc-CCNE2-1	8	95803871	95806064	-	0.004755053669214249	0.002681046724319458	0.33175697922706604
Inc-INTS8-1	8	95961797	95963624	+	5.008938312530518	1.1740211248397827	1.7692208290100098
Inc-INTS8-5	8	95986836	96001576	+	5.7639594078063965	2.075063467025757	1.6596341133117676
Inc-CPQ-1	8	97506041	97551044	+	120.31291961669922	20.798643112182617	24.946823120117188
Inc-TSPYL5-4	8	97964092	98458725	-	0.041430361568927765	0.2827984690666199	0.11963460594415665
Inc-RPL30-1	8	98737115	98742478	-	0.027214165776968002	0.01531076431274414	1.1985458135604858
Inc-RPL30-4	8	99033979	99035225	-	0.4588901996612549	0.4690759479999542	0.10289527475833893
Inc-RIDA-1	8	99207919	99217404	-	2.2820091247558594	1.3644698858261108	0.2546350061893463
Inc-RIDA-2	8	99229253	99266296	-	3.2420870626153564	1.8457692861557007	0.31167659163475037
Inc-VPS13B-1	8	100008217	100015451	+	0.06881802529096603	0.008130214177072048	0.013883810490369797
Inc-POLR2K-2	8	100708185	100710245	+	0.05874419957399368	0.21618346869945526	0.008601350709795952
Inc-SPAG1-7	8	101733930	101734296	+	1.7315741777420044	0.35192930698394775	13.867088317871094
Inc-GRHL2-19	8	101920389	101925408	+	0.07574044167995453	0.14672459661960602	0.016587181016802788
Inc-PABPC1-3	8	101946568	101949291	-	0.6560357809066772	2.756598949432373	0.22860200703144073
Inc-GRHL2-8	8	102064243	102088728	+	0.07750727981328964	0.025475487112998962	0.001106620766222477
Inc-RRM2B-8	8	102758053	103136489	-	1.7657536268234253	0.954620361328125	0.29076212644577026
Inc-RRM2B-7	8	102792150	102803205	-	8.219924926757812	3.8856265544891357	2.5264008045196533
Inc-ODF1-1	8	103540968	103550896	+	0.06979629397392273	0.47305816411972046	0.5326782464981079
Inc-ODF1-91	8	103668692	103742333	+	0.2760714590549469	0.6332042813301086	0.8106027841567993

LINC01181	8	104092485	104148399	+	0.019431501626968384	0.6355893015861511	0.693207859992981
BAALC-AS2	8	104145191	104153703	-	0.954934298992157	4.448959827423096	6.306231498718262
lnc-SLC25A32-9	8	104240653	104241542	-	0.08105185627937317	0.2140086144208908	2.2347798347473145
lnc-BAALC-1	8	104255773	104258560	+	0.023608004674315453	0.18788878619670868	0.06783047318458557
lnc-DCAF13-2	8	104546104	104550388	+	0.1364026516675949	0.3601454496383667	0.022012298926711082
lnc-ABRA-6	8	106877635	106879846	-	0.0750393494963646	1.0491975545883179	0.0
lnc-EMC2-10	8	109261101	109263688	+	0.06267257779836655	0.2912003993988037	0.010663085617125034
lnc-EMC2-6	8	109559983	109566595	+	0.04187128320336342	0.013661878183484077	0.002017877995967865
lnc-UTP23-11	8	116440195	116488238	+	0.005777682177722454	0.09705348312854767	0.025311743840575218
lnc-SAMD12-5	8	119047209	119047786	-	0.18364372849464417	0.5221049189567566	0.013087130151689053
lnc-SAMD12-4	8	119097734	119100498	-	0.43729349970817566	1.2432825565338135	0.01933637075126171
lnc-MED30-3	8	119124228	119125847	+	0.13735195994377136	0.34275051951408386	0.023602381348609924
lnc-TAF2-3	8	120584860	120590725	-	0.744940996170044	0.19950011372566223	0.011282447725534439
lnc-MTBP-5	8	121824459	121825599	+	0.5323621034622192	3.314714193344116	2.566326141357422
lnc-DERL1-3	8	123789843	123793918	-	0.0631970763206482	0.10565916448831558	0.26233944296836853
lnc-ATAD2-2	8	124536040	124537708	-	1.1864627599716187	0.9731549620628357	0.11547352373600006
lnc-TMEM65-1	8	125202449	125259639	-	0.21622109413146973	0.02166593261063099	0.013127347454428673
lnc-MTSS1-1	8	125823468	125869758	-	0.15471398830413818	0.21884536743164062	0.01885230839252472
LINC00964	8	125860577	125966570	+	0.015467319637537003	0.027048172429203987	0.0022574737668037415
lnc-WASHC5-5	8	126016112	126021316	-	0.03913942724466324	0.011754686944186687	0.6956973075866699
lnc-POU5F1B-14	8	127570873	127572720	+	0.014866380952298641	0.06532403826713562	0.5907947421073914
lnc-FAM84B-15	8	128084939	128494384	-	0.009776975028216839	0.00672547472640872	0.08467822521924973
lnc-FAM84B-84	8	128654997	128683235	-	4.622854758054018E-4	0.1779036819934845	0.02589414082467556
CASC11	8	128686128	128748143	-	0.008808496408164501	0.12332719564437866	0.05818149447441101
lnc-FAM84B-21	8	128750022	128750598	-	0.06950607895851135	0.2183447778224945	0.42960694432258606
lnc-FAM84B-7	8	128823492	129113502	-	0.01819523610174656	0.035203978419303894	0.11597545444965363
lnc-GSDMC-34	8	129646445	130695925	-	0.008094330318272114	0.024988532066345215	0.06764888763427734
ASAP1-IT1	8	131307601	131308779	-	0.17269329726696014	1.2915847301483154	0.03694868087768555
lnc-TG-2	8	133838424	133839148	+	0.2503001391887665	0.8016635775566101	0.061136968433856964
lnc-TMEM71-1	8	133850362	133856543	-	0.007555769756436348	7.713045924901962E-4	0.325125515460968
lnc-TG-4	8	134241299	134241940	+	0.8569890856742859	13.035820960998535	23.553970336914062
lnc-NDRG1-1	8	134249414	134309547	-	3.504082441329956	40.392486572265625	12.283769607543945
lnc-SLA-2	8	134271239	134276824	-	7.229478359222412	84.05197143554688	35.42167663574219
lnc-WISP1-2	8	134584414	134586104	+	0.7522551417350769	1.2610647678375244	2.4473912715911865
lnc-KHDRBS3-16	8	135795862	135812762	+	9.060000884346664E-4	8.862082031555474E-4	0.016910793259739876
lnc-WISP1-15	8	136659978	136668756	+	1.670792579650879	2.6836538314819336	5.5524749755859375
PEG13	8	141104993	141110659	-	0.5680837631225586	0.5223420858383179	5.230647087097168
lnc-CHRA1-6	8	141608076	141609842	+	0.0	0.07996884733438492	0.04197067394852638
lnc-GPR20-1	8	142363503	142365465	-	0.47603973746299744	0.045815493911504745	0.10342737287282944
lnc-GPR20-2	8	142400039	142402674	-	0.022972993552684784	0.19909781217575073	0.08860920369625092
lnc-DENND3-9	8	142402121	142432271	+	5.462613105773926	14.31168270111084	26.84878158569336
lnc-JRK-3	8	143693426	143694063	-	3.3073630332946777	23.787870407104492	54.23732376098633
lnc-PSCA-3	8	143701734	143702425	+	0.007381549570709467	0.26713982224464417	0.3112340569496155
lnc-THEM6-3	8	143859059	143859640	+	0.10735251754522324	0.22284619510173798	0.6987156867980957
lnc-LY6H-2	8	144239331	144241726	-	4.414307117462158	0.051822420209646225	0.2946503758430481
lnc-TOP1MT-5	8	144343417	144344565	-	0.03504614531993866	0.35420432686805725	0.19538643956184387
lnc-TSTA3-2	8	144731830	144738588	-	0.018206506967544556	0.002098478376865387	0.4161415696144104
lnc-PLEC-4	8	144975923	144977734	-	0.4828881025314331	0.7486214637756348	2.1018123626708984
lnc-PARP10-1	8	145107673	145109782	-	1.403794527053833	2.819288730621338	5.61074161529541
lnc-DGAT1-2	8	145488937	145489891	-	0.14502504467964172	0.7044453620910645	1.380865216255188

Inc-DGAT1-3	8	145534840	145535060	-	0.4275616407394409	0.1226276308298111	2.133488178253174
Inc-ADCK5-4	8	145643454	145645447	+	0.02295395359369345	0.23475930094718933	0.1125531758069992
Inc-C9orf66-7	9	503057	504746	-	0.06698273122310638	0.5003756284713745	0.43780818581581116
Inc-DOCK8-2	9	547038	549531	+	0.7274670600891113	3.455575942993164	6.282650470733643
Inc-PUM3-7	9	2192967	2193572	-	0.017975647002458572	0.011846954934298992	0.7580746412277222
Inc-SPATA6L-1	9	4070906	4071884	-	0.20473985373973846	0.921607255935669	0.026255900040268898
Inc-SPATA6L-5	9	4258129	4259207	-	0.22627760469913483	2.6147944927215576	0.013198410160839558
Inc-SLC1A1-1	9	4298101	4309891	+	0.043800123035907745	0.04568762332201004	0.1461208015680313
Inc-RCL1-3	9	4888991	4893493	+	0.13704808056354523	0.6767798066139221	0.4129621684551239
Inc-KDM4C-1	9	6716183	6719370	+	0.09284218400716782	0.1275731921195984	0.27189451456069946
Inc-DMAC1-10	9	8484238	8485636	-	26.56345558166504	17.100414276123047	8.119758605957031
PTPRD-AS1	9	8858018	8865021	+	1.9482842683792114	0.793232798576355	0.6309247016906738
Inc-ZDHC21-5	9	14081848	14082201	-	12.577485084533691	25.944005966186523	41.6984977722168
Inc-SNAPC3-11	9	14314231	14359243	+	0.32967719435691833	1.092976450920105	1.1005785465240479
Inc-SNAPC3-7	9	14993325	15019722	+	0.3722933530807495	0.32401803135871887	1.1054633855819702
Inc-CCDC171-5	9	15454152	15454489	+	0.8451494574546814	1.5744107961654663	0.26294150948524475
Inc-SNAPC3-3	9	15553289	15564022	+	0.6319149732589722	0.49617236852645874	0.17628610134124756
Inc-SNAPC3-1	9	15888035	15890761	+	0.1527579128742218	0.14903055131435394	0.00398223195250004
Inc-CCDC171-1	9	16035383	16061855	+	0.26312190294265747	0.03189248964190483	0.03903048858046532
Inc-CNTLN-1	9	17018406	17115188	+	0.018507370725274086	0.16015897691249847	0.07077746838331223
Inc-ACER2-1	9	19453207	19455171	+	4.663407802581787	1.339400291442871	1.6347202062606812
Inc-CDKN2A-1	9	21858909	21861925	-	0.0	0.08448519557714462	0.28409573435783386
Inc-CDKN2B-3	9	21969582	21970466	-	0.2434399574995041	0.6525115966796875	2.343596935272217
Inc-CDKN2B-2	9	21989339	21994872	-	1.328072190284729	5.841495037078857	28.22059440612793
CDKN2B-AS1	9	21994777	22239121	+	0.11478586494922638	0.37437647581100464	0.7076414227485657
LINC01239	9	22238192	22876945	+	0.09150934964418411	0.3787313401699066	4.237781524658203
IFT74-AS1	9	26955452	26956305	-	0.05533798411488533	0.20908209681510925	0.19300724565982819
Inc-EQTN-3	9	27374228	27378942	-	0.06140681728720665	0.31295865774154663	0.015910621732473373
Inc-IFNK-3	9	27829274	27844479	+	0.20716100931167603	0.01182706281542778	0.0
Inc-LINGO2-1	9	27937615	27944495	-	0.42213186621665955	0.01724391244351864	0.0
Inc-LINGO2-3	9	27948076	27948746	-	1.6420005559921265	0.09170875698328018	0.0
Inc-C9orf72-3	9	28067553	28295329	-	0.6049047708511353	0.04068981856107712	0.0
Inc-LINGO2-2	9	29185807	29214176	-	0.7610140442848206	0.03741629049181938	0.0
Inc-IFNK-7	9	29214301	29229149	+	0.3489746153354645	0.004291141405701637	0.0
Inc-ACO1-11	9	31578602	31744566	+	0.0011777844047173858	0.11832732707262039	0.3130647540092468
Inc-ACO1-9	9	31848674	32268073	+	0.004166288301348686	0.6877345442771912	1.2954206466674805
Inc-DDX58-8	9	32281644	32351947	-	0.02744434028863907	0.0012150672264397144	0.0031902543269097805
Inc-DDX58-3	9	32441075	32443191	-	0.08416477590799332	0.1645430326461792	0.013797452673316002
Inc-APTX-3	9	33025348	33039905	-	0.9716850519180298	0.1990882307291031	10.726733207702637
Inc-SPINK4-4	9	33165996	33180529	+	0.7282861471176147	0.09418103098869324	0.13145765662193298
Inc-UBAP2-4	9	34109169	34109966	-	0.18978846073150635	0.3749624788761139	0.027635248377919197
Inc-KIF24-1	9	34223982	34224626	-	0.4949696958065033	0.08521255105733871	0.11376635730266571
Inc-ENHO-1	9	34561352	34563613	-	4.431779384613037	1.7227044105529785	0.6554616689682007
Inc-C9orf131-3	9	35103285	35104111	+	0.23339246213436127	0.29130327701568604	0.03865780380842659
Inc-TESK1-2	9	35507476	35508705	+	0.3154616951942444	1.8980216979980469	0.05498487874865532
Inc-ARHGGEF39-1	9	35657748	35658015	-	759.2634887695312	32201.36328125	12838.392578125
Inc-MSMP-2	9	35752989	35756610	-	9.37885856628418	3.8681631088256836	17.692094802856445
Inc-MSMP-1	9	35756709	35757937	-	0.11567225307226181	0.11807457357645035	1.6604700088500977
Inc-HINT2-2	9	35808128	35809874	-	0.23929642140865326	0.5088836550712585	0.9005671143531799
Inc-RNF38-5	9	36332947	36334969	-	0.17542751133441925	0.3587038815021515	0.008985312655568123

Inc-RNF38-4	9	36840556	37026572	-	5.46335506439209	0.19800859689712524	0.042805880308151245
Inc-ZCCHC7-6	9	37027964	37029109	+	0.6709668636322021	0.0	0.0
Inc-GRHPR-7	9	37131103	37131901	+	0.1812421977519989	0.8722297549247742	0.0366976335644722
Inc-TOMM5-1	9	37564532	37567353	-	0.2149432897567749	0.6217215061187744	0.04145785990428925
Inc-SLC25A51-3	9	37871890	37872757	-	0.12358175963163376	0.45738351345062256	0.008032952435314655
Inc-SLC25A51-4	9	37910721	37912138	-	0.8746094703674316	1.553454875946045	2.8862504959106445
Inc-SLC25A51-5	9	37930141	37974245	-	0.19357438385486603	0.5477544069290161	0.019880807027220726
Inc-SLC25A51-8	9	38061392	38064421	-	0.2934828996658325	1.3045755624771118	0.04073592647910118
Inc-IGFBPL1-2	9	38396526	38398241	-	0.10510864108800888	0.028712846338748932	1.195114254951477
Inc-IGFBPL1-1	9	38406526	38408241	-	203.7638702392578	39.15036392211914	7.040103435516357
Inc-ALDH1B1-3	9	38406579	38407093	+	0.4856244623661041	0.014768971130251884	0.05471565201878548
Inc-ALDH1B1-6	9	38437706	38504528	+	0.412318617105484	0.15742383897304535	0.0029606109019368887
Inc-FAM240B-9	9	39173791	39174510	-	0.9450784921646118	0.2673572897911072	0.11729200184345245
Inc-ANKRD20A2-14	9	41954580	41955037	+	0.49320441484451294	1.1229002475738525	1.9312471151351929
Inc-CNTNAP3-24	9	41958802	42251629	-	0.35585734248161316	0.5695729851722717	1.8231464624404907
Inc-ANKRD20A2-15	9	42018871	42020413	+	0.14751103520393372	0.19091303646564484	0.734513521194458
Inc-ANKRD20A2-11	9	42250840	42251545	+	0.10575741529464722	0.0587320551276207	0.5482630729675293
Inc-ANKRD20A2-9	9	42266980	42267558	+	0.0063322861678898335	0.007821036502718925	0.41006314754486084
Inc-ANKRD20A2-16	9	42419017	42429602	+	0.010585873387753963	0.3172058165073395	1.459407925605774
Inc-ANKRD20A2-3	9	42461394	42464233	+	0.06091718375682831	0.33537107706069946	0.7901136875152588
Inc-ANKRD20A3-51	9	42466315	42474237	+	0.07513058930635452	0.21144133806228638	1.500876784324646
Inc-ANKRD20A2-5	9	42493617	42494809	+	0.11416119337081909	1.4934585094451904	0.8910025358200073
Inc-ANKRD20A2-8	9	42500527	42506814	+	0.026375556364655495	0.17142127454280853	0.25175580382347107
Inc-ANKRD20A2-12	9	42817350	42857850	-	0.0	0.49604853987693787	0.6169386506080627
Inc-ANKRD20A4-12	9	42844370	69664949	-	0.006550300866365433	0.2236834615468979	0.3851090371608734
Inc-SPATA31A6-5	9	44109338	44118673	-	0.05730963498353958	0.09234267473220825	2.0678679943084717
Inc-SPATA31A7-2	9	45108392	45112532	+	0.049536269158124924	0.19500389695167542	0.3102627694606781
Inc-SPATA31A6-15	9	45359303	45365869	+	0.04052816331386566	0.1563206911087036	0.5993009805679321
Inc-SPATA31A7-10	9	46577620	46578220	+	0.4938017427921295	0.5000020265579224	4.262962341308594
Inc-FOXD4L5-35	9	46685429	46688171	-	0.1882246732711792	0.25424376130104065	0.8161225914955139
Inc-SPATA31A7-13	9	46687557	46748385	+	0.04241836816072464	0.10515591502189636	0.158871591091156
Inc-FOXD4L5-30	9	46842616	46844326	-	0.03379140421748161	0.12197008728981018	0.22851288318634033
Inc-SPATA31A7-14	9	46843638	46846357	+	0.1479787975549698	0.2299596071243286	0.9390419125556946
Inc-CBWD6-25	9	47304438	47311821	-	0.2316434383392334	0.04420202597975731	0.7416297793388367
Inc-FOXD4L5-27	9	66454679	66457162	-	3.293189287185669	6.807607173919678	9.998892784118652
Inc-FOXD4L5-80	9	66490072	66494196	-	1.692483901977539	3.1237573623657227	8.9608736038208
Inc-ANKRD20A4-20	9	66494269	66503030	+	0.08943095803260803	0.33088061213493347	1.1182302236557007
Inc-FOXD4L5-25	9	66512823	66554298	-	0.14164020121097565	0.3179292380809784	0.7859538793563843
Inc-ANKRD20A4-18	9	66553200	66555928	+	1.103351354598999	2.0574800968170166	4.190347671508789
Inc-FOXD4L5-23	9	67016227	67032072	-	0.0	0.12154160439968109	0.1814689189195633
Inc-FOXD4L5-22	9	67254257	67289492	-	1.408048391342163	15.316913604736328	22.89320945739746
Inc-ANKRD20A4-14	9	67340517	67343501	+	1.390233039855957	1.893863558769226	4.86210298538208
Inc-ANKRD20A4-13	9	67353657	67355405	+	0.3696303367614746	1.4734388589859009	1.90570068359375
Inc-ANKRD20A4-5	9	68408723	68419927	+	1.1597760915756226	2.7702062129974365	4.050447463989258
Inc-FOXD4L5-18	9	68425818	68455397	-	0.19427740573883057	0.4050096571445465	1.150418758392334
Inc-FOXD4L6-3	9	69082536	69108793	-	0.03638341650366783	0.29848212003707886	0.20414289832115173
Inc-FOXD4L6-2	9	69256455	69272421	-	0.45993006229400635	0.5339707136154175	1.5387446880340576
Inc-FOXD4L5-12	9	69379292	69380714	-	0.029168911278247833	0.19021835923194885	0.8136647939682007
Inc-ANKRD20A4-1	9	69451764	69452598	+	0.4118451178073883	2.998781442642212	2.317392587661743
Inc-ANKRD20A4-2	9	69475237	69475614	+	0.29571741819381714	0.04247460514307022	1.7058382034301758

Inc-ANKRD20A4-3	9	69501018	69502204	+	0.023123616352677345	0.35238996148109436	0.3106977045536041
Inc-FOXDL5-10	9	69616244	69651314	-	0.10798365622758865	0.5946414470672607	1.1584107875823975
Inc-FAM122A-1	9	71320901	71401076	+	1.6317663192749023	0.48110252618789673	0.11090729385614395
Inc-KLF9-5	9	73034428	73035801	-	0.058665595948696136	0.6222409009933472	0.18608921766281128
Inc-KLF9-4	9	73477838	73480385	-	1.7628650665283203	15.157413482666016	8.656854629516602
Inc-C9orf85-5	9	74204517	74204849	+	1.8047786951065063	1.3130618333816528	0.1955210566520691
Inc-ABHD17B-2	9	74364917	74383429	-	61.733543395996094	16.638145446777344	22.42369842529297
Inc-ABHD17B-6	9	74375874	74377418	-	0.448108971118927	0.7448552250862122	0.01851153001189232
Inc-C9orf57-1	9	74722734	74723228	-	0.23641014099121094	0.014548496343195438	0.028991762548685074
Inc-ZFAND5-5	9	75172713	75192159	-	0.0013214353239163756	0.1989855170249939	0.5104303956031799
Inc-GDA-5	9	75192704	75243260	+	0.020552806556224823	0.23496828973293304	0.2647581696510315
Inc-GDA-6	9	75254126	75270532	+	0.007236036937683821	0.03526231646537781	0.02464565820991993
RORB-AS1	9	77070127	77114391	-	0.329824298620224	0.07081115245819092	0.06075219810009003
Inc-CEP78-1	9	80834036	80834273	+	0.6781720519065857	0.030258428305387497	0.0
Inc-AGTPBP1-2	9	88400637	88420553	-	0.12894025444984436	0.06402664631605148	0.024901079013943672
Inc-NAA35-1	9	88472600	88488125	+	0.411396324634552	0.5143692493438721	0.10600284487009048
Inc-NAA35-7	9	88752796	88806768	+	0.0021778636146336794	0.21760402619838715	0.09989815950393677
Inc-NAA35-15	9	89204719	89205038	+	0.0	4.01483488028857	0.8483267426490784
Inc-NAA35-16	9	89247062	89311411	+	0.0	0.37820202112197876	0.20441259443759918
Inc-DAPK1-7	9	89763559	89774471	+	0.06024552509188652	0.3834279775619507	0.2374228686094284
Inc-C9orf47-3	9	91538874	91541644	+	0.1865384876728058	0.027781907469034195	0.0
Inc-SHC3-8	9	91603062	91606246	-	0.6929645538330078	0.06410399824380875	0.05615346133708954
Inc-SYK-6	9	94186315	94192731	+	0.026252076029777527	0.13091708719730377	0.20438873767852783
Inc-SPTLC1-6	9	94519718	94712188	-	5.362659454345703	0.37810707092285156	0.014911510050296783
Inc-CENPP-13	9	94793430	94794193	+	0.015002408996224403	0.012554594315588474	0.9673997163772583
Inc-CENPP-5	9	95393149	95395650	+	0.17957457900047302	0.0707889124751091	0.0391925685107708
Inc-ZNF484-64	9	95567667	95570369	-	0.04247351363301277	0.1181761771440506	0.1250808984041214
Inc-MFSD14B-7	9	97792029	97795781	+	0.39688289165496826	1.1553648710250854	0.020597796887159348
Inc-MFSD14B-20	9	97847502	97848370	+	5.135529518127441	2.2275869846343994	1.1004970073699951
Inc-C9orf3-6	9	98207060	98208373	+	0.03916928172111511	0.0018108516233041883	1.59967041015625
Inc-HABP4-7	9	98680418	98680986	+	0.2032889574766159	0.6039807200431824	0.02502826601266861
Inc-HSD17B3-4	9	98867764	98878696	-	3.394067462068051E-4	0.03555299714207649	0.00593675347045064
Inc-HABP4-2	9	99019298	99045097	+	0.027448222041130066	0.21221493184566498	0.0024784228298813105
Inc-HABP4-4	9	99262637	99266837	+	0.015212302096188068	0.12703287601470947	0.9797809720039368
Inc-TSTD2-4	9	100153118	100158973	-	0.0	0.07244738191366196	0.01628470979630947
Inc-TSTD2-3	9	100164458	100174844	-	6.876253755763173E-4	0.07001405954360962	0.07079502195119858
Inc-STX17-5	9	102937460	102938338	+	0.1598602831363678	1.076828122138977	0.026941023766994476
Inc-BAAT-3	9	103755183	103790912	-	0.010468493215739727	0.1926061362028122	0.055547744035720825
Inc-TAL2-4	9	108530807	108535529	+	0.07714515179395676	0.17395766079425812	0.02570052072405815
Inc-RAD23B-3	9	109984518	110017878	+	0.1846570521593094	0.021088898181915283	0.02032598666846752
Inc-KLF4-10	9	110399205	110400005	-	0.06811411678791046	1.0744516849517822	0.12266668677330017
Inc-FRRS1L-1	9	111892573	111898218	-	9.473989486694336	0.6612342596054077	2.5667150020599365
Inc-C9orf152-5	9	112932549	112938715	-	0.21231254935264587	0.007001638412475586	1.5819425582885742
Inc-TXNDC8-1	9	113139091	113141658	-	2.4844624996185303	0.3760570287704468	0.4793521463871002
Inc-C9orf84-1	9	114354578	114362096	-	6.460803031921387	5.510737895965576	22.168195724487305
Inc-DNAJC25-2	9	114426760	114427112	+	1.2459486722946167	1.6048645973205566	0.3219517767429352
Inc-UGCG-1	9	114582193	114586602	+	0.016093235462903976	0.17277315258979797	0.055091022692585
Inc-SLC46A2-1	9	115631918	115636827	-	0.0071518742479383945	0.0	0.3371388912200928
Inc-ZFP37-1	9	115758812	115812323	-	2.528226375579834	9.378982543945312	8.545533180236816
FAM225B	9	115865618	115873957	-	0.0014167504850775003	0.11936280131340027	1.4411052465438843

FAM225A	9	115875176	115882208	+	0.005831004120409489	0.18970952928066254	1.0154978036880493
Inc-C9orf43-1	9	116170093	116170786	+	0.04952876269817352	0.0	4.129461765289307
Inc-C9orf43-5	9	116304733	116306551	+	2.7424156665802	0.36890098452568054	0.4882160425186157
Inc-BRINP1-2	9	121915736	121971164	-	1.33048415184021	1.6932897567749023	2.5318570137023926
Inc-PSMD5-1	9	123574753	123575123	-	0.07532046735286713	0.48842519521713257	0.555335521697998
Inc-B3GNT10-21	9	123587106	123617146	+	1.2442034482955933	4.535043716430664	5.557251453399658
Inc-PHF19-1	9	123588873	123593679	-	5.523981094360352	13.98350715637207	19.781795501708984
Inc-TRAF1-1	9	123787974	123797104	-	1.3921608924865723	4.567912578582764	4.8645920753479
Inc-ZBTB26-1	9	125702833	125703718	-	0.24042578041553497	0.08087366074323654	0.03625038266181946
Inc-DENND1A-5	9	126137915	126141006	-	0.17037497460842133	0.4080962836742401	0.8642464876174927
Inc-DENND1A-2	9	126758547	126761864	-	0.0087287537753582	0.12031958997249603	0.22380921244621277
Inc-GOLGA1-2	9	127805168	127807307	-	0.04788871109485626	0.15360119938850403	0.008145563304424286
Inc-GAPVD1-6	9	128519873	128520523	+	1.1143500804901123	1.2993919849395752	0.38798046112060547
Inc-MVB12B-7	9	128664233	128666749	+	0.8005205392837524	0.7746079564094543	0.25346463918685913
Inc-ZBTB34-1	9	129585768	129587191	+	0.15049877762794495	0.638187050819397	0.027651682496070862
Inc-LRSAM1-1	9	130349340	130354502	+	0.0775768831372261	0.3337652385234833	0.22576944530010223
Inc-PTRH1-3	9	130452377	130453119	-	0.3005061447620392	0.32876333594322205	1.253872275352478
Inc-COQ4-1	9	131104432	131105049	+	14.285940170288086	1.1480820178985596	2.8571696281433105
Inc-TRUB2-8	9	131154286	131155789	-	6.45943546295166	1.632452130317688	0.025234127417206764
Inc-CERCAM-1	9	131171198	131172076	+	1.8344279527664185	0.5280526280403137	0.08004165440797806
ODF2-AS1	9	131231236	131235291	-	0.018016677349805832	0.008656765334308147	1.1977788209915161
Inc-WDR34-3	9	131232752	131253522	-	0.01941956952214241	0.0015526801580563188	0.22021813690662384
Inc-PKN3-1	9	131486724	131495522	+	0.4522320032119751	0.813744843006134	1.290243148803711
Inc-PTPA-8	9	131938086	131938941	+	0.05210651084780693	0.22663667798042297	0.556955099105835
Inc-PTPA-3	9	132044695	132075915	+	0.02278561145067215	0.005368048325181007	0.0042957342229783535
Inc-C9orf50-5	9	132173539	132175738	-	0.05170932784676552	0.15447404980659485	0.190128356218338
Inc-C9orf50-2	9	132262772	132270807	-	0.004929470829665661	0.0023346422240138054	0.1682368963956833
Inc-NTMT1-2	9	132337396	132369370	+	0.10802538692951202	0.012625069357454777	0.003165607573464513
Inc-FNBP1-1	9	132807230	132807899	-	0.30692392587661743	0.7080918550491333	0.016051912680268288
Inc-FIBCD1-2	9	133813404	133814673	-	1.6213383674621582	0.5897141098976135	10.944165229797363
Inc-FAM78A-3	9	134008239	134042892	-	0.0017082423437386751	0.0	0.08891425281763077
Inc-UCK1-3	9	134372866	134375578	-	0.24332992732524872	0.18783225119113922	2.0843751430511475
Inc-SETX-1	9	135252508	135254261	-	0.1123017743229866	0.35023149847984314	0.025724342092871666
Inc-SPACA9-1	9	135820366	135827438	+	0.07994651794433594	0.06303121894598007	0.021078011021018028
Inc-TSC1-1	9	135894816	135896553	-	0.42001885175704956	0.18926623463630676	3.494950532913208
Inc-FAM163B-2	9	136529094	136532245	-	0.7869492769241333	0.4025237262248993	0.026663340628147125
Inc-FCN1-1	9	137710890	137764482	-	0.004590453580021858	0.340742826461792	0.20405927300453186
Inc-C9orf116-1	9	138395119	138398293	-	0.017081061378121376	0.0	0.2906949520111084
Inc-KCNT1-2	9	138900082	138901544	+	0.024874409660696983	0.0034484912175685167	3.7852394580841064
Inc-TMEM250-2	9	138999328	139001270	-	0.2630600333213806	0.42458948493003845	1.5003656148910522
Inc-NOTCH1-1	9	139454744	139466574	-	0.9800676703453064	0.09412282705307007	0.04375728219747543
Inc-LCN10-3	9	139612032	139613223	-	0.20883524417877197	0.29963308572769165	0.9174231290817261
Inc-RABL6-2	9	139736279	139736848	+	1.5033950805664062	1.4852724075317383	5.056468486785889
Inc-NPDC1-1	9	139932430	139933342	-	0.22141508758068085	0.618259072303772	0.7913329601287842
Inc-UAP1L1-2	9	139948598	139957958	+	0.07734038680791855	0.08695793151855469	0.9871692657470703
Inc-UAP1L1-1	9	139957987	139959033	+	0.03186269849538803	0.046888940036296844	1.629707932472229
Inc-DPP7-1	9	139995938	139998780	-	0.023385539650917053	0.07086337357759476	0.5224238634109497
Inc-SAPCD2-2	9	140006830	140007701	-	8.918169021606445	43.93880081176758	56.579750061035156
Inc-RNF208-3	9	140116875	140117887	-	1.2528505325317383	1.0881072282791138	4.141482353210449
Inc-RNF208-1	9	140118567	140122265	-	0.4130520224571228	0.7433754801750183	1.4872971773147583

Inc-FAM166A-3	9	140136126	140137267	-	0.5080949664115906	0.04140389710664749	7.392388820648193
Inc-FAM166A-2	9	140138037	140142222	-	0.14480902254581451	0.25822713971138	4.30502986907959
Inc-NRARP-1	9	140188320	140190173	-	0.2638315260410309	0.0579448863863945	0.016438189893960953
Inc-PRR26-2	10	674578	677195	+	0.0019980536308139563	0.2230769842863083	0.07057719677686691
Inc-DIP2C-2	10	860702	861655	-	10.282240867614746	13.46039867401123	10.884317398071289
Inc-ID1-5	10	1259747	1260603	-	0.4471898078918457	0.07227656245231628	0.028476202860474586
Inc-ID1-6	10	1261616	1282593	-	0.638963520526886	0.19868534803390503	0.024029646068811417
Inc-ID1-8	10	1332213	1335197	-	0.12205350399017334	0.008572671562433243	0.0035038201604038477
Inc-PITRM1-10	10	3075085	3099644	-	0.1123199462890625	0.19671760499477386	0.007454175502061844
Inc-PITRM1-2	10	3094708	3109567	-	0.15836293995380402	0.16190433502197266	0.5619027018547058
LINC00703	10	4426438	4458809	+	0.1773861199617386	0.006973549723625183	0.0
Inc-ASB13-3	10	5636645	5654048	-	0.008231708779931068	0.018404705449938774	0.16817989945411682
Inc-IL15RA-2	10	5994334	6020150	-	0.673473060131073	1.803119421005249	2.1176466941833496
PRKCQ-AS1	10	6622361	6681743	+	0.15690098702907562	0.44841042160987854	0.6385530233383179
LINC00707	10	6821472	6924874	+	0.010685333050787449	0.03664565831422806	0.23924164474010468
Inc-PFKFB3-4	10	6828670	6843827	+	0.0018411334604024887	0.013213767670094967	0.023809300735592842
Inc-SFMBT2-3	10	7200572	7203727	-	1.9854812622070312	7.432627201080322	8.121869087219238
Inc-ITIH2-9	10	7453057	7455429	+	0.07147899270057678	0.14278219640254974	0.364351361989975
Inc-KIN-12	10	7844032	7860333	-	0.037853170186281204	0.03307313099503517	0.21243087947368622
Inc-TAF3-1	10	8091817	8097516	+	0.002806723117828369	0.0020263497717678547	0.18041688203811646
Inc-USP6NL-7	10	10817261	10837007	-	2.188305616378784	0.22396479547023773	0.1404011845588684
Inc-ECHDC3-9	10	11219703	11221256	+	0.1818704903125763	1.473616123199463	0.04262030869722366
Inc-ECHDC3-8	10	11295754	11298627	+	0.2006339728832245	0.6973103880882263	0.0632385370283127
Inc-ECHDC3-6	10	11335760	11338633	+	0.09830305725336075	0.6214159727096558	0.009045036509633064
Inc-ECHDC3-5	10	11361411	11361978	+	0.9322965741157532	1.8711379766464233	0.26092442870140076
Inc-NUDT5-1	10	12286750	12289844	-	0.014031291007995605	0.004407464526593685	0.4613797962665558
Inc-PRPF18-14	10	14227465	14228956	+	1.7845865488052368	1.1520673036575317	0.09417786449193954
Inc-CDNF-1	10	14885630	14886747	-	0.0294987540692091	0.06198456138372421	0.4444606602191925
Inc-MINDY3-2	10	15638512	15646269	-	0.9479902982711792	0.7762587070465088	0.03461221605539322
Inc-PTER-7	10	15902588	15903682	+	0.16221754252910614	0.24535082280635834	0.039947714656591415
Inc-TRDMT1-5	10	17273002	17279310	-	1.2246090173721313	0.23817473649978638	11.900744438171387
Inc-CASC10-4	10	21776454	21779401	-	13.324004173278809	1.0984457731246948	1.2128506898880005
Inc-CASC10-3	10	21781587	21782606	-	17.08940315246582	2.6933348178863525	2.2416656017303467
Inc-CASC10-5	10	21808437	21812824	-	1.3820887804031372	0.3554217517375946	0.40398770570755005
Inc-COMMD3-1	10	22540720	22547532	+	0.163152813911438	0.2300303429365158	0.6017391085624695
Inc-BMI1-4	10	22621333	22621916	+	0.0870574414730072	0.30394813418388367	0.2741907835006714
Inc-C10orf67-2	10	23252896	23384253	-	0.008026422001421452	0.005950924940407276	6.887687486596406E-4
Inc-OTUD1-1	10	23632920	23651146	+	0.4476073980331421	0.10827703773975372	0.10577327013015747
Inc-C10orf67-1	10	23725272	23727683	-	0.08142402023077011	0.09116390347480774	0.015492012724280357
GPR158-AS1	10	25447001	25465205	-	0.12310125678777695	0.2324834167957306	0.49630245566368103
Inc-ANKRD26-4	10	27272258	27273353	-	0.2819328010082245	0.49194037914276123	0.07398532330989838
Inc-MASTL-4	10	27810962	27811539	+	0.15728981792926788	0.3938537836074829	0.006031662691384554
Inc-ARMC4-3	10	28525530	28527629	-	0.9746770858764648	0.08535934239625931	0.025304103270173073
Inc-SVIL-3	10	29710568	29711301	-	0.0	0.004740657284855843	0.9607341885566711
Inc-LYZL1-7	10	29723168	29725346	+	0.015000749379396439	0.8146787285804749	0.05848192051053047
Inc-SVIL-1	10	29743271	29746228	-	0.08785295486450195	0.13710787892341614	0.018225468695163727
Inc-LYZL1-9	10	29745065	29746228	+	0.08357705920934677	0.8582589030265808	0.1887931376695633
Inc-JCAD-10	10	29835750	29837842	-	0.3372734487056732	1.6314101219177246	0.018711334094405174
Inc-JCAD-8	10	29933707	29935702	-	0.19164755940437317	0.5922572612762451	0.006279694382101297
Inc-JCAD-2	10	29941944	30543666	-	0.13064652681350708	0.22280572354793549	0.005588344298303127

