



## Early View

### Original Article

## Morphomolecular motifs of pulmonary neoangiogenesis in interstitial lung diseases

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# Morphomolecular motifs of pulmonary neoangiogenesis in interstitial lung diseases

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AH and DJ managed the patients. MA, AH, LN, SS, HS, WS, WW, and MK worked up surgical specimens. MA, HS, SJM, MJ, MK, and DJ interpreted the data. MA, SS, HS, MK, and DJ wrote the manuscript. MA, LN, PB, WS, WW, and HS prepared the images. MA, AG, SJM, LA, HS, MK, and DJ revised the manuscript.

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**Key words:**

Interstitial lung diseases, vascular remodeling, intussusceptive angiogenesis

**Take-home-message:**

Pulmonary injury patterns are the common denominator in genesis and progression of fibrosing lung diseases. We identified distinct manifestations of neoangiogenesis as main drivers of pulmonary remodeling and disease manifestation in distinct interstitial lung diseases, modulated by bone marrow-derived monocytes.

**Abbreviations:**

**μA** - Microampere

**μCT** - Micro-computed tomography

**μm** - Micrometer

**3D** - three-dimensional

**AFE** - Alveolar fibroelastosis

**bFGF** - Basic fibroblast growth factor

**BREATH** - Biomedical Research in Endstage and Obstructive Lung Disease  
Hannover

**CCL-18** - C-C motif chemokine ligand 1

**CD31** - Platelet and endothelial cell adhesion molecule 1 (also known as PECAM1)

**CD34** - Hematopoietic Progenitor Cell Antigen CD34

**CD90** - Thy-1 cell surface antigen (also known as THY1)

**CK7** - Keratin 7(also known as KRT7)

**CT** - Computed tomography

**CXC** - C-X-C motif chemokine 1(also known as LOC100301634)

**CXCL11** - C-X-C Motif Chemokine Ligand 11

**DLL4** - Delta-like canonical Notch ligand 4

**DZL** - German Center for Lung Research

**EC** - Echinus

**ELR** - Elliptical rough

**EM** - Extracellular matrix

**EMT** - Endothelial / epithelial-mesenchymal transition

**ESEM** - Environmental scanning electron microscope

**FFPE** - Formalin-fixation and paraffin-embedding

**FOV** - Field of view

**HE** - Hematoxylin-Eosin

**HIF-1α** - Hypoxia-inducible factor 1 subunit alpha



**IA** - Intussusceptive pillars

**IIP** - Idiopathic interstitial pneumonias

**ILD** - Interstitial lung diseases

**IPA** - Ingenuity Pathway Analysis

**IPF** - Idiopathic pulmonary fibrosis

**Ki-67** - Marker Of Proliferation Ki-67

**KOH** - Potassium hydroxide

**kV** - Kilovolt

**MHH** - Hannover Medical School

**mRNA** - Messenger ribonucleic acid

**MSCs** - Mesenchymal stem cells

**NSIP** - Non-specific interstitial pneumonia

**PCR** - Polymerase Chain Reaction

**PEDF** - Pigment epithelium-derived factor

**PVOD** - Pulmonary venous occlusive disease

**SA** - Numerical density newly-formed sprouts

**SDF-1** - Stromal Cell-Derived Factor 1 (also known as CXCL12)

**SEM** - Scanning electron microscope

**TGF- $\beta$**  - Transforming growth factor beta

**TLRC** - Translational Lung Research Center Heidelberg

**Tx** - Transplantation

**UIP** - Usual interstitial pneumonia

**VEGF** - Vascular endothelial growth factor

**VEGFR1** - Soluble vascular endothelial growth factor receptor-1

**VEGFR2** - Soluble vascular endothelial growth factor receptor-2

## ABSTRACT

The pathogenetic role of angiogenesis in interstitial lung diseases (ILD) is controversial. This study represents the first investigation of the spatial complexity and molecular motifs of microvascular architecture in important subsets of human ILD.

The aim of our study was to identify specific variants of neoangiogenesis in three common pulmonary injury patterns in human ILD.

We performed comprehensive and compartment-specific analysis of a total of 24 human lung explants with UIP, NSIP and AFE using histopathology, microvascular corrosion casting,  $\mu$ CT-based volumetry, and gene expression analysis using Nanostring as well as immunohistochemistry to assess remodeling-associated angiogenesis.

Morphometrical assessment of vessel diameters and intervascular distances showed significant differences in neoangiogenesis in characteristically remodeled areas of UIP, NSIP, and AFE lungs. Likewise, gene expression analysis revealed distinct and specific angiogenic profiles in UIP, NSIP and AFE lungs.

Whereas UIP lungs showed a higher density of upstream vascularity and lower density in perifocal blood vessels, NSIP and AFE lungs revealed densely packed alveolar septal blood vessels. Vascular remodeling in NSIP and AFE is characterized by a prominent intussusceptive neoangiogenesis, in contrast to UIP, in which sprouting of new vessels into the fibrotic areas is characteristic. The molecular analyses of the gene expression provide a foundation for understanding these fundamental differences between AFE and UIP and give insight into the involved cellular functions.