Inc-LYZL2-11	10	31119045	31124561	-	0.12289204448461533	0.33824077248573303	0.3685731589794159
Inc-ZEB1-11	10	31321459	31445420	+	0.031014472246170044	0.1529354304075241	0.09207911044359207
Inc-ARHGAP12-1	10	31982012	31996375	-	0.4084080755710602	5.157621383666992	8.001824378967285
Inc-ZEB1-9	10	31991161	32015267	+	0.0011421137023717165	0.0937938541173935	0.04723964259028435
Inc-ARHGAP12-2	10	32044658	32067736	-	0.1922733336687088	1.1815626621246338	0.7798548936843872
Inc-NRP1-5	10	33232929	33233218	-	1.4962992668151855	1.7688932418823242	0.03606518730521202
Inc-NRP1-2	10	33247414	33249432	-	0.1969200074672699	0.02681008167564869	0.05055040121078491
Inc-CREM-6	10	34398809	34399990	+	0.0	0.0	0.5426742434501648
Inc-CUL2-1	10	35386934	35415948	-	0.04969842731952667	0.035337015986442566	0.006782555487006903
Inc-ZNF25-4	10	38082866	38085037	-	0.06656886637210846	0.3856516480445862	0.014580669812858105
Inc-ZNF33A-8	10	38426265	38433327	+	0.5293152928352356	0.9903574585914612	0.17512431740760803
Inc-ZNF33B-6	10	42903616	42967688	-	0.03159879520535469	0.9369137287139893	1.143853783607483
LINC00839	10	42970939	42992174	+	0.30561885237693787	3.1964361667633057	5.6036200523376465
Inc-RET-4	10	43299977	43307499	+	0.11092991381883621	0.2953176200389862	0.01845560409128666
Inc-ZNF487-1	10	43916027	43918820	+	0.23751206696033478	0.8683618903160095	1.7561302185058594
Inc-DEPP1-2	10	45497670	45643340	-	0.016778895631432533	0.0015942208701744676	0.0930161252617836
Inc-NPY4R2-1	10	46951472	46966835	+	2.9252257347106934	0.9101978540420532	0.17968051135540009
Inc-GPRIN2-1	10	46951472	46966835	+	2.2642951011657715	0.7649196982383728	0.14973615109920502
Inc-GPRIN2-3	10	46971633	46972832	+	1.493189811706543	0.8527809977531433	0.094106525182724
ARHGAP22-IT1	10	49717904	49719721	-	0.07859393209218979	0.928386926651001	0.011076520197093487
Inc-ERCC6-1	10	50641879	50655452	-	1.1533514261245728	0.7008023858070374	0.19738277792930603
Inc-DRGX-2	10	50691414	50714045	-	10.003240585327148	6.6268391609191895	3.3612520694732666
Inc-CHAT-3	10	50747271	50750078	+	0.10434137284755707	0.04216643050312996	0.0023261618334800005
Inc-SGMS1-3	10	51946971	51958906	-	0.20172731578350067	0.5946643948554993	1.372431993484497
Inc-SGMS1-2	10	52426409	52434709	-	0.014977174811065197	0.05888069048523903	0.7147126197814941
Inc-FAM13C-5	10	59960595	59961847	-	0.15720143914222717	0.4312847852706909	0.025103311985731125
Inc-TFAM-3	10	60273109	60274558	+	0.697993278503418	0.23384815454483032	0.01683042012155056
Inc-TFAM-5	10	60429269	60496140	+	0.10430315881967545	0.1050657406449318	0.0014816410839557648
Inc-FAM13C-3	10	60896385	60897942	-	0.10083373636007309	0.007183128502219915	0.01890578493475914
Inc-CCDC6-3	10	61789449	61804561	-	2.652695894241333	0.8404480814933777	0.743140697479248
Inc-CCDC6-1	10	61811442	61814831	-	0.244768425822258	0.09602846205234528	0.023319756612181664
Inc-CCDC6-4	10	61821679	61824050	-	4.896941184997559	2.0544142723083496	1.0477505922317505
Inc-CCDC6-5	10	61842266	61844473	-	16.449918746948242	6.665865898132324	3.966517448425293
Inc-CCDC6-6	10	61898275	61900273	-	10.05004596710205	1.766088604927063	1.412987470626831
Inc-RTKN2-1	10	63852523	63856700	-	0.0147392638027668	0.0016066905809566379	0.48754557967185974
Inc-EGR2-1	10	64553322	64565731	-	0.28178152441978455	0.06297336518764496	0.0722159743309021
Inc-NRBF2-2	10	64981915	64982805	+	0.2134881466627121	0.020579837262630463	0.030095383524894714
Inc-EGR2-5	10	65005260	65007599	-	0.10012821853160858	0.5757405757904053	0.016641482710838318
Inc-JMID1C-3	10	65796105	65797040	-	0.05965731665492058	0.98813796043396	0.28824490308761597
LINC01515	10	67330096	67528593	+	0.5733506679534912	0.4721177816390991	0.1597895324230194
Inc-DNAJC12-6	10	69299384	69425382	-	0.06523731350898743	2.1452829837799072	0.9551224112510681
Inc-DNAJC12-2	10	69720459	69721221	-	1.4604076147079468	1.6518982648849487	0.2805723249912262
Inc-DNAJC12-4	10	69767477	69767774	-	0.32246801257133484	0.4585011303424835	0.0
Inc-CCAR1-3	10	70434113	70434857	+	0.35119691491127014	1.391044020652771	0.10313210636377335
Inc-SLC25A16-3	10	70545609	70550589	-	0.037554461508989334	0.009510084055364132	0.4582579731941223
Inc-FAM241B-1	10	71335563	71336910	+	0.8719744086265564	0.160818949341774	0.040617961436510086
Inc-LRRC20-2	10	72163581	72165086	-	0.22456936538219452	0.03645710274577141	0.6186233758926392
Inc-ADAMTS14-1	10	72577323	72577968	+	0.19247181713581085	0.4551485478878021	0.02628997713327408
Inc-CDH23-2	10	73124000	73126131	+	0.20408941805362701	0.15122836828231812	0.044668227434158325
Inc-SPOCK2-1	10	73846439	73848790	-	1.9443387985229492	11.22309684753418	10.073453903198242

Inc-ASCC1-4	10	74031731	74033469	-	0.2999177270881653	0.5621657967567444	0.07074641436338425
DDIT4-AS1	10	74034673	74035738	-	0.10512160509824753	0.29049012064933777	0.7492518424987793
Inc-DDIT4-2	10	74079622	74082287	+	0.0695820078253746	0.07291965931653976	0.0
Inc-MSS51-1	10	75210406	75211755	-	0.38366109132766724	0.3771314322948456	0.08833964169025421
Inc-PLAU-2	10	75788171	75789962	+	0.23092538118362427	0.8081264495849609	0.04480429737599945
Inc-ZNF503-1	10	77039484	77162109	-	0.6716368198394775	0.4417320787906647	2.4517014026641846
Inc-DLGS-5	10	78629364	78632322	-	0.3369787335395813	0.3447479009628296	3.1692731380462646
Inc-DLGS-1	10	79317424	79320001	-	0.07759416848421097	0.2388349175453186	0.004651243798434734
Inc-RPS24-2	10	79542624	79551665	+	0.014060434885323048	0.0	0.7905236482620239
Inc-POLR3A-8	10	80191575	80270532	-	0.0063023255206644535	0.022278843447566032	4.4482789235189557E-4
Inc-ZCCHC24-7	10	81058519	81061950	-	0.0894344374537468	0.012705772183835506	0.3041689395904541
Inc-PPIF-1	10	81142084	81169030	+	0.038358818739652634	0.0134772397577626	0.8673946261405945
Inc-EIF5AL1-1	10	81213170	81214510	+	0.023207832127809525	0.6531238555908203	0.27747511863708496
Inc-SFTPD-6	10	81651904	81652931	-	0.3015461564064026	0.13550104200839996	0.050884075462818146
Inc-NUTM2E-2	10	81664654	81710785	+	0.8311697244644165	0.18046414852142334	0.03977976366877556
SFTPD-AS1	10	81727969	81732969	+	0.054172515869140625	4.480485513340682E-4	0.0
Inc-DYDC1-1	10	82279333	82295768	-	0.008600760251283646	0.07269304990768433	0.08049734681844711
Inc-DYDC1-3	10	83633129	83634284	-	0.6482214331626892	0.015910014510154724	0.0
Inc-LRIT2-4	10	85898176	85900338	-	0.014895128086209297	0.13283663988113403	0.11475082486867905
CERNA2	10	85926984	85931832	-	0.25317078828811646	0.0036198562011122704	0.0
Inc-GRID1-6	10	87315241	87317193	-	0.027892405167222023	0.12260041385889053	0.12389850616455078
Inc-SNCG-1	10	88677348	88677575	+	1.9246494770050049	2.646972179412842	0.5275883674621582
ADIRF-AS1	10	88725102	88731068	-	0.434755802154541	0.908915638923645	2.2861857414245605
Inc-KLLN-2	10	89623328	89624455	-	0.11410097032785416	0.004532300401479006	0.3526957035064697
Inc-PAPSS2-9	10	89696356	89696835	+	1.1748377084732056	2.4445040225982666	0.2672801911830902
Inc-PAPSS2-10	10	89706925	89708694	+	0.7479740977287292	0.7846161723136902	0.15470919013023376
Inc-LIPJ-2	10	90343084	90344727	+	0.0950913205742836	0.13561853766441345	0.6259766817092896
Inc-FAS-2	10	90787438	90793194	+	0.14450497925281525	0.15876701474189758	0.03877030685544014
Inc-HECTD2-4	10	92927623	92931346	+	0.23324838280677795	0.7612969875335693	0.04767043888568878
Inc-FRA10AC1-1	10	95472090	95505414	-	0.40210598707199097	0.017308611422777176	0.01809655874967575
Inc-FRA10AC1-2	10	95505514	95517409	-	0.6693727374076843	0.02833726815879345	0.007687036879360676
Inc-PDE6C-5	10	95522210	95531748	+	0.5322672128677368	0.007963545620441437	0.004479133524000645
Inc-PDLIM1-4	10	97152266	97152995	-	0.4746459722518921	1.5376431941986084	0.05630713328719139
Inc-BLNK-4	10	97888812	97890249	-	0.875322699546814	0.26729488372802734	0.2921658456325531
Inc-CCNJ-1	10	97889479	97915776	+	2.220639705657959	2.3731398582458496	0.599696695804596
Inc-PIK3AP1-2	10	98510022	98510684	-	0.14291900396347046	0.0	4.682271957397461
Inc-FRAT1-2	10	99084503	99093019	+	0.0	0.009090520441532135	0.5071702003479004
Inc-AVPI1-1	10	99477217	99477902	-	0.028103232383728027	0.09570498019456863	0.5933489203453064
Inc-SLC25A28-1	10	101404270	101419006	-	0.3186105787754059	0.18703755736351013	0.11625757068395615
Inc-SCD-2	10	101989417	101991744	+	0.13088051974773407	0.22397039830684662	0.024266086518764496
Inc-SEC31B-4	10	102224313	102238765	-	1.4113740921020508	0.3388967216014862	0.2666723430156708
Inc-PDZD7-1	10	102762051	102767512	-	0.07161233574151993	0.03477122262120247	0.7230947613716125
Inc-PDZD7-11	10	102826264	102827759	-	0.3630675971508026	0.4325125515460968	1.3517223596572876
LBX1-AS1	10	102989351	103029905	+	0.005502562038600445	0.2476373016834259	0.09026499837636948
Inc-FBXW4-3	10	103454399	103458148	-	0.007494644727557898	0.16092179715633392	1.9452179670333862
Inc-LDB1-2	10	103847546	103849781	-	0.08549245446920395	0.06620492786169052	0.0019345000619068742
Inc-C10orf95-2	10	104209594	104211300	-	0.045594897121191025	0.15840904414653778	0.18152852356433868
Inc-ARL3-1	10	104402549	104403897	-	0.24693429470062256	0.3660447895526886	0.7649455070495605
Inc-BORCS7-2	10	104605352	104605707	+	3.6041927337646484	0.718573808670044	0.6628472208976746
Inc-CNNM2-1	10	104674342	104675161	+	0.12446069717407227	0.1300293356180191	0.0

Inc-NT5C2-2	10	104948480	105026741	-	0.09807781130075455	0.2356385439634323	0.02088097296655178
Inc-NT5C2-1	10	104958490	105036919	-	0.1921113133430481	0.04618270695209503	0.004403974395245314
Inc-CALHM3-2	10	105401922	105408105	-	0.11267105489969254	0.6885903477668762	0.00573002640157938
Inc-STN1-2	10	105696445	105726783	-	0.13253694772720337	0.3993377983570099	0.38704630732536316
Inc-CFAP43-6	10	106014589	106015609	-	0.11174426227807999	0.08459792286157608	0.7406442761421204
Inc-ZDHH6-8	10	114553848	114594534	-	0.02214277908205986	0.010374188423156738	8.704813080839813E-4
Inc-VTI1A-7	10	114716295	114716950	+	0.5848755240440369	4.3895087242126465	0.2127925157546997
Inc-AFAP1L2-1	10	116199376	116200800	-	3.7308881282806396	0.8863637447357178	1.0010980367660522
Inc-AFAP1L2-2	10	116225224	116228024	-	23.011499404907227	14.221848487854004	7.0615363121032715
Inc-AFAP1L2-5	10	116354761	116370476	-	7.005651473999023	1.4018844366073608	1.6030102968215942
Inc-ABLIM1-1	10	116552407	116581425	-	0.7435129284858704	0.184694305062294	0.0931130200624466
Inc-GFRA1-1	10	117816436	117820910	-	16.94068717956543	2.383727550506592	0.29532015323638916
Inc-C10orf82-2	10	118031516	118032155	-	8.516745567321777	1.3384506702423096	0.3286055624485016
Inc-CCDC172-1	10	118033779	118040914	+	0.43345069885253906	0.04509012773633003	0.010384493507444859
Inc-RAB11FIP2-7	10	120064392	120064610	-	0.4656720459461212	0.7064395546913147	0.031838368624448776
LINC00867	10	120116620	120124615	+	0.1600649356842041	0.005504943896085024	0.036498237401247025
Inc-NANOS1-3	10	120871442	120873202	+	0.2770761251449585	0.30239593982696533	0.06785691529512405
Inc-BAG3-1	10	121331316	121334113	+	7.205480942502618E-4	7.48589402064681E-4	0.3993440568447113
Inc-FGFR2-12	10	122517001	122610857	-	0.13837924599647522	0.160633847117424	0.02510998770594597
Inc-PLPP4-6	10	122656797	122657778	+	0.24697282910346985	0.35973823070526123	0.07124827057123184
Inc-CPXM2-1	10	125702798	125754114	-	0.11837370693683624	0.007141768001019955	0.00706419255844784
Inc-CPXM2-4	10	125805529	125853098	-	20.35532569885254	1.218247890472412	1.9464101791381836
Inc-LHPP-8	10	125853328	125858109	+	0.04945625737309456	0.0056518386118113995	0.011647054925560951
Inc-FAM53B-2	10	126467360	126467666	-	0.5168732404708862	0.6423438191413879	0.07532438635826111
Inc-CTBP2-6	10	126565359	126605273	-	0.031597014516592026	0.06216385215520859	0.010279752314090729
Inc-ZRANB1-4	10	126605991	126610770	+	0.5535861849784851	1.3500168323516846	0.14437954127788544
Inc-DHX32-3	10	127779305	127798357	-	4.111009120941162	10.901139259338379	13.640268325805664
Inc-DHX32-4	10	127823937	127843874	-	4.913021564483643	20.664079666137695	24.699169158935547
LINC00601	10	128102438	128110448	-	0.17662855982780457	1.5497201681137085	1.599523901939392
Inc-FAM196A-1	10	128786359	128824771	-	0.0016104993410408497	5.623868783004582E-4	0.23568032681941986
Inc-C10orf90-3	10	128939563	128964289	-	0.07585345208644867	1.777949571609497	1.2482023239135742
Inc-FOX12-1	10	129717792	129734616	+	0.08624961227178574	0.9403373599052429	0.38736462593078613
Inc-CLRN3-1	10	129727640	129732781	-	0.0	0.18770559132099152	0.11056216061115265
Inc-FOX12-2	10	129796776	129798365	+	0.05877717584371567	0.7755456566810608	1.1985429525375366
Inc-EBF3-8	10	131754628	131799071	-	0.2752981185913086	0.401224285364151	0.005031374748796225
Inc-STK32C-1	10	133994177	134000254	-	0.24910467863082886	0.07705793529748917	0.05233440175652504
Inc-PWWP2B-1	10	134232510	134249038	+	0.05445964261889458	0.12002754956483841	0.01850578375160694
LINC01165	10	134334331	134335953	-	0.03763684257864952	0.04552585631608963	0.30048245191574097
Inc-NKX6-2-1	10	134596683	134598269	-	2.530874729156494	0.06604141741991043	0.5032055974006653
Inc-ADAM8-1	10	135075907	135090407	-	0.7577397227287292	2.357241153717041	2.269754409790039
Inc-IFITM2-1	11	318640	325631	+	0.8318235874176025	2.7716195583343506	2.593548536300659
Inc-IFITM5-3	11	325703	326294	-	0.35138803720474243	0.04725728556513786	0.007168326061218977
Inc-B4GALNT4-1	11	356462	358128	+	0.028197690844535828	0.26176315546035767	0.2289275379888153
Inc-HRAS-2	11	555660	558420	-	0.21017566323280334	0.15751908719539642	0.9247221946716309
Inc-HRAS-3	11	558476	560143	-	0.2678912878036499	0.34598758816719055	0.9542298316955566
Inc-PHRF1-1	11	574141	575388	+	0.02977002039551735	0.18420526385307312	0.1489049792289734
Inc-IRF7-1	11	606489	607524	-	0.02307482436299324	0.0	0.1759561151266098
Inc-SLC25A22-1	11	788178	790113	-	9.32730484008789	17.856752395629883	28.461978912353516
Inc-POLR2L-5	11	880867	881475	-	2.8060998916625977	1.0028901100158691	10.405606269836426
Inc-CTSD-4	11	1754736	1756194	-	0.25933489203453064	1.2199875116348267	1.033447027206421

Inc-CTSD-3	11	1769160	1770427	-	0.4896700978279114	0.7435488700866699	2.1256046295166016
Inc-INS-IGF2-1	11	2150351	2151194	-	0.556878924369812	8.599120140075684	28.396377563476562
Inc-C11orf21-3	11	2356545	2356979	-	7.406252384185791	0.6027216911315918	2.1240174770355225
Inc-SLC22A18-1	11	2965668	2966753	+	0.12555073201656342	0.004895373247563839	2.1850223541259766
Inc-OR2D2-3	11	6843173	6948108	-	0.14320829510688782	0.06912163645029068	0.0038931386079639196
Inc-ZNF214-1	11	7009115	7018463	-	0.5055935978889465	0.1494848132133484	0.11820303648710251
Inc-OR2D2-2	11	7037051	7041573	-	4.04470157623291	1.365927815437317	0.8780001401901245
Inc-TUB-8	11	8290184	8295418	+	0.0052330452017486095	0.279762327671051	0.158247172832489
Inc-AKIP1-6	11	8954475	8958768	+	0.20285993814468384	0.09634736180305481	0.0340871699154377
Inc-DENND5A-3	11	9332831	9333236	-	0.4683178961277008	2.000446081161499	0.1305527687072754
Inc-SBF2-7	11	9589441	9594917	-	0.2841309607028961	0.23394307494163513	0.0781094878911972
Inc-WEE1-3	11	9766574	9768012	+	0.45265111327171326	0.5757326483726501	0.13737031817436218
Inc-SBF2-1	11	10317870	10326390	-	1.1625230312347412	0.42321887612342834	0.3591211438179016
Inc-AMPD3-2	11	10329860	10452220	+	0.37123483419418335	0.5367403626441956	0.10260741412639618
Inc-RNF141-1	11	10613123	10615570	-	2.1644794940948486	1.025102138519287	0.09986580908298492
Inc-LYVE1-1	11	10651232	10715504	-	4.434269428253174	1.578562617301941	0.11569774895906448
Inc-ZBED5-1	11	10905668	10922015	-	0.020050710067152977	0.3312295973300934	0.3527778089046478
LINC02547	11	12052422	12083332	+	0.01413504034280777	0.1817740499973297	0.05581504479050636
Inc-BTBD10-8	11	12957658	12967671	-	0.013129052706062794	0.0013582443352788687	0.605922520160675
LINC00958	11	12981281	13011095	-	0.11811867356300354	0.027390703558921814	0.008703650906682014
Inc-PLEKHA7-8	11	15987996	15989841	-	3.3420190811157227	15.39788818359375	21.50725746154785
Inc-PLEKHA7-7	11	16071328	16133415	-	5.013826370239258	48.70012283325195	22.639493942260742
Inc-PLEKHA7-6	11	16208327	16274082	-	3.5285372734069824	26.537429809570312	17.659128189086914
Inc-NUCB2-30	11	16667585	16677089	+	0.14793048799037933	1.667248010635376	2.0198440551757812
Inc-RPS13-5	11	16876436	17034889	-	2.3437368869781494	0.4633806049823761	0.7457775473594666
Inc-NCR3LG1-4	11	17230981	17236657	+	0.3108113408088684	0.3252257704734802	0.08468735218048096
Inc-ABCC8-1	11	17407610	17408297	-	0.4176972806453705	0.3280041515827179	2.2873711585998535
Inc-DBX1-6	11	19732480	19736218	-	0.24393591284751892	0.8390583395957947	1.2978534698486328
Inc-BBOX1-5	11	27529711	27530878	+	0.29736828804016113	0.4074024260044098	0.05871453881263733
Inc-KCNA4-9	11	29319134	29339880	-	0.4986254572868347	0.019017616286873817	0.005277332384139299
Inc-CCDC73-4	11	32410604	32417949	-	0.06687697023153305	2.3414552211761475	0.9989928007125854
Inc-C11orf91-2	11	33675753	33718576	-	0.049789510667324066	0.13491874933242798	0.5139163136482239
Inc-KIAA1549L-1	11	33730981	33731568	+	0.2658696174621582	0.03413117304444313	21.572668075561523
Inc-LMO2-1	11	33835687	33843901	-	0.020389998331665993	0.023469984531402588	0.589118242263794
Inc-FBXO3-2	11	33886310	33892075	-	2.0322060585021973	2.0434727668762207	4.705655574798584
Inc-ABTB2-3	11	34122338	34127030	-	0.030742133036255836	0.04261617362499237	0.20052091777324677
Inc-EHF-1	11	34714000	34723562	+	4.1228861808776855	0.18007047474384308	0.0
Inc-EHF-4	11	34731147	34731708	+	11.262887954711914	0.477448970079422	0.0
Inc-SLC1A2-2	11	35150431	35160563	-	0.08753587305545807	0.3560204803943634	0.3558376729488373
CD44-AS1	11	35231890	35236532	-	0.032810457050800323	0.02278963290154934	0.5901370644569397
Inc-PAMR1-3	11	35742777	35940294	-	0.20624952018260956	2.940537929534912	4.818696022033691
Inc-PRR5L-1	11	36317838	36350891	+	0.22094981372356415	0.43015262484550476	0.9245718717575073
Inc-ALX4-7	11	43350298	43381056	-	0.027952484786510468	0.004235145635902882	1.272621512413025
MIR670HG	11	43577986	43694943	+	0.14687909185886383	0.015874119475483894	0.025305215269327164
Inc-ALKBH3-3	11	43740226	43740696	+	0.5128846168518066	1.2148054838180542	0.08716852217912674
Inc-ALX4-20	11	43877463	43877954	-	0.0704735517501831	0.008233421482145786	2.627945899963379
Inc-ALX4-11	11	43887418	43899052	-	0.0	0.009844611398875713	0.16119110584259033
Inc-C11orf94-5	11	45672783	45687144	-	0.6511878371238708	0.28107333183288574	4.056709289550781
Inc-C11orf94-2	11	45926604	45926823	-	0.3034392297267914	0.54178386926651	1.5652945041656494
Inc-C11orf94-1	11	45927492	45928012	-	0.3844350278377533	0.3039848506450653	6.784348964691162

Inc-ARHGAP1-1	11	46671290	46672092	-	0.004583048168569803	0.0025551447179168463	0.6043848991394043
Inc-PACSIN3-2	11	47212732	47213093	-	0.7122465372085571	0.16111505031585693	0.05263947322964668
Inc-FNBP4-2	11	47726652	47736921	-	0.04749069735407829	0.3536963164806366	0.3193916380405426
Inc-OR4C12-9	11	50238935	50257665	-	0.07489003986120224	0.17086689174175262	0.2828679084777832
Inc-LRRC55-1	11	56947536	56948750	+	8.710186004638672	0.1468258947134018	0.0380527526140213
Inc-P2RX3-4	11	56956461	56959187	+	13.934276580810547	0.2724165618419647	0.08562536537647247
Inc-TIMM10-1	11	57298645	57309993	-	1.0190927982330322	0.37219730019569397	0.049876224249601364
Inc-SERPING1-1	11	57386014	57388699	+	0.15520209074020386	0.01058594137430191	0.0
Inc-CLP1-3	11	57405497	57420263	+	7.68105411529541	1.0042997598648071	0.5799968242645264
Inc-OR10Q1-2	11	58009515	58010569	-	0.1408160924911499	0.0	0.013443066738545895
Inc-GLYAT-1	11	58378592	58380115	-	0.28946393728256226	0.13156664371490479	1.2478032112121582
Inc-GLYAT-2	11	58656261	58664214	-	1.044589638710022	0.8519672155380249	0.14588218927383423
Inc-PTGDR2-2	11	60603469	60610438	-	0.08008381724357605	0.02328334003686905	0.7175348997116089
Inc-DDB1-4	11	61026553	61036889	-	12.662679672241211	0.9927239418029785	4.132748126983643
Inc-FTH1-4	11	61723408	61726310	-	0.6835939288139343	0.20284907519817352	0.19356760382652283
Inc-AHNAK-4	11	62158988	62160844	-	0.01717722296595573	0.0	0.5697665810585022
Inc-CSKMT-3	11	62380338	62380597	+	0.297131210565567	0.11135104298591614	1.3707882165908813
Inc-UQCC3-1	11	62432808	62433183	+	16.268840789794922	43.83762741088867	54.134437561035156
Inc-SLC3A2-3	11	62619909	62620313	+	0.061600323766469955	0.06529676914215088	5.933314323425293
Inc-PLAZG16-1	11	63357811	63384355	-	8.460927963256836	5.3820109367370605	32.16780090332031
Inc-MACROD1-5	11	63743171	63743910	-	0.32683420181274414	0.011157254688441753	4.212246894836426
Inc-RCOR2-4	11	63766032	63766862	-	3.690744400024414	8.546631813049316	11.645875930786133
Inc-TRPT1-3	11	63918390	63919879	-	1.986401081085205	5.225407123565674	6.853879451751709
Inc-TRPT1-1	11	63996686	64001824	-	0.8225513696670532	1.0833215713500977	2.7714011669158936
Inc-RPS6KA4-3	11	64216529	64219129	+	0.03459739312529564	0.21853750944137573	0.4403919279575348
Inc-CDC42BPG-1	11	64590658	64591781	-	0.6400647759437561	0.0	0.12639889121055603
Inc-TMEM262-1	11	64852451	64856579	-	0.02460484579205513	0.005375031381845474	0.3170788884162903
Inc-MRPL49-1	11	64902095	64903571	+	0.18325287103652954	0.5402922034263611	0.0554320327937603
Inc-LTBP3-2	11	65180388	65278498	-	0.1775774359703064	0.3229028582572937	0.9887988567352295
Inc-LTBP3-11	11	65236994	65239618	-	0.056014396250247955	0.09087491035461426	0.01023861300200224
Inc-LTBP3-3	11	65254018	65256453	-	0.19650796055793762	0.40863174200057983	0.05950937792658806
Inc-KCNK7-1	11	65350277	65357843	-	0.013490334153175354	0.04565173014998436	0.3026314675807953
Inc-RNASEH2C-1	11	65493816	65495428	-	0.0671936422586441	0.26478689908981323	0.21756558120250702
OVOL1-AS1	11	65556472	65562174	-	0.1291559636592865	0.01213099155575037	0.005922748241573572
Inc-EIF1AD-1	11	65768900	65772094	-	0.3549051582813263	0.18187443912029266	8.961451530456543
Inc-CATSPER1-2	11	65812462	65816622	-	5.286443710327148	0.9335126280784607	1.4459682703018188
Inc-SF3B2-1	11	65818200	65819790	+	1.0915913581848145	0.4646203815937042	3.6089870929718018
Inc-Y1F1A-5	11	66027038	66029305	-	0.16870257258415222	0.43499138951301575	0.658950924873352
Inc-Y1F1A-8	11	66033841	66035050	-	0.19576257467269897	0.31685441732406616	1.1944758892059326
Inc-Y1F1A-2	11	66037303	66045996	-	0.08261581510305405	0.007313879672437906	1.285656213760376
Inc-Y1F1A-1	11	66044250	66044963	-	0.10278480499982834	0.0236064326018095	3.961397647857666
Inc-NPAS4-1	11	66176629	66187199	+	1.5409075021743774	0.4554379880428314	0.3269733488559723
Inc-ZDHHC24-1	11	66332213	66333619	-	6.247966766357422	19.518281936645508	25.2922420501709
Inc-SPTBN2-5	11	66625354	66627946	-	0.16427595913410187	0.3704746663570404	0.8406257629394531
Inc-POLD4-2	11	67059467	67060093	-	0.0052813570946455	0.0	0.5600115060806274
RPS6KB2-AS1	11	67198838	67202870	-	0.07078802585601807	0.049671467393636703	0.8089022636413574
Inc-CABP4-2	11	67227339	67227784	+	0.0	1.5071507692337036	0.17798516154289246
Inc-NUDT8-2	11	67380124	67383135	-	0.6585864424705505	0.09163971990346909	0.0673217698931694
Inc-NUDT8-1	11	67385750	67394775	-	0.3885267674922943	0.277093768119812	0.050902534276247025
Inc-NDUFV1-4	11	67387475	67394864	+	3.1899354457855225	0.4798298478126526	0.15604469180107117

Inc-NDUFV1-8	11	67557616	67560760	+	0.005888109095394611	0.0	0.2547450363636017
Inc-UNC93B1-3	11	67702034	67723273	-	0.21366196870803833	0.040825024247169495	0.8037053346633911
Inc-CHKA-3	11	67800578	67803813	-	0.15362510085105896	0.017520098015666008	5.538656711578369
Inc-TCIRG1-2	11	67889047	67897988	+	0.09642904996871948	0.2840750515460968	0.3287913501262665
Inc-IGHMBP2-1	11	68637569	68642010	+	0.4622666537761688	0.2925184667110443	2.2830421924591064
MIRGPRF-AS1	11	68779751	68785916	+	0.08283113688230515	0.0038129130844026804	0.2995905578136444
Inc-ORAOV1-1	11	69290335	69296313	-	0.06023871526122093	0.001857952680438757	0.015623972751200199
Inc-ORAOV1-5	11	69467844	69473198	-	0.46127235889434814	0.21411940455436707	1.4522169828414917
Inc-SHANK2-5	11	70052235	70055094	-	0.06814191490411758	0.021738644689321518	1.7289938926696777
Inc-FAM86C1-1	11	71422786	71459019	+	0.012370618060231209	0.01829594373703003	0.2318086326122284
Inc-NUMA1-5	11	71638624	71639493	-	1.0503857135772705	1.4364646673202515	0.9804229736328125
Inc-P2RY2-11	11	72956521	72959333	+	0.05995587259531021	0.005248044151812792	0.01471335906535387
Inc-FAM168A-1	11	73106604	73107481	-	0.13937431573867798	0.24782536923885345	0.6933677196502686
Inc-MRPL48-4	11	73373398	73373860	+	13.366342544555664	82.54126739501953	55.65243911743164
Inc-CHRD12-3	11	74456730	74457239	-	122.30689239501953	14.901960372924805	16.5103816986084
Inc-ARRB1-1	11	74915055	74952793	-	0.09732717275619507	0.030883096158504486	0.002947229193523526
Inc-GDPD5-4	11	75133445	75135941	-	0.8830960392951965	0.06071586161851883	0.03587622940540314
Inc-GDPD5-3	11	75136551	75137884	-	1.4284884929656982	0.1571941375732422	0.06870699673891068
Inc-KLHL35-2	11	75145984	75149893	-	3.2046024799346924	0.2719862163066864	0.2872403562068939
Inc-KLHL35-3	11	75147150	75157340	-	1.8180423974990845	0.17311212420463562	0.1481500267982483
Inc-KLHL35-4	11	75196350	75236909	-	1.7255405187606812	0.24785500764846802	0.20572908222675323
Inc-MAP6-1	11	75282944	75283832	-	0.8680233359336853	0.014955799095332623	7.890355110168457
Inc-GDPD5-1	11	75307189	75308315	-	1.6165575981140137	0.1948857605457306	0.05429913476109505
Inc-MOGAT2-4	11	75379481	75382008	+	1.538568377494812	0.19504056870937347	0.25123098492622375
Inc-DGAT2-4	11	75770005	75803311	+	0.04797019436955452	0.236379936337471	0.01310992892831564
Inc-EMSY-2	11	76103240	76103949	+	0.704576849937439	0.34492871165275574	0.20708255469799042
Inc-GDPD4-1	11	76834749	76837201	-	0.008565603755414486	0.002744716592133045	4.132938385009766
Inc-INTS4-2	11	77540700	77583308	-	0.2077576369047165	0.15187780559062958	0.7084490656852722
Inc-GAB2-1	11	78135028	78140882	-	0.5952102541923523	0.412710040807724	0.1891472190618515
Inc-TENM4-8	11	79686118	79794717	-	0.012553616426885128	0.03263045847415924	7.355583366006613E-4
MIR4300HG	11	81590893	82429124	-	0.008828889578580856	0.16145412623882294	0.05076725035905838
Inc-RAB30-2	11	82783444	82828306	-	0.007287479937076569	0.004481649026274681	0.1943017989397049
Inc-CCDC83-3	11	85780517	85781293	+	0.1827126294374466	0.3250176012516022	0.01422216792404652
Inc-TMEM135-7	11	86544110	86548657	+	0.28177446126937866	0.3626609146595001	0.003560108132660389
Inc-TYR-2	11	88157549	88161277	+	0.37176674604415894	1.6701772212982178	1.5434366464614868
Inc-CHORDC1-6	11	90847892	90849119	-	0.2714831233024597	0.0	0.006974571850150824
Inc-SMCO4-1	11	93211638	93276546	-	15.282597541809082	2.4441030025482178	1.5056880712509155
Inc-GPR83-1	11	94206074	94206736	-	2.8343842029571533	2.459606409072876	0.7429999709129333
Inc-PIWIL4-6	11	94523351	94531960	+	0.1910007894039154	0.6604645252227783	0.050093334168195724
Inc-CWC15-3	11	94607217	94658686	-	0.011052215471863747	0.0	1.055716872215271
Inc-CWC15-5	11	94800780	94801275	-	0.2566908895969391	0.10076294094324112	0.8962278962135315
Inc-ENDOD1-6	11	94878601	94879168	+	0.12037215381860733	0.27986863255500793	0.41049718856811523
Inc-JRKL-3	11	96123153	96240738	+	0.10656280070543289	0.054300155490636826	0.30003300309181213
Inc-TMEM123-1	11	102100582	102101653	-	0.15407085418701172	0.0	3.012742519378662
Inc-PDGF1-1	11	103397459	103765999	-	0.01677194982767105	6.566073861904442E-4	0.0023090101312845945
Inc-AASDHPPT-4	11	105625956	105639165	+	0.055392105132341385	0.5895950198173523	0.007945985533297062
Inc-KBTBD3-1	11	105956717	105972702	-	0.005435432307422161	0.005640579387545586	0.3687642812728882
Inc-KDELC2-1	11	108384134	108408914	-	0.41476067900657654	0.5529850125312805	0.05287029966711998
Inc-FDX1-3	11	110583286	110585647	+	0.0	0.12075009196996689	0.08882845938205719
Inc-PPP2R1B-1	11	111639392	111649074	-	0.7825415134429932	0.1819918006658554	0.03787635639309883

lnc-C11orf1-1	11	111743332	111782833	+	0.006979064550250769	0.02395855262875557	0.2178027182817459
lnc-NCAM1-1	11	112658027	112666577	+	0.0	0.7597111463546753	0.06834032386541367
lnc-TTC12-2	11	112851125	112852231	+	0.016482504084706306	0.6814242005348206	0.048308975994586945
NCAM1-AS1	11	113133455	113144798	-	0.011470010504126549	0.009953447617590427	0.08290496468544006
lnc-DRD2-1	11	113145764	113185174	-	0.25694572925567627	0.26269108057022095	1.0159845352172852
lnc-DRD2-4	11	113276482	113278538	-	0.028421679511666298	0.19813451170921326	0.45389607548713684
lnc-TMPRSS5-2	11	113285097	113295229	-	0.7287315726280212	1.8122689723968506	5.130659580230713
lnc-TMPRSS5-1	11	113287546	113287763	-	0.4279818534851074	1.526232361793518	2.8862414360046387
lnc-ZW10-2	11	113691578	113692607	-	1.3231474161148071	1.0078997611999512	0.31833648681640625
lnc-USP28-3	11	113718831	113754874	-	0.08277768641710281	0.40735918283462524	0.008893625810742378
lnc-REXO2-1	11	114323786	114324845	+	0.2359500527381897	0.3913218080997467	0.04792702570557594
lnc-NXPE2-1	11	115045697	115046044	+	0.030201641842722893	0.0	2.5759851932525635
LINC00900	11	115623423	115631345	-	0.11838982254266739	0.04086475074291229	0.013050244189798832
lnc-TAGLN-1	11	117070040	117075503	+	71.47589874267578	13.745627403259277	6.313655376434326
lnc-IL10RA-1	11	117704434	117709657	+	0.07363524287939072	0.0	0.4364287257194519
lnc-JAML-1	11	118097406	118099840	-	0.49217966198921204	0.5141109824180603	0.5852816700935364
lnc-CD3D-5	11	118267810	118272610	-	0.08617808669805527	0.053645748645067215	1.2660754919052124
lnc-IFT46-2	11	118473667	118479226	-	0.09301728010177612	0.3489875793457031	0.30146175622940063
lnc-C1QTNF5-1	11	119206959	119208019	-	0.045169223099946976	0.002373117720708251	2.63212513923645
lnc-C1QTNF5-2	11	119207336	119207750	-	0.0	0.0	3.4492058753967285
lnc-MFRP-4	11	119228745	119230924	-	1.6567800045013428	4.863895893096924	7.308393955230713
USP2-AS1	11	119252488	119397374	+	0.08226954191923141	0.594273030757904	0.41216325759887695
lnc-RNF26-2	11	119288661	119289824	+	0.3091033697128296	0.060339704155921936	2.7140581607818604
lnc-RNF26-1	11	119600109	119617543	+	0.05703521519899368	0.13108909130096436	0.25482237339019775
lnc-TRIM29-3	11	120099586	120101127	-	0.013154515996575356	0.0	0.6469897031784058
lnc-BLID-4	11	121987841	121988678	-	0.8145931363105774	2.359283685684204	0.23638856410980225
lnc-UBASH3B-2	11	122011861	122234470	+	0.03610291704535484	0.0036808389704674482	0.005613065790385008
lnc-JHY-1	11	122830316	122836011	+	0.04717641323804855	0.07096195966005325	0.19908329844474792
lnc-SIAE-1	11	124539332	124565603	-	1.798667073249817	1.3915512561798096	5.595160007476807
lnc-ESAM-65	11	124659136	124662714	-	3.848538398742676	3.928812026977539	1.343778133392334
PKNOX2-AS1	11	125024885	125034505	-	0.790108323097229	0.10481409728527069	0.004082415718585253
lnc-EI24-1	11	125287355	125290076	+	0.6511579751968384	0.6206755042076111	0.02691023051738739
lnc-PUS3-1	11	125742926	125757467	-	0.022358208894729614	0.1098569929599762	0.26010680198669434
lnc-DCPS-1	11	126219413	126219895	+	1.4634730815887451	1.9277307987213135	4.633499622344971
lnc-SRPRA-7	11	126306759	126310713	-	0.3349948525428772	0.17104825377464294	2.1244847774505615
lnc-KIRREL3-1	11	126419179	126873355	-	0.34393778443336487	0.15409912168979645	1.7711248397827148
lnc-ST3GAL4-4	11	126522673	126551999	+	0.2018888145685196	0.04723818972706795	0.910531222820282
lnc-ST3GAL4-5	11	126572441	126579046	+	0.010611830279231071	0.691260039806366	0.11873549222946167
lnc-KCNJ5-1	11	128789206	128791058	+	0.5907579660415649	0.8484498262405396	1.2552450895309448
lnc-ADAMTS15-5	11	130501224	130628919	+	0.0991416722536087	0.04232319816946983	0.3480992317199707
lnc-SNX19-9	11	131372637	131410761	-	4.39799070591107E-4	0.04478871449828148	0.017140086740255356
lnc-SPATA19-8	11	132526982	132812905	-	0.6817793846130371	1.3681526184082031	7.796758651733398
lnc-IGSF9B-13	11	133766327	133772905	-	3.6843793392181396	5.408237457275391	18.99104118347168
lnc-IGSF9B-3	11	133772965	133774419	-	3.3027093410491943	5.72371768951416	13.761702537536621
lnc-SPATA19-1	11	133778894	133782774	-	1.899229884147644	4.191205978393555	7.90740966796875
lnc-JAM3-3	11	133902167	133918269	+	0.0828629732131958	0.43875250220298767	0.2772769033908844
lnc-THYN1-4	11	134020575	134021747	-	1.8893725872039795	2.4365217685699463	6.59353494644165
lnc-THYN1-1	11	134127999	134146254	-	0.031895171850919724	0.7412987947463989	0.7468165159225464
lnc-GLB1L2-1	11	134282202	134401542	+	0.27595266699790955	0.10809651017189026	0.025846440345048904
lnc-WNK1-1	12	798989	837559	+	0.18988600373268127	0.014326668344438076	0.0

Inc-ERC1-1	12	1609657	1621175	+	1.7896251678466797	0.47269803285598755	0.11821164935827255
Inc-CACNA2D4-1	12	1866397	1867177	-	0.14531655609607697	0.005776336882263422	0.015095786191523075
ITFG2-AS1	12	2804931	2922079	-	0.46718257665634155	0.6849232912063599	1.486791968345642
Inc-FOXM1-1	12	3048889	3050025	-	0.06243039295077324	0.03124569170176983	2.4427363872528076
Inc-FOXM1-4	12	3320775	3321096	-	777.2520141601562	102.05138397216797	208.9614715576172
Inc-CRACR2A-8	12	3456063	3475270	-	0.059633370488882065	0.14180083572864532	0.004162974655628204
Inc-CRACR2A-1	12	3592878	3601985	-	0.6051199436187744	0.06997553259134293	0.0020918415393680334
Inc-CCND2-2	12	4128280	4136056	+	0.07412593066692352	0.00652945414185524	0.0
Inc-FGF23-5	12	4409588	4417916	-	0.10392171144485474	0.04438173770904541	1.6667077541351318
Inc-C12orf4-2	12	4744515	4745306	-	0.3279757499694824	0.00382197555154562	0.0
Inc-KCNA5-5	12	5578418	5580254	+	0.040309011936187744	0.23726962506771088	0.0
Inc-VWV-5	12	5744443	5850277	-	0.7119993567466736	0.017743028700351715	0.005309026222676039
Inc-VWV-4	12	5936971	5990972	-	0.5537217259407043	0.009992610663175583	0.0
Inc-VWV-2	12	6258772	6290040	-	0.1266716867685318	0.0457841195166111	0.022564616054296494
CD27-AS1	12	6548167	6561094	-	0.7230496406555176	4.437543869018555	6.1169114112854
Inc-GAPDH-2	12	6619388	6619717	+	163.3947296142578	875.7378540039062	444.7312927246094
Inc-IFFO1-3	12	6646960	6647536	-	16.2193660736084	6.386541843414307	106.51750946044922
Inc-PTMS-2	12	6862355	6863552	+	0.07770666480064392	0.235440194606781	0.19941887259483337
Inc-CDC43-2	12	6948604	6949010	-	0.038811661303043365	0.0	2.9711618423461914
Inc-PHB2-8	12	7042827	7043359	-	0.13178734481334686	0.04148886725306511	2.044628620147705
Inc-PHB2-7	12	7045434	7045654	-	0.05264011770486832	0.05047581344842911	2.245206594467163
Inc-RBP5-3	12	7268332	7281485	-	1.012231707572937	0.04436938837170601	0.028085488826036453
Inc-RBP5-2	12	7319270	7342115	-	0.06815671920776367	0.09310390055179596	0.015399057418107986
LINC00937	12	8448333	8549399	-	0.04131017625331879	0.014325902797281742	0.010448910295963287
Inc-MFAP5-3	12	8804325	8815484	-	3.9152398109436035	0.0063654398545622826	7.083725929260254
Inc-RIMKLB-6	12	8940306	8948420	+	1.1005735397338867	0.21698501706123352	0.07496104389429092
Inc-KLRG1-9	12	9217764	9220330	+	0.729653000831604	0.32929107546806335	0.1084084883322525
LINC00987	12	9392599	9395648	+	0.20841437578201294	0.18142671883106232	0.058894816786050797
Inc-KLRG1-7	12	9469448	9470619	+	1.6638485193252563	0.9953003525733948	0.4408724009990692
Inc-KLRG1-8	12	9470627	9493304	+	1.4919239282608032	0.8307745456695557	0.48356297612190247
Inc-CLEC2D-6	12	9498751	9501023	+	0.1776103228306122	0.10466483235359192	0.017833655700087547
Inc-CLEC2D-5	12	9502422	9504944	+	0.26255640387535095	0.2948736250400543	0.013711179606616497
LINC02598	12	10511063	10513644	-	0.015477080829441547	0.4422137439250946	0.108313977171835327
Inc-TAS2R46-1	12	11200931	11201855	-	0.17172792553901672	0.5626454949378967	0.03590866923332144
Inc-TAS2R43-1	12	11229368	11231770	-	0.1886739730834961	0.300606906414032	0.050158947706222534
Inc-TAS2R30-1	12	11311384	11312410	-	0.498584121465683	2.4706568717956543	0.11870090663433075
Inc-ETV6-5	12	11592231	11608600	+	0.010540160350501537	0.07602404803037643	0.0372856929898262
LINC01252	12	11700964	11743303	+	0.3097538352012634	0.2357778041362762	1.121371865272522
Inc-GPRC5D-3	12	12982298	12982992	-	0.05286933854222298	0.002163144527003169	2.6905853748321533
Inc-GPRC5A-4	12	13024038	13028843	+	1.4367538690567017	0.2148897796869278	0.2638416290283203
Inc-GPRC5A-2	12	13052296	13083871	+	3.894392728805542	0.6065939664840698	0.2010374218225479
Inc-DDX47-3	12	13068126	13070865	+	5.21867561340332	2.617204189300537	0.7150524258613586
Inc-ATF7IP-3	12	14369524	14374231	+	0.009025368839502335	0.3805018961429596	0.48992156982421875
Inc-H2AFJ-6	12	14545417	14545920	+	0.21357963979244232	0.6604016423225403	0.027669057250022888
Inc-ERP27-1	12	15035077	15038788	-	136.4715118408203	4.964181900024414	6.403982162475586
Inc-DERA-1	12	16535761	16600358	+	0.12979568541049957	0.05751056969165802	0.022162560373544693
Inc-DERA-7	12	16619220	16632174	+	0.02417435124516487	0.026833705604076385	5.098636029288173E-4
Inc-AEBP2-3	12	19300008	19307593	+	0.20262813568115234	0.22448641061782837	0.010225088335573673
Inc-AEBP2-6	12	19456414	19456710	+	0.5727030634880066	0.39288485050201416	0.01822112500667572
Inc-PLEKHA5-5	12	19566087	19566395	+	1.7353862524032593	0.016062112525105476	0.09197738021612167

LINC02398	12	19928385	20291394	+	0.05001538619399071	0.010291866026818752	0.010750498622655869
lnc-SLCO1C1-1	12	20848289	20850430	+	3.0454764366149902	0.7665691375732422	0.13998648524284363
lnc-SLCO1A2-1	12	21426876	21572528	-	0.14802636206150055	0.03877665475010872	0.0020388858392834663
lnc-SPX-4	12	21927965	21935691	+	0.03778104484081268	0.056472182273864746	0.003376143518835306
lnc-CMAS-3	12	22094338	22097222	+	0.2290627807378769	0.03227250277996063	0.003253503469750285
lnc-BHLHE41-1	12	26278088	26279550	-	0.5032573342323303	2.4411733150482178	1.5077859163284302
lnc-ITPR2-2	12	26354786	26488789	-	0.013548515737056732	0.02674349583685398	0.055193185806274414
lnc-FGFR10P2-1	12	27124519	27132515	+	0.012536749243736267	0.019087888300418854	0.13288214802742004
lnc-MANSC4-3	12	27848424	27863703	-	0.002516977721825242	0.005655716639012098	0.879229724407196
lnc-MANSC4-10	12	27932754	27934000	-	0.15200437605381012	0.03695858642458916	0.5742871761322021
lnc-MANSC4-2	12	27951460	27953660	-	0.023563446144104	5.196931888349354E-4	0.7483177185058594
LINC02387	12	31458281	31522235	-	0.3972088694572449	0.13969604671001434	0.012317240238189697
lnc-KIAA1551-6	12	32155165	32157256	+	0.23865418136119843	0.1892457902431488	0.055132050067186356
lnc-H3F3C-4	12	32257051	32260462	-	0.009260687977075577	0.02503936178982258	0.6794680953025818
lnc-DNM1L-4	12	32753809	32754014	+	0.5405728816986084	0.4871976971626282	0.020997779443860054
lnc-CPNE8-7	12	38472331	38472801	-	0.9402040839195251	0.0	0.0
lnc-ABCD2-8	12	40462045	40462392	-	0.06880722939968109	0.6595389246940613	0.030054321512579918
lnc-MUC19-1	12	40787197	40964634	+	0.20179793238639832	0.04264365881681442	0.012871123850345612
lnc-PDZRN4-3	12	42682122	42683400	+	2.2733302116394043	0.14240162074565887	0.2631170451641083
LINC02461	12	43549118	43556913	+	0.39770859479904175	0.018845906481146812	0.004524139687418938
lnc-IRAK4-5	12	44200188	44204324	+	0.0452536977827549	0.09549830853939056	0.013959389179944992
lnc-DBX2-5	12	45173471	45245630	-	78.90682983398438	10.312910079956055	5.317468166351318
lnc-DBX2-3	12	45268782	45270069	-	43.627174377441406	4.932980537414551	6.349031925201416
lnc-ANO6-5	12	46267812	46268111	+	0.2788993716239929	0.3568621277809143	0.014418473467230797
lnc-ARID2-11	12	46752134	46754400	+	0.14147600531578064	0.010137082077562809	2.4528234004974365
lnc-ENDOU-1	12	48121934	48124381	-	0.013267070055007935	0.18087786436080933	0.07534978538751602
lnc-VDR-2	12	48211234	48211749	-	1.148593544960022	0.8312137722969055	0.29028064012527466
lnc-TMEM106C-9	12	48398744	48401097	+	0.1892566829919815	0.04884686693549156	0.013673321343958378
lnc-CCDC184-2	12	48583132	48584990	+	0.12561464309692383	0.10791489481925964	0.02857053438544273
lnc-CCDC184-3	12	48591968	48610374	+	0.06656385213136673	0.090030238032341	0.013405738398432732
lnc-H1FNT-1	12	48744141	48840696	+	0.1364714354276657	0.11092618852853775	0.0380048044025898
lnc-TEX49-1	12	49159977	49161106	+	0.007924271747469902	0.0	1.6645326614379883
lnc-WNT1-3	12	49455910	49457826	+	1.0179002285003662	0.13785016536712646	0.13865713775157928
lnc-C1QL4-4	12	49658939	49667089	-	0.026032911613583565	0.3959462344646454	3.68278431892395
lnc-PRPH-1	12	49687035	49687780	+	0.5764200091362	4.062679767608643	1.9219183921813965
lnc-SPATS2-1	12	49745340	49751309	+	0.7026976346969604	4.163218975067139	3.5928151607513428
lnc-FAM186B-1	12	49970623	49971288	-	1.2650226354599	0.08680915087461472	0.0
lnc-RACGAP1-1	12	50343746	50356707	-	0.010144345462322235	0.006220221519470215	0.0826224684715271
lnc-CERS5-2	12	50611445	50614726	-	0.6203323006629944	1.8068315982818604	0.20782378315925598
lnc-LARP4-5	12	50679362	50681700	+	0.23309174180030823	0.5908074378967285	0.04670237377285957
lnc-LARP4-3	12	50691304	50692152	+	0.23129697144031525	0.5894694328308105	0.04529267176985741
lnc-ANKRD33-8	12	52132900	52133850	+	0.11802884936332703	0.3347337245941162	0.015285976231098175
lnc-FIGNL2-6	12	52203489	52204384	-	1.1650326251983643	0.14527130126953125	0.08220535516738892
lnc-KRT80-15	12	52211673	52212142	-	13.005305290222168	0.6475911140441895	0.3697751760482788
lnc-KRT80-14	12	52215746	52242470	-	13.866931915283203	0.9384142756462097	0.3463974595069885
lnc-KRT80-13	12	52221964	52238055	-	0.7045329213142395	0.13995642960071564	0.0063682906329631805
lnc-KRT80-5	12	52233847	52241322	-	0.7655538320541382	0.1629771590232849	0.042602650821208954
lnc-ANKRD33-2	12	52240854	52251690	+	1.4317336082458496	0.1648046225309372	0.28946343064308167
lnc-GRASP-1	12	52377099	52377357	+	1.0205053091049194	0.6490782499313354	0.24577541649341583
lnc-FIGNL2-10	12	52389347	52390807	-	0.02170971781015396	0.0013685664162039757	0.5942317247390747

Inc-KRT80-3	12	52470625	52475868	-	0.028575442731380463	0.011077648028731346	2.372218370437622
Inc-SPRYD3-1	12	53408380	53448222	-	1.1687958240509033	1.7417398691177368	4.614959716796875
Inc-ZNF740-2	12	53551573	53570194	+	0.010032309219241142	0.0036540767177939415	0.33165815472602844
HOXC-AS3	12	54373388	54379370	-	0.0	0.0896439403295517	0.1634838581085205
HOXC-AS2	12	54387594	54390569	-	0.0	1.0325812101364136	0.6230981945991516
HOXC-AS1	12	54392806	54393794	-	0.0	1.0260330438613892	1.332464337348938
Inc-HOXC8-1	12	54413694	54416373	+	0.0	1.3531996011734009	0.7238957285881042
Inc-HOXC4-2	12	54452038	54516199	+	0.0	0.11468847841024399	0.061154961585998535
FAM242C	12	54478916	54519776	-	0.045971453189849854	0.2807781994342804	0.2610815763473511
Inc-HOXC4-4	12	54519855	54546523	+	0.01522334199398756	1.0065993070602417	1.7432327270507812
Inc-NFE2-1	12	54649415	54649694	-	0.4476546347141266	0.9132071137428284	0.07681987434625626
Inc-CD63-6	12	56079014	56081827	-	120.3715591430664	17.518030166625977	29.043729782104492
Inc-CD63-5	12	56088434	56090200	-	152.37832641601562	34.456329345703125	36.481563568115234
Inc-CD63-4	12	56091536	56091946	-	136.901611328125	9.412787437438965	28.973276138305664
Inc-CD63-3	12	56092642	56105988	-	136.1386260986328	28.63421630859375	33.59016036987305
Inc-PYM1-3	12	56348060	56351126	-	9.521028518676758	2.391171455383301	0.23350131511688232
Inc-PYM1-2	12	56349580	56350323	-	3.0115251541137695	0.7807387113571167	0.03995753452181816
Inc-PYM1-4	12	56351718	56360493	-	6.215033531188965	1.5869745016098022	0.23354430496692657
Inc-PYM1-1	12	56360622	56361258	-	0.09605064243078232	0.007436204236000776	1.6755740642547607
Inc-SMARCC2-5	12	56498398	56507689	-	0.6229692101478577	0.2017545998096466	2.128931999206543
Inc-SMARCC2-2	12	56544580	56552009	-	0.3060644268989563	0.3007557690143585	1.2280855178833008
Inc-IL23A-2	12	56701427	56703233	+	0.05312499776482582	0.1842425912618637	0.13176771998405457
Inc-MIP-2	12	56873353	56882146	-	0.39666539430618286	0.01816488243639469	0.08693394064903259
Inc-RBMS2-4	12	56904565	56906914	+	3.6814703941345215	0.8776125907897949	0.9100263714790344
Inc-RBMS2-2	12	57146241	57164328	+	0.338022917509079	0.8706950545310974	1.0533775091171265
Inc-ZBTB39-1	12	57406951	57410313	-	0.3678709864616394	0.01840788871049881	0.0336277075111866
Inc-NDUFA4L2-1	12	57628694	57634527	-	23.273744583129883	17.148956298828125	1.5638082027435303
Inc-B4GALNT1-1	12	58005901	58015686	-	0.03135892376303673	0.011923658661544323	0.19451145827770233
Inc-AGAP2-2	12	58087915	58115293	-	0.28323426842689514	0.1750815361738205	5.343005657196045
Inc-AGAP2-3	12	58142194	58146116	-	216.45945739746094	161.55352783203125	1599.704467734375
Inc-CYP27B1-1	12	58156897	58162769	-	2.24607515335083	2.348357677459717	8.170476913452148
Inc-AVIL-1	12	58191159	58194436	-	2.793893575668335	0.6642860174179077	0.7534242868423462
Inc-CTDSP2-5	12	58197079	58200272	-	6.185715198516846	1.2812814712524414	1.1765398979187012
Inc-TSFM-1	12	58230875	58237544	+	2.2022807598114014	1.1883834600448608	0.234788715839386
Inc-CTDSP2-1	12	58261903	58290267	-	0.053481172770261765	0.21110886335372925	0.5383941531181335
Inc-PPM1H-6	12	62415351	62415955	-	4.31485652923584	0.08941270411014557	0.04513997957110405
Inc-MON2-2	12	62996306	63017469	+	5.014219760894775	3.6244089603424072	1.3215258121490479
Inc-AVPR1A-4	12	63195721	63234008	-	4.588822841644287	2.1823835372924805	0.5576736330986023
Inc-RXYLT1-3	12	64392054	64393594	+	0.24560995399951935	0.6554798483848572	0.04302658885717392
Inc-C12orf66-1	12	64540168	64541637	-	0.021170247346162796	0.019885729998350143	0.3635590970516205
Inc-TBC1D30-1	12	65153276	65173098	+	0.1729767620563507	0.14667657017707825	0.052884843200445175
Inc-WIF1-4	12	65516788	65563196	-	0.08710043877363205	0.10275708138942719	0.014443042688071728
Inc-LEM3-1	12	65675437	65680508	+	0.3665893077850342	0.30226120352745056	0.0010940643260255456
Inc-HMGA2-1	12	66200129	66247173	+	1.3186817169189453	2.947493553161621	0.36170637607574463
Inc-MSRB3-7	12	66224530	66224830	+	1.626028060913086	1.5131906270980835	0.280632346868515
Inc-IRAK3-4	12	66343154	66343501	+	0.7303403615951538	1.817376732826233	0.1612633466720581
Inc-GRIP1-1	12	67186839	67463661	-	0.360064297914505	0.0496610552072525	0.00329971106722951
Inc-TMBIM4-6	12	67356807	67372982	-	0.15976420044898987	0.03962138295173645	0.0
LINC02384	12	68726572	68845476	-	0.010277515277266502	0.19357319176197052	0.11551725119352341
Inc-CPM-3	12	69043344	69054300	-	0.009193948470056057	0.018273886293172836	0.30700382590293884

Inc-CPM-5	12	69198217	69199274	-	0.0	0.010383927263319492	0.6991198658943176
Inc-SLC35E3-1	12	69221898	69222333	+	0.891305685043335	1.535487413406372	3.5076494216918945
Inc-CPM-1	12	69235068	69237017	-	0.08834380656480789	1.2090510129928589	13.40229606628418
Inc-MDM2-3	12	69401411	69420531	+	0.0011637457646429539	0.0323227196931839	0.20651428401470184
Inc-CP5F6-2	12	69676713	69679851	+	0.4918944835662842	0.8590964674949646	0.13163092732429504
Inc-LRRC10-2	12	70053814	70055209	-	0.02336220070719719	0.5103324055671692	0.08465324342250824
Inc-KCNMB4-2	12	70825517	70828074	+	3.274216890335083	0.528677225112915	0.8624036908149719
Inc-TSPAN8-1	12	71441182	71512027	-	0.20725208520889282	0.014227710664272308	0.0
Inc-KCNC2-1	12	74931925	74932442	-	0.2654971778392792	0.0029448748100548983	1.1709108352661133
Inc-KRR1-4	12	75926574	76377805	-	0.08389409631490707	0.31388676166534424	0.42451947927474976
LINC02407	12	76646055	76703381	+	0.28411349654197693	0.06585501879453659	0.011282689869403839
Inc-E2F7-6	12	77259449	77272777	-	57.29595184326172	9.47923469543457	16.51372528076172
Inc-ZDHHC17-2	12	77271973	77275109	+	0.1315526217222137	0.07567011564970016	0.024769572541117668
Inc-ZDHHC17-18	12	77459576	77461179	+	0.1984008550643921	0.19752976298332214	0.049954671412706375
Inc-NAV3-6	12	79262552	79611297	+	10.296338081359863	1.7900522947311401	1.621035099029541
Inc-PAWR-1	12	79734985	79897176	-	0.22398419678211212	0.009848577901721	0.0231624785810709
Inc-PAWR-7	12	79945574	79981518	-	1.3426543474197388	0.3342825472354889	0.16834302246570587
Inc-PPP1R12A-3	12	79983572	80025942	-	12.065794944763184	2.378519296646118	3.173924207687378
Inc-PPP1R12A-2	12	79986295	79990869	-	18.128366470336914	3.732387065887451	3.9329280853271484
Inc-CCDC59-6	12	82069265	82081339	-	0.8068534135818481	0.33093610405921936	0.10549059510231018
Inc-TMTC2-4	12	82862235	82862727	+	0.33496934175491333	0.4706617593765259	0.053831230849027634
Inc-CCDC59-8	12	83065567	83080513	-	0.07740182429552078	0.037693507969379425	0.012768385000526905
Inc-SLC6A15-2	12	85408096	85410080	-	0.3164867162704468	0.025767670944333076	0.0071871038526296616
Inc-LRRIQ1-3	12	85657322	85658235	+	0.1313280463218689	0.0012514711124822497	0.045581039041280746
Inc-ALX1-2	12	85711797	85988373	+	0.14464497566223145	0.13588587939739227	0.0
Inc-TMTC3-19	12	89520834	89561683	+	0.3551410436630249	0.0	0.0033813142217695713
LINC02391	12	92641531	92757608	-	0.11136683821678162	0.5086764693260193	0.3334856629371643
LINC02397	12	92815307	92889395	+	0.011745622381567955	0.05977698788046837	0.05399927496910095
Inc-UBE2N-1	12	93397191	93771512	-	0.04099693149328232	0.05976045876741409	0.191432923078537
Inc-NR2C1-3	12	95470527	95472226	-	8.987271308898926	1.4200294017791748	2.094531297683716
Inc-NR2C1-5	12	95582968	95602732	-	2.805765151977539	0.9042507410049438	0.45521822571754456
Inc-USP44-3	12	95866997	95868094	-	0.206630140542984	0.18398122489452362	0.7582370042800903
Inc-NTN4-2	12	95918296	95922776	-	4.951503753662109	0.14418599009513855	0.07359756529331207
Inc-NTN4-3	12	95940226	95942445	-	1.0000041723251343	0.10888075083494186	0.06101417541503906
Inc-USP44-2	12	96057173	96059635	-	5.545506477355957	0.7315718531608582	1.7206470966339111
Inc-CCDC38-7	12	96107075	96133773	-	30.933439254760742	3.9231863021850586	7.4857587814331055
Inc-CDK17-1	12	96616575	96617751	-	0.006257649511098862	0.004267983138561249	1.1444244384765625
LINC02409	12	97666470	97669987	-	0.5551811456680298	0.06879504024982452	0.05577205866575241
Inc-ICKBIP-16	12	98107190	98155637	-	0.304818332195282	0.0026385863311588764	0.0
Inc-ICKBIP-11	12	98943554	98943953	-	0.11701162159442902	0.0030079269781708717	3.6775131225585938
Inc-ICKBIP-1	12	98997629	99000150	-	0.11225281655788422	0.19366790354251862	0.40549930930137634
Inc-WASHC3-4	12	102315580	102318599	-	0.002420977223664522	0.00428045867010951	0.2310783416032791
Inc-PARBPBP-5	12	102611882	102613275	+	0.14584273099899292	0.386039137840271	0.03440958634018898
Inc-PAH-3	12	103310351	103352188	-	0.0018307266291230917	0.06699597090482712	0.04847913607954979
Inc-HSP90B1-4	12	104319269	104320074	+	0.014030054211616516	0.35100364685058594	0.3966727554798126
Inc-C12orf73-1	12	104424522	104426026	-	0.0	0.0	0.18122173845767975
Inc-CHST11-2	12	105166326	105170689	+	0.014692478813230991	0.17348109185695648	0.10264746099710464
Inc-FICD-4	12	108523367	108589463	+	1.0381100177764893	0.013653960078954697	0.04488787427544594
Inc-SSH1-5	12	109104781	109106688	-	0.1851297914981842	0.9597512483596802	0.024894820526242256
Inc-ALKBH2-2	12	109510482	109525751	-	0.10642439872026443	0.28921350836753845	0.33525457978248596

Inc-KCTD10-1	12	109883215	109885302	-	0.611757218837738	0.25034627318382263	0.1669091433286667
Inc-IFT81-6	12	110678365	110680063	+	0.11715694516897202	0.38206467032432556	0.026830635964870453
Inc-ATP2A2-10	12	110725932	110849594	+	0.42034366726875305	1.8719645738601685	0.06783804297447205
Inc-PPP1CC-2	12	111120460	111127624	-	0.33326491713523865	0.22258052229881287	0.03017907403409481
LINC02356	12	111807068	111841114	+	0.02786659635603428	0.03546589985489845	0.0062780738808214664
Inc-FAM109A-1	12	111885465	111889784	-	0.3886086940765381	0.7592105865478516	1.8993641138076782
Inc-MAPKAPK5-1	12	112250597	112251224	+	0.8888015747070312	0.18939682841300964	0.05026416853070259
Inc-SDSL-12	12	114299023	114309741	+	0.13162276148796082	0.060688566416502	0.7356700897216797
TBX5-AS1	12	114845996	114850637	+	0.001777010620571673	0.08900708705186844	0.057814572006464005
Inc-MAP1LC3B2-28	12	116955663	116992186	+	0.064593605697155	0.3600715696811676	0.4425033309173584
Inc-RNFT2-1	12	117099349	117153774	+	0.028678923845291138	0.014828027226030827	0.8264670968055725
Inc-C12orf49-2	12	117293950	117295968	-	1.032019376547607	3.7498083114624023	3.6348958015441895
Inc-C12orf49-15	12	117298932	117317422	-	0.4704664647579193	2.7620151042938232	2.2056891918182373
Inc-TESC-1	12	117415245	117425142	-	0.0027322862297296524	0.0012765686260536313	0.04758031293749809
Inc-TESC-4	12	117468114	117468878	-	0.023139744997024536	0.046680670231580734	0.6546719074249268
Inc-TESC-3	12	117468955	117470651	-	0.04042387753725052	0.06640972942113876	0.3039834201335907
Inc-TAOK3-9	12	118582297	118583391	-	0.7335256338119507	0.12209376692771912	8.748250961303711
Inc-VSIG10-3	12	118636195	118651976	-	1.2777669429779053	2.3154094219207764	4.083773612976074
Inc-VSIG10-4	12	118693401	118810698	-	3.5023233890533447	6.249452590942383	11.931866645812988
LINC02440	12	119210723	119212942	-	0.5282477140426636	0.01665346324443817	0.07921140640974045
Inc-CIT-1	12	119825792	120105884	-	0.01458036433905363	0.03627963364124298	4.315435409545898
Inc-SIRT4-5	12	120807162	120809491	+	0.6589683294296265	0.24813638627529144	0.22564566135406494
Inc-SPPL3-4	12	121120697	121126702	-	0.02962716855108738	0.0012830564519390464	0.1716652810573578
Inc-SPPL3-3	12	121134117	121141628	-	0.24930773675441742	0.04193757101893425	2.6700706481933594
Inc-SPPL3-2	12	121159310	121161442	-	0.04928147420287132	0.0	2.140629291534424
Inc-P2RX7-1	12	121625339	121627249	+	0.0773010402917862	5.041208744049072	7.55387776184082
Inc-P2RX7-7	12	121628671	121629321	+	0.007013566792011261	1.3326945304870605	1.9105256795883179
Inc-RHOF-4	12	122294504	122296761	-	0.5648849606513977	0.08076734840869904	0.030360491946339607
Inc-MLXIP-12	12	122501196	122516420	+	1.410710334777832	1.7691389322280884	0.1477363258600235
Inc-MLXIP-1	12	122510024	122515640	+	1.4566947221755981	1.72636079788208	0.15316683053970337
Inc-KNTC1-5	12	123118677	123119220	+	1.606058120727539	0.6735964417457581	0.46309521794319153
Inc-HIP1R-1	12	123349882	123351568	+	0.38344165682792664	0.4680127799510956	3.6123158931732178
Inc-EIF2B1-6	12	124072198	124086580	-	0.2705223858356476	0.36354243755340576	1.98283851146698
Inc-EIF2B1-3	12	124191690	124196765	-	0.008280301466584206	0.05298115685582161	0.06306296586990356
Inc-NCOR2-3	12	125088760	125164248	-	0.006821327842772007	0.06434181332588196	0.023401465266942978
Inc-BRI3BP-8	12	125271310	125276024	+	0.28087878227233887	0.01937074214220047	0.08425352722406387
THRIL	12	125509980	125513897	-	0.016385715454816818	0.0021352150943130255	0.6010496020317078
LINC00944	12	127214185	127256991	-	0.0025252553168684244	0.11240693181753159	0.013589696027338505
Inc-SLC15A4-24	12	127650471	127650988	-	2.4053680896759033	0.05423310399055481	0.3106636703014374
TMEM132D-AS1	12	129594174	129597848	+	0.0	0.3977849781513214	0.14362412691116333
Inc-RIMBP2-5	12	130336753	130343928	-	0.04747134447097778	0.001768186455592513	0.0
FZD10-DT	12	130606749	130646910	-	1.673680067062378	0.09061025828123093	0.0
Inc-STX2-11	12	130949553	130950860	-	0.11967304348945618	0.14977771043777466	0.0066139791160821915
Inc-STX2-8	12	131359352	131361883	-	0.22828201949596405	0.01390839647501707	4.124519348144531
Inc-DDX51-5	12	132302149	132303828	-	0.011172963306307793	0.3747711181640625	0.4862739145755768
Inc-MMP17-1	12	132341965	132349083	+	0.0730370432138443	0.22183188796043396	0.8061290383338928
Inc-DDX51-2	12	132562348	132565005	-	0.004611951299011707	0.0	0.9787373542785645
LINC02361	12	132671184	132674250	-	0.1282113641500473	0.2707973122596741	0.6752384901046753
Inc-FBRS1-3	12	132906337	132913671	+	0.014471210539340973	0.002641886007040739	0.15030574798583984
Inc-LRCOL1-2	12	133179609	133187037	-	0.05369719862937927	0.05551476031541824	0.8134754300117493