## Introduction

The term interstitial lung disease (ILD) refers to a complex group of hundreds of non-neoplastic pulmonary diseases with variable morphologies, clinical presentations, and progression tendencies. ILD is characterized by an aberrant response-to-injury, generally leading to compartment-specific disruptions of lung architecture [1]. In wound healing, the impact of angiogenesis and physiologic vascular architecture has long been recognized as a crucial element, particularly in the interaction of granulation tissue and extracellular matrix (EM) [2]. Although blood vessels make up more than 70% of normal lung parenchyma volume [3,4], the influence of pulmonary microvascular changes on fibrotic remodeling in humans and especially on the progress of ILD remains poorly understood.

The pivotal role of neoangiogenesis in idiopathic pulmonary fibrosis (IPF), an aggressive variant of the idiopathic interstitial pneumonias (IIP), was revealed by Ebina *et al.* [5], who could demonstrate an increased capillary density with increased endothelial proliferation in areas of minimal fibrosis, but decreased density in the adjacent, most extensively remodeled fibrotic lesions in afflicted patients.

Microvascular corrosion casting and high-resolution computed tomography ( $\mu$ CT) are well suited to visualize and analyze the vascular structure of lung tissue [6]. Using these methods, the heterogeneous complexity of the vasculature in neoplasias was characterized [7,8,9]. Here, highly vascularized, capsule-like structures around (myo) fibroblastic foci [10] were described. In ILD, the only previous demonstration of prominent vascular obstruction was in lungs of patients with IPF [11].

Aberrant expression of a multitude of angiogenesis-related molecular mediators has been described in the lungs and blood of IPF patients, including VEGF, bFGF, CXC chemokines with ELR motif and TGF- $\beta$ . In addition the highly angiostatic molecule pigment epithelium-derived factor (PEDF), was found to be overexpressed within the fibroblastic foci typical – but not specific – for the usual interstitial pneumonia (UIP) pattern commonly seen in IPF [10,12]. In a bleomycin-induced murine fibrosis model, CXCL11 reduced pulmonary fibrosis and the absolute number of endothelial cells found in the remodeled compartments [13]. Our own studies on the antiangiogenic multi-kinase inhibitor nintedanib [14,15] revealed an attenuation of aberrant microvascular architecture. In detailed studies, we and others found an overall

decreased vascular density with normalization of vessel diameters [16] and a reduction of CCL18 secretion and macrophage polarization in treated lungs [17,18].

In a computed tomography (CT) analysis of the degrees of fibrotic remodeling in IPF patients, Jacob *et al.* [19] reported on the impact of radiological variables for predicting progression and mortality. They demonstrated that pulmonary vascular volumes had the strongest correlation with mortality [19]. We and others have repeatedly hypothesized that microvascular alterations represent (one of) the first step(s) in the pathogenesis of IPF [20]. The loss of vascular integrity and the destruction of the alveolar-capillary membrane drives the continuous remodeling of the pulmonary architecture by pro-angiogenic and pro-fibrotic stimuli [16]. Recent observations also demonstrated that pulmonary capillaries can undergo an endothelial-mesenchymal transition (EMT) in bleomycin-induced fibrosis [21].

Given the significant role of angiogenesis in repair reactions, one can reasonably assume that varying microvascular alterations may be reflections of both the differing response-to-injury patterns and the subsequent remodeling of the pulmonary architecture observed in ILD [22, 23]. Prior studies have focused predominantly on epithelial-mesenchymal pathogenesis of ILD, while possible vascular mechanisms remain poorly characterized or understood. Therefore, the aim of our present study was to characterize the morphological and molecular differences of vascularization and angiogenesis in ILD, focusing on the predominant and clinically important patterns/entities of UIP, non-specific interstitial pneumonia (NSIP) and alveolar fibroelastosis (AFE).

## Methods

### **Patient selection, specimens and study groups.**

Fresh lung explants of 24 patients with different subtypes of ILD were included in this study. All diagnoses were made by experienced pulmonary pathologists following the European Respiratory Society and American Thoracic Society guidelines. Patient groups consisted of patients with characteristic radiological and histological patterns: UIP (n = 6, 0 female donors, age at transplantation (Tx)  $61.4 \pm 6.8$  years [mean  $\pm$  SD]), idiopathic NSIP (n = 6, 4 female, age at Tx  $52.3 \pm 9.2$  years) as well as AFE (n = 6, 5 female, age at Tx  $40.7 \pm 27.8$  years) in the context of chronic Graft versus host disease, following radio/chemo therapy, as the histological hallmark of chronic lung allograft dysfunction and idiopathically (iPPFE). As controls, we used surgically resected lung allograft samples which had been obtained immediately prior to transplantation for donor-recipient size matching (n = 6, 1 female donor, age at transplantation  $29.0 \pm 22.8$  years). Despite careful specimen selection, a significant difference in age between UIP and controls remains (p-value =  $0.046 < 0.05$ , Holm–Bonferroni method). All IPF/UIP patients showed varying degrees of mild pulmonary hypertension (PH) consistent with sclerosis of the elastic and muscular pulmonary arteries. Tissue specimens and samples were handled anonymously according to the principles expressed in the Declaration of Helsinki. The study was designed and performed following the requirements of the local ethics committee at MHH (ethics vote no. 2702-2015). Sampling and histology, microvascular corrosion casting,  $\mu$ CT, gene expression (see **Supplementary Methods**).