Inc-ZNF26-2	12	133464384	133466056	+	0.3020853102207184	0.46177029609680176	0.9034615755081177
Inc-TUBA3C-15	13	19466400	19469370	-	0.1564788818359375	0.003422117792069912	0.032308682799339294
Inc-TPTE2-5	13	19878733	19879765	-	6.784477233886719	2.0640580654144287	1.677390217781067
Inc-MPHOSPH8-5	13	20179732	20199044	+	0.30129191279411316	0.513627290725708	0.012616594322025776
Inc-ZMYM5-2	13	20311117	20311394	-	0.5691567659378052	1.4877058267593384	0.11712312698364258
Inc-ZMYM2-7	13	20666771	20668283	+	0.2501494586467743	0.3600042164325714	0.060960642993450165
Inc-MICU2-1	13	22225659	22245083	-	0.7105391025543213	0.2060675024986267	0.0
Inc-SGCG-6	13	23477402	23498741	+	1.3942729234695435	0.13861629366874695	0.40267372131347656
Inc-C1QTNF9B-1	13	24481423	24523454	-	0.067707359790802	0.0025276823434978724	0.012432140298187733
Inc-C1QTNF9-3	13	24765539	24768436	+	0.19434188306331635	0.6577028632164001	0.025816813111305237
Inc-ATP12A-4	13	25086987	25110903	+	0.01538026612251997	0.01688612811267376	0.0780690461397171
Inc-CENPJ-1	13	25498815	25542625	-	0.38555607199668884	0.12082814425230026	0.032543472945690155
Inc-CENPJ-4	13	25562715	25563063	-	0.3850109279155731	0.006426582112908363	0.0
Inc-CENPJ-8	13	25600075	25621532	-	0.5253617763519287	0.024931268766522408	0.027954377233982086
LINC00463	13	25746962	25754217	-	0.20874010026454926	0.0162673257291317	0.005271704401820898
Inc-USP12-9	13	27752302	27825691	-	0.3370453715324402	0.5224112272262573	0.07846765965223312
Inc-POMP-5	13	29173843	29174130	+	7.342357635498047	0.9839451909065247	1.0156276226043701
Inc-SLC46A3-7	13	29221336	29233215	-	0.2146359086036682	0.2537839710712433	0.07345709949731827
Inc-MTUS2-1	13	30083552	30088215	+	0.05300474166870117	0.003118210006505251	1.075077721240503
Inc-MTUS2-5	13	30259722	30272881	+	0.04294963926076889	0.0017146921018138528	0.0037038333248347044
Inc-SLC7A1-7	13	30354978	30404745	-	0.1098581999540329	0.49386322498321533	0.01033003069460392
TEX26-AS1	13	31456070	31507983	-	0.013794943690299988	8.783531957305968E-4	0.002450495259836316
Inc-RXFP2-2	13	32612375	32614415	+	0.07405488193035126	0.33575358986854553	0.017875369638204575
Inc-N4BP2L1-1	13	33066436	33072629	-	0.2059669941663742	0.5750185251235962	0.020722052082419395
Inc-STAR13-2	13	33929343	34250935	-	0.007964988239109516	1.2608342170715332	0.12404201924800873
Inc-STAR13-6	13	34688350	34727647	-	0.0	0.049242060631513596	0.085026815533638
Inc-STAR13-7	13	34728364	34731222	-	0.016606463119387627	0.24700936675071716	0.08180652558803558
Inc-POSTN-2	13	38237565	38248507	-	7.007664203643799	0.6259987950325012	0.4683094918727875
Inc-UFM1-1	13	38444084	38446356	+	0.343923956155777	0.03680404648184776	0.0
LINC00437	13	39106137	39260812	-	0.0346636101603508	0.11805401742458344	0.14235277473926544
Inc-NHLRC3-1	13	39627209	39796064	+	0.08476103097200394	0.02016664296388626	0.017739977687597275
Inc-LHFPL6-2	13	39790914	39793772	-	0.3315134346485138	0.1408519148826599	0.07639624923467636
Inc-LHFPL6-1	13	39887794	39911246	-	0.13143864274024963	0.12675778567790985	0.0060212453827261925
Inc-PROSER1-2	13	39923131	39953143	-	0.8062270283699036	0.3282301425933838	0.0391320176422596
Inc-PROSER1-3	13	40100016	40107556	-	0.44905924797058105	0.7229035496711731	0.05088253319263458
Inc-KBTBD6-1	13	41631306	41721972	-	0.34007954597473145	1.1007020473480225	0.09475361555814743
Inc-VWA8-9	13	42609412	42614554	-	0.060697801411151886	0.08033788949251175	0.017653653398156166
Inc-DGKH-1	13	42848464	42851124	+	0.24097199738025665	0.3732486665248871	0.0351996012032032
Inc-VWA8-2	13	42876243	42884992	-	0.01056281290948391	0.002908363938331604	0.3513522446155548
TUSC8	13	44971861	44984922	-	0.030257944017648697	0.028899619355797768	0.0
Inc-GPALPP1-5	13	45524984	45573483	+	0.175065815448761	0.6319289207458496	0.05294204503297806
Inc-GTF2F2-3	13	45862299	45862681	+	0.29528504610061646	0.3806689977645874	0.0
Inc-GTF2F2-8	13	45920015	45921465	+	0.6061245203018188	1.5958824157714844	0.1260111829280853
Inc-LRRC63-3	13	46693992	46696834	+	0.3435046076774597	0.12742063403129578	0.07804308086633682
Inc-LCP1-2	13	46946188	46961367	-	1.9292969703674316	4.382523059844971	7.477538108825684
Inc-LRRC63-6	13	46961502	46966917	+	0.10771574079990387	0.513427197933197	0.4967346787452698
LINC01198	13	47029269	47060641	-	0.26034611463546753	0.35367482900619507	2.2050557136535645
Inc-MED4-3	13	48792313	48807191	-	0.04263216257095337	0.04289906099438667	0.008606616407632828
RB1-DT	13	48863195	48877837	-	0.2642749547958374	0.18543827533721924	0.09989561885595322
Inc-LPAR6-3	13	49064033	49066709	-	14.622761726379395	2.655810594558716	3.339489698410034

Inc-EBPL-2	13	50351804	50361781	-	0.2028656005859375	0.7157588601112366	0.052099425345659256
Inc-TRIM13-7	13	50510782	50522681	+	0.32538169622421265	0.5643761157989502	0.09852025657892227
Inc-KCNRG-1	13	50598524	50604264	+	0.0480395071208477	0.09499873965978622	0.014863169752061367
Inc-KCNRG-6	13	50699952	50702599	+	0.3826988339421333	0.54128098487854	1.1842070817947388
Inc-DLEU7-4	13	51285144	51289619	-	0.48686543107032776	0.08821023255586624	0.001852312940172851
Inc-SERPINE3-2	13	51835089	51836507	+	0.18343012034893036	0.30327531695365906	0.04045594856142998
Inc-NEK5-1	13	52603159	52624034	-	0.01833653636276722	0.010326458141207695	0.19984376430511475
Inc-CNMD-1	13	53263722	53274883	-	0.0016062234062701464	0.0021427844185382128	0.06587904691696167
Inc-OLFM4-15	13	55146379	55355246	+	0.34679895639419556	0.02230660989880562	0.01825506053864956
Inc-DIAPH3-24	13	58203302	58204055	-	0.05767502635717392	0.8017520904541016	0.20338796079158783
Inc-DIAPH3-17	13	58206664	58207850	-	0.0	1.0255354642868042	3.1504130363464355
Inc-KLHL1-10	13	67656645	67658943	-	0.20720791816711426	0.44069594144821167	0.011258592829108238
Inc-PCDH9-5	13	67840977	67841838	-	37.17848205566406	0.3646853268146515	0.21054162085056305
Inc-BORA-25	13	69559190	69560196	+	0.6533418893814087	0.049125008285045624	0.1458575427532196
Inc-MZT1-4	13	72440078	72440376	-	7.368803977966309	0.7431604862213135	1.3859232664108276
Inc-BORA-13	13	72441332	72445112	+	0.6251806020736694	0.030061820521950722	0.04347579553723335
Inc-KLF12-5	13	74611060	74613076	-	0.0950106829404831	0.4790889024734497	0.010810830630362034
Inc-KLF12-4	13	74700603	74702042	-	0.3547362685203552	1.2120436429977417	0.04951206222176552
Inc-KCTD12-1	13	77174564	77303640	-	0.365782231092453	0.0019100693752989173	0.0
Inc-KCTD12-2	13	77453179	77469979	-	5.103512287139893	0.8354277014732361	0.8016581535339355
Inc-ACOD1-5	13	77461686	77465270	+	0.475093275308609	0.1153632253408432	0.04583447054028511
MYCBP2-AS2	13	77654646	77655325	-	0.25289592146873474	0.2427520751953125	0.008145563304424286
Inc-SPRY2-132	13	80615858	80649832	-	0.1586729735136032	0.019790826365351677	0.010959690436720848
Inc-DZIP1-3	13	96567601	96568330	-	0.20273643732070923	0.445771187543869	0.015059617348015308
Inc-FARP1-2	13	98647466	98652538	+	0.5383087396621704	1.0472103357315063	0.16644321382045746
Inc-RNF113B-2	13	98674417	98676530	-	0.07177046686410904	0.00998006947338581	0.4205704927444458
Inc-IPO5-3	13	98795434	98865486	+	7.488238334655762	4.340245246887207	24.408029556274414
Inc-SLC15A1-1	13	99155296	99158256	-	0.2134794294834137	0.40763500332832336	0.039382968097925186
Inc-PCCA-5	13	101189619	101191821	+	0.24205932021141052	0.08356484025716782	0.05788286775350571
Inc-GGACT-2	13	101276129	101276683	-	3.6539924144744873	1.6429048776626587	1.1615270376205444
Inc-PPP2-3	13	103333291	103334216	+	0.23697906732559204	0.5832671523094177	0.04625829681754112
Inc-DAOA-47	13	107144496	107173978	+	0.014866610988974571	0.0035474912729114294	0.10853305459022522
Inc-ARGLU1-2	13	107158394	107159061	-	1.5933250188827515	0.6460016965866089	0.44833695888519287
Inc-MYO16-9	13	109917837	109929450	+	0.08832258731126785	0.014886689372360706	10.418585777282715
Inc-COL4A1-8	13	110637205	110638912	-	0.0036351708695292473	0.2440718561410904	0.22760428488254547
Inc-COL4A1-2	13	110640444	110709678	-	0.26453715562820435	5.909414291381836	3.354647159576416
Inc-COL4A1-7	13	110683448	110683914	-	0.12201056629419327	4.070766448974609	0.7957714200019836
Inc-RAB20-6	13	110814305	110815905	-	116.7844009399414	58.39169692993164	28.57012367248535
Inc-RAB20-2	13	110917598	110918460	-	0.3389418423175812	0.40087854862213135	0.025609878823161125
Inc-TEX29-9	13	111809434	111810330	+	0.3467221260070801	0.8504177331924438	0.06951592862606049
Inc-TEX29-3	13	111944867	111947538	+	5.135270595550537	2.0480244159698486	1.4558221101760864
SOX1-OT	13	112626624	112765274	+	6.51032018661499	1.6990678310394287	0.5092182755470276
Inc-SOX1-5	13	112757225	112758628	+	7.98455810546875	1.215612769126892	0.42877358198165894
UNC01043	13	112967781	112976080	+	1.2953557968139648	0.1830195039510727	0.0
Inc-ADPRHL1-5	13	113993765	113994273	-	0.46798473596572876	0.24437719583511353	0.0
Inc-ADPRHL1-6	13	114013932	114018446	-	4.664729118347168	0.8248859643936157	0.6924891471862793
Inc-POTEM-4	14	19650018	19718563	+	0.10862138867378235	1.2314835786819458	0.8450525999069214
Inc-POTEG-6	14	19687688	19887497	-	0.07110628485679626	0.3540955185890198	0.8276508450508118
Inc-POTEG-14	14	19832617	19925348	-	0.1032756119966507	0.9756485223770142	0.8559576272964478
Inc-CCNB1IP1-5	14	20738080	20742354	-	0.7726399302482605	0.8287219405174255	0.26044824719429016

Inc-CCNB1IP1-1	14	20811207	20811844	-	453.90032958984375	20476.271484375	6837.63623046875
Inc-APEX1-2	14	20906141	20909427	+	0.004474328365176916	0.07007796317338943	0.28120845556259155
Inc-PIP4P1-1	14	20942948	20945248	-	0.019800327718257904	0.0	1.2117353677749634
Inc-RNASE4-2	14	21093523	21094048	+	3.2964653968811035	3.2598674297332764	0.2767092287540436
Inc-RNASE1-2	14	21153505	21268108	-	0.11161072552204132	0.011002521961927414	0.0037869156803935766
Inc-NDRG2-1	14	21463996	21467322	-	0.030492018908262253	0.015937669202685356	0.31344419717788696
Inc-RPGRIPI-2	14	21668434	21672514	+	0.019259493798017502	0.0022559070494025946	0.20964369177818298
Inc-TOX4-4	14	21924614	21929292	+	0.12024250626564026	0.2523499131202698	0.5002260208129883
Inc-SLC7A7-2	14	23238862	23268760	-	0.0034083949867635965	0.009368574246764183	0.1169639602303505
Inc-MYH6-1	14	23884827	23885283	-	0.7161962985992432	2.494969606399536	4.386142253875732
Inc-MYH7-1	14	23935884	23938439	-	0.09027761965990067	0.30180832743644714	0.0
ZFH2-AS1	14	23981981	24013485	+	0.03656469285488129	0.6916837096214294	0.121756893825531
Inc-DHRS4L2-2	14	24439140	24520586	+	0.4858618676662445	1.617027997970581	1.7549004554748535
Inc-KHNYN-2	14	25064929	25127377	+	0.016158662736415863	0.65558922290802	0.0010205033468082547
LINC02306	14	26297441	26750888	-	1.1319340467453003	0.17671874165534973	0.002477790229022503
Inc-NOVA1-7	14	26370461	26382350	-	0.33121228218078613	0.046284016221761703	0.0
LINC02588	14	27067611	27275673	+	0.16657419502735138	1.8535841703414917	2.222672939300537
Inc-FOXG1-15	14	27151634	27178674	+	0.0	0.1592983454465866	0.018562138080596924
LINC02293	14	27278522	27305664	+	0.11947128176689148	0.5227847099304199	0.7654008865356445
LINC00645	14	28081794	28108842	+	0.45605117082595825	0.22077836096286774	0.4128808379173279
Inc-PRKD1-17	14	29142447	29142933	-	0.18889208137989044	0.0024705766700208187	0.016855701804161072
FOXG1-AS1	14	29187569	29235781	-	0.06483621150255203	0.5235626697540283	0.9364852905273438
LINC01551	14	29241910	29282659	+	0.740627110004425	1.8305398225784302	13.634054183959961
LINC02282	14	29252697	29265164	-	0.010047049261629581	0.6372145414352417	0.7641056180000305
Inc-FOXG1-11	14	29287947	29288464	+	0.09448782354593277	0.2529985010623932	1.444362998008728
Inc-COCH-2	14	31290633	31291075	+	1.3271098136901855	0.0	0.0
Inc-STRN3-11	14	31614377	31615656	-	0.17968058586120605	0.4852607548236847	0.03157849237322807
Inc-INSM2-7	14	36350207	36350915	+	0.583625078201294	0.30649298429489136	0.12638995051383972
LINC00609	14	36367151	36705454	+	0.031176311895251274	0.3523072600364685	0.13929502665996552
Inc-PAX9-11	14	36789959	37126386	+	0.014247478917241096	0.07181822508573532	0.045021187514066696
Inc-NKX2-8-3	14	37194358	37228923	-	1.3707787990570068	0.20345154404640198	0.1689775288105011
Inc-NKX2-8-5	14	37339680	37641551	-	0.5326648354530334	0.09592147171497345	0.056515198200941086
Inc-LRFN5-6	14	41099213	41376298	+	0.396614134311676	0.11215493083000183	0.0
LINC02315	14	41423761	41618408	+	2.1040399074554443	0.2316567450761795	0.0
Inc-LRFN5-10	14	43769466	43769798	+	0.9709091186523438	0.15418431162834167	0.23618710041046143
Inc-KLHL28-3	14	45431442	45511525	-	0.029042134061455727	0.001419516745954752	0.14441758394241333
Inc-FANCM-1	14	45722515	45858489	+	0.062442123889923096	0.10021257400512695	0.009016570635139942
Inc-LRR1-2	14	49840684	49841101	+	1.0663868188858032	0.0	0.0
Inc-LRR1-1	14	50053296	50053596	+	974.643798828125	89279.6171875	46267.41015625
Inc-RPL36AL-1	14	50087533	50090198	-	0.18688495457172394	0.15094655752182007	1.5792268514633179
Inc-NEMF-2	14	50320336	50320652	-	371.6532287597656	3334.874755859375	1751.4864501953125
Inc-NEMF-1	14	50327785	50334880	-	43.07085037231445	4384.19921875	2717.81396484375
Inc-CDKL1-1	14	50793244	50794627	-	1.2548332214355469	3.157174587249756	3.6167380809783936
Inc-L2HGDH-1	14	50807756	50830694	-	1.1954442262649536	2.3516087532043457	3.5636398792266846
Inc-ATP5S-1	14	50863055	50886143	+	0.151079460978508	0.33924731612205505	0.5480455160140991
Inc-ATL1-8	14	51135274	51138548	+	0.16425162553787231	0.3088509142398834	0.04224393144249916
Inc-NIN-1	14	51350294	51353947	-	0.022169236093759537	0.3163850009441376	0.055669527500867844
Inc-ABHD12B-4	14	51411285	51416017	+	0.0929265022277832	0.370131254196167	0.287812739610672
Inc-PYGL-1	14	51422977	51428720	-	0.07623861730098724	0.5879367589950562	0.7379456162452698
Inc-NID2-2	14	52433721	52436518	-	0.13039787113666534	0.0	4.180883884429932

Inc-GPR137C-1	14	53107557	53108284	+	0.01717378944158554	0.09452386945486069	0.5222788453102112
Inc-TBPL2-2	14	55861658	55861951	-	3.405646562576294	3.3476803302764893	0.8886727690696716
Inc-KTN1-4	14	56232895	56233508	+	0.2012777030467987	0.012845952995121479	0.02397126518189907
Inc-EXOC5-1	14	57532978	57585672	-	0.2669842541217804	0.038417816162109375	0.0
Inc-ACTR10-6	14	58460250	58467324	+	0.011818112805485725	3.167054383084178E-4	0.05951739475131035
Inc-C14orf37-1	14	58460263	58461243	-	7.311853408813477	2.0480234622955322	1.9949270486831665
Inc-C14orf37-5	14	58466453	58470742	-	7.271230220794678	2.5503787994384766	1.82097589969635
Inc-ARID4A-2	14	58745016	58764796	+	0.013552237302064896	0.010049061849713326	0.10514545440673828
Inc-TIMM9-4	14	59100929	59114883	-	0.006774201523512602	7.378662703558803E-4	0.16557848453521729
Inc-RTN1-2	14	60007401	60031208	-	0.050217363983392715	0.2943507432937622	0.21938113868236542
Inc-PPM1A-2	14	60625694	60626042	+	0.4644494354724884	0.32544058561325073	0.061701368540525436
Inc-SNAPC1-4	14	62166849	62167661	+	1.6903750896453857	7.900673866271973	0.8680937886238098
Inc-TMEM30B-9	14	62213757	62215807	-	0.15613947808742523	0.019564935937523842	1.078356146812439
Inc-SYT16-67	14	62581071	62600961	+	0.05081406980752945	1.3226057291030884	0.8721426129341125
Inc-MTHFD1-3	14	64523701	64525743	+	0.09042261540088974	0.23608268797397614	0.024301253259181976
Inc-GPX2-4	14	65234042	65234931	-	0.015744250267744064	0.5612606406211853	0.461225686551666
Inc-PLEK2-2	14	67921205	67934635	-	0.0	0.25735801458358765	0.1609051674604416
Inc-ZFP36L1-8	14	68888415	68888913	-	1.4888668060302734	0.0801401436328888	0.20332758128643036
ACTN1-AS1	14	69446215	69456524	+	0.08467285335063934	0.06400848925113678	0.02061920054256916
Inc-DCAF5-2	14	69705883	69727284	-	0.9016791582107544	0.07899457216262817	0.053723059594631195
Inc-ERH-1	14	69865409	69926228	-	0.0222863771021366	0.0036682451609522104	0.9028258919715881
Inc-CDCDC177-1	14	70036532	70037918	-	5.5811944007873535	0.66777104139328	0.05184381082653999
Inc-SMOC1-2	14	70653840	70701216	+	0.11530151963233948	0.007918128743767738	0.018061116337776184
Inc-ADAM21-3	14	70721796	70791647	+	0.0037326321471482515	0.0026117691304534674	0.03440263867378235
Inc-ADAM21-2	14	70833709	70838831	+	0.0048831491731107235	0.0	0.3301733136177063
Inc-ADAM20-2	14	70935598	70950473	-	0.2687039375305176	0.3508705198764801	0.05691380426287651
Inc-MED6-2	14	71023476	71030240	-	0.14217902719974518	0.5581886768341064	0.02506384812295437
LINC01269	14	71148354	71182301	+	0.0906522945695877	0.041310690343379974	0.0032078668009489775
Inc-MED6-3	14	71189244	71193302	-	6.604536056518555	0.9184017181396484	1.9152599573135376
Inc-MED6-4	14	71216270	71219673	-	2.0017993450164795	0.9157593250274658	0.4624519348144531
Inc-PCNX1-2	14	71276602	71297199	+	1.3198986053466797	0.12588122487068176	0.2981627285480499
Inc-MAP3K9-11	14	71373374	71373828	-	5.357117652893066	0.5173323154449463	1.2633411884307861
Inc-MAP3K9-10	14	71574142	71609977	-	0.004902987740933895	0.00877819862216711	0.06847666949033737
Inc-DCAF4-1	14	73427303	73428701	+	0.3562262952327728	3.183061361312866	1.1678937673568726
Inc-HEATR4-5	14	74031376	74034323	-	0.14664870500564575	0.3903447687625885	0.5498076677322388
Inc-HEATR4-6	14	74034942	74036537	-	0.7669185996055603	1.8649780750274658	3.8656206130981445
Inc-FAM161B-4	14	74468337	74470121	-	0.12198971211910248	0.5117557048797607	0.01119118183851242
Inc-NPC2-1	14	74939815	74941567	-	0.5545448064804077	0.2107471078634262	0.19464778900146484
Inc-RPS6KL1-1	14	75411267	75422467	-	3.2169623374938965	0.7721542716026306	0.4475775361061096
Inc-MLH3-1	14	75471422	75475184	-	0.0741719976067543	0.503468930721283	0.7072948813438416
Inc-ZC2HC1C-2	14	75548828	75549988	+	0.042122405022382736	0.042999252676963806	0.9207518696784973
Inc-ZC2HC1C-1	14	75593809	75603633	+	0.22361521422863007	0.2975911796092987	0.03893299028277397
Inc-TGFB3-2	14	76620530	76673228	-	0.0037000260781496763	0.0019282487919554114	0.35927847027778625
Inc-GPATCH2L-2	14	76745516	76749446	+	0.08985503017902374	0.056411463767290115	0.02380010485649109
Inc-IRF2BPL-6	14	77421547	77422777	-	0.134816974401474	0.5220094323158264	0.03493081405758858
LINC02308	14	81908331	81916501	-	0.06802285462617874	0.685638427734375	0.616549551486969
LINC02301	14	83108882	83213677	+	0.09790907800197601	0.03794942796230316	0.0023298191372305155
Inc-GALC-8	14	85990713	85997568	-	1.1329373121261597	0.0576232485473156	0.0518195740878582
Inc-GALC-16	14	85991899	85992792	-	0.44398942589759827	0.01857847161591053	0.015748923644423485
Inc-FLRT2-1	14	85994943	85995730	+	0.3234694302082062	0.02331957407295704	0.03283146396279335

Inc-GPR65-19	14	85996490	86029396	+	7.517800807952881	0.31847548484802246	0.4472029209136963
Inc-GPR65-18	14	86090034	86092572	+	28.28957748413086	1.0732052326202393	3.03804874420166
LINC02328	14	86378385	86596997	+	0.0053590042516589165	0.16635139286518097	0.05900285020470619
Inc-ZC3H14-1	14	89017929	89018837	+	0.21671919524669647	0.7007315754890442	1.1318321228027344
Inc-EML5-1	14	89285952	89288495	-	0.03617338091135025	0.059223469346761703	0.0014867063146084547
Inc-EML5-4	14	89288757	89290671	-	0.09960601478815079	0.05343443900346756	0.003410894190892577
Inc-EML5-10	14	89756549	89757938	-	0.0935758426785469	0.6133473515510559	0.007575090043246746
Inc-NRDE2-1	14	90868867	90871579	-	0.08496899902820587	0.0	0.626880943775177
Inc-NRDE2-3	14	91026142	91028352	-	0.22981855273246765	0.6269240379333496	0.049354150891304016
LINC02321	14	91288709	91294472	-	0.16070730984210968	1.13198721408844	0.5362928509712219
Inc-CATSPERB-1	14	91968239	91970505	-	0.4453485906124115	1.5832862854003906	0.11630795896053314
Inc-CPSF2-2	14	92492910	92493231	+	8.10964584350586	0.9940509796142578	1.5086406469345093
Inc-COX8C-1	14	93800874	93801403	+	1.0460205078125	0.5633330941200256	0.26230406761169434
FAM181A-AS1	14	94370575	94393412	-	1.3557242155075073	0.23708516359329224	0.3395353853702545
Inc-SERPINA5-1	14	95078721	95080194	+	0.07677255570888519	3.1098220348358154	1.7356942892074585
Inc-SERPINA3-22	14	95236979	95241195	+	5.413602339103818E-4	0.4305763840675354	0.2320781797170639
Inc-TUNAR-1	14	96342595	96364905	+	0.107061967253685	0.021842868998646736	0.0
Inc-ATG2B-9	14	96552848	96560227	-	0.11067849397659302	0.0050783464685082436	0.43867015838623047
Inc-AK7-1	14	96832347	96832578	+	0.8042036294937134	0.437880277633667	0.07665546983480453
Inc-EML1-1	14	100193358	100208834	+	0.40132036805152893	0.16295868158340454	0.04209338501095772
Inc-EML1-3	14	100485068	100496263	+	0.0837935134768486	0.5156407952308655	0.008103100582957268
Inc-DEGS2-6	14	100610054	100613761	-	0.27315279841423035	0.002287941286340356	0.965369701385498
Inc-YY1-1	14	100757453	100760993	+	0.1436322182416916	0.04937249794602394	2.350315570831299
Inc-WARS-4	14	101010279	101011666	-	2.060288429260254	0.7759367823600769	6.499853610992432
Inc-BEGAIN-2	14	101142267	101146221	-	0.04550309479236603	0.20436042547225952	0.9342392086982727
Inc-RTL1-13	14	101292453	101297352	-	0.101480633020401	0.010927928611636162	2.609302282333374
Inc-RTL1-1	14	101300769	101327363	-	0.0	0.0	2.7917938232421875
LINC02320	14	102092732	102197643	-	0.011972644366323948	0.439212828874588	0.14742186665534973
Inc-HSP90AA1-16	14	102409442	102414359	-	0.13362401723861694	0.28393545746803284	0.03815324231982231
Inc-HSP90AA1-1	14	102502652	102532565	-	0.09345365315675735	0.004231779836118221	0.5354463458061218
Inc-HSP90AA1-2	14	102606212	102676863	-	0.10810577124357224	0.08525943011045456	0.6604723334312439
Inc-CINP-1	14	102723312	102725118	-	0.05569033324718475	0.5220229625701904	0.002429146086797118
Inc-TECPR2-1	14	102991264	102998072	+	0.009292786940932274	0.05693067982792854	0.025494065135717392
Inc-EXOC3L4-3	14	103602740	103603769	+	3.4871468544006348	16.95615005493164	20.369747161865234
Inc-XRCC3-1	14	104146166	104150352	-	0.0366949588060379	0.010379577986896038	0.20715689659118652
Inc-XRCC3-3	14	104160853	104161387	-	0.32252752780914307	0.2748637795448303	1.2195724248886108
Inc-XRCC3-2	14	104161753	104163460	-	0.3379982113838196	0.5410739779472351	1.235506296157837
Inc-INF2-1	14	105147470	105151269	+	0.10670166462659836	0.10215765237808228	0.87056964635849
Inc-BRF1-2	14	105934130	105936954	-	0.036538757383823395	0.035363003611564636	3.1966469287872314
Inc-TEDC1-1	14	105993442	105995090	+	0.6550111770629883	0.8074625730514526	3.5485522747039795
Inc-TMEM121-1	14	105998192	106000655	+	0.12195560336112976	1.3690049648284912	1.1114568710327148
Inc-GOLGA6L6-6	15	20663079	20711424	-	0.25073087215423584	0.5354291200637817	1.8679735660552979
Inc-POTEB3-1	15	21932224	21968151	-	0.19072239100933075	0.10415179282426834	0.853903591632843
Inc-OR4N4-1	15	22278010	22431226	+	0.0	0.11193519085645676	0.12465009838342667
Inc-CYFIP1-5	15	23032649	23171714	+	0.002781599061563611	9.150794357992709E-4	0.22094663977622986
Inc-CYFIP1-7	15	23390722	23393943	+	0.4089498817920685	0.3902304172515869	1.2275961637496948
Inc-MAGEL2-1	15	23812411	23814804	-	0.6201320886611938	0.12248151749372482	0.1091296449303627
Inc-NDN-5	15	23910127	23939217	-	0.34214112162590027	0.007942342199385166	0.07890155166387558
Inc-MKRN3-2	15	24157556	24186863	+	0.08778125792741776	0.022711576893925667	0.0
PWRN4	15	24219700	24333301	+	0.4813840687274933	0.14121286571025848	0.0

Inc-MKRN3-4	15	24356506	24358424	+	0.7254144549369812	0.17108725011348724	0.0
Inc-NPAP1-10	15	24426314	24445661	+	0.27968746423721313	0.09930539131164551	0.0
Inc-NPAP1-9	15	24451931	24525611	+	0.19225218892097473	0.0705539882183075	0.0
Inc-NPAP1-5	15	24641974	24643464	+	0.12754946947097778	0.03052380494773388	0.0
PWRN1	15	24736610	24897277	+	0.18287308514118195	0.037657517939805984	0.0012722042156383395
Inc-SNRPN-11	15	25380789	25383202	+	0.5329033136367798	0.47869789600372314	0.028337450698018074
SNHG14	15	25497372	25664609	+	0.6057804822921753	0.08121183514595032	0.14081352949142456
Inc-SNRPN-12	15	25500726	25502174	+	0.8760322332382202	0.08878664672374725	0.06762237846851349
Inc-ATP10A-69	15	25590780	25592382	-	0.2571505010128021	0.6252330541610718	0.044399555772542953
Inc-SNRPN-14	15	25684374	25692252	+	0.2770060896873474	0.44471555948257446	0.0713643804192543
Inc-ATP10A-8	15	26995082	27035447	-	3.073757886865967	0.46916061639785767	1.044255256652832
Inc-APBA2-5	15	29077407	29101361	+	0.7873376607894897	1.1763070821762085	4.125214576721191
Inc-GOLGA8J-3	15	29967043	29980057	+	0.1812787503004074	0.07908801734447479	1.1091089248657227
Inc-FAM189A1-3	15	30020390	30021735	-	0.6284141540527344	1.0228575468063354	0.17500245571136475
LINC02249	15	30488239	30506743	+	0.3865542411804199	0.0779489055275917	0.02793331816792488
Inc-FAN1-6	15	31114850	31115373	+	0.8146411776542664	0.03766431659460068	0.02919081039726734
Inc-TRPM1-1	15	31506443	31523063	-	0.0019247399177402258	0.033849313855171204	0.026911405846476555
Inc-TRPM1-4	15	31767607	31770705	-	0.34714826941490173	0.09502582997083664	0.05095924064517021
Inc-GOLGA8K-4	15	32474850	32500363	-	1.1671204566955566	0.1983513981103897	0.05987796187400818
Inc-GOLGA8K-2	15	32618370	32635000	-	0.3244771659374237	0.05469585955142975	0.0047711762599647045
Inc-AVEN-3	15	34129867	34143825	-	0.45809292793273926	0.06823572516441345	0.003539443714544177
Inc-AVEN-2	15	34143986	34149010	-	1.7557483911514282	0.41965240240097046	0.496218740940094
Inc-AVEN-1	15	34150796	34157026	-	2.540113925933838	0.8417640328407288	0.4857105016708374
Inc-NUTM1-7	15	34875112	34938003	+	0.06804092973470688	0.20099642872810364	0.2941993772983551
Inc-MEIS2-2	15	37090797	37110712	-	0.08527801185846329	0.0035468360874801874	0.005680743604898453
Inc-RASGRP1-3	15	38431796	38545856	-	0.028732139617204666	0.14049018919467926	0.11073961853981018
Inc-FAM98B-4	15	38625007	38626346	+	2.314032793045044	3.64150333404541	0.7723689079284668
Inc-RASGRP1-6	15	38765938	38774531	-	0.018411491066217422	0.05910700187087059	0.38949835300445557
Inc-EIF2AK4-9	15	39878762	39879494	+	9.410268783569336	1.9887627363204956	0.15097840130329132
Inc-FSIP1-10	15	39880558	39881083	-	0.26545724272727966	0.09940851479768753	0.8381807208061218
Inc-EIF2AK4-6	15	39887881	39890033	+	88.65876007080078	42.07904815673828	14.692840576171875
Inc-EIF2AK4-1	15	40213228	40218081	+	0.017218679189682007	0.0727158710360527	0.06986935436725616
Inc-CCDC9B-3	15	40623653	40633121	-	3.0031898021698	4.489459037780762	19.35294532775879
Inc-CCDC32-1	15	40756392	40758925	-	0.009039275348186493	0.00511369900777936	0.3990481197834015
SPINT1-AS1	15	41126930	41136704	-	0.07776348292827606	0.004308195319026709	0.0019671220798045397
Inc-VPS18-3	15	41150091	41150384	+	0.5553520917892456	0.0	0.0
Inc-EXD1-1	15	41455315	41456708	-	0.0	0.0	0.41318124532699585
Inc-JMJD7-PLA2G4B-2	15	42184960	42192352	+	0.002845914801582694	0.001417849794961512	0.22151605784893036
Inc-SPTBN5-6	15	42200402	42200912	-	0.6225842833518982	0.6592521667480469	0.17791755497455597
Inc-LRRC57-1	15	42824065	42825038	-	0.1590724140405655	0.13423697650432587	0.7917168736457825
Inc-TP53BP1-2	15	43789636	43802926	-	1.4941444396972656	1.0392531156539917	0.4919816553592682
Inc-FRMD5-1	15	44580909	44581547	-	0.13552333414554596	0.041134994477033615	0.5965911149978638
Inc-SPG11-3	15	44694883	44719342	-	0.03391951322555542	0.003733718767762184	0.9439821839332581
Inc-SPG11-5	15	44957931	44959476	-	0.04614029824733734	0.28244462609291077	0.1775653213262558
Inc-PATL2-8	15	45070288	45076534	-	0.30308428406715393	0.0702989250421524	0.04304279759526253
Inc-SLC30A4-5	15	45741901	45748914	-	0.032435476779937744	0.15747378766536713	0.136958509683609
Inc-SLC30A4-2	15	45865724	45925724	-	0.005513411946594715	0.0016376882558688521	0.19332434237003326
Inc-SQOR-1	15	45996888	46224561	+	0.02341548539698124	0.004136471543461084	0.001276630093343556
Inc-CEP152-1	15	49170333	49172001	-	1.0142252445220947	0.14549748599529266	7.30933324432373
Inc-COPS2-5	15	49334540	49334840	-	0.6049493551254272	0.6077561378479004	0.047312572598457336

Inc-COPS2-7	15	49620590	49626499	-	0.36739712953567505	0.1279689371585846	0.10291323065757751
Inc-TRPM7-1	15	50616758	51025495	-	0.17180639505386353	0.24768349528312683	0.016193246468901634
Inc-USP50-1	15	50789392	50790941	-	0.11830653250217438	0.06458618491888046	0.6208281517028809
Inc-GLDN-5	15	51236326	51238762	+	0.4417714774608612	0.4498191773891449	0.10597863793373108
Inc-LEO1-2	15	52201099	52201839	-	0.014058760367333889	0.0047183167189359665	0.7613239288330078
Inc-LEO1-5	15	52221530	52228374	-	0.5360738039016724	0.23751726746559143	0.08338126540184021
Inc-BCL2L10-2	15	52345194	52393162	-	0.01413683034479618	0.14390748739242554	0.05881202965974808
Inc-MAPK6-14	15	52387492	52387944	+	1.4022003412246704	0.026961589232087135	0.008238255977630615
Inc-MAPK6-5	15	52408771	52414328	+	0.0	0.0	0.39108729362487793
Inc-MAPK6-8	15	52596649	52603672	+	0.02995900809764862	0.006079362705349922	0.6278591156005859
Inc-FAM214A-2	15	53049512	53083273	-	5.539756774902344	0.5431305766105652	0.1339709311723709
Inc-FAM214A-1	15	53077922	53080605	-	0.5228533148765564	0.12273246049880981	0.03987394645810127
Inc-ONECUT1-1	15	53092153	53098609	-	1.3615645170211792	0.00411975895985961	0.0
Inc-RSL24D1-1	15	55464171	55470373	-	0.5873299837112427	0.7491085529327393	0.2160814255475998
Inc-PIGBOS1-6	15	55530316	55582011	-	0.645466685295105	0.4386455714702606	2.081122636795044
Inc-PYGO1-2	15	55903750	55906620	-	96.51863861083984	12.323525428771973	1.0252454280853271
Inc-PYGO1-3	15	55970211	55972028	-	23.614398956298828	8.963438034057617	0.6443256139755249
Inc-NEDD4-2	15	56030403	56030857	-	4.339886665344238	1.1682993173599243	0.5821378827095032
Inc-RFX7-1	15	56514392	56578226	-	0.38782262802124023	1.6233673095703125	0.07406523823738098
Inc-MNS1-2	15	56686519	56688983	-	0.00227904599159956	0.08969696611166	0.08953840285539627
Inc-MNS1-1	15	56700681	56702384	-	0.01990676485002041	0.22677524387836456	0.1252511739730835
Inc-MNS1-4	15	56713742	56726405	-	1.0163131952285767	1.8829728364944458	4.833873748779297
Inc-TEX9-5	15	56739318	56739895	+	0.7039686441421509	0.3280823230743408	0.17696864902973175
Inc-ZNF280D-2	15	56755978	56757283	-	0.9214478731155396	1.7970808744430542	4.619064807891846
Inc-MNS1-11	15	57022130	57022809	-	0.20532087981700897	0.5363208651542664	0.8790925741195679
Inc-RNF111-1	15	59107471	59109927	+	0.2234586477279663	0.439389169216156	0.0
Inc-SLTM-1	15	59149030	59160576	-	0.02042960748076439	0.06382802128791809	0.09584683924913406
Inc-SLTM-2	15	59211128	59394178	-	0.5325127243995667	1.0008455514907837	0.1257481724023819
Inc-SLTM-3	15	59558919	59563361	-	0.2741950452327728	0.4096238911151886	0.0
Inc-BNIP2-4	15	60287089	60303612	-	0.1468104124069214	0.05620928108692169	0.013581640087068081
Inc-FOXB1-6	15	60296433	60353929	+	0.8060759902000427	0.1770583540201187	0.023203350603580475
Inc-ANXA2-1	15	60364999	60410522	-	0.16815203428268433	0.030718322843313217	0.005682335700839758
Inc-FOXB1-9	15	60696662	60697159	+	1.2616864442825317	0.013723395764827728	0.01197717897593975
Inc-ICE2-4	15	60820272	60884716	-	0.24382124841213226	0.8766999840736389	0.056744061410427094
Inc-ICE2-5	15	61139956	61141267	-	0.1216990128159523	0.7233471274375916	0.02558312378823757
Inc-C2CD4A-1	15	62352702	62354633	+	0.027835939079523087	0.2210792601108551	0.15244434773921967
Inc-RPS27L-9	15	63119589	63176244	-	0.020971709862351418	0.004835340194404125	0.06243704631924629
Inc-TLN2-1	15	63188011	63191742	+	0.32386767864227295	0.04994382709264755	0.09001825749874115
Inc-TPM1-1	15	63245372	63246323	+	0.4531131386756897	0.004872218705713749	0.039523541927337646
Inc-RPS27L-8	15	63331377	63334703	-	0.1975965052843094	0.033660467714071274	0.007411058060824871
TPM1-AS	15	63338233	63341586	-	0.01096466463059187	0.03243345022201538	0.08134917914867401
Inc-RPS27L-1	15	63362224	63364110	-	0.07115412503480911	0.0	1.1954569816589355
Inc-DAPK2-3	15	64081538	64118982	-	0.0885477364063263	0.3334462642669678	0.015670493245124817
Inc-PCLAF-6	15	64820866	64821870	-	0.3186737895011902	0.024353982880711555	0.01811848022043705
Inc-PLEKHO2-4	15	64944043	64946414	+	0.09459544718265533	0.4551222026348114	0.027173813432455063
Inc-PIF1-2	15	65063514	65067598	-	1.4019044637680054	0.12068860977888107	0.3332715928554535
Inc-UBAP1L-1	15	65375380	65383454	-	0.1739668995141983	0.11768950521945953	0.03503968566656113
Inc-KBTBD13-5	15	65579425	65586329	+	0.05674654617905617	0.06082376837730408	0.016013655811548233
Inc-PARP16-5	15	65620723	65621092	-	84.45885467529297	7.440535545349121	1.6939504146575928
Inc-IGDCC4-1	15	65665827	65667638	-	26.435100555419922	2.3078534603118896	0.5328221321105957

Inc-SLC24A1-5	15	66176953	66179490	+	0.4273717701435089	0.5378285646438599	0.1392793208360672
Inc-DENND4A-3	15	66214030	66214713	-	1.1198245286941528	4.289628982543945	7.701961517333984
Inc-DENND4A-5	15	66311735	66312472	-	0.1254747360944748	0.40687674283981323	1.140315055847168
Inc-SMAD6-2	15	67134907	67175201	+	0.1876407414674759	0.13436277210712433	0.030656123533844948
Inc-IQCH-7	15	67401665	67403023	+	0.19618023931980133	0.8731552362442017	0.014714956283569336
Inc-FEM1B-4	15	68404219	68404810	+	0.2878241539001465	1.999632716178894	0.06742145866155624
Inc-CLN6-1	15	68559484	68570332	-	0.30801013112068176	0.3545584976673126	0.08569557219743729
Inc-CLN6-27	15	68591128	68593343	-	1.2018214464187622	1.7332336902618408	0.08215207606554031
Inc-CLN6-2	15	68650845	68661579	-	8.239587783813477	16.17089080810547	1.2206342220306396
Inc-ANP32A-3	15	69682700	69707368	-	0.2897542715072632	0.14147478342056274	0.09821856766939163
Inc-UACA-5	15	70389744	70390187	-	7.34284353262256	4.1721038818359375	23.779603958129883
Inc-PKM-66	15	72452149	72459043	-	0.13229253888130188	0.06627525389194489	0.0037819938734173775
ADPGK-AS1	15	73076225	73085304	+	0.11273553222417831	0.07431837171316147	0.01596788875758648
Inc-NPTN-2	15	73660613	73661255	-	0.40879368782043457	0.006594348698854446	0.08898905664682388
Inc-CD276-3	15	73925920	73927923	+	0.15177719295024872	0.12170184403657913	0.02530844509601593
Inc-PML-1	15	74342347	74346215	+	0.4252307415008545	1.306403398513794	0.06202439218759537
Inc-PML-2	15	74346640	74348558	+	0.2319478541612625	0.5878348350524902	0.011690150015056133
Inc-GOLGA6A-1	15	74418256	74421619	-	1.3070862293243408	0.1236332431435585	0.08446550369262695
Inc-UBL7-2	15	74703309	74703980	-	3.370889663696289	11.410375595092773	11.191567420959473
Inc-CLK3-2	15	74888937	74890318	+	17.51715660095215	1.589913010597229	2.023857593536377
Inc-C15orf39-1	15	75510018	75511743	+	0.06857407093048096	0.314384400844574	0.012290664948523045
Inc-SNX33-1	15	75928480	75931580	+	0.005906213540583849	0.07403355836868286	0.48940935730934143
Inc-SNX33-3	15	75970889	75973093	+	1.1334002017974854	0.6912976503372192	0.3057595491409302
Inc-NRG4-4	15	76225024	76225471	-	0.06364437192678452	0.0	1.3317545652389526
Inc-SCAPER-8	15	76628198	76628819	-	0.07038557529449463	0.7721172571182251	0.3529565334200684
Inc-ISL2-1	15	76635983	76636706	+	0.0	0.1598937213420868	0.15381084382534027
Inc-PEAK1-2	15	77713044	77776947	-	0.21760033071041107	0.21307332813739777	0.6139547228813171
Inc-CIB2-6	15	78278255	78283125	-	0.03413239121437073	0.04859195277094841	0.0021893330849707127
Inc-TBC1D2B-4	15	78342467	78421177	-	0.1395062953233719	0.29055896401405334	0.020548533648252487
Inc-ACSBG1-2	15	78486990	78538030	-	0.36811819672584534	2.3605339527130127	3.67452073097229
Inc-WDR61-1	15	78505865	78526967	-	0.5067514777183533	4.436558246612549	5.347206115722656
Inc-CHRNA3-5	15	78792408	78792890	-	0.012977216392755508	0.0	1.5470930337905884
Inc-CHRNA3-6	15	78832799	78833002	-	0.11689353734254837	0.1343996375799179	3.304974663317871
Inc-CHRNA3-1	15	78881465	78883618	-	0.022683922201395035	0.06329916417598724	0.3347221314907074
Inc-CHRNA4-2	15	79056293	79057455	-	11.593875885009766	1.8017935752868652	3.6396684646606445
Inc-CTSH-5	15	79162512	79165032	-	0.04082245007157326	0.12033482640981674	0.008109844289720058
Inc-MORF4L1-3	15	79198469	79199151	+	0.4460966885089874	1.213411569595337	0.13563129305839539
Inc-TLNRD1-2	15	81353294	81355829	+	0.008747833780944347	0.19657841324806213	0.03648864105343819
Inc-GOLGA6L9-2	15	82684055	83088121	+	0.05170310661196709	0.1283019781112671	0.15965966880321503
Inc-RPS17-1	15	82821196	83209203	-	7.893805503845215	2.3166303634643555	1.7905486822128296
Inc-WDR73-15	15	84721865	84748849	-	0.25965195894241333	0.03268727287650108	0.03476900979876518
Inc-GOLGA6L4-2	15	84944332	84950601	+	0.021149326115846634	0.5391091704368591	0.3505515456199646
Inc-WDR73-4	15	84953014	84966399	-	0.6341087818145752	0.522278904914856	0.20263555645942688
Inc-WDR73-12	15	84967471	84976535	-	0.4942782521247864	0.6209884881973267	0.017006346955895424
Inc-KLHL25-6	15	86122096	86123409	-	0.011258012615144253	0.019710395485162735	0.2220809906721115
Inc-AGBL1-3	15	86244340	86246002	+	0.2634708285331726	0.8855658769607544	0.025681480765342712
Inc-SEC11A-7	15	86303848	86338149	-	15.65815544128418	4.379658222198486	16.155685424804688
Inc-NTRK3-2	15	87849166	88247086	-	0.03476351499557495	0.0040728687308728695	0.00339759374037385
LINC00052	15	88120152	88123097	+	1.6208252906799316	0.0058873980306088924	0.018800918012857437
Inc-MRPL46-5	15	88615655	88642496	-	0.003812834620475769	0.8567400574684143	0.10629624128341675

Inc-ACAN-1	15	89346667	89347046	+	0.6791807413101196	3.028020143508911	3.315279006958008
Inc-RLBP1-3	15	89744322	89744999	-	0.32910293340682983	0.05140799656510353	2.2913544178009033
Inc-POLG-2	15	89762793	89764836	-	0.7631054520606995	5.754877090454102	16.861255645751953
Inc-FANCI-3	15	89943395	89981066	+	0.2636440098285675	2.351748466491699	0.9570258259773254
Inc-TICRR-5	15	89993078	89995278	+	0.06591251492500305	0.8309840559959412	0.3464103639125824
Inc-TICRR-4	15	89995601	89996440	+	0.03729558736085892	0.7548452019691467	0.1296491026878357
Inc-TICRR-3	15	89998065	89998454	+	0.021541034802794456	1.0481065511703491	0.14423616230487823
Inc-MESP1-1	15	90291892	90294368	-	0.31907394528388977	1.0859923362731934	1.3612732887268066
Inc-SEMA4B-6	15	90568187	90569235	+	0.18064212769420624	0.7779263854026794	0.009970354847609997
Inc-CIB1-3	15	90814473	90815809	-	0.11860200762748718	0.02030218578875065	1.4600979089736938
Inc-CIB1-1	15	90816233	90821105	-	0.011143257841467857	0.01179916225373745	0.33748045563697815
Inc-CIB1-134	15	90889763	90892679	-	0.16247496008872986	0.013752849772572517	0.006669690832495689
Inc-BLM-7	15	91177957	91178265	+	1.1732592582702637	0.5258110165596008	0.11962129175662994
Inc-BLM-6	15	91369656	91399239	+	0.03788477182388306	0.08104748278856277	0.002129025524482131
Inc-HDDC3-3	15	91424512	91426689	-	0.08333586156368256	0.0	1.1727726459503174
Inc-HDDC3-2	15	91463448	91464416	-	0.0909639298915863	0.04265066981315613	1.6267197132110596
Inc-PRC1-1	15	91494012	91498459	-	0.021408749744296074	0.02819344587624073	0.12996220588684082
Inc-SLCO3A1-2	15	92990453	92992236	+	3.628774642944336	0.5484399199485779	0.05442354455590248
Inc-ST8SIA2-7	15	93014884	93044347	+	0.08361432701349258	0.015068985521793365	0.0
Inc-FAM174B-1	15	93135601	93147549	-	0.03937472775578499	0.008314029313623905	0.0
Inc-RGMA-14	15	93173391	93198581	-	4.819238662719727	1.3309935331344604	0.34249645471572876
Inc-CHD2-2	15	93632644	93772276	+	0.33400464057922363	0.08487081527709961	0.06519113481044769
Inc-CHD2-4	15	93670411	94131466	+	1.1983516216278076	0.44666925072669983	0.2827249765396118
Inc-MCTP2-18	15	94133096	94304028	+	2.2309515476226807	0.5555067658424377	0.3695864677429199
LINC01579	15	94261771	94614105	-	0.09027616679668427	0.6519748568534851	0.5838263630867004
LINC01197	15	95752001	95870634	-	0.16202375292778015	0.0877617672085762	0.0028218068182468414
Inc-PGPEP1L-28	15	96838164	96841252	-	0.18168096244335175	0.31200918555259705	0.023227397352457047
Inc-SPATA8-1	15	97300217	97301826	+	0.3352528512477875	0.13180245459079742	0.07507196813821793
Inc-TTC23-1	15	99669037	99672011	-	0.3918783366680145	0.13667751848697662	1.2268978357315063
Inc-TTC23-4	15	99675518	99675793	-	0.05764075741171837	0.11015113443136215	1.191502332687378
Inc-TTC23-2	15	99931827	99943918	-	0.004124036058783531	0.2625620365142822	0.20694012939929962
Inc-TTC23-3	15	99961346	99975416	-	3.95769951865077E-4	0.05875053256750107	0.009563697502017021
Inc-LYSMD4-2	15	100330361	100347132	-	0.21508845686912537	0.24002143740653992	0.05820153281092644
Inc-MEF2A-9	15	100347228	100501612	+	0.779666006565094	0.6511576175689697	0.19915254414081573
Inc-ALDH1A3-2	15	101256264	101373815	+	0.00103950931224972	0.01436619833111763	0.00494536105543375
Inc-ALDH1A3-1	15	101389766	101414574	+	0.001438148901797831	0.04041672125458717	0.0889432355761528
Inc-CHSY1-2	15	101630821	101649239	-	1.7290822267532349	0.48403239250183105	0.28957897424697876
Inc-PCSK6-1	15	101844136	102065405	-	1.1597163677215576	4.609574317932129	4.8166351318359375
Inc-OR4F6-1	15	102291235	102334505	+	0.20608340203762054	0.12021617591381073	0.033475253731012344
Inc-OR4F15-5	15	102347649	102455771	+	0.004716029856353998	0.07116381078958511	0.148752361536026
Inc-RHBDF1-1	16	129423	130119	-	0.22505195438861847	0.3511265218257904	1.014808177947998
Inc-METTL26-3	16	597185	603847	-	0.129073366522789	0.007831694558262825	1.0876868963241577
Inc-RAB40C-1	16	636662	639291	+	0.1614214926958084	0.30263587832450867	0.4474411606788635
Inc-METTL26-2	16	704611	706194	-	0.12021394819021225	0.8798447847366333	0.6097485423088074
Inc-METTL26-6	16	707659	709524	-	0.09058723598718643	0.5679370164871216	0.49410876631736755
Inc-FAM173A-1	16	767619	769654	+	21.197021484375	33.00552749633789	64.14678192138672
Inc-CCDC78-1	16	772582	776868	-	1.2284778356552124	3.06410551071167	6.682386875152588
Inc-TSR3-1	16	1367892	1419666	-	0.052234165370464325	0.008568464778363705	0.37798571586608887
Inc-CCDC154-2	16	1509456	1510252	-	1.006535530090332	1.9600036144256592	4.523613452911377
Inc-IFT140-2	16	1722898	1727907	-	0.015101865865290165	0.003916650544852018	0.3411323130130768

Inc-IGFALS-1	16	1838695	1839187	-	0.014942294918000698	0.0027559404261410236	0.43693065643310547
Inc-HAGH-2	16	1887685	1891908	-	0.0063771032728254795	4.896145343780518	0.12162917852401733
Inc-RPL3L-3	16	2013746	2014096	-	4.046078205108643	10.951554298400879	12.509648323059082
Inc-CCNF-4	16	2389151	2417125	+	0.03935578092932701	0.6474820375442505	0.4820129871368408
Inc-CEMP1-7	16	2502582	2502978	-	0.42696040868759155	0.5598491430282593	1.2014880180358887
Inc-NTN3-1	16	2526559	2532174	+	2.3098907470703125	1.786418080329895	0.757463359909058
Inc-CEMP1-5	16	2647882	2649719	-	0.07893798500299454	0.03458879888057709	0.5749722123146057
Inc-CEMP1-10	16	2651152	2663417	-	0.08548875153064728	0.09735012799501419	0.6672059297561646
Inc-FLYWCH2-2	16	2961982	2972652	+	3.0399115085601807	2.234501361846924	8.811528205871582
Inc-CLUAP1-7	16	3666091	3667361	+	0.3968140482902527	0.5221268534660339	0.08861491084098816
Inc-DNASE1-7	16	4010960	4012761	+	0.19823230803012848	2.0903468132019043	1.1783157587051392
Inc-DNASE1-8	16	4013043	4014591	+	0.004747346509248018	0.03896220028400421	0.3753194808959961
GLIS2-AS1	16	4367549	4378343	-	0.054893068969249725	0.03764521703124046	0.01475421991199255
Inc-CDIP1-3	16	4519392	4524556	-	4.674831867218018	11.82098388671875	18.32792854309082
Inc-NMRAL1-5	16	4577278	4578683	-	0.2480497807264328	1.203195333480835	0.07381761074066162
Inc-CDIP1-2	16	4612815	4613129	-	8.543647766113281	0.21645157039165497	0.6808825135231018
Inc-ANKS3-2	16	4735831	4740970	-	0.10863621532917023	0.05759212374687195	0.4545186758041382
Inc-ABAT-4	16	8893452	8893981	+	0.24522557854652405	0.4517722725868225	0.04421686753630638
Inc-PMM2-1	16	8947169	8948204	+	0.5830199122428894	1.1316183805465698	2.098086357116699
Inc-EMP2-5	16	9943744	10125421	-	0.1980510950088501	0.16179177165031433	0.8019383549690247
Inc-ATF7IP2-3	16	10420291	10522861	+	1.6435543298721313	0.10923747718334198	0.10823143273591995
Inc-EMP2-3	16	10534622	10538541	-	0.12347547709941864	0.17933958768844604	0.011931703425943851
Inc-TVP23A-2	16	10868871	10912651	-	1.2902357578277588	0.11118350923061371	0.0072541008703410625
Inc-CLEC16A-1	16	11022021	11026079	+	0.3342043161392212	0.5498847365379333	0.2884852886199951
Inc-CLEC16A-2	16	11027760	11030661	+	0.1723758578300476	0.3803574740886688	0.1544976383447647
Inc-PRM1-1	16	11429767	11439145	-	0.23011434078216553	0.17162472009658813	0.06960680335760117
Inc-PRM1-5	16	11443548	11493112	-	0.31480804085731506	0.012289115227758884	0.02153056301176548
Inc-PRM1-4	16	11481047	11484311	-	1.1489933729171753	0.017350444570183754	0.0
Inc-PRM1-6	16	11495987	11511667	-	1.7311969995498657	0.06170293688774109	0.005642604548484087
Inc-LITAF-3	16	11544557	11550995	-	1.2001011371612549	0.035695187747478485	0.0
Inc-NPIP2-2	16	12027480	12070500	-	2.526604652404785	0.3132546842098236	0.2833111584186554
Inc-CPPED1-1	16	12662992	12666861	-	0.0020574454683810472	0.0019928032997995615	0.1510521024465561
Inc-SHISA9-3	16	13340173	13656775	+	0.01323183998465538	0.12935219705104828	0.41263413429260254
Inc-PARN-7	16	14024534	14029492	-	0.0023651125375181437	0.0011810602154582739	0.11834967881441116
Inc-NTAN1-2	16	15003744	15005202	-	0.0975518748164177	0.11714939773082733	0.02254953794181347
Inc-MPV17L-1	16	15506577	15507131	+	0.041355475783348083	0.5168512463569641	0.12875773012638092
Inc-MARF1-2	16	15806747	15818185	-	1.508589506149292	0.004223428666591644	0.04009224474430084
Inc-NPIPA7-4	16	16450946	16451960	+	0.1557629555463791	0.3053749203681946	0.5109521150588989
Inc-NOMO2-5	16	18476934	18477335	-	1.5912853479385376	0.9785438179969788	4.851873397827148
Inc-NPIPA8-1	16	18512289	18518622	-	1.8219290971755981	3.139310598373413	6.7396697998046875
Inc-TMC7-1	16	18938185	18948365	+	0.06078065559267998	0.31016212701797485	0.3035065531730652
Inc-COQ7-1	16	19077313	19078016	+	0.011886975727975368	0.7288483381271362	0.22288857400417328
Inc-ITPRIPL2-2	16	19098164	19169185	+	0.01728922687470913	0.2871428430080414	0.14521969854831696
Inc-SMG1-2	16	19131298	19132951	-	0.0	0.0281952116638422	0.550271213054657
Inc-TMCS-1	16	19513011	19513608	+	0.006621795706450939	0.0	0.570271909236908
Inc-KNOP1-1	16	19772494	19777421	-	0.006582318339496851	0.16967713832855225	0.5952796936035156
Inc-KNOP1-2	16	19868621	19869368	-	13.385818481445312	41.083221435546875	66.20806121826172
Inc-KNOP1-3	16	19870293	19873662	-	52.009761810302734	114.21842193603516	161.3660888671875
Inc-CRYM-3	16	21443324	21445776	-	0.06609795242547989	0.2103675752878189	0.020258132368326187
Inc-NPIPB4-6	16	21904661	21907115	-	0.014901882968842983	0.12186317145824432	0.13354343175888062

Inc-CDR2-8	16	22186451	22202645	-	0.023648666217923164	0.027961477637290955	0.003447947558015585
Inc-CDR2-1	16	22295906	22300059	-	0.0075571173802018166	0.0012419117847457528	0.6857536435127258
Inc-GGA2-1	16	23457767	23458603	-	0.17588099837303162	0.2735862731933594	0.03238868713378906
Inc-NDUFAB1-1	16	23583180	23583599	-	0.06090964004397392	0.0	0.6584141254425049
Inc-ERN2-1	16	23698370	23699665	-	0.05839229375123978	0.0	0.6941336393356323
Inc-ARHGAP17-7	16	25022254	25030385	-	0.3149968683719635	0.6593890190124512	0.03689207881689072
Inc-NSMCE1-12	16	27214040	27215049	-	0.13955886662006378	0.19683660566806793	0.018775751814246178
Inc-GSG1L-1	16	27690261	27730129	-	0.0379030816257	0.4058860242366791	0.10825652629137039
Inc-NPIPB6-1	16	28293573	28304462	-	0.8201751708984375	0.5819605588912964	0.23743027448654175
Inc-SBK1-1	16	28333040	28335170	+	46.592689514610156	7.227496147155762	14.345818519592285
Inc-TUFM-1	16	28841933	28848521	-	0.01514392253011465	0.0	2.3885109424591064
Inc-RABEP2-2	16	28968008	28978204	-	0.0	0.0	0.2076166719198227
Inc-NPIPB11-2	16	29219327	29232167	-	0.2318764477968216	0.020376432687044144	1.4017407894134521
Inc-NPIPB11-5	16	29426391	29427917	-	0.12049654126167297	0.752730667591095	0.028813248500227928
Inc-NPIPB12-1	16	29521572	29533461	-	0.11804993450641632	0.43405604362487793	0.037929389625787735
Inc-NPIPB12-3	16	29551768	29553028	-	0.17403407394886017	0.6519142985343933	0.0
Inc-CDIPT-4	16	29815580	29816817	-	0.5988786816596985	0.4142039120197296	2.0545148849487305
Inc-CDIPT-2	16	29817817	29819053	-	1.17478609085083	0.2228197306394577	8.938947677612305
Inc-CDIPT-1	16	29819957	29832573	-	0.5976481437683105	0.22011670470237732	5.963583469390869
Inc-CDIPT-3	16	29825752	29828307	-	0.6300700306892395	0.14854298532009125	1.876603364944458
Inc-MVP-3	16	29874872	29880100	+	0.04722549393773079	0.27431103587150574	0.18232589960098267
Inc-DOC2A-2	16	30043986	30047851	-	0.01522204838693142	0.2143521010875702	0.08627219498157501
Inc-PPP4C-12	16	30125433	30125826	+	0.03001016192138195	0.006122887600213289	0.6333111524581909
Inc-NPIPB13-1	16	30204256	30204845	-	3.973855972290039	0.6850612163543701	0.7035569548606873
Inc-MYLPF-3	16	30346850	30363926	+	0.08570824563503265	0.07078638672828674	0.7169890403747559
Inc-ZNF629-1	16	30784853	30787354	-	0.24574078619480133	0.2359645515680313	1.2889472246170044
Inc-RNF40-1	16	30789770	30791473	+	0.1726461946964264	0.484255850315094	1.2208006381988525
Inc-PRSS36-1	16	31144521	31147048	-	2.57187819480896	0.01129478681832552	0.002648832043632865
Inc-C16orf58-1	16	31498691	31499813	-	0.38367193937301636	0.24342741072177887	0.05704578012228012
Inc-ZNF267-1	16	31799523	31802314	+	0.10972540080547333	0.08487667143344879	0.012276791967451572
Inc-SHCBP1-2	16	46694608	46695503	-	0.5899934768676758	0.520330011844635	0.1497199684381485
Inc-MYLK3-5	16	46707358	46707839	-	0.3956330418586731	0.8618937134742737	0.11348790675401688
Inc-GPT2-13	16	47177999	47217006	+	0.08441875874996185	0.042862337082624435	0.29967936873435974
Inc-NETO2-3	16	47310408	47311851	-	0.14177696406841278	0.47905433177948	0.018002381548285484
Inc-BRD7-6	16	49880929	49881543	-	1.9008702039718628	0.5021610856056213	0.289705365896225
Inc-SNX20-8	16	50582419	50670031	-	2.9662708402611315E-4	0.003002764657139778	0.0015536034479737282
Inc-CYLD-4	16	51183150	51184723	+	0.2573402225971222	0.32316112518310547	0.947553366203308
Inc-HNRNPA1P48-124	16	51184681	51476430	+	0.07534845173358917	0.279941201210022	0.23439297080039978
Inc-SALL1-6	16	51388367	51559447	-	0.07822497934103012	1.310942530632019	0.690193235874176
LINC01571	16	51788706	51847468	+	0.04180935025215149	0.38293322920799255	0.3185737431049347
Inc-CHD9-9	16	52968725	52969547	+	0.5170095562934875	0.002988502848893404	0.038219522684812546
Inc-RBL2-1	16	53407403	53464389	+	0.07674822211265564	0.01273388508707285	0.0013384767808020115
Inc-RBL2-6	16	53981071	54056363	+	0.14428994059562683	0.8269989490509033	0.01978919468820095
Inc-IRX3-7	16	54314290	54316386	-	0.1665845364332199	0.27018600702285767	0.019738618284463882
Inc-IRX5-1	16	54968825	54988577	+	0.41576239466667175	0.14783188700675964	0.07550356537103653
Inc-AMFR-1	16	56385798	56387436	-	0.11327104270458221	0.02143982984125614	0.002639134880155325
Inc-BBS2-1	16	56499554	56500074	-	0.7233976125717163	0.7888152599334717	0.13722290098667145
Inc-PLLP-4	16	57279744	57280308	-	0.03766597434878349	0.15608690679073334	0.32972168922424316
Inc-PLLP-1	16	57282459	57286664	-	0.15964481234550476	0.1047404408454895	2.3104052543640137
Inc-COQ9-1	16	57477062	57481271	+	0.007248258218169212	0.0011097443057224154	0.06016674265265465

Inc-CNOT1-3	16	58545858	58550001	-	0.2070709466934204	0.25673747062683105	1.19752836227417
Inc-GOT2-6	16	59743897	59789095	-	0.5593400597572327	0.041304562240839005	0.13165059685707092
Inc-GOT2-9	16	61701083	61748188	-	0.6034830212593079	0.036240022629499435	0.0
Inc-GOT2-11	16	61823380	61851947	-	6.703723907470703	0.4080573618412018	0.007418966386467218
Inc-CDH11-11	16	62065895	62070336	-	8.814530372619629	0.5632004141807556	0.0
Inc-CMTM3-1	16	66754800	66765688	+	0.060802046209573746	0.02917412668466568	1.219149112701416
Inc-FAM96B-3	16	66978563	66978999	-	0.017802458256483078	0.0	0.7651345133781433
Inc-B3GNT9-2	16	67189442	67190584	-	1.8245501518249512	1.7753602266311646	7.292224407196045
Inc-KIAA0895L-2	16	67218284	67219567	-	1.0848615169525146	0.12546902894973755	0.136971578001976
Inc-KIAA0895L-3	16	67220934	67224088	-	1.172663688659668	0.0868128314614296	0.0
Inc-LRRC36-1	16	67465025	67468931	+	0.3895569145679474	0.277424693107605	0.030900992453098297
Inc-ESRP2-2	16	68259872	68263048	-	0.03196631744503975	0.00800502672791481	0.4577203691005707
Inc-ESRP2-4	16	68290065	68298358	-	0.01928023248910904	0.029711706563830376	0.08112111687660217
Inc-SMPD3-2	16	68678151	68680086	-	1.8357352018356323	0.16682493686676025	0.05303044244647026
Inc-CDH1-5	16	68730047	68730826	+	0.23050884902477264	0.02239772118628025	0.0
Inc-TANGO6-1	16	69140157	69140891	+	0.2186541110277176	0.14031408727169037	1.2910175323486328
Inc-WWP2-5	16	69666044	69666474	+	0.5681447386741638	1.237358570098877	0.14040686190128326
Inc-NFAT5-1	16	69743777	69744486	+	0.03710303455591202	0.0947011411190033	1.1200450658798218
Inc-NOB1-3	16	69795853	69796190	-	0.09892188012599945	0.4761914908885956	0.030943503603339195
Inc-EXOSC6-2	16	70190243	70207351	-	0.03888659179210663	0.00938904844224453	0.830955982208252
Inc-DDX19B-2	16	70273803	70282018	+	0.011832288466393948	0.0017139674164354801	0.237120121717453
Inc-IL34-6	16	70788863	70800557	+	0.02730114758014679	0.3672159016132355	0.2742183804512024
Inc-HYDIN-1	16	70802893	70804124	-	0.14105677604675293	0.3415626585483551	0.03267592936754227
Inc-DHX38-22	16	72656278	72673701	+	0.1654491275548935	0.00531949894502759	0.0
Inc-DHX38-25	16	72782162	72787324	+	0.1571013480424881	0.558255136013031	0.1202259436249733
Inc-PMFBP1-4	16	72863408	72923733	-	6.105363368988037	2.7207469940185547	1.4810577630996704
Inc-PMFBP1-3	16	72897138	72899169	-	0.16868820786476135	0.35057157278060913	0.005705720279365778
Inc-DHX38-29	16	73082133	73085207	+	0.0941450297832489	0.023841986432671547	0.005705288145691156
Inc-PSMD7-5	16	73577840	73592421	+	0.4503318667411804	0.06317737698554993	0.0
Inc-CLEC18B-8	16	74323491	74324950	-	0.18284910917282104	0.35104748606681824	0.04125604033470154
Inc-LDHD-1	16	75142499	75144610	-	0.03552256524562836	0.09403662383556366	0.16531527042388916
Inc-ZFP1-2	16	75174594	75175101	+	0.035071760416030884	2.866976499557495	0.1243261769413948
Inc-CHST6-1	16	75492150	75494517	-	0.5185140371322632	0.8993152379989624	0.1742955446243286
MAFTRR	16	79691311	79804827	-	0.12547211349010468	0.13296127319335938	0.03352583572268486
LINC01229	16	79709816	79841819	+	0.03378235176205635	0.0026481265667825937	0.0020260855089873075
Inc-CDYL2-6	16	80188950	80597032	-	0.05581175908446312	0.1527000516653061	0.014999479055404663
Inc-ATMIN-4	16	81110924	81112466	+	0.17300112545490265	0.19275730848312378	0.01895538717508316
Inc-PLCG2-4	16	81698959	81700881	+	0.2659248411655426	0.8061298727989197	0.0802421048283577
Inc-SDR42E1-4	16	81738303	81745364	-	0.019534248858690262	0.006700482685118914	0.4035821855068207
Inc-SLC38A8-5	16	83739256	83751504	-	0.004668714944273233	0.07274840027093887	0.10948773473501205
Inc-SLC38A8-2	16	83823106	83841439	-	0.003766711102798581	0.003370286663994193	0.07322452962398529
Inc-TLDC1-2	16	84599208	84610702	-	142.2097930908203	29.091609954833984	40.8696174621582
Inc-KLHL36-5	16	84599238	84599842	+	1.3750499486923218	0.09676758199930191	9.222282409667969
Inc-TLDC1-3	16	84623731	84651681	-	163.3525390625	21.92899513244629	51.615928649902344
Inc-CRISPLD2-5	16	85067132	85082153	+	0.08594749122858047	0.288163423538208	0.011603373102843761
Inc-FAM92B-1	16	85319914	85337002	-	0.2557915449142456	0.01480352266447544	0.004444356542080641
Inc-FAM92B-2	16	85340979	85345537	-	0.6441594958305359	0.06212065741419792	0.0
Inc-GINS2-5	16	85588729	85588963	-	0.3823557198047638	0.3542725145816803	2.6371781826019287
Inc-GINS2-4	16	85674669	85893869	-	0.021362723782658577	0.1589498221874237	0.16330976784229279
Inc-C16orf74-1	16	85722932	85784616	-	0.06810947507619858	0.29935240745544434	0.40183326601982117

FENDRR	16	86507244	86542705	-	6.386201712302864E-4	0.4246780276298523	0.22852185368537903
LINC02188	16	86750479	86775053	+	0.10816284269094467	0.012248852290213108	0.008520976640284061
lnc-C16orf95-1	16	86962017	86964962	-	0.013538584113121033	0.06752987205982208	0.8893219828605652
lnc-MAP1LC3B-7	16	87417601	87425459	+	0.22564078867435455	0.38947799801826477	0.7823929786682129
lnc-KLHDC4-2	16	87727143	87729753	-	1.7716938257217407	1.252687931060791	0.5442990660667419
lnc-SLC7A5-3	16	87773369	87781312	-	0.07519500702619553	0.874755859375	0.37263810634613037
lnc-CYBA-5	16	88579368	88597461	-	0.09396251291036606	0.5278933048248291	0.3540174961090088
lnc-CBFA2T3-1	16	89106631	89119373	-	0.0013971198350191116	0.06288997083902359	0.029153190553188324
lnc-SLC22A31-4	16	89293103	89299484	-	0.011401617899537086	0.004210826009511948	0.1524377167224884
lnc-ZNF778-2	16	89386860	89396352	+	0.028651516884565353	0.11150923371315002	0.6483529806137085
lnc-ANKRD11-3	16	89584045	89588625	-	8.36322084069252E-4	0.0	0.041774362325668335
lnc-RPL13-4	16	89645754	89647938	+	0.20948117971420288	3.6862215995788574	1.0255768299102783
lnc-SPATA33-3	16	89751050	89751712	+	0.2338622510433197	0.3801790773868561	0.07159721851348877
lnc-DBNDD1-1	16	90061106	90062978	-	0.014406802132725716	0.0022569033317267895	0.2514943480491638
lnc-CENPBD1-2	16	90071281	90075480	-	11.516265869140625	16.76767349243164	42.52085494995117
lnc-DBNDD1-2	16	90086147	90114033	-	0.11290846765041351	0.07840272784233093	0.607138454914093
lnc-DEF8-3	16	90107060	90108062	+	0.26356810331344604	0.8335392475128174	1.60139000415802
lnc-RFLNB-4	17	164273	167143	-	0.001924888463690877	0.25745654106140137	0.048017654567956924
lnc-RPH3AL-1	17	254259	263814	-	0.037615325301885605	0.3963690400123596	0.11942454427480698
lnc-GLOD4-1	17	692984	693765	-	1.378395438194275	0.6555121541023254	0.19157534837722778
lnc-ABR-6	17	726886	882589	-	12.235471725463867	2.6090075969696045	3.6636765003204346
lnc-NXN-1	17	891435	894424	-	0.00382559048011899	0.048935335129499435	0.055259667336940765
lnc-TUSC5-5	17	1366963	1368138	+	0.03764621913433075	0.010108322836458683	1.7656933069229126
lnc-RILP-3	17	1541434	1543851	-	0.5698381662368774	0.1272207796573639	0.05637142062187195
lnc-RILP-1	17	1543875	1549017	-	0.5971084833145142	0.08664955198764801	0.07933557778596878
lnc-TLCD2-6	17	1626923	1627901	-	0.015577192418277264	0.11704649776220322	0.10300295799970627
lnc-SMG6-1	17	2207756	2211342	-	0.005739168263971806	0.10810660570859909	0.06701691448688507
lnc-MNT-2	17	2275157	2277575	-	0.05132521688938141	0.10586635023355484	0.31746983528137207
lnc-MNT-1	17	2278355	2282600	-	0.14480330049991608	0.20206062495708466	0.6342002153396606
lnc-SGSM2-1	17	2288141	2289958	+	0.029830751940608025	0.03642438352108002	1.0704638957977295
lnc-RAP1GAP2-4	17	2515704	2516336	+	0.27056849002838135	0.9457904100418091	0.02800534851849079
lnc-CLUH-2	17	2586599	2588382	-	0.05675223097205162	0.016692273318767548	1.561822533607483
lnc-METTL16-5	17	2598999	2599767	-	4.609269618988037	5.033661365509033	13.768500328063965
lnc-PAFAH1B1-2	17	2615219	2616575	+	0.24328193068504333	1.5473573207855225	2.1524057388305664
lnc-SPATA22-1	17	3430991	3433406	-	0.7203772068023682	0.8291122913360596	0.1732105016708374
lnc-TRPV3-1	17	3481249	3482147	-	0.1929415613412857	0.40067216753959656	0.0677567645907402
lnc-P2RX5-1	17	3608266	3608922	-	0.5121392011642456	0.18072420358657837	0.02531861886382103
lnc-P2RX5-5	17	3627198	3631210	-	0.03741258382797241	0.015371751971542835	0.3313840627670288
lnc-NCBP3-2	17	3764656	3764886	-	2.9744653701782227	4.341129779815674	17.270774841308594
lnc-SPNS3-2	17	4067204	4068007	+	0.1575849950313568	0.3266400694847107	0.7739050984382629
lnc-PELP1-2	17	4608111	4608512	-	29.49650001525879	0.4459851086139679	0.5328481793403625
lnc-CHRNE-2	17	4790264	4790584	-	0.029468756169080734	0.0	0.432857871055603
lnc-SLC52A1-1	17	4922509	4923388	-	0.043078456073999405	0.058282747864723206	1.337017297744751
lnc-USP6-2	17	5095393	5116514	+	2.2313296794891357	0.8810320496559143	0.7301563620567322
lnc-RABEP1-5	17	5138264	5151759	+	0.3932722508907318	0.1589888483285904	0.07528772950172424
lnc-AIPL1-6	17	6023334	6024620	-	0.33469465374946594	0.038842540234327316	1.1279903650283813
lnc-AIPL1-1	17	6257600	6278580	-	0.1885146051645279	0.041489239782094955	0.01978365145623684
lnc-MED31-1	17	6556783	6558328	-	0.14826512336730957	0.02886340767145157	0.021306587383151054
lnc-MED31-3	17	6588042	6593401	-	2.9369988441467285	0.0700303167104721	0.01723644696176052
lnc-ALOX12-1	17	6745419	6858258	+	0.006389819085597992	0.027039170265197754	0.026383575052022934