### **Gene expression analysis of ILD explants.**

All mRNA expression data was obtained via the nCounter<sup>®</sup> Analysis System (NanoString Technologies, Seattle, WA) using the PanCancer Progression Panel (770 genes including 30 reference genes). Normalization of raw counts was performed using the nSolver<sup>™</sup> analysis software version 3.0 (NanoString Technologies, Seattle, WA) and a modified version of the nCounter<sup>®</sup> advanced analysis module (version 1.1.5). The normalization process included positive normalization (geometric mean), negative normalization (arithmetic mean) and

reference normalization (geometric mean) using the 5 most suitable reference genes from the total of 30 available reference genes selected by the geNorm algorithm [24].

### **Protein expression analysis of ILD explants**

Detection of expressed proteins was done using standard immunohistochemistry and multiplex labelling using the OPAL 7 system. Additional information can be found in the ***Supplementary Methods***.

### **Functional analysis.**

In order to gain insight on the regulation of physiological functions conveyed by the mRNA expression in different ILD entities, we made use of the Ingenuity Pathway Analysis tool (IPA, QIAGEN) [27]. We considered p-values significant according to the following levels of confidence:  $p < 0.05$  (\*),  $p < 0.01$  (\*\*) and  $p < 0.001$  (\*\*\*). Additional information in ***Supplementary Methods***.

### **Statistical analysis of vascular morphometry.**

Analysis of vascular morphometry was based on measurements in at least 24 lung samples (intervascular distances: 2566 measuring points; vessel diameters: 2259 measuring points). Intervascular distances and vessel diameters were analyzed by a one-way ANOVA. If the ANOVA indicated significant differences ( $p < 0.05$ ) between samples within a group, an all-pairwise analysis was performed (Tukey's). Commercially available statistical analysis software (JMP<sup>®</sup> 8.0.2.2, SAS Institute Inc.) was used to perform the statistical tests.

## Results

### **UIP, NSIP, and AFE present a specific vascular morphogenetic pattern.**

In contrast to regular lung morphology (**fig.1a-c**), histopathological subtypes of interstitial lung diseases reveal specific morphologic alterations: A characteristic feature of the UIP pattern is a transition between a spatially and temporally heterogeneous interstitial fibrosis, driven by aggregates of myofibroblasts (fibroblast foci), and morphologically normal lung tissue (**fig.1f**). UIP shows patchy and dense fibrous remodeling. UIP shows patchy and dense fibrosing remodeling predominantly in the subpleural spaces (**fig. 1d, e**). NSIP shows homogeneous and mild interstitial fibrosis with a uniform and diffuse thickening of alveolar septa as well as some degree of interstitial inflammation (**fig.1g-i**). The development of AFE involves three stages [30,31]. The AFE pattern (**fig.1j-l**) is characterized by preserved elastic fibers outlining the former alveolar septa and a continuously increased deposition of elastin (*arrowheads*) in the alveolar interstitium, whereas the airspaces are completely filled up by EM

The immunohistochemical analysis allows a morphological characterization of fibrotic areas where an expression of the endothelial marker CD31, the broncho-epithelial marker CK7 and the lymphatic marker podoplanin can all be frequently observed in close spatial proximity (**fig. 2**). However, immunohistochemical staining of the fibrotic areas cannot reflect the 3-dimensional architectural aspects of fibrotic and vascular remodeling.

Our analysis of microvascular corrosion casts of UIP, NSIP, and AFE lungs show the underlying morphological patterns (**Supplementary Material 1**). The microvascular architecture of UIP lungs reveals a tumor-like and chaotic aberrant distribution of blind-ending, partly occluded sinusoid-like vessels with a lack of hierarchy and wide alterations of vessel diameters with reduced vessel density (**fig. 3B**). The NSIP pattern is characterized by densely, packed, dilated tufts of vessel formation with abnormal tortuosity within the alveolar septa (**fig. 3C**). The AFE pattern exhibits a certain resemblance with the NSIP pattern whereby the microvasculature in the preserved alveolar septa suggests some degree of compression (**fig. 3D**).

### **Vascular morphometry reveals significant alterations in vascular remodeling in UIP, NSIP, and AFE.**

We assessed the microvascular unit of fibrotic areas by 3D-morphometry of the microvascular corrosion casts. The individual vessel diameters in the fibrotic foci, in alveolar vessels of UIP, NSIP, AFE, and healthy control lung revealed highly significant differences (**fig. 4A**). The highest vessel diameters were seen in UIP lungs