Inc-TEKT1-6	17	6830791	6831510	-	0.0044324672780931	1.2345815896987915	0.0671878233551979
Inc-DLG4-2	17	7079933	7082695	-	2.6361584663391113	0.46442711353302	0.5949236154556274
Inc-GPS2-3	17	7191582	7197254	-	6.159007549285889	0.7478619813919067	0.9875773191452026
Inc-NEURL4-4	17	7255369	7258332	-	0.027084173634648323	0.010726965963840485	0.14503084123134613
Inc-RNF227-2	17	7771136	7777031	-	1.2167294025421143	1.0880378484725952	0.3045857548713684
Inc-TRAPP1-3	17	7826026	7829293	-	1.9153270721435547	4.666668891906738	6.511840343475342
Inc-TRAPP1-2	17	7830445	7831337	-	0.8856350779533386	2.029200553894043	2.8520405292510986
Inc-RNF222-2	17	8415787	8424218	-	168.14183044433594	50.49013900756836	50.44122314453125
Inc-RNF222-3	17	8424242	8424837	-	110.67574310302734	31.781831741333008	26.157453536987305
Inc-RCVRN-1	17	9846438	9940018	-	2.0643181800842285	116.67827606201172	46.8188591003418
Inc-ADPRM-6	17	10598216	10613085	+	0.2602396011352539	0.4627547562122345	0.05865972116589546
Inc-TMEM238L-1	17	10726858	10728357	-	0.19304727017879486	1.4125968217849731	1.2737959623336792
Inc-ELAC2-1	17	12893466	12893927	-	0.21101535856723785	0.2194615602493286	1.8186067342758179
Inc-COX10-3	17	14207057	14209062	+	8.60473918914795	1.3783210515975952	1.5822936296463013
Inc-COX10-4	17	14230652	14232791	+	0.26780587434768677	0.21952618658542633	0.017101246863603592
Inc-HS3ST3B1-1	17	14276848	14333970	+	0.021090859547257423	0.03392723575234413	0.0014705080538988113
Inc-PMP22-7	17	14670900	14683520	-	1.1121171712875366	0.13924044370651245	0.0
Inc-TEKT3-1	17	15143744	15147713	-	0.27925100922584534	0.9901328682899475	0.05711305886507034
Inc-TEKT3-2	17	15207128	15210318	-	0.9326515197753906	0.39781075716018677	0.15206345915794373
Inc-TVP23C-4	17	15369845	15372023	-	0.05335911363363266	0.26857149600982666	0.01014625839890495
Inc-CDRT4-4	17	15434087	15434403	-	0.9066516757011414	1.5320695638656616	0.15032027661800385
Inc-CDRT1-2	17	15442295	15443485	-	1.3032007217407227	1.4006859064102173	0.28085318207740784
Inc-CDRT1-1	17	15534973	15536237	-	7.180484294891357	15.562178611755371	27.410310745239258
Inc-ZSWIM7-4	17	15947766	15948278	-	2.6481685638427734	2.408756971359253	0.5514562129974365
Inc-ZSWIM7-1	17	15948896	15949795	-	2.057854413986206	1.7589540481567383	0.5263795852661133
Inc-CENPV-2	17	16285466	16285983	-	2.1938185691833496	1.2530511617660522	27.90587043762207
Inc-LRRC75A-2	17	16328356	16332182	-	0.01315696258097887	0.036139730364084244	0.18164266645908356
Inc-RASD1-1	17	17346637	17349537	-	0.0011414720211178064	0.06360452622175217	0.040406376123428345
Inc-RASD1-2	17	17447584	17449725	-	0.08286549150943756	0.29742637276649475	0.2102344036102295
Inc-ATPAF2-2	17	18004608	18020918	-	0.007479086983948946	0.0011125425808131695	0.13753561675548553
Inc-MIEF2-2	17	18176224	18178354	+	0.07737085223197937	0.09230898320674896	0.6985872983932495
Inc-TBC1D28-7	17	18414535	18455019	-	0.27264612913131714	1.0457602739334106	1.0501655340194702
Inc-TBC1D28-6	17	18427880	18430160	-	0.0711996778845787	0.3416583240032196	0.2546130418777466
Inc-EPN2-3	17	19091329	19092027	+	150.4317169189453	11802.326171875	15313.3623046875
Inc-B9D1-1	17	19237621	19239440	-	0.44314271211624146	0.5557829141616821	1.989763617515564
Inc-RNF112-4	17	19349405	19350190	+	0.19429782032966614	0.03308814391493797	4.7846550941467285
Inc-ALDH3A2-2	17	19460524	19461224	+	0.00785554111301899	0.376007616519928	0.08435443043708801
Inc-ALDH3A2-7	17	19473356	19477730	+	0.0032001633662730455	0.4364185631275177	0.12259874492883682
Inc-ALDH3A2-5	17	19622372	19625741	+	0.015007016249001026	0.06122512370347977	0.04405433312058449
Inc-ULK2-1	17	19832685	19833050	-	0.23422951996326447	1.4559553861618042	0.03292413055896759
Inc-AKAP10-1	17	19911108	19912704	-	0.172138050198555	0.42205312848091125	0.7160179615020752
Inc-LGALS9B-11	17	20278682	20280153	-	0.15324050188064575	0.1112958563543472	0.4386802613735199
Inc-LGALS9B-1	17	20433355	20434194	-	0.26304730772972107	0.15629509091377258	0.013537425547838211
Inc-CCDC144NL-6	17	20646646	20657814	-	0.1544555127620697	0.0039937784895300865	0.0035474617034196854
Inc-CDRT15L2-1	17	20691384	20692912	+	0.07758824527263641	0.008155946619808674	0.00999092024540901
Inc-CCDC144NL-1	17	20739760	20771538	-	0.6543183922767639	0.04189767688512802	0.04404003545641899
CCDC144NL-AS1	17	20771746	20905589	+	3.014681339263916	0.5919827818870544	0.5433984398841858
Inc-DHRS7B-10	17	20815828	20818683	+	0.23057115077972412	0.14695411920547485	0.013142990879714489
LINC01563	17	20978861	21021039	+	0.050519026815891266	0.7892404198646545	0.2475273460149765
Inc-NOS2-12	17	25409716	25411062	-	0.4930262565612793	1.2692276239395142	0.14484460651874542

Inc-WSB1-7	17	25601133	25601503	+	4.251789569854736	0.15667304396629333	0.14365322887897491
Inc-WSB1-3	17	25660282	25675517	+	0.07527086138725281	0.2742857336997986	0.40245625376701355
Inc-LYRM9-3	17	26101341	26105950	-	0.06032543629407883	20.496898651123047	11.968554496765137
Inc-SEBOX-1	17	26688623	26689881	-	0.018097449094057083	7.173409103415906E-4	0.48386552929878235
Inc-SEBOX-3	17	26694889	26695958	-	1.6923357248306274	0.13440853357315063	0.3168757858921814
Inc-SUPT6H-3	17	26934981	26936748	+	0.010766265913844109	0.08390936255455017	0.12658770382404327
Inc-TLCD1-1	17	27047744	27049895	-	0.8760433793067932	0.6580508947372437	6.232967376708984
Inc-FAM222B-1	17	27076749	27077097	-	0.11731021106243134	0.31290537118911743	2.128948450088501
Inc-TAOK1-5	17	27679087	27731123	+	0.6022266149520874	1.176567792892456	0.13425107300281525
Inc-SSH2-1	17	27948635	27949272	-	0.27981045842170715	0.30669379234313965	0.02281980775296688
Inc-ADAP2-1	17	29298670	29300330	+	0.08629564940929413	0.29679757356643677	0.08132724463939667
Inc-TEFM-8	17	29334361	29336333	-	0.32135456800460815	0.06546737253665924	0.05647721514105797
Inc-MYO1D-1	17	30748305	30773056	-	0.01684153638780117	0.02362135984003544	0.1888234764375397
Inc-C17orf75-7	17	30821471	30824091	-	6.816867828369141	2.3685991764068604	0.011889022774994373
Inc-TMEM98-1	17	31273702	31277548	+	0.35049715638160706	0.030772283673286438	0.004358663223683834
Inc-SLFN12-3	17	33727897	33730025	-	0.6594172716140747	0.07779069244861603	0.18291200697422028
Inc-SLFN12-2	17	33730856	33731392	-	3.963249921798706	0.37786009907722473	1.016453742980957
Inc-SLFN12-1	17	33733703	33737247	-	9.456486701965332	0.7173938155174255	2.817182779312134
Inc-SLFN13-1	17	33758902	33760184	-	5.375034332275391	0.5679879784584045	1.1001927852630615
Inc-DUSP14-2	17	35814273	35815033	+	0.2713276147842407	1.116533875465393	0.057161845266819
Inc-SRCIN1-1	17	36604717	36609907	-	1.9458675384521484	0.35732516646385193	0.7023895978927612
Inc-PCGF2-1	17	36871581	36876525	-	0.0650341808795929	0.06406666338443756	0.4558437168598175
Inc-PCGF2-3	17	36881812	36886003	-	0.06392571330070496	0.03922589495778084	1.8017879724502563
Inc-FBXO47-1	17	37075054	37078022	-	0.14911751449108124	0.00449951970949769	1.5986846685409546
Inc-LASP1-5	17	37081562	37085635	+	1.6998628377914429	0.6568306684494019	0.5422934889793396
Inc-LINCO0672-4	17	37186159	37209458	+	0.04405758157372475	0.0073881871066987514	0.002204646123573184
Inc-MED1-4	17	37617719	37618883	-	0.2689245641231537	0.19386444985866547	1.8833990097045898
Inc-LRRC3C-2	17	38078108	38078537	+	0.057878971099853516	0.0	0.6775708198547363
Inc-MED24-4	17	38253597	38256549	-	3.252711772918701	16.07955551147461	19.100616455078125
Inc-TNS4-4	17	38598840	38609354	-	0.1256314218044281	0.010791557841002941	0.03808828443288803
Inc-TNS4-3	17	38612920	38613681	-	0.13324245810508728	0.00301732518710196	0.5897084474563599
Inc-IGFBP4-3	17	38618212	38620215	+	1.5995547771453857	0.2181333750486374	0.0
Inc-DNAJC7-1	17	40119785	40126494	-	0.778778612613678	0.787068784236908	3.909144401550293
Inc-ZNF385C-1	17	40177594	40180707	-	0.8797982931137085	0.23423634469509125	0.09424261003732681
Inc-STAT5B-1	17	40344949	40346531	-	3.2468466758728027	4.637169361114502	10.630544662475586
Inc-GHDC-1	17	40374802	40375225	-	0.23359055817127228	0.31781259179115295	0.04996545985341072
Inc-STAT5A-2	17	40428514	40429690	+	0.01616457663476467	0.10353846102952957	0.08420634269714355
Inc-PSMC3IP-4	17	40671167	40674884	-	0.08704541623592377	0.04627039283514023	0.7614569664001465
Inc-NAGLU-2	17	40684209	40684423	+	3.2806055545806885	0.2556059956550598	0.07872944325208664
Inc-PSMC3IP-1	17	40722003	40723904	-	0.15069542825222015	0.11156017333269119	2.5156562328338623
Inc-MLX-3	17	40731535	40732698	+	0.16096700727939606	0.3982822299003601	1.0119136571884155
Inc-VAT1-4	17	41151325	41152110	-	1.5030291080474854	0.24876253306865692	17.244474411010742
Inc-LINCO0854-1	17	41368960	41383338	-	0.004812770523130894	0.03514318913221359	0.031202586367726326
LINCO0910	17	41412831	41466841	-	0.8224223852157593	0.5936728119850159	0.2877694368362427
Inc-LINCO0854-5	17	41441799	41445444	-	0.2958247661590576	0.38020825386047363	0.12291218340396881
LINCO1976	17	42015629	42016330	+	0.0	1.0813521146774292	0.21045058965682983
Inc-TMEM101-1	17	42101057	42111361	-	1.564098596572876	0.7711979150772095	0.5094152092933655
Inc-ATXN7L3-1	17	42264343	42267550	-	0.08913171291351318	0.09223372489213943	0.40764227509498596
Inc-TMUB2-2	17	42269166	42271337	+	0.30419379472732544	0.2284134477376938	2.071624755859375
Inc-DCAKD-5	17	43198603	43209885	-	6.3698344230651855	2.4171030521392822	23.92986297607422

Inc-PLCD3-3	17	43246167	43248951	-	0.06352244317531586	0.1410016119480133	0.6733813285827637
Inc-ARHGAP27-1	17	43515282	43518425	-	0.059826478362083435	0.09448546171188354	0.773279669006348
Inc-PLEKHM1-10	17	43699326	43718042	-	0.0	0.0	0.12277507781982422
MAPT-IT1	17	43973149	43976164	+	0.0028924953658133745	0.6205142140388489	0.028351880609989166
Inc-RPRML-6	17	45262555	45265845	-	0.3164691627025604	0.9460408091545105	0.10110624134540558
Inc-CDC27-2	17	45379255	45403111	-	0.04003200680017471	0.06276343762874603	0.13907063007354736
Inc-NPEPPS-2	17	45500843	45504056	+	0.01926189288496971	0.26946836709976196	0.20707762241363525
Inc-OSBPL7-1	17	45759783	45760049	-	0.4335872530937195	0.08660106360912323	11.608661651611328
Inc-PRR15L-6	17	45988568	45994468	-	0.02620125375688076	0.3441007733345032	0.1405266672372818
Inc-PRR15L-2	17	46024168	46025641	-	0.0	0.014244578778743744	1.3380259275436401
Inc-HOXB2-2	17	46632753	46634305	-	0.23037154972553253	1.9280730485916138	8.331047058105469
Inc-HOXB4-1	17	46656992	46659621	-	0.05137602984905243	0.11498243361711502	0.13068190217018127
Inc-HOXB7-2	17	46675573	46681494	-	0.03093383088707924	0.21643893420696259	3.0142264366149902
Inc-HOXB8-1	17	46684989	46724397	-	0.014456610195338726	0.3095841705799103	0.958652675151825
Inc-ATP5MC1-1	17	46976493	46977110	+	0.9978803396224976	0.2086518108844757	0.10708092153072357
Inc-GIP-1	17	47071253	47074854	-	0.7372521758079529	0.08392912149429321	0.0
Inc-B4GALNT2-3	17	47114484	47114791	+	3.0171620845794678	0.3315819203853607	0.021207347512245178
Inc-B4GALNT2-2	17	47129177	47132517	+	86.8831787109375	4.983120918273926	0.5039246082305908
Inc-NGFR-6	17	47492507	47496077	+	0.008938566781580448	0.19055983424186707	0.0793559402274017
Inc-KAT7-1	17	47911601	47913816	+	1.2485557794570923	2.2455556392669678	0.35303807258605957
Inc-KAT7-2	17	47919957	47923284	+	0.2673298716545105	0.8557137846946716	0.07794775813817978
Inc-PPP1R9B-8	17	48190033	48193651	-	10.121196746826172	3.041332721710205	3.4914708137512207
Inc-PPP1R9B-3	17	48235694	48238637	-	0.25873473286628723	1.7185707092285156	1.7201560735702515
Inc-PPP1R9B-2	17	48240884	48244194	-	0.031688641756772995	1.9228333234786987	2.935617446899414
Inc-COL1A1-6	17	48248789	48258539	-	0.17881560325622559	3.872391939163208	6.251832485198975
Inc-PPP1R9B-6	17	48273440	48276063	-	15.526471138000488	31.837045669555664	17.38249397277832
Inc-ABCC3-1	17	48770809	48772810	+	0.019124597311019897	0.010158319026231766	1.428946852684021
Inc-MBTD1-6	17	49445423	49450146	-	0.2608734965324402	0.5664353370666504	0.061961982399225235
LINC02073	17	49512788	49523163	+	0.11353147029876709	0.37055256962776184	0.5421953201293945
Inc-DGKE-7	17	54991547	54991894	+	0.5495567321777344	1.1706647872924805	3.167062759399414
Inc-AKAP1-1	17	55060110	55062465	+	0.15915097296237946	0.11351685225963593	0.02726808376610279
Inc-COIL-8	17	55328412	55333701	-	0.07612202316522598	0.22545020282268524	0.5113231539726257
Inc-AKAP1-7	17	55626694	55640463	+	0.271553099155426	1.4150390625	0.09660667926073074
Inc-MPO-2	17	56378592	56382749	-	0.8022554516792297	0.1173064261674881	0.19635523855686188
TSPOAP1-AS1	17	56401922	56429104	+	0.09670005738735199	0.051369283348321915	0.016200734302401543
Inc-SKA2-1	17	57280038	57281190	-	0.0	0.0	0.6801198720932007
Inc-VMP1-8	17	57921744	57925458	+	1.4707447290420532	2.118077516555786	0.46258655190467834
Inc-HEATR6-1	17	58160924	58169300	-	1.5649954080581665	0.16006501019001007	0.27375054359436035
Inc-HEATR6-3	17	58191154	58198048	-	0.021900629624724388	0.17305848002433777	0.26006320118904114
Inc-APPBP2-5	17	58958989	58960185	-	0.09638631343841553	0.003509987611323595	0.020533708855509758
Inc-TBX2-1	17	59475313	59476820	+	0.4731059670448303	0.08014377951622009	0.04180179536342621
Inc-NACA2-10	17	59477258	59486501	-	0.02664184384047985	0.013585871085524559	0.16044487059116364
Inc-MARCH10-5	17	60678011	60683834	-	0.0	0.0	1.239057183265686
Inc-SMURF2-2	17	62743382	62743610	-	1.4054239988327026	0.01065960433341122	0.07127857953310013
Inc-AXIN2-2	17	63802090	63804739	-	0.0505523756146431	0.3023550808429718	0.008116817101836205
Inc-HELZ-2	17	65028525	65029406	-	0.015148750506341457	0.005254020914435387	2.6809730529785156
Inc-SLC16A6-2	17	66121918	66148609	-	0.01309180911630392	0.00311104953289032	0.3650742173194885
Inc-ABCA10-1	17	67243517	67245282	-	2.3603594303131104	2.4195547103881836	0.6177253127098083
Inc-MAP2K6-5	17	67547499	67550002	+	4.739629745483398	2.0660157203674316	1.637778053283691
LINC01483	17	67573392	67899141	+	0.12375079095363617	0.011327411979436874	0.015338248573243618

Inc-SLC39A11-1	17	70319264	70636611	-	0.9384296536445618	4.151486396789551	5.637362957000732
Inc-SOX9-4	17	70419592	70424993	+	0.0041757565923035145	0.12207626551389694	0.16736002266407013
Inc-SOX9-7	17	70427269	70588931	+	0.5121829509735107	0.4032480716705322	2.4858198165893555
Inc-SOX9-8	17	70609752	70632785	+	0.008315552026033401	0.82957923412323	0.18190497159957886
Inc-FAM104A-4	17	71068408	71088849	-	1.3082454204559326	1.133791446685791	3.860595226287842
Inc-SSTR2-1	17	71161151	71165450	+	2.8208298683166504	0.20874585211277008	0.8631949424743652
Inc-SSTR2-2	17	71171622	71172772	+	2.1300742626190186	0.1199922263622284	0.6845690011978149
Inc-CDC42EP4-3	17	71500479	71503733	-	7.773907661437988	0.7286350727081299	0.2422998886585236
Inc-C17orf80-7	17	71640680	71642666	+	0.6813884973526001	0.031201040372252464	0.01245117001235485
Inc-USH1G-1	17	72950421	72952051	-	9.155667304992676	2.301281452178955	1.5725551843643188
Inc-MIF4GD-2	17	73284201	73285530	-	0.9901357889175415	2.2280828952789307	3.730611801147461
Inc-SLC25A19-1	17	73367028	73369817	-	0.1908208578824997	0.5698593854904175	0.0553278848528862
Inc-CASKIN2-1	17	73517105	73521559	-	0.05876097083091736	0.0160711370408535	0.3299263119697571
Inc-MYO15B-1	17	73629526	73630282	+	0.10398810356855392	0.24075165390968323	0.448053089969635
Inc-H3F3B-1	17	73779188	73781974	-	0.8834707736968994	0.3097130060195923	0.2565687298774719
Inc-MRPL38-1	17	73888664	73892721	-	3.558509111404419	6.069488048553467	17.049846649169922
Inc-UBE2O-1	17	74382886	74383666	-	0.0742856115102768	0.07827719300985336	0.42111045122146606
Inc-UBE2O-2	17	74475228	74497497	-	1.3059581518173218	3.9150073528289795	4.576115608215332
Inc-ST6GALNAC2-2	17	74559792	74583038	-	0.1923457235097885	0.5684152245521545	1.543879747390747
SNHG20	17	75082798	75095524	+	6.2035417556762695	15.007588386535645	21.761699676513672
Inc-SRSF2-6	17	75084811	75091072	-	0.005266712512820959	0.002024067798629403	0.23814116418361664
Inc-SEPT9-3	17	75523548	75564836	+	0.10317708551883698	0.1870664805173874	5.486236186698079E-4
Inc-TNRC6C-5	17	75878990	75881244	+	0.0	0.11807406693696976	0.05428711324930191
Inc-TMCC-7	17	75940228	76003563	-	0.06420767307281494	0.2272939831018448	0.01668170467019081
TNRC6C-AS1	17	76103479	76107880	-	1.7334320545196533	0.2188299149274826	0.4190768301486969
Inc-TK1-2	17	76220063	76220513	-	0.2175629585981369	0.030470486730337143	8.452713012695312
LINC01993	17	76257430	76274669	-	0.42004135251045227	0.23023591935634613	1.2557982206344604
Inc-PGS1-10	17	76320900	76322603	+	0.08107349276542664	0.3065227270126343	0.010750671848654747
Inc-SOCS3-3	17	76373370	76375338	-	0.025248095393180847	0.12815235555171967	0.09329148381948471
Inc-C1QTNF1-10	17	76858307	76865355	+	0.01665668562054634	0.07530298829078674	0.14055389165878296
LINC01979	17	77889051	77900524	-	0.026091624051332474	0.1420290619134903	0.11079122871160507
LINC01978	17	77893100	77903758	+	7.025699014775455E-4	0.028503337875008583	0.011509761214256287
Inc-EIF4A3-1	17	77965743	77966640	-	0.1192481741309166	0.4559967517852783	0.4080914556980133
Inc-BAIAP2-4	17	78978161	78980791	+	0.9550600647926331	1.207898736000061	4.6991868019104
Inc-AATK-2	17	79084283	79086760	-	0.08315391838550568	0.4013688862323761	0.4271185100078583
Inc-CEP131-2	17	79091800	79102700	-	0.5492150187492371	1.3634247779846191	2.4579880237579346
Inc-CEP131-1	17	79096309	79098814	-	0.8334295153617859	1.5236337184906006	2.719189405441284
Inc-ACTG1-5	17	79430632	79439185	-	0.02729160152375698	0.004770943429321051	0.3272813856601715
Inc-FSCN2-3	17	79525638	79526085	+	0.10485093295574188	0.11729475110769272	0.9383063912391663
Inc-PDE6G-2	17	79603423	79604136	-	8.483449935913086	6.575900554656982	24.10215950012207
Inc-SLC25A10-1	17	79690305	79691954	+	0.4365975558757782	0.9730996489524841	1.3934197425842285
Inc-ANAPC11-2	17	79825597	79826149	+	0.8765153884887695	0.7347588539123535	8.10672664642334
Inc-MAFG-1	17	79875239	79875992	-	3.0397870540618896	1.959518551826477	15.134961128234863
Inc-PYCR1-2	17	79887355	79889126	-	0.008079325780272484	0.002756077330559492	0.2526727020740509
Inc-NPB-5	17	79890274	79890934	+	0.1841605305671692	0.5882278680801392	1.2730991840362549
Inc-NOTUM-2	17	79927681	79935328	-	0.030815865844488144	0.19457682967185974	0.09308003634214401
Inc-RAC3-1	17	79995780	79997256	+	0.255247035190582	0.43306633830070496	1.5992050170898438
Inc-SLC16A3-2	17	80170804	80175570	+	0.19246183335781097	0.28765255212783813	0.9838179349899292
Inc-SLC16A3-3	17	80251346	80252787	+	1.872244954109192	4.0070271492004395	5.577333927154541
Inc-WDR45B-1	17	80560865	80562401	-	0.06847049295902252	0.2359071969985962	0.76814866065979

Inc-METRN1-8	17	81056122	81056732	+	2.2816660404205322	0.28664788603782654	0.8529852628707886
Inc-METRN1-6	17	81187695	81188160	+	0.10364644229412079	1.0550563335418701	1.8859446048736572
Inc-ADCYAP1-2	18	976590	1174824	+	0.26715096831321716	0.02092587575316429	0.0
Inc-YES1-9	18	1362446	1363874	-	1.2809462547302246	0.1375008374452591	0.05614102631807327
Inc-MYL12B-1	18	3284143	3327290	+	0.08206139504909515	0.7446331977844238	1.2063344717025757
Inc-MYOM1-10	18	3286730	3297448	-	0.054800935089588165	0.015455816872417927	0.003083702875301242
Inc-MYOM1-2	18	3983108	4248719	-	0.2759697139263153	0.12696610391139984	0.011162602342665195
Inc-ARHGAP28-10	18	5880672	5946916	+	0.8781430125236511	0.7895232439041138	0.161299892204666
Inc-L3MBTL4-3	18	6965399	6972207	-	29.1658935546875	2.4303441047668457	1.3037090301513672
Inc-L3MBTL4-5	18	7038571	7040236	-	23.333209991455078	2.185851812362671	1.134399652481079
Inc-LAMA1-8	18	7500294	7568727	-	0.03289766609668732	0.0029214085079729557	0.0
Inc-RAB12-3	18	8402845	8405159	+	0.3069070875644684	0.09179415553808212	0.007399373222142458
Inc-PPP4R1-8	18	8635177	8636345	-	0.020576590672135353	0.018650470301508904	0.33852362632751465
Inc-RAB12-1	18	8801654	8802303	+	1.1578738689422607	0.6009758710861206	0.3115933835506439
Inc-NDUFV2-1	18	8949324	8998420	+	0.06754667311906815	0.026475492864847183	0.29450735449790955
Inc-PPP4R1-2	18	9290915	9334491	-	0.5561062693595886	0.09740443527698517	0.13714763522148132
Inc-PIEZO2-15	18	9561046	9561395	-	0.3221530318260193	0.4776483178138733	0.04068881273269653
Inc-TXNDC2-3	18	9937601	9937833	+	0.7321762442588806	1.6831412315368652	0.13215069472789764
Inc-TXNDC2-4	18	9939988	9940340	+	1.074561595916748	2.3502886295318604	0.18100154399871826
Inc-PIEZO2-16	18	10448398	10455140	-	1.056602954864502	0.5179364681243896	0.21607838571071625
Inc-PIEZO2-8	18	10623873	10624302	-	1.50059175491333	0.09903398901224136	0.11565885692834854
Inc-PPP4R1-22	18	10677514	10681725	-	10.711562156677246	0.7254234552383423	0.0
Inc-MPPE1-15	18	10769758	10773562	-	9.175721168518066	0.8401739597320557	0.0
Inc-MPPE1-14	18	10784068	10785002	-	4.283163070678711	0.5375626087188721	0.0
Inc-MPPE1-13	18	10794068	10795002	-	3.269603729248047	0.25385987758636475	0.0
CHMP1B-AS1	18	11851413	11852750	-	0.06577722728252411	0.014315849170088768	2.2662100791931152
Inc-CIDEA-4	18	12278495	12282738	+	0.09096001833677292	0.020292077213525772	0.0
Inc-PTPN2-6	18	12984693	12991172	-	0.026247935369610786	0.16669337451457977	0.15439526736736298
Inc-ANKRD30B-13	18	14225223	14342525	+	0.8567582964897156	0.16195449233055115	0.2360488921403885
Inc-ROCK1-2	18	18819035	18821332	-	0.7879781723022461	0.2067993432834015	0.03806935250759125
Inc-NPC1-2	18	21179974	21227961	-	0.05871998146176338	0.45830097794532776	0.4754627048969269
LINC01915	18	22208145	22242162	+	0.0058516706340014935	0.13236044347286224	0.10854251682758331
LINC01894	18	22503835	22567657	-	1.198367953300476	0.06142730638384819	0.018968626856803894
Inc-ZNF521-2	18	22521583	22575814	-	0.07362507283687592	0.01655185967683792	0.0024930641520768404
Inc-SS18-6	18	22913212	22914068	-	0.17163735628128052	0.2944026589393616	0.009302418678998947
Inc-PSMA8-5	18	22932402	22960598	+	0.05556980520486832	0.04058971628546715	0.0019947353284806013
Inc-AQP4-4	18	24145687	24155590	-	0.17562656104564667	0.05365302041172981	0.012437798082828522
Inc-AQP4-2	18	24161126	24237358	-	0.4772782623767853	0.11807159334421158	0.13691683113574982
AQP4-AS1	18	24235706	24770662	+	0.04080277681350708	0.013157488778233528	0.1174774481773376
Inc-CHST9-2	18	24436253	24442140	-	4.384400367736816	14.197209358215332	19.85346031188965
Inc-MEP1B-2	18	29992145	29993199	+	0.04824830964207649	0.0	1.543221354484558
Inc-ASXL3-1	18	31329600	31331159	+	2.7814738750457764	0.3808887004852295	0.0987694039940834
Inc-ZSCAN30-5	18	32467998	32482849	-	0.01352663803845644	0.0015022576553747058	0.08498353511095047
Inc-ZNF397-5	18	33175865	33177563	+	0.16782629489898682	0.7036709189414978	0.022745845839381218
Inc-RPRD1A-2	18	33531766	33553879	-	0.026864230632781982	0.05057115852832794	0.08351242542266846
Inc-SLC39A6-1	18	33754063	33767413	-	0.07068699598312378	0.09529271721839905	0.24881047010421753
Inc-MOCOS-4	18	33954221	33955232	+	0.17943240702152252	0.58501136302948	0.008011584170162678
Inc-TPGS2-11	18	34272161	34304821	-	0.00878753513097763	0.0459139421582222	0.03991008922457695
LINC01901	18	37421138	37504804	-	0.10773506760597229	0.018042566254734993	0.0
LINC01902	18	37421673	37605492	+	0.08263839036226273	0.009003788232803345	0.002800625516101718

lnc-RIT2-2	18	39045747	39212149	-	0.7538973093032837	0.061764564365148544	0.0
lnc-C18orf25-1	18	43857448	43859388	+	0.22458386421203613	0.33955684304237366	0.043521948158741
lnc-LOXHD1-1	18	44247785	44256829	-	3.728621244430542	5.564368724822998	37.906654357910156
lnc-KATNAL2-5	18	44632317	44634433	+	0.05227235332131386	0.1840139776468277	0.29520270228385925
MIR4527HG	18	44788841	45120921	+	0.0073513975366950035	0.11464804410934448	1.3931384086608887
lnc-SMAD2-400	18	45553258	45555546	-	0.212121844291687	1.3413758277893066	1.481736660003662
lnc-SMAD2-3	18	45567280	45935663	-	0.109309621155262	0.6412208080291748	0.6129125356674194
lnc-LIPG-9	18	46282065	46282694	+	0.21227365732192993	0.7296887040138245	0.021668031811714172
lnc-SMAD7-1	18	46485880	46502913	-	0.01768673211336136	0.009820796549320221	0.09128134697675705
lnc-CTIF-1	18	46547889	46575329	+	0.0016022685449570417	4.1984685231000185E-4	0.11735006421804428
lnc-LIPG-2	18	47013698	47018248	+	0.036951083689928055	0.020968692377209663	0.2913755178451538
LINC01630	18	48872619	49170309	+	0.05258309841156006	0.07900600135326385	0.19106392562389374
lnc-TCF4-8	18	53440548	53447389	-	0.08782918006181717	1.2850077152252197	0.7487057447433472
LINC01415	18	53443958	53448952	-	0.0954892486333847	1.3425958156585693	0.8652952909469604
lnc-WDR7-6	18	53560269	53702176	+	1.0484498732942554	0.36369043588638306	0.162154421210289
LINC01539	18	53670844	53858493	-	0.08387091010808945	0.014642526395618916	4.0751619962975383E-4
lnc-ATP8B1-1	18	55686021	55686293	-	0.47029027342796326	0.04561518877744675	0.008870519697666168
lnc-MALT1-11	18	56038798	56039898	+	0.22036990523338318	0.3445128798484802	0.029729068279266357
lnc-ZNF532-3	18	56357588	56359385	+	0.23503117263317108	0.5832997560501099	0.06637324392795563
lnc-RNF152-2	18	59238575	59416200	-	2.164445638656616	0.20510929822921753	0.1418178826570511
lnc-PIGN-6	18	59475300	59476953	-	18.20798110961914	1.1401571035385132	0.9325702786445618
lnc-RNF152-3	18	59542238	59561480	-	2.312720537185669	0.22792822122573853	0.11131114512681961
lnc-TNFRSF11A-5	18	59913043	59914645	+	0.2433980405330658	0.6958919167518616	0.05553610250353813
lnc-KDSR-4	18	61082550	61083702	-	0.3888278007507324	0.7275006771087646	0.0789046436548233
lnc-CCDC102B-7	18	65183783	65566856	+	0.2665954828262329	0.01734297350049019	0.029039019718766212
lnc-CCDC102B-2	18	66817066	66832387	+	0.3086682856082916	0.9785324335098267	0.0549638569355011
lnc-CCDC102B-3	18	66879514	66881587	+	0.08363687247037888	0.3310098946094513	0.012084302492439747
LINC01910	18	68047376	68243317	-	0.0080411983653903	0.0992770865559578	0.4514105021953583
lnc-SOCS6-8	18	68132235	68158441	+	0.23320826888084412	1.367396354675293	0.9830552935600281
lnc-SOCS6-3	18	68423514	68438194	+	0.14036336541175842	0.9539300203323364	1.4999483823776245
lnc-NETO1-3	18	70534937	70535381	-	3.009920597076416	0.6240234375	9.5933198928833
lnc-ZNF407-1	18	72259010	72262618	+	0.0	0.013024990446865559	0.14153912663459778
lnc-CNDP1-5	18	72369600	72400771	+	0.03452882170677185	0.35215988755226135	0.0031099922489374876
lnc-CNDP1-8	18	72530974	72534580	+	0.06429534405469894	0.47957643866539	0.012060885317623615
lnc-TSHZ1-4	18	73115119	73191662	+	0.21846400201320648	0.007064994424581528	0.06105002015829086
lnc-ZNF516-4	18	73884720	73967211	-	0.018447495996952057	0.3823562264442444	0.9385835528373718
LINC00683	18	74327169	74342075	+	0.0949799194931984	0.035939645022153854	0.013103749603033066
lnc-GALR1-3	18	75133575	75272719	+	0.7686737179756165	0.10309485346078873	0.03990774229168892
lnc-NFATC1-1	18	77336460	77349010	+	0.0026201214641332626	0.014808405190706253	0.053880900144577026
lnc-ADNP2-3	18	77941607	77942844	+	0.14332254230976105	0.5058342814445496	0.5928628444671631
lnc-PLPP2-5	19	60105	70966	-	0.3166598081588745	0.4192124903202057	1.0814123153686523
lnc-MADCAM1-5	19	305573	306467	+	0.05084018409252167	0.009899131953716278	0.5510981678962708
lnc-POLRMT-5	19	582836	583498	-	1.0511672496795654	0.06490334868431091	23.77422523498535
lnc-POLRMT-2	19	615886	617159	-	0.052324045449495316	0.049046531319618225	0.9049864411354065
lnc-MED16-3	19	812518	821967	-	4.75922966003418	0.19321176409721375	0.8768875002861023
lnc-ARID3A-1	19	925781	929508	+	2.817807912826538	0.4924471080303192	0.9760831594467163
lnc-KISS1R-1	19	926349	926943	+	0.23939599096775055	0.13271473348140717	0.005859329365193844
lnc-WDR18-2	19	961827	962424	+	0.2825518548488617	0.32279321551322937	0.07724794745445251
lnc-TMEM259-3	19	1036384	1037105	-	0.22494535148143768	0.002841802081093192	1.9731627702713013
lnc-TMEM259-5	19	1038726	1039063	-	0.2400020956993103	0.0	2.8511085510253906

Inc-CBARP-2	19	1257245	1259141	-	0.461072727274131775	0.0022497219033539295	2.3156931400299072
Inc-MIDN-1	19	1261165	1264697	+	1.4403293132781982	1.8347890377044678	6.41670560836792
Inc-CBARP-6	19	1271610	1275378	-	0.5720067620277405	0.9133134484291077	3.5198280811309814
Inc-GAMT-7	19	1372237	1374363	-	0.045695945620536804	0.0	0.2645435333251953
Inc-GAMT-6	19	1376772	1377519	-	0.0319620817899704	0.0	0.5043011903762817
Inc-GAMT-2	19	1385158	1389650	-	0.04488694295287132	0.0	0.12098948657512665
Inc-ONECUT3-3	19	1815248	1815872	+	0.028054140508174896	0.010337529703974724	0.4161931574344635
Inc-SCAMP4-4	19	1852381	1853621	+	0.006621549837291241	0.0	0.51541668176651
Inc-CSNK1G2-1	19	1940871	1950025	+	1.7344791889190674	0.5683003067970276	8.476463317871094
Inc-MKNK2-2	19	2000439	2001115	-	0.1729012131690979	0.7554214596748352	0.8929768800735474
Inc-PLEKHJ1-1	19	2212028	2215564	-	0.03767438977956772	0.012703615240752697	0.15472888946533203
Inc-LINGO3-1	19	2287163	2287942	-	0.03595617786049843	1.9295639991760254	0.7150221467018127
Inc-GADD45B-1	19	2414241	2654269	+	0.01037470530718565	0.004017102066427469	0.15816570818424225
LINC01775	19	2458933	2462183	-	0.19386009871959686	0.7143726944923401	0.7841179966926575
Inc-DIRAS1-2	19	2641836	2643851	-	0.006244130432605743	0.43934205174446106	0.04874471202492714
Inc-DIRAS1-1	19	2680962	2682106	-	0.00942115020006895	0.5510733127593994	0.11308299750089645
Inc-DIRAS1-3	19	2700687	2701264	-	0.01662183366715908	0.5744292140007019	0.15215004980564117
Inc-AES-2	19	3009570	3028917	-	2.764042854309082	18.361326217651367	9.4066743850708
Inc-GNA11-3	19	3052908	3053722	+	0.3265072703361511	0.002028093207627535	13.009364128112793
Inc-AES-4	19	3118663	3119302	-	0.00987579207867384	0.0017790690762922168	2.680880308151245
Inc-AES-5	19	3121114	3122126	-	0.058228809386491776	0.004944012500345707	1.6025935411453247
Inc-AES-6	19	3138372	3155173	-	0.004457433708012104	0.033647265285253525	0.02491157501935959
Inc-AES-8	19	3180428	3185248	-	0.02330189198255539	0.09037800878286362	0.06472308933734894
Inc-C19orf71-3	19	3544197	3575567	+	0.9497532248497009	0.5114807486534119	2.887028694152832
Inc-ZBTB7A-1	19	4035738	4037093	-	0.0960765555009842	0.4302026629447937	0.2788652181625366
Inc-UBXN6-3	19	4429686	4430931	-	0.015244786627590656	0.0	0.5431100726127625
Inc-TNFAIP8L1-1	19	4580557	4586168	+	0.03679973632097244	0.1969146728515625	0.25664517283439636
Inc-DPP9-2	19	4654976	4655536	-	0.596418559551239	1.099510669708252	1.7235257625579834
Inc-TICAM1-2	19	4785132	4791219	-	0.07354305684566498	0.11271561682224274	0.5263925194740295
Inc-TICAM1-1	19	4791757	4795571	-	0.04926681146025658	0.014479074627161026	0.8452697396278381
Inc-FEM1A-4	19	4838344	4838919	+	0.036557991057634354	0.0	0.9437317848205566
Inc-PTPRS-1	19	5144261	5144910	-	0.012389513663947582	0.0	0.9812619090080261
Inc-ZNRF4-5	19	5309044	5310157	+	0.40431100130081177	1.0787206888198853	0.0973668544845428
Inc-RANBP3-1	19	5911589	5913910	-	0.14906401932239532	0.30646711587905884	0.4051133096218109
Inc-ACSBG2-2	19	6062609	6077872	+	0.0399436429142952	0.016742954030632973	0.006029151845723391
Inc-ACER1-1	19	6343772	6362692	-	0.03227286413311958	0.007602551486343145	0.5723888874053955
Inc-TUBB4A-2	19	6527594	6530882	-	0.0015958074945956469	0.0897690538009644	0.0455881804227829
Inc-CD70-1	19	6562134	6563859	-	0.45967990159988403	0.009571741335093975	0.09025302529335022
Inc-TNFSF14-2	19	6684244	6684643	-	0.10554566979408264	10.588854789733887	0.6704541444778442
Inc-TNFSF14-3	19	6696625	6697726	-	0.19289879500865936	16.57074546813965	0.7954198718070984
Inc-GPR108-2	19	6712291	6713326	-	0.25218528509140015	25.742685317993164	0.6500649452209473
Inc-PEX11G-3	19	7597616	7601370	-	0.6986764073371887	0.8628809452056885	2.3416624069213867
Inc-CTXN1-6	19	7971111	7974758	-	0.01288645714521408	0.007906602695584297	0.1836153268814087
Inc-CTXN1-5	19	7977533	7978403	-	0.14299607276916504	0.11737073957920074	0.798062801361084
Inc-CTXN1-2	19	7987331	7989258	-	0.27166542410850525	0.3415925204753876	1.4439207315444946
Inc-KANK3-3	19	8166027	8537075	-	0.08106406778097153	0.002133074915036559	0.513221263885498
Inc-CD320-1	19	8370519	8373240	-	11.547737121582031	24.56679916381836	44.8227424621582
Inc-KANK3-1	19	8415456	8416481	-	0.1330832690000534	0.19152790307998657	0.012253768742084503
Inc-PRAM1-4	19	8483419	8503964	-	0.0346771702170372	0.0039791930466890335	0.6154768466949463
Inc-PRAM1-1	19	8575862	8576690	-	6.0771660804748535	2.3565244674682617	17.906614303588867

Inc-ZNF559-ZNF177-1	19	9633900	9637304	+	0.0	0.0	0.2683921754360199
Inc-ZNF562-1	19	9800600	9811452	-	0.13740672171115875	0.027101624757051468	0.010024936869740486
Inc-ANGPTL6-1	19	10199708	10201059	-	0.009495693258941174	0.029497811570763588	0.12692272663116455
Inc-ZGLP1-3	19	10362944	10395784	-	0.06936603039503098	0.009779819287359715	0.6784950494766235
Inc-S1PR2-2	19	10369785	10370721	-	0.02205095998942852	0.0	0.9613674283027649
Inc-ZGLP1-2	19	10396477	10399695	-	0.017951209098100662	0.19258588552474976	0.05185488238930702
Inc-KEAP1-1	19	10623539	10625548	-	0.7067863345146179	0.800341010093689	2.2181873321533203
Inc-SLC44A2-1	19	10779907	10780164	+	0.4595692753791809	3.0094692707061768	0.11604183912277222
Inc-YIPF2-3	19	11029846	11031582	-	0.21949860453605652	0.2781434655189514	1.027187705039978
Inc-CNN1-4	19	11634251	11634646	+	0.93553344745636	0.019043896347284317	0.025668079033493996
Inc-ZNF823-4	19	11942755	11980159	-	0.0024470980279147625	0.0013603775296360254	0.18556582927703857
Inc-ZNF433-1	19	12105582	12114626	-	0.029724907130002975	0.0215317253023386	0.3135342597961426
Inc-ZNF791-3	19	12754405	12754799	+	0.4062345325946808	0.012831326574087143	2.6542952060699463
Inc-THSD8-2	19	12907637	12912663	+	1.5056991577148438	0.05464635044336319	10.81075668334961
Inc-GADD45GIP1-1	19	13054932	13055301	-	0.3574594259262085	0.004236461594700813	4.988493919372559
Inc-GADD45GIP1-2	19	13124476	13125325	-	0.020428141579031944	0.15728603303432465	0.27851948142051697
Inc-TRMT1-1	19	13211992	13213538	-	0.3324090242385864	0.06219550594687462	0.031260326504707336
Inc-NACC1-1	19	13227636	13228971	+	2.3859336376190186	4.3207807540893555	8.258108139038086
Inc-STX10-3	19	13250431	13251961	-	0.041447099298238754	0.04997289180755615	4.1045308113098145
Inc-STX10-2	19	13263885	13265007	-	0.6345422863960266	0.0100687425583601	2.068472385406494
Inc-C19orf57-4	19	13882932	13884447	-	0.0	0.022457728162407875	0.9431928396224976
Inc-C19orf57-2	19	13956536	13958622	-	0.05880648270249367	0.15036967396736145	0.016217194497585297
Inc-C19orf57-1	19	13959603	13962069	-	0.028562497347593307	0.16821196675300598	0.1462533324956894
Inc-RFX1-2	19	14060100	14064089	-	0.39720460772514343	0.263480544090271	1.107254981994629
Inc-PODNL1-1	19	14093840	14117101	-	2.6601881980895996	2.59311842918396	8.006743431091309
Inc-RFX1-1	19	14108980	14117851	-	0.3632492125034332	0.44529253244400024	1.1898406744003296
UNCO1842	19	14444555	14454728	+	0.0674201101064682	0.9251267910003662	0.26724156737327576
Inc-DDX39A-3	19	14513529	14519535	-	0.027620937675237656	0.09453574568033218	0.796232283115387
Inc-GIPC1-1	19	14638179	14640065	-	0.5125104784965515	1.8595038652420044	2.4312989711761475
Inc-NDUFB7-1	19	14674708	14675052	-	0.12192188948392868	0.012084943242371082	6.318998336791992
Inc-OR7C2-1	19	15050246	16748905	+	0.002164779230952263	0.0	0.23068156838417053
Inc-EPHX3-6	19	15289749	15290470	-	44.9880485534668	8.604355812072754	15.887033462524414
Inc-CYP4F8-1	19	15722467	15722934	+	17.92401695251465	1.299436330795288	1.307227611541748
Inc-OR10H1-3	19	15947287	15947865	-	0.08604113012552261	0.4738248884677887	0.9108150601387024
Inc-CIB3-1	19	16234471	16250725	-	0.044426120817661285	8.990954956971109E-4	0.7385022044181824
Inc-CIB3-6	19	16300595	16308554	-	0.2612534463405609	0.2005995362997055	1.138802409172058
Inc-SLC35E1-2	19	16650499	16650795	-	0.04451121389865875	1.6434623003005981	0.3342196047306061
Inc-C19orf44-3	19	16662584	16663139	+	0.020309580489993095	0.07991773635149002	1.2020896673202515
Inc-HAUS8-4	19	17003765	17008203	-	3.1059365272521973	0.16996899247169495	0.016149546951055527
Inc-HAUS8-2	19	17062799	17081935	-	5.1403489112854	0.2788315415382385	0.0
Inc-CPAMD8-1	19	17124398	17139846	-	0.20290173590183258	0.055360157042741776	8.399655343964696E-4
Inc-NR2F6-4	19	17263398	17278861	-	0.01755080744624138	0.031739767640829086	0.524871289730072
Inc-NR2F6-5	19	17320393	17326074	-	0.11934076994657516	0.17509415745735168	0.7604609131813049
Inc-NR2F6-2	19	17373393	17375562	-	0.28305062651634216	0.042689356952905655	0.013124150224030018
Inc-ANO8-1	19	17416635	17420116	-	0.1393451690673828	0.05207853764295578	0.40116074681282043
Inc-UNC13A-2	19	17838649	17845322	-	0.23361916840076447	0.013383829966187477	0.8414601683616638
Inc-JAK3-1	19	17953244	17958880	-	0.3339942693710327	0.17367102205753326	0.0069980621337890625
Inc-PGPEP1-7	19	18485554	18496882	+	0.11552774906158447	0.3591664135456085	0.4408429265022278
Inc-SSBP4-2	19	18551920	18555242	+	0.012356719933450222	0.020381148904561996	0.2343059629201889
Inc-CRLF1-4	19	18668585	18680185	-	0.08747366815805435	0.01584615558385849	0.7805740237236023

Inc-FKBP8-2	19	18704047	18704944	-	2.898702383041382	1.0479375123977661	0.07165021449327469
Inc-CRLF1-1	19	18710510	18718551	-	0.5556448698043823	0.5805309414863586	0.0
Inc-ARMC6-1	19	19101702	19104419	+	0.09453300386667252	0.0013738886918872595	1.7942878007888794
Inc-NR2C2AP-1	19	19312218	19313908	-	10.599496841430664	17.686588287353516	31.299856185913086
Inc-BORCS8-2	19	19312887	19313653	-	5.822368144989014	8.206391334533691	15.824440002441406
Inc-TSSK6-4	19	19465544	19606654	-	0.048336368054151535	0.002183101838454604	0.7243860363960266
Inc-GMIP-1	19	19738314	19739359	-	9.674571990966797	3.0786924362182617	2.774914026260376
Inc-ZNF14-2	19	19852774	19865337	-	0.015594352036714554	0.04643692448735237	0.0793379694223404
Inc-ZNF506-2	19	19945686	20011568	-	0.02515023574233055	0.036576539278030396	0.2290249913930893
Inc-ZNF737-3	19	20451078	20607810	-	0.6526868939399719	0.24468280375003815	0.12736822664737701
Inc-ZNF708-2	19	21621295	21646710	-	1.6460919380187988	0.1176917627453804	0.0
Inc-ZNF98-3	19	22551401	22551754	-	4.9168524742126465	0.12047196179628372	0.17000146210193634
Inc-ZNF723-5	19	23290627	23294867	+	3.921870470046997	2.462526559829712	0.7994259595870972
Inc-ZNF726-7	19	23780143	23780394	+	0.13103309273719788	0.026790225878357887	1.518894910812378
Inc-ZNF726-5	19	23945746	24014998	+	8.135382652282715	1.2957907915115356	0.5903221368789673
Inc-ZNF726-4	19	23968384	23970608	+	0.430668443441391	0.22678638994693756	0.0369785912334919
Inc-ZNF726-3	19	24047842	24054170	+	1.318432331085205	0.20740611851215363	0.04375436156988144
Inc-VSTM2B-1	19	29777925	30017286	+	0.003014432033523917	0.5018634796142578	1.846430778503418
Inc-ZNF536-3	19	30719197	30791576	+	0.40611159801483154	0.3266931176185608	0.009235681965947151
Inc-ANKRD27-10	19	31799251	31840161	-	0.21251754462718964	0.4804381728172302	1.3782426118850708
Inc-RGS9BP-1	19	33173073	33173778	+	0.007503706030547619	0.2245848923921585	0.08343903720378876
Inc-KCTD15-2	19	34395804	34405638	+	0.0700707659125328	0.05532843992114067	0.0
Inc-SCGB2B2-133	19	34659765	34663270	-	0.8613132834434509	0.5166558027267456	0.15897388756275177
Inc-PDCD2L-4	19	34873966	34893064	+	6.12414026260376	10.895042419433594	17.861940383911133
Inc-SCGB2B2-12	19	34881384	34884200	-	0.0	0.0048109740018844604	0.22640551626682281
LINC01801	19	35279438	35323773	-	0.2796627879142761	0.022266754880547523	0.004988567437976599
Inc-ZNF599-3	19	35339893	35351480	-	0.3136138319969177	0.10705948621034622	0.0
Inc-ZNF792-5	19	35434458	35435670	-	0.08285351097583771	0.18974663317203522	0.2897959053516388
Inc-HPN-1	19	35527238	35527964	+	0.09393054246902466	2.2617011070251465	1.4700548648834229
Inc-FXYD3-2	19	35596873	35598222	+	0.001198095385916531	0.13943979144096375	0.05578044056892395
Inc-FAM187B-7	19	35617605	35625532	-	0.2726207375526428	1.622584581375122	1.4380592107772827
Inc-FAM187B-6	19	35628549	35630484	-	0.0431508906185627	0.3755033016204834	0.207680806517601
Inc-FAM187B-5	19	35759434	35759793	-	0.15436965227127075	0.05487687885761261	0.688709020614624
Inc-FAM187B-3	19	35759881	35770718	-	0.6954725384712219	0.1016591489315033	3.8060970306396484
Inc-HSPB6-1	19	36237958	36244316	-	0.014274056069552898	0.027262462303042412	0.20063166320323944
Inc-HSPB6-2	19	36245427	36246208	-	1.6661779880523682	12.384190559387207	30.370529174804688
Inc-LIN37-3	19	36245467	36246391	+	0.049065910279750824	0.1806289106607437	2.4297187328338623
Inc-CAPNS1-2	19	36646018	36647113	+	0.02706132084131241	0.4628910422325134	0.17597191035747528
Inc-ZNF146-1	19	36795482	36812260	+	0.019907047972083092	0.0488496758043766	0.07402529567480087
Inc-ZNF585B-5	19	37756841	37762420	-	0.0028291912749409676	0.05570711940526962	0.08238758891820908
Inc-HKR1-2	19	37795355	37802681	+	0.05648593604564667	0.13018319010734558	0.47636422514915466
Inc-SIPA1L3-6	19	38307935	38327847	+	0.35694196820259094	0.06936199218034744	0.06972312182188034
Inc-SIPA1L3-3	19	38320191	38322800	+	0.6191872358322144	0.08007517457008362	0.1016430332567215
Inc-KCNK6-1	19	38822274	38822716	+	3.3463432788848877	0.39250242710113525	0.2781883180141449
Inc-RASGRP4-1	19	38885715	38893558	-	0.01822684146463871	0.004904392175376415	0.41259264945983887
Inc-LGALS7B-1	19	39310806	39318865	+	0.007209026254713535	0.1368742138147354	0.06471766531467438
Inc-NFKBIB-5	19	39342922	39344120	+	0.257843438106384	0.5994224548339844	0.9921342730522156
Inc-SARS2-6	19	39432918	39437356	-	2.9877007007598877	6.06964111328125	11.982903480529785
Inc-LRFN1-1	19	39800187	39811502	-	0.27949801087379456	0.8722094297409058	1.2566341161727905
Inc-LRFN1-3	19	39823544	39826723	-	0.8644804358482361	0.27241548895835876	0.058696579188108444

Inc-SELENOV-3	19	40025103	40025661	+	0.4454302489757538	0.05883948504924774	0.06565158069133759
Inc-ZNF546-6	19	40596661	40600313	+	0.010842761024832726	0.04006131365895271	0.03599077835679054
Inc-PLD3-3	19	40818459	40825438	+	9.285417036153376E-4	2.959868579637259E-4	0.050368666648864746
Inc-CEACAM21-5	19	42051554	42072311	+	0.6992567181587219	6.869107601232827E-4	0.0
Inc-LYPD4-2	19	42400449	42402843	-	0.0039593311958014965	0.00581608759239316	0.41638684272766113
Inc-GRIK5-2	19	42488413	42489494	-	7.80394172668457	2.2007033824920654	3.9332797527313232
Inc-GRIK5-1	19	42492224	42497674	-	9.349376678466797	2.2725961208343506	3.7044260501861572
Inc-POU2F2-1	19	42582740	42584259	-	0.01064324751496315	0.0	0.4680260121822357
Inc-ZNF574-1	19	42636707	42661675	+	2.018206834793091	0.3077477216720581	0.025638410821557045
Inc-PINLYP-4	19	44037588	44038418	+	0.2777967154979706	0.2534302771091461	1.4993396997451782
Inc-LYPD5-2	19	44298461	44299810	-	0.02351011522114277	0.2539128065109253	0.1891622096300125
Inc-LYPD5-1	19	44326209	44331358	-	0.015652095898985863	0.07726043462753296	0.12051096558570862
Inc-ZNF235-2	19	44660662	44682394	-	0.012402087450027466	0.007293747738003731	0.5581866502761841
Inc-ZNF233-1	19	44861000	44861983	+	0.21133621037006378	0.6180468797683716	1.5873032808303833
Inc-BCL3-1	19	45240862	45250906	+	0.0073435925878584385	0.3197248578071594	0.24497289955615997
Inc-CEACAM20-2	19	45247258	45251638	-	0.022596292197704315	0.11333166807889938	0.054138101637363434
Inc-GEMIN7-1	19	45595050	45596529	+	1.932646632194519	1.3570795059204102	5.717769145965576
Inc-BLOC1S3-1	19	45706606	45714492	+	0.0032947417348623276	0.07592371851205826	0.051266469061374664
Inc-FOXA3-2	19	46406168	46407273	+	0.14156806468963623	0.30221086740493774	0.45622655749320984
Inc-PPP5D1-1	19	47112378	47114130	-	0.9453909397125244	0.018950967118144035	13.272276878356934
Inc-TMEM160-1	19	47421933	47504632	-	0.10823164880275726	0.005441840272396803	1.8812519311904907
Inc-NPAS1-5	19	47469418	47470565	+	0.18830928206443787	0.9520604014396667	0.05310022830963135
Inc-TMEM143-2	19	48799721	48806658	-	0.06771456450223923	0.3117122948169708	0.3276105225086212
Inc-CCDC114-1	19	48807338	48827644	-	0.015895072370767593	0.15452204644680023	0.0568474642932415
Inc-KCNJ14-1	19	48969623	48970237	+	0.46774420142173767	0.9320667386054993	1.4812536239624023
Inc-LMTK3-1	19	48978357	48985570	-	0.034465640783309937	0.012007133103907108	0.5014464855194092
Inc-LMTK3-2	19	49016464	49016937	-	0.23489052057266235	0.1465858817100525	1.7093913555145264
Inc-CA11-1	19	49165732	49176284	-	0.06052154302597046	0.32469117641448975	0.19388999044895172
NUCB1-AS1	19	49414187	49422148	-	0.050898171961307526	0.008030989207327366	1.9574755430221558
Inc-TULP2-4	19	49425572	49426681	-	0.14012236893177032	0.0013601005775853992	3.614835739135742
Inc-LHB-1	19	49519136	49522755	-	0.025626201182603836	0.15975923836231232	0.4569742679595947
Inc-CGB5-2	19	49563870	49564389	+	0.22113093733787537	0.49789944291114807	0.0156949944794178
Inc-KCNA7-1	19	49566996	49568098	-	0.4183748960494995	0.01646159030497074	0.015264925546944141
Inc-CD37-2	19	49778376	49778677	+	5.342162132263184	0.008144166320562363	0.016037428751587868
Inc-TEAD2-2	19	49834874	49843865	-	10.806854248046875	2.6466379165649414	3.1196398735046387
Inc-SCAF1-2	19	50127039	50128096	+	0.12751422822475433	0.396476149559021	0.5440664887428284
Inc-RRAS-2	19	50129251	50129696	-	0.008026781491935253	0.0	0.7444397807121277
Inc-IL4I1-5	19	50373585	50373810	-	1.3386175632476807	1.8566213846206665	4.0114426612854
Inc-VRK3-2	19	50546453	50554319	-	0.09873513877391815	0.07819563150405884	0.37083545327186584
Inc-POLD1-3	19	50832979	50874697	+	0.8314981460571289	0.1731715202331543	0.19420485198497772
Inc-KCNC3-4	19	50861735	50869044	-	0.01996934786438942	0.09453880041837692	0.1643439084291458
Inc-NAPSA-3	19	50909485	50912479	-	0.014219701290130615	0.0	0.28405168652534485
Inc-FAM71E1-2	19	50983376	51005149	-	0.020504644140601158	0.029824301600456238	0.28307467699050903
Inc-EMC10-4	19	50993641	51009180	+	0.08846469968557358	0.34854423999786377	0.37207281589508057
Inc-JOSD2-1	19	51014861	51017922	-	0.05603322386741638	0.2471300655174255	0.7152088284492493
LINC01869	19	51308361	51322222	+	0.08439495414495468	0.2855217754840851	0.27372920513153076
Inc-VSIG10L-2	19	51834788	51835353	-	3.0667989253997803	1.746774435043335	1.021610975265503
Inc-ZNF175-3	19	52104965	52109403	+	0.09151270985603333	0.32646965980529785	0.2997765839099884
Inc-HAS1-2	19	52197744	52207406	-	8.862355607561767E-4	0.004225833807140589	0.04759107530117035
ZNF649-AS1	19	52391278	52403717	+	0.08181633055210114	0.16806642711162567	0.5334020853042603

Inc-ZNF616-1	19	52570752	52579642	-	5.488470554351807	5.7815165519714355	5.480371952056885
Inc-PPP2R1A-2	19	52646296	52646589	+	57.854618072509766	1.3859384059906006	1.8932567834854126
Inc-ZNF836-2	19	52725478	52734547	-	0.0	0.0	0.11366427689790726
Inc-ZNF611-9	19	53100952	53102140	-	0.061129651963710785	0.11351753026247025	0.2965441048145294
Inc-ERVV-1-2	19	53300917	53452889	+	0.0	0.0016621218528598547	0.1448197364807129
Inc-ZNF816-2	19	53459294	53541136	-	1.75617253780365	0.370715469121933	0.4575513005256653
Inc-VN1R2-5	19	53700354	53722265	+	0.9866677522659302	0.6758226752281189	0.30657249689102173
Inc-BIRC8-3	19	53958314	53960667	-	0.005239294376224279	0.00240051350556314	0.4058808386325836
Inc-VSTM1-3	19	54444964	54445599	-	0.14681795239448547	0.00635984493419528	1.1611435413360596
Inc-TFPT-1	19	54622891	54628722	-	0.22552384436130524	0.08232328295707703	0.8719329833984375
Inc-TMC4-1	19	54663846	54664386	-	1.1757317781448364	0.2448337823152542	0.3077843189239502
Inc-LENG9-4	19	54960790	54963440	-	0.19860339164733887	0.008803592063486576	1.9199559688568115
Inc-NLRP2-2	19	55517561	55559454	+	1.024343490600586	0.35121971368789673	0.22381125390529633
Inc-ZNF784-2	19	56123245	56125388	-	0.09922244399785995	0.02194206416606903	0.8724620938301086
Inc-EPN1-3	19	56181998	56183435	+	0.4266138970851898	0.6426032781600952	1.3337619304656982
Inc-ZNF835-2	19	57132633	57133764	-	0.05124383419752121	0.002226692857220769	0.43954914808273315
ZIM2-AS1	19	57276741	57309747	+	0.17512859404087067	1.769202470779419	3.9529178142547607
Inc-ZNF835-4	19	57321459	57322651	-	0.638635933992004	14.87297534942627	14.997190475463867
Inc-ZNF460-1	19	57808920	57811732	+	6.908138751983643	10.67912483215332	2.39174747467041
Inc-ZNF154-1	19	58208735	58220562	-	3.008904218673706	0.568889026641846	0.3298056125640869
Inc-ZNF671-1	19	58264590	58266305	-	0.03256901726126671	0.009617339819669724	0.4975205957889557
Inc-ZNF552-3	19	58336667	58338830	-	1.811450481414795	0.43652939796447754	0.5835548639297485
Inc-C20orf96-3	20	306269	309372	-	0.20056433975696564	0.17497669160366058	2.559734582901001
Inc-TBC1D20-1	20	409871	410917	-	0.16679610311985016	0.1181059256196022	0.025950061157345772
Inc-TMEM74B-2	20	1161928	1166059	-	3.1535990238189697	0.2721850574016571	0.1761527955532074
Inc-TMC2-4	20	2505257	2506703	+	0.026539908722043037	0.12441062927246094	0.06938090175390244
LINC01730	20	3789004	3793081	+	0.35180845856666565	2.0146522521972656	2.7686824798583984
Inc-PRND-2	20	5123867	5126532	+	0.10908663272857666	0.600648045539856	0.0124770887196064
Inc-PCNA-1	20	5170744	5178502	-	0.04040738195180893	0.011083417572081089	0.5289551019668579
Inc-PROKR2-1	20	5273034	5273477	-	34.50336456298828	7.380334377288818	7.04386568069458
MCM8-AS1	20	5971441	5986627	-	0.008894710801541805	0.006566456984728575	0.11018070578575134
Inc-LRRN4-2	20	6018020	6019573	-	0.11416163295507431	0.007515495643019676	0.4636402130126953
Inc-FERMT1-4	20	6046612	6048543	-	0.0	0.33467113971710205	0.22121883928775787
Inc-SNAP25-1	20	10153077	10196164	+	0.010925548151135445	0.09038296341896057	0.032636623829603195
Inc-SLX4IP-37	20	10967323	10982411	+	0.021842271089553833	0.11436489969491959	0.09641356021165848
Inc-SLX4IP-39	20	11137821	11253738	+	0.0033621680922806263	0.05684888735413551	0.10351250320672989
Inc-JAG1-15	20	11293311	11436271	-	0.2205774486064911	0.030659401789307594	0.04359860345721245
Inc-JAG1-6	20	11890052	11899325	-	0.011662156321108341	0.00657454552128911	0.1274493783712387
Inc-RRBP1-2	20	17487473	17495386	-	0.9922151565551758	1.329339861869812	3.729271650314331
Inc-SNX5-1	20	17868007	17876405	-	0.0	0.06573408842086792	0.1287015676498413
Inc-RRBP1-3	20	17943353	17943589	-	197.29164123535156	961.1248779296875	697.689208984375
Inc-MGME1-2	20	17992599	17992928	+	2.066385269165039	0.0176091231405735	0.0
Inc-DZANK1-1	20	18294061	18339944	-	0.03128691762685776	0.0017038793303072453	0.12786172330379486
Inc-CRNKL1-8	20	19737034	19738681	-	0.22539210319519043	0.1918662041425705	0.04630841687321663
Inc-RIN2-2	20	19852535	19852928	+	0.5032654404640198	0.21780775487422943	0.09465236961841583
Inc-INSM1-1	20	20344335	20346301	+	0.15224780142307281	0.024119695648550987	0.007421892136335373
Inc-NKX2-4-5	20	21123045	21147236	-	2.754150867462158	0.07077088207006454	0.2829549312591553
Inc-NKX2-2-2	20	21479899	21484354	-	0.032675158232450485	3.2136294841766357	4.679956436157227
Inc-XRN2-9	20	21504420	21506850	+	0.0	0.24531656503677368	0.27307265996932983
LINC01727	20	21550602	21600312	+	0.0025901917833834887	1.7501473426818848	0.6646609306335449

Inc-PAX1-6	20	21632328	21637680	+	0.0	0.9696003198623657	0.5803266763687134
Inc-VSX1-1	20	25120101	25130058	-	0.04807458072900772	0.014328650198876858	0.0
Inc-ABHD12-1	20	25214634	25228577	-	0.298639714717865	0.2671516239643097	0.5329499244689941
Inc-DEFB115-4	20	29638246	29641792	+	0.07869144529104233	0.42878663539886475	0.33546289801597595
Inc-DUSP15-1	20	30432990	30433321	-	14.076436996459961	2.126734495162964	0.5360637307167053
Inc-XKR7-1	20	30586850	30591190	+	1.9538006782531738	0.07100575417280197	0.028146013617515564
Inc-NOL4L-3	20	31021422	31021706	-	0.0710783451795578	0.0	1.0543488264083862
Inc-C20orf203-1	20	31219428	31261743	-	0.08281395584344864	0.04948282614350319	0.0019053473370149732
Inc-DNMT3B-1	20	31396845	31397163	+	17.171295166015625	3.906318187713623	2.543505907058716
Inc-E2F1-3	20	32291920	32292454	-	2.7083277702331543	4.156861305236816	10.517974853515625
Inc-PXMP4-5	20	32339973	32340349	-	5.411172389984131	0.19111762940883636	0.10743143409490585
Inc-AHCY-3	20	32833759	32834343	-	6.298698425292969	1.020219087600708	1.4265722036361694
Inc-PIGU-3	20	33097348	33097815	-	0.008607026189565659	0.09269954264163971	0.5883529782295227
Inc-EDEM2-2	20	33789550	33791091	-	0.0134499341121111	0.09106860309839249	0.13003996014595032
Inc-C20orf173-4	20	34164152	34164508	-	0.3183367848396301	1.6851507425308228	0.9993110299110413
Inc-CPNE1-2	20	34190347	34191004	-	0.1554149091243744	1.0333441495895386	0.5913366079330444
Inc-CPNE1-1	20	34261680	34262720	-	2.3538811206817627	4.22230863571167	7.401592254638672
Inc-SCAND1-4	20	34438596	34438837	-	1.4360623359680176	0.0	0.0
Inc-SCAND1-5	20	34816085	34820716	-	0.05532446503639221	0.011618315242230892	0.178529754281044
Inc-SLA2-4	20	35177530	35233900	-	0.11430254578590393	0.21444348990917206	3.7149136066436768
Inc-SLA2-1	20	35219453	35233983	-	0.06175748258829117	0.1310635656118393	0.23432759940624237
Inc-RBL1-1	20	35729633	35737067	-	1.4046963453292847	0.3031301200389862	0.43629205226898193
Inc-BLCAP-1	20	36120874	36156264	-	4.169309139251709	1.3783154487609863	1.3669703006744385
Inc-GHRH-3	20	36155044	36155462	-	3.499234914779663	1.7100038528442383	1.1996852159500122
Inc-TP53TG5-3	20	44043285	44045498	-	0.04331847280263901	0.2224591225385666	0.2716250419616699
Inc-WFDC3-1	20	44376583	44420571	-	0.07881452143192291	0.33896633982658386	0.3220343291759491
Inc-CD40-3	20	44993170	45019524	+	0.07783593982458115	0.4083319902420044	0.18704232573509216
Inc-OCSTAMP-1	20	45205553	45206592	-	0.1889951229095459	0.5450042486190796	0.04195209965109825
Inc-EYA2-3	20	45947246	45949498	+	0.1520167589187622	0.1689481884241104	0.010789215564727783
Inc-NCOA3-29	20	45986642	45988187	+	0.08471650630235672	0.6183453798294067	0.005002396646887064
LINC01754	20	46011782	46050965	-	0.12460486590862274	0.0013022710336372256	0.006648320239037275
Inc-NCOA3-26	20	46904669	46923713	+	0.5699709057807922	0.13848043978214264	0.0859026163816452
LINC00494	20	46983957	47000425	+	0.03638273850083351	3.726411086972803E-4	0.0
Inc-PREX1-10	20	47533866	47538154	-	0.013242017477750778	0.09267732501029968	0.05346374586224556
Inc-KCNB1-2	20	47855480	47861289	-	0.3882732391357422	0.4681970775127411	1.459363579750061
Inc-B4GALT5-1	20	48346128	48346379	-	14.076224327087402	2.1280813217163086	3.766636610031128
Inc-CEBPB-13	20	48884023	48903572	+	0.004283983260393143	0.0565333291888237	0.03566433861851692
Inc-RIPOR3-1	20	49187512	49194578	-	0.0066413008607923985	0.009395897388458252	0.10662973672151566
Inc-ATP9A-2	20	50007946	50015756	-	0.05188487097620964	1.1404446363449097	1.2944319248199463
Inc-ATP9A-1	20	50408522	50418125	-	9.162459373474121	1.2678183317184448	0.14043080806732178
LINC01524	20	50827153	51328997	+	0.013137053698301315	0.008894653059542179	0.0010941961081698537
Inc-TSHZ2-11	20	52352887	52370001	+	0.1195015013217926	0.055127888917922974	0.03786671161651611
Inc-PFDN4-1	20	52556699	52559047	+	0.943812370300293	0.28721386194229126	0.211038738489151
Inc-MTRNR2L3-1	20	55959216	55968122	-	0.008895041421055794	0.012417711317539215	0.12488123029470444
Inc-PCK1-2	20	56224091	56224500	+	0.0	0.0	1.435201644897461
Inc-ZBP1-2	20	56224550	56224992	-	6.341331958770752	10.970681190490723	37.15876770019531
Inc-PMEP1-2	20	56234606	56286592	-	3.9775547981262207	4.652910232543945	13.739952087402344
Inc-PCK1-5	20	56286543	56288784	+	0.4271165430545807	0.2973915636539459	3.829226016998291
Inc-APCDD1L-6	20	56937951	56941646	-	0.008641115389764309	0.010014442726969719	0.7862027883529663
LINC01711	20	57209828	57210794	+	0.2103118598461151	1.2641372680664062	1.7415155172348022

Inc-APCDD1L-3	20	57223663	57227379	-	0.20634256303310394	0.650783896446228	1.8497669696807861
Inc-STX16-NPEPL1-1	20	57292420	57294287	+	0.37628036737442017	0.25131291151046753	0.11436488479375839
Inc-CTSZ-7	20	57486024	57486241	-	1.4020650386810303	0.3213038742542267	4.905783176422119
Inc-CTSZ-6	20	57560742	57562496	-	0.03587343171238899	0.007458904758095741	1.0327075719833374
Inc-SYCP2-1	20	58193324	58203344	-	0.0	0.13831967115402222	0.020318275317549706
Inc-LSM14B-5	20	59946575	59949067	+	0.06476519256830215	0.2906109392642975	0.010282764211297035
Inc-LSM14B-8	20	60240411	60244750	+	0.021779149770736694	0.12897254526615143	0.0010860752081498504
Inc-PSMA7-1	20	60709736	60710130	-	0.10761153697967529	0.16831299662590027	2.9703214168548584
Inc-LAMA5-4	20	60868586	60869995	-	0.03521190211176872	0.03339706361293793	0.9738876819610596
Inc-LAMA5-3	20	60875855	60878715	-	0.02332337386906147	0.0689728781580925	0.48616498708724976
Inc-LAMA5-1	20	60880488	60884313	-	1.4620684385299683	3.9906296730041504	7.792001724243164
Inc-CABLES2-4	20	60893591	60894168	-	8.707473754882812	22.283796310424805	31.561758041381836
Inc-CABLES2-3	20	60898832	60899927	-	7.469513893127441	26.698102951049805	22.370901107788086
Inc-GATA5-5	20	61193939	61200695	-	0.0052696107886731625	0.604585587978363	3.5080292224884033
Inc-GATA5-8	20	61272071	61274656	-	0.0	0.09509143978357315	0.04172348603606224
SLCO4A1-AS1	20	61288493	61298076	-	0.005745092406868935	9.703852653503418	7.104212760925293
Inc-SLCO4A1-4	20	61355775	61363408	+	0.01151745393872261	0.12240810692310333	0.15867044031620026
LINC00659	20	61361280	61408299	-	0.013354071415960789	0.41494235396385193	0.25564733147621155
OGFR-AS1	20	61430693	61436939	-	0.13015928864479065	0.08904927968978882	0.968611478805542
Inc-TCFL5-6	20	61443581	61444752	-	0.5315762758255005	0.13186730444431305	3.138720035529785
Inc-TCFL5-5	20	61463235	61467082	-	0.005960616748780012	0.013303464278578758	0.3319574296474457
Inc-YTHDF1-2	20	61797380	61812255	-	6.106572151184082	1.010408639907837	0.026933440938591957
Inc-BIRC7-4	20	61825593	61825930	+	0.864152729511261	0.036432694643735886	0.024398889392614365
Inc-ARFGAP1-4	20	61909873	61924802	+	0.5608075857162476	1.227973222732544	5.061307907104492
Inc-CHRNA4-1	20	62044086	62044548	-	0.5560975670814514	0.42328861355781555	0.07675675302743912
Inc-ARFRP1-1	20	62326693	62327765	-	0.09045246243476868	0.5668252110481262	0.4192364513874054
Inc-ZBTB46-1	20	62362436	62363079	-	0.2539701461791992	0.021097514778375626	0.04330721125006676
Inc-ARFRP1-2	20	62419073	62421212	-	1.0055406093597412	0.5856106281280518	0.17414362728595734
Inc-TCEA2-1	20	62681189	62694220	+	0.0501311793923378	0.3575110137462616	0.27052897214889526
Inc-NPBWR2-4	20	62885535	62887023	-	0.04676136374473572	0.19931548833847046	0.3376328647136688
Inc-TPTE-1	21	10163846	10208330	+	0.007318467833101749	0.05436694994568825	0.10753517597913742
Inc-KCNE1B-2	21	10196442	10200844	-	0.3503899872303009	0.13942259550094604	0.03173327073454857
Inc-KCNE1B-5	21	11169665	11186885	+	0.0026277026627212763	0.4863757789134979	0.21475200355052948
Inc-LIPI-5	21	15289238	15290123	-	0.0372183658182621	0.7706340551376343	0.29302582144737244
Inc-LIPI-4	21	15307774	15352765	-	0.03522445261478424	0.3120315372943878	0.23220455646514893
Inc-RBM11-3	21	16333630	16336554	+	0.023675506934523582	0.0	0.38775309920310974
Inc-SAMSN1-7	21	16351553	16363310	-	0.8304529190063477	1.1171131134033203	0.05264550819993019
Inc-USP25-1	21	17259153	17267300	+	0.49433833360671997	0.7515935301780701	0.17279702425003052
Inc-NRIP1-14	21	17664112	17680454	-	0.8139780163764954	0.12569044530391693	0.1893521249294281
Inc-USP25-11	21	17921145	17928124	+	0.39534202218055725	0.7932666540145874	0.054802168160676956
LINC01549	21	18811208	18821503	+	0.13806672394275665	0.756048858165741	0.43423306941986084
Inc-CHODL-3	21	18908620	18944549	+	0.1405724734067917	0.2875504791736603	0.009069593623280525
LINC01687	21	23381263	23470778	-	7.14126683305949E-4	0.24230851233005524	0.054537802934646606
Inc-MRPL39-13	21	24733426	24757215	-	4.4656596183776855	0.033414918929338455	0.0
Inc-MRPL39-4	21	26825507	26839042	-	0.32371610403060913	0.048461999744176865	0.10073195397853851
Inc-MRPL39-3	21	26884778	26890661	-	0.23699840903282166	0.04538443312048912	0.03780260309576988
Inc-GABPA-10	21	27015801	27016528	+	0.757520854473114	1.0401464700698853	0.14673222601413727
Inc-MRAP-4	21	33352005	33359159	+	0.30914953351020813	0.8372200727462769	0.04280241206288338
URB1-AS1	21	33765439	33766269	+	2.705501079559326	8.879715919494629	10.576308250427246
Inc-TCP10L-1	21	33944548	33948191	-	0.3288692533969879	0.07060196995735168	0.08477956056594849

Inc-C21orf62-5	21	34285957	34443410	-	0.1355401873588562	0.41563811898231506	0.7765519618988037
Inc-C21orf62-4	21	34402769	34407618	-	0.0	0.3520817160606384	0.1468404233455658
Inc-OLIG1-3	21	34443974	34444741	+	27.199251174926758	97.00714111328125	106.76187896728516
IL10RB-DT	21	34634695	34638566	-	0.009069067426025867	0.02040787972509861	0.45228517055511475
Inc-IFNAR1-3	21	34681796	34682486	+	0.12742114067077637	0.35359424352645874	0.3289482891559601
Inc-SON-1	21	35017975	35031349	+	0.40893542766571045	0.7848215699195862	0.06319651007652283
Inc-SON-2	21	35039924	35079053	+	0.08101793378591537	0.2331610769033432	0.02146572433412075
Inc-RCAN1-4	21	36193576	36202267	-	0.2596401870250702	2.0420894622802734	0.9551399350166321
Inc-RCAN1-5	21	36205258	36231875	-	1.0848811864852905	6.314813137054443	5.253666400909424
Inc-RUNX1-12	21	36259343	37376965	-	0.031352121382951736	0.1607111543416977	0.3730892241001129
Inc-RUNX1-6	21	37388377	37388844	-	7.414952278137207	0.014080749824643135	0.0
CBR3-AS1	21	37441940	37648524	-	0.08252424746751785	0.5464287400245667	0.5911767482757568
Inc-CBR3-1	21	37476927	37493461	+	0.0	0.05414591729640961	0.13833147287368774
Inc-CLDN14-1	21	38004979	38009331	-	0.0	0.23955382406711578	0.07011429220438004
Inc-RIPPLY3-5	21	38473114	38473643	+	1.0890532732009888	3.8421871662139893	0.3324620723724365
Inc-RIPPLY3-6	21	38500120	38502606	+	0.3606279790401459	1.0809171199798584	0.07127545028924942
TTC3-AS1	21	38559913	38566227	-	0.009214273653924465	0.0	0.3296871483325958
Inc-KCNJ6-3	21	38979269	38982665	-	0.8968949317932129	0.8874232769012451	0.13116663694381714
Inc-PSMG1-10	21	40543056	40544032	-	0.4611167311668396	0.6273540258407593	0.10565880686044693
Inc-LCASL-2	21	41435297	41441930	-	0.003968484699726105	0.8193106055259705	0.0715595930814743
Inc-TMPRSS2-83	21	42513420	42609510	-	0.002864543115720153	0.009127970784902573	0.02476455457508564
Inc-FAM3B-9	21	42582896	42585127	+	0.11872127652168274	1.0302261114120483	0.3564409613609314
Inc-FAM3B-7	21	42592173	42593987	+	0.07185903191566467	0.5309286713600159	0.33510011434555054
Inc-BACE2-1	21	42651026	42654456	+	1.6712281703948975	3.568699359893799	7.700394630432129
Inc-MX1-4	21	42792231	42801848	+	0.45406007766723633	0.27642500400543213	0.1530126929283142
Inc-RIPK4-6	21	42837817	42840764	-	0.3066387725601196	0.025159401819109917	0.0
Inc-NDUFV3-1	21	44337150	44339420	+	0.25436931848526	0.5932036638259888	0.04677891358733177
AATBC	21	45220692	45238644	-	0.04121195152401924	0.02404850907623768	0.18286733329296112
Inc-PWP2-1	21	45595338	45609439	+	0.008983113802969456	0.09582731127738953	4.7845658264122903E-4
Inc-DNMT3L-1	21	45648155	45649214	-	1.7942055463790894	3.6424779891967773	0.39501500129699707
LRRC3-DT	21	45863207	45875167	-	0.04324021190404892	0.003140777815133333	0.0
Inc-TRPM2-2	21	45877517	45878815	+	8.756888389587402	1.1896936893463135	0.0056192693300545216
Inc-LRRC3-3	21	45885105	45886307	+	0.2289171665906906	0.018674729391932487	0.0
Inc-LRRC3-5	21	45895071	45899899	+	0.706915557384491	0.08029623329639435	0.0
LINC02575	21	45904861	45922501	+	0.936597466468811	0.09562765061855316	0.01522552315145731
TSPEAR-AS2	21	45937098	45940713	+	0.7433012127876282	0.2432919442653656	0.024066247045993805
Inc-FAM207A-8	21	46269504	46270003	+	0.235648512840271	0.03163657709956169	2.3092281818389893
Inc-ITGB2-1	21	46286280	46288992	-	5.555389404296875	4.227395057678223	1.7989226579666138
LINC00334	21	46654255	46684463	+	0.0039450363256037235	0.0	0.14451809227466583
Inc-POFUT2-4	21	46922427	46924035	-	0.15000976622104645	0.3407188951969147	0.8668105602264404
Inc-POFUT2-5	21	46926024	46929082	-	0.13244125247001648	0.8513715267181396	0.5243518948554993
Inc-COL6A1-1	21	47392727	47394868	+	0.1160377785563469	0.6274157762527466	1.573590874671936
Inc-FTCD-2	21	47395659	47397653	-	0.021472185850143433	3.9477550983428955	3.3167312145233154
Inc-COL6A1-4	21	47397218	47399441	+	0.0	1.2475805282592773	2.8233888149261475
Inc-FTCD-5	21	47536429	47540176	-	0.22418875992298126	0.11467475444078445	0.9658075571060181
Inc-FTCD-3	21	47556176	47562655	-	0.11536180973052979	0.28215479850769043	0.8871166706085205
Inc-SPATC1L-4	21	47559330	47560987	-	0.05869195982813835	0.18851597607135773	0.686373233795166
Inc-SPATC1L-3	21	47565742	47566840	-	0.03942963853478432	0.06316015124320984	0.41804155707359314
Inc-POTEH-8	22	16100517	16127623	-	0.01130292471498251	0.21902360022068024	0.1335221529006958
Inc-POTEH-7	22	16147640	16193004	-	0.47720804810523987	4.714005947113037	2.633026599884033

Inc-POTEH-6	22	16154073	16154766	-	0.16774854063987732	2.276364803314209	1.5733617544174194
Inc-POTEH-4	22	16179617	16181004	-	0.02771928161382675	0.5060523152351379	0.2021571844816208
Inc-IL17RA-13	22	17338027	17398742	+	0.0014534302754327655	0.060881733894348145	0.012112739495933056
Inc-IL17RA-33	22	17517460	17541715	+	0.10312805324792862	4.709103107452393	2.584192991256714
Inc-IL17RA-11	22	17542913	17551565	+	0.04087113216519356	2.61744998855591	0.7156904339790344
Inc-IL17RA-10	22	17561591	17562346	+	0.008591785095632076	1.6799451112747192	0.17156982421875
Inc-SLC25A18-1	22	17897744	17898875	+	0.11462229490280151	0.907158613204956	0.02590230666100979
Inc-SLC25A18-3	22	18034546	18035078	+	11.432538032531738	7.347121715545654	2.063795328140259
Inc-MICAL3-5	22	18566252	18572441	-	0.009219973348081112	0.0	0.4147868752479553
Inc-MICAL3-1	22	18593525	18613921	-	0.0032062120735645294	0.035975273698568344	0.009065101854503155
Inc-DGCR6-6	22	18957373	19019118	+	0.9567233920097351	0.30645063519477844	0.2459063082933426
Inc-DGCR2-3	22	19004656	19009570	-	0.031059036031365395	0.148840993642807	0.32137107849121094
Inc-TBX1-2	22	19848748	19849060	+	0.08935768902301788	0.5559133291244507	0.03341502696275711
Inc-GNB1L-2	22	19882539	19885653	-	4.2048516273498535	5.7961201667785645	16.262409210205078
Inc-ARVCF-3	22	19898781	19903360	-	4.495745658874512	11.336549758911133	19.038272857666016
Inc-ARVCF-4	22	20045553	20058092	-	0.003255154937505722	0.0025746477767825127	0.29110148549079895
Inc-CRKL-2	22	21265337	21270094	+	0.29155704379081726	0.010787636041641235	0.0
Inc-THAP7-1	22	21356901	21357417	-	1.21735417842865	0.6787676811218262	3.4246931076049805
Inc-GGT2-2	22	21495618	21496738	-	0.15319553017616272	0.3517039120197296	0.6297928094863892
Inc-RIMBP3C-3	22	21803801	21805329	-	0.06699470430612564	0.002531391568481922	0.18177668750286102
Inc-YDJC-1	22	21982378	21984301	-	10.258532524108887	9.972835540771484	29.73133659362793
Inc-RSPH14-5	22	23659119	23660864	-	0.011447658762335777	0.0	0.3692700266838074
LINC01659	22	23775715	23777258	+	0.031027810648083687	0.031937237828969955	0.3882809281349182
Inc-RGL4-4	22	23834998	23857412	+	0.007320741657167673	0.5512255430221558	0.023807574063539505
Inc-DRICH1-2	22	24005496	24009061	-	0.0929526537656784	0.3722698986530304	0.01756369136273861
Inc-SMARCB1-1	22	24201144	24203477	+	0.08510500192642212	0.1945229321718216	0.021446441053676605
Inc-SPECC1L-1	22	24652602	24660665	+	0.27835237979888916	0.2114056497812271	0.013972257263958454
Inc-GGT1-1	22	25047814	25048364	+	0.29481226205825806	0.5376777052879333	1.310198187828064
Inc-PIWIL3-2	22	25082140	25092005	-	0.002070573391392827	0.04910556972026825	0.8893079161643982
Inc-GGT1-4	22	25082890	25084054	+	0.4919469654560089	0.02691183052957058	0.04779799285250812
Inc-LRP5L-8	22	25851679	25916821	-	0.023783458396792412	0.0028307808097451925	0.32126808166503906
Inc-GRK3-4	22	25915208	25917362	+	1.051316261291504	1.0928668975830078	0.3237527906894684
Inc-MYO18B-3	22	26043228	26045199	+	0.12558655440807343	0.3254487216472626	0.0279704462736845
LINC01422	22	27254597	27316612	+	0.0881984531879425	0.11476212739944458	0.01456085592508316
LINC02554	22	27703777	27713801	+	0.18568427860736847	0.008065443485975266	0.0
Inc-PITPNB-4	22	28146666	28187871	-	31.652389526367188	5.03727388381958	6.230461120605469
Inc-PITPNB-3	22	28163006	28168118	-	0.46447160840034485	0.1786765158176422	0.030907373875379562
Inc-PITPNB-2	22	28317840	28326811	-	0.0	0.0040877871215343475	0.20605477690696716
Inc-PITPNB-6	22	28416309	28419341	-	0.41337475180625916	0.6085582971572876	0.12250878661870956
Inc-RHBDD3-3	22	29576311	29601821	-	0.6967218518257141	0.4880034923553467	0.219007208943367
HORMAD2-AS1	22	30374939	30476884	-	0.02152375504374504	0.11735039204359055	0.18508918583393097
Inc-GAL3ST1-1	22	30999765	31003045	-	1.50253427028656	0.3405912518501282	0.429904043674469
Inc-MORC2-8	22	31298187	31300818	-	0.9545385241508484	0.24067679047584534	0.3285168707370758
Inc-MORC2-3	22	31304797	31318219	-	0.8087946176528931	0.2743936777114868	0.20560167729854584
Inc-MORC2-2	22	31372501	31374834	-	0.09856322407722473	0.0021789916791021824	2.883749485015869
Inc-MORC2-1	22	31373502	31373844	-	0.090248703956604	0.0	1.4299724102020264
Inc-SELENOM-1	22	31478142	31480854	-	0.16864660382270813	1.3478184938430786	1.2583487033843994
Inc-EIF4ENIF1-3	22	31829794	31832848	-	0.45454683899879456	0.4636617600917816	1.936171054840088
Inc-PRR14L-5	22	32329507	32341504	-	0.8485071659088135	0.2056332379579544	0.24581758677959442
Inc-PRR14L-4	22	32336414	32340282	-	0.058530293405056	0.15647481381893158	0.017675653100013733

Inc-SYN3-5	22	32896532	32898414	-	0.009488171897828579	0.19486667215824127	0.22479313611984253
Inc-SYN3-1	22	32904729	32905176	-	0.02239524945616722	2.091395616531372	0.6433889269828796
Inc-BP1FC-2	22	32909563	32926189	-	0.0272449292242527	0.8031321167945862	0.5569329261779785
Inc-BP1FC-4	22	33025592	33265087	-	0.009695986285805702	0.6480810642242432	0.2341020554304123
Inc-TIMP3-2	22	33048403	33216563	+	0.16111579537391663	0.2211882323026657	0.1203736662864685
Inc-LARGE1-8	22	33256006	33256421	-	0.025671394541859627	0.25259456038475037	4.554502964019775
Inc-APOL2-5	22	36730924	36732334	-	1.200116753578186	1.4716801643371582	0.07184183597564697
Inc-APOL1-1	22	36784419	36826834	+	0.13783402740955353	0.07784782350063324	0.03851642459630966
Inc-IFT27-1	22	37196746	37215517	-	1.5557960271835327	0.908572793006897	0.0
Inc-TEX33-1	22	37401890	37407790	-	0.3859069347381592	0.20529891550540924	0.1278439164161682
Inc-SSTR3-2	22	37621304	37622035	-	0.08138562738895416	2.369669198989868	9.278095245361328
Inc-ELFN2-2	22	37735624	37823505	-	0.015660542994737625	0.12098859250545502	0.24591515958309174
Inc-CARD10-4	22	37936064	37942130	-	0.07227703928947449	0.01612156070768833	0.007305747363716364
Inc-LGALS2-4	22	37950727	37956340	-	0.048422038555145264	0.07484643906354904	0.00272572723388505
Inc-LGALS2-2	22	37964117	37965396	-	0.15003865957260132	0.017685510218143463	1.0700844526290894
Inc-LGALS2-5	22	38069315	38073291	-	0.3024882376194	0.26328450441360474	1.3139629544937134
Inc-ANKRD54-1	22	38201236	38203442	-	0.4923340082168579	0.7349311113357544	4.624854564666748
Inc-PICK1-5	22	38475048	38476078	+	0.1766911894083023	0.11290720850229263	0.0070465137250721455
Inc-PICK1-4	22	38486134	38487566	+	0.6241291165351868	0.1533980667591095	0.0962819829583168
Inc-MAFF-2	22	38615653	38616226	+	0.040781136602163315	0.009141824208199978	1.16129732131958
Inc-MAFF-6	22	38687344	38687698	+	0.19151447713375092	0.0	2.8963091373443604
Inc-CBY1-2	22	38966482	38969528	+	0.046524424105882645	0.13554690778255463	0.008327714167535305
Inc-JOSD1-1	22	39056343	39077861	-	1.401229739189148	0.719449877389526	0.5106344223022461
Inc-MIEF1-1	22	39867799	39868646	+	0.3833767771720886	0.36542603373527527	0.04807135462760925
Inc-GRAP2-2	22	40271301	40272465	+	1.4861868619918823	0.6160809397697449	4.885841369628906
Inc-TOB2-2	22	41807133	41809946	-	0.22976642847061157	0.5259427428245544	0.039328087121248245
Inc-POLR3H-1	22	41947377	41956913	-	0.23400701582431793	0.03349956497550011	0.0
Inc-CSDC2-1	22	41994034	41995651	+	0.07301158457994461	0.07407838106155396	0.627311646938324
Inc-SHISA8-2	22	42310142	42311066	-	0.0887870192527771	0.09506943821907043	0.838226228713989
Inc-CENPM-5	22	42392239	42398032	-	0.1369590312242508	0.13806502521038055	0.5679690837860107
Inc-NFAM1-4	22	42670869	42681589	-	0.06076422333717346	0.34001314640045166	0.020769581198692322
Inc-SERHL2-1	22	42896574	42908566	+	0.006502968724817038	0.0228752288967371	0.07219551503658295
Inc-TTLL1-3	22	43380649	43399963	-	0.09061376750469208	0.891412079334259	0.004123491235077381
Inc-SCUBE1-2	22	43593289	43595057	-	1.471884846687317	0.0	0.0
Inc-TTLL12-2	22	43712843	43716071	-	1.1365376710891724	0.0	0.0
Inc-PNPLA3-1	22	44208302	44219982	+	0.3960556983947754	0.4347913861274719	0.13044056296348572
Inc-SULT4A1-1	22	44210408	44223288	-	1.9045923948287964	1.3938188552856445	0.137700155377388
Inc-PARVB-3	22	44352907	44353228	+	0.6493232846260071	0.4705854058265686	0.011589844711124897
Inc-PNPLA5-3	22	44395422	44414025	-	0.07814817875623703	0.5103746056556702	0.19328433275222778
Inc-KIAA0930-1	22	45658118	45664977	-	0.08561625331640244	0.05409028008580208	0.008011448197066784
Inc-SMC1B-2	22	45893829	45898411	-	0.055163756012916565	0.024552665650844574	0.006908206734806299
Inc-WNT7B-1	22	46271879	46283628	-	0.3209715783596039	0.008545394986867905	0.0
Inc-PPARA-11	22	46402496	46630013	+	0.07224075496196747	0.46098268032073975	0.3345753252506256
Inc-PPARA-6	22	46448973	46449440	+	0.17399707436561584	0.7070316672325134	0.3301098942756653
PRR34-AS1	22	46450340	46453090	+	0.866119384765625	3.5576603412628174	5.052604675292969
Inc-PRR34-1	22	46451620	46454040	-	0.06908634305000305	0.4402996003627777	0.2603525221347809
Inc-TBC1D22A-4	22	48027346	48303666	+	4.321896121837199E-4	0.30378666520118713	0.005711587145924568
Inc-ALG12-1	22	50276980	50280966	-	0.08362061530351639	0.17726285755634308	0.6171005964279175
Inc-ALG12-4	22	50326846	50327722	-	0.036176469177007675	0.36414507031440735	0.3032988905906677
Inc-TTLL8-1	22	50508971	50513113	-	30.985193252563477	69.24614715576172	135.4212646484375

Inc-TYMP-1	22	50966221	50970251	-	0.9410706758499146	0.2952651381492615	0.09628329426050186
Inc-KLHDC7B-7	22	51001449	51002404	+	0.12009677290916443	0.26672932505607605	0.010940276086330414
Inc-KLHDC7B-4	22	51002838	51006652	+	0.10442998260259628	0.18328160047531128	0.009494678117334843
Inc-ARSD-5	X	2876452	2882305	-	2.3149843215942383	0.6070341467857361	0.7637494206428528
Inc-VCX-2	X	7895782	8030696	+	0.27050653100013733	0.11691591143608093	0.00227297726534009
Inc-FAM9A-4	X	8503222	8504977	-	0.999057948589325	3.158097743988037	0.233234703540802
Inc-FAM9A-3	X	8533847	8538691	-	1.3494904041290283	3.866276502609253	0.27670809626579285
Inc-FAM9B-3	X	9706269	9707759	-	1.7084393501281738	1.136345624923706	0.07049150764942169
Inc-FAM9B-4	X	9715873	9727434	-	1.3901742696762085	0.8799614906311035	0.02137858234345913
Inc-ARHGAP6-7	X	10417431	10535202	-	34.491004943847656	10.022690773010254	12.093422889709473
Inc-ARHGAP6-5	X	10466859	10468872	-	0.21207427978515625	0.3184868395328522	0.003608978120610118
Inc-PRPS2-1	X	12843959	12844952	+	1.7288843393325806	0.04071861878037453	0.019910350441932678
Inc-FAM9C-4	X	13173467	13182934	-	1.3073692321777344	0.4190930724143982	0.13064256310462952
Inc-ATXN3L-3	X	13405671	13438072	-	0.4727037847042084	0.4627036452293396	0.6990453004837036
Inc-GEMIN8-2	X	13908106	13916860	-	0.29660987854003906	2.3994593620300293	0.04749100282788277
Inc-GLRA2-2	X	14262504	14263050	+	21.522968292236328	3.2935030460357666	5.731199264526367
Inc-CTPS2-3	X	16492465	16493463	-	0.21277357637882233	0.015870351344347	0.010762018151581287
Inc-CTPS2-8	X	16788107	16789969	-	0.26920461654663086	0.7015925049781799	0.08695699274539948
Inc-RBBP7-2	X	17117905	17118362	-	1.3511559963226318	0.01093264389783144	0.045577313750982285
Inc-RAI2-5	X	17653632	17755200	-	0.04090999811887741	0.05346555635333061	0.1923971027135849
Inc-BEND2-2	X	17819784	17855852	-	3.8676321506500244	0.0485367551445961	0.2767014801502228
LINC01456	X	17912255	18122764	-	0.6783497929573059	0.007769385818392038	0.0
Inc-ACOT9-2	X	23093708	23096495	-	0.02020191214978695	0.015785494819283485	0.26637163758277893
Inc-DDX53-3	X	23094772	23096503	+	0.9967166781425476	0.7136589884757996	3.019317626953125
Inc-ACOT9-1	X	23785504	23801103	-	0.18304561078548431	0.19278904795646667	0.051739804446697235
Inc-Cxorf58-2	X	24001725	24002923	+	0.0031435363925993443	0.010377387516200542	0.28693562746047974
Inc-PDK3-7	X	24826079	24826848	+	0.2717604339122772	1.2325242757797241	0.038853324949741364
Inc-MAGEB5-6	X	26766146	26767207	+	0.3100705146789551	0.015873029828071594	0.05354906991124153
Inc-PPP4R3C-2	X	27029732	27417114	-	0.18905824422836304	0.2185438871383667	0.0164211243391037
Inc-GK-6	X	30635571	30635810	+	1.5712028741836548	0.0	0.0
Inc-FTHL17-1	X	31241147	31285069	-	16.240663528442383	3.2331619262695312	2.5906388759613037
Inc-FTHL17-2	X	31747804	31854900	-	11.20046615600586	2.563770055770874	0.34388425946235657
Inc-DYNLT3-3	X	36392908	36393298	-	0.4709867537021637	0.0	0.0
Inc-ATP6AP2-13	X	39646130	39646370	+	0.4941215515136719	0.0	0.06811400502920151
Inc-ATP6AP2-4	X	39865616	39871680	+	2.0610318183898926	0.2875039279460907	0.034281205385923386
Inc-MED14-4	X	40671203	40704710	-	0.08701168745756149	0.006077930331230164	0.015210337936878204
Inc-USP9X-7	X	40715245	40731295	+	0.1684432476758957	0.3788958787918091	0.0
PINCR	X	43036215	43085847	+	0.5450984239578247	0.0632549524307251	0.030907070264220238
Inc-NDP-1	X	43703046	43741549	-	0.029498925432562828	0.8728653192520142	7.516294956207275
Inc-MAOA-5	X	43888578	43890167	+	0.15313535928726196	0.04867572337388992	0.029083553701639175
Inc-Cxorf36-46	X	45606507	45710962	-	1.1463391780853271	4.204037189483643	0.37366771697998047
LINC01186	X	46173493	46187109	-	0.2051919847726822	0.006866907700896263	0.05677060782909393
Inc-ZNF674-4	X	46343687	46347916	-	0.062323033809661865	0.07391755282878876	0.004367111716419458
Inc-SSX4B-2	X	48323106	48324489	-	0.15486383438110352	0.4728572964668274	4.366601943969727
Inc-TIMM17B-2	X	48689506	48693970	-	26.133296966552734	157.62820434570312	94.86035919189453
Inc-TIMM17B-1	X	48690673	48693221	-	2.209127426147461	4.58797550201416	25.733253479003906
Inc-DGKK-1	X	50111897	50213824	-	0.08080936223268509	0.0033492473885416985	0.0033540804870426655
LINC01284	X	50838682	51139590	-	0.020749730989336967	0.027435818687081337	0.003757609287276864
Inc-CENPVL2-3	X	51486516	51489023	-	0.05471718683838844	0.023586701601743698	1.5179954767227173
Inc-CENPVL2-4	X	51810098	51810701	-	4.053720951080322	2.3939244747161865	17.556522369384766

Inc-XAGE5-3	X	52920646	52929686	+	0.02523276023566723	0.09083171933889389	0.5222909450531006
Inc-FAM156A-3	X	52977815	53024651	-	0.6631986498832703	0.7402554154396057	2.350383758544922
Inc-FAM156A-2	X	53111935	53114276	-	0.0739792212843895	0.027681998908519745	0.596227765083313
Inc-RIBC1-6	X	53852385	53852807	+	1.1483793258666992	0.30478551983833313	0.25740063190460205
Inc-PHF8-1	X	54094777	54098372	-	3.7761237621307373	13.481759071350098	14.202371597290039
Inc-FGD1-1	X	54553279	54556499	-	0.08816105127334595	0.3542136549949646	0.02250983752310276
Inc-PFKFB1-3	X	54813630	54815041	-	0.009816072881221771	5.474360942840576	4.432069301605225
Inc-ALAS2-2	X	55026949	55033606	-	0.006177874282002449	0.0015372311463579535	0.15585386753082275
Inc-KLF8-1	X	56316470	56325981	+	0.19524411857128143	0.032742395997047424	0.029708152636885643
Inc-UBQLN2-5	X	56760584	56761001	+	0.3087771534919739	0.7480290532112122	0.03536505624651909
Inc-UBQLN2-6	X	56762139	56762989	+	0.2743307948112488	0.8408900499343872	0.05171491205692291
Inc-NLRP2B-1	X	57620186	57623908	-	0.0	3.1432940158993006E-4	0.1426883190870285
Inc-ZC3H12B-16	X	61998720	61999796	+	0.8303630948066711	0.24818046391010284	0.1277816742658615
Inc-ZC3H12B-12	X	62736790	62780931	+	0.0	0.0	0.8294247984886169
Inc-ZC3H12B-11	X	62986755	62987280	+	0.4497056305408478	0.0	0.05077056586742401
Inc-ASB12-1	X	63551294	63565038	-	1.7009907960891724	0.2148783951997757	0.07150765508413315
Inc-ZC3H12B-18	X	64295361	64628987	+	0.9267391562461853	0.45072677731513977	0.2107197642326355
Inc-ZC3H12B-2	X	64724986	64762482	+	0.7366797924041748	0.10226745903491974	0.20999130606651306
Inc-ZC3H12B-7	X	64914523	64915344	+	0.15367969870567322	0.8819674253463745	0.01740974374115467
Inc-VSIG4-3	X	65041097	65042091	-	0.2663337886334656	0.019708910956978798	0.05513140559196472
Inc-VSIG4-2	X	65176131	65177038	-	2.233064889907837	0.02902553230524063	0.05462053418159485
Inc-PJA1-4	X	68014149	68048682	-	0.0202814731746912	0.051264334470033646	0.003604919882491231
Inc-IL2RG-2	X	70342584	70343547	-	0.004588709212839603	0.0033073751255869865	0.497312992811203
Inc-IL2RG-5	X	70381547	70401926	-	0.030768539756536484	0.034178003668785095	0.15108101069927216
Inc-ZMYM3-2	X	70534762	70535729	-	0.432232141494751	0.011252353899180889	0.034956954419612885
Inc-ZMYM3-5	X	70584737	70585764	-	0.17434169352054596	0.8667794466018677	0.03544077277183533
Inc-Cxorf49-5	X	71089382	71091316	-	0.5664010643959045	0.0060916137881577015	2.0621705055236816
Inc-PIN4-2	X	71370734	71373135	+	19.50049591064453	2.2659335136413574	0.20205816626548767
Inc-NAP1L2-3	X	72744111	72782921	-	0.20293955504894257	0.08828901499509811	0.03000972792506218
Inc-ZCCHC13-17	X	73237606	73244765	+	0.5337598919868469	0.8364569544792175	0.1471998393535614
Inc-ZCCHC13-9	X	73416216	73417692	+	0.0290736835449934	0.016134386882185936	0.42431288957595825
Inc-ZCCHC13-8	X	73429038	73436714	+	0.010302403941750526	1.5497322601731867E-4	0.044032592326402664
Inc-ATRX-5	X	75875899	75876960	-	3.411165714263916	0.0722234696149826	0.28481218218803406
MIR325HG	X	75878198	76234957	-	3.448948621749878	0.18206098675727844	0.44096770882606506
Inc-TAF9B-2	X	77351902	77359458	-	0.07068349421024323	0.3368745744228363	0.1547897756099701
Inc-SH3BGR1-1	X	80583971	80585393	+	0.14646178483963013	0.2625181972980499	0.03705452010035515
Inc-SH3BGR1-2	X	80618767	80619669	+	0.14998222887516022	0.07186290621757507	0.006542583927512169
Inc-RPS6KA6-4	X	83003833	83004947	-	1.2338216304779053	0.020873595029115677	0.023762859404087067
Inc-DIAPH2-16	X	97828799	98155082	+	0.158573716878891	0.05791980400681496	1.1716246081050485E-4
Inc-TSPAN6-2	X	99546645	99551298	-	10.553266525268555	3.4107604026794434	0.25253215432167053
ARMCX3-AS1	X	100877813	100880895	-	0.1434260457754135	0.07963820546865463	1.1005762815475464
Inc-TMSB15A-5	X	101854585	101914640	-	0.028592895716428757	0.025906937196850777	0.4678429067134857
Inc-BEX1-3	X	102063371	102171920	-	0.0	0.0017565212910994887	0.042440496385097504
Inc-BEX2-2	X	102608467	102612614	-	0.1903589516878128	0.0997573733329773	0.5607374310493469
Inc-TCEAL3-3	X	102851536	102853832	+	0.149507537484169	0.25100916624069214	0.031917646527290344
Inc-PSMD10-1	X	107404861	107406828	-	5.547969818115234	0.34496593475341797	1.1534725427627563
Inc-COL4A6-2	X	107510872	107682727	-	4.379586219787598	0.6069151759147644	0.9300710558891296
Inc-ATG4A-2	X	107760346	107764754	+	0.03659490495920181	0.1010260060429573	0.006806555669754744
Inc-IRS4-3	X	107963179	107968338	-	0.5781331658363342	0.03365834429860115	0.01758485473692417
Inc-COL4A5-1	X	107979741	107983061	+	0.5318978428840637	0.06459717452526093	0.03739624470472336

lnc-TMEM164-2	X	109437414	109438732	+	0.04655808210372925	0.21901151537895203	0.4933027923107147
lnc-SERTM2-4	X	110254149	110259085	+	0.03318735957145691	0.22153836488723755	0.004835024010390043
lnc-IL13RA2-1	X	114249089	114254540	-	1.6114145517349243	9.619508743286133	71.39749908447266
lnc-KLHL13-2	X	117028595	117029646	-	0.08327978104352951	0.46486639976501465	0.5495465397834778
LINC01285	X	117973517	118053632	+	0.021071141585707664	0.10382438451051712	0.07544193416833878
lnc-PGRMC1-3	X	118449686	118451248	+	0.11515233665704727	0.0	0.0
lnc-SOWAHD-1	X	118827531	118830022	+	0.09781847149133682	0.00994658563286066	0.019528700038790703
lnc-LAMP2-1	X	119443748	119445257	-	1.0740963220596313	7.658692359924316	11.073908805847168
lnc-XIAP-1	X	122867001	122869897	+	0.12195753306150436	0.21799713373184204	0.6010530591011047
lnc-TENM1-6	X	123235614	123236403	-	0.0	0.00144790462218225	0.7305268049240112
lnc-APLN-1	X	128809863	128812410	-	0.0450999603033066	0.6134968400001526	0.8737816214561462
lnc-ENOX2-3	X	130414943	130415320	-	2.8099160194396973	0.0	0.0
lnc-OR13H1-3	X	130780647	130780899	+	7.965203285217285	0.0852782130241394	0.8522524833679199
lnc-FRMD7-4	X	131145464	131157195	-	0.15774428844451904	0.018350206315517426	0.0014684691559523344
lnc-STK26-6	X	131180331	131394520	+	0.027629613876342773	0.1577761322259903	0.002615991747006774
lnc-GPC3-1	X	133302941	133308119	-	0.7091379165649414	0.1550644040107727	0.018628185614943504
LINC00629	X	133683366	133695148	+	0.06826689094305038	0.15097740292549133	0.23877672851085663
lnc-RTL8B-1	X	134166291	134167559	-	0.6108927726745605	0.03137613832950592	7.006197452545166
lnc-SMIM10L2B-1	X	134225085	134232739	-	1.828652262687683	0.2986460328102112	0.37570837140083313
lnc-ZNF449-3	X	134556543	134561947	+	10.482961654663086	0.9535311460494995	1.3874725103378296
lnc-ARHGFE6-1	X	135889382	135890036	-	1.560656189918518	1.048677921295166	0.4612100124359131
lnc-FGF13-1	X	137696892	137699799	-	0.4577616751194	0.12797369062900543	0.04952293634414673
FGF13-AS1	X	137793614	137798779	+	0.9016011953353882	0.040199700742959976	0.026694614440202713
lnc-MCF2-4	X	137823303	137826931	-	0.04062006622552872	0.06978509575128555	0.0
lnc-MCF2-3	X	137939674	138287153	-	24.053241729736328	3.8647515773773193	4.207386016845703
lnc-ATP11C-1	X	138689343	138697109	-	0.39681944251060486	0.019671984016895294	0.04018574208021164
lnc-F9-4	X	139115445	139115665	+	0.6128074526786804	0.0	0.10840754956007004
lnc-CDR1-4	X	139586572	139586799	-	74.8108139038086	3.8844008445739746	3.7677605152130127
LINC00632	X	139791924	139857448	+	3.2411277294158936	2.041455030441284	0.21995694935321808
lnc-SPANXB1-7	X	139805230	139808882	+	0.21581056714057922	0.6013610363006592	9.698832291178405E-4
lnc-SPANXB1-5	X	139863224	139865339	+	1.5139026641845703	0.9780474901199341	0.03348291665315628
lnc-SPANXB1-4	X	139872024	139875380	+	0.5828503370285034	0.1690642386674881	0.008807866834104061
lnc-HSF3-1	X	148560282	148560512	-	8.931511878967285	16.612472534179688	27.17833137512207
lnc-CXorf40A-1	X	148636140	148637469	+	1.9278873205184937	0.273809015750885	0.003252287395298481
lnc-GPR50-1	X	150350858	150351327	+	1.981658935546875	0.0	0.0
lnc-BCAP31-5	X	153001080	153031933	-	1.4382036924362183	3.410562038421631	5.147240161895752
lnc-TMEM187-2	X	153236397	153236602	+	0.09226863086223602	0.2097015231847763	1.1556974649429321
lnc-MECP2-1	X	153278787	153279828	-	22.10846519470215	27.17473602294922	77.93499755859375
lnc-SLC10A3-1	X	153714381	153714923	-	5.819730758666992	10.573315620422363	21.84124183654785
lnc-CTAG2-1	X	153906567	153924367	-	0.15437577664852142	2.6830317974090576	1.1054850816726685
lnc-SMIM9-2	X	154044612	154045787	-	2.2847700119018555	1.4963287115097046	0.4682360291481018
lnc-TMLHE-6	X	154706250	154715909	-	0.10641732811927795	0.19764947891235352	0.3362874984741211
lnc-UTY-18	Y	10027986	10029907	-	0.06305412203073502	0.0	0.0
lnc-HSFY2-10	Y	21154353	21154595	-	262.9295654296875	23.593761444091797	43.86238479614258
lnc-BPY2C-23	Y	28740998	28780799	-	0.13609299063682556	0.03311903774738312	0.01802348904311657
lnc-CDY1-21	Y	59001685	59002351	+	1.1018003225326538	0.07361718267202377	0.2573111951351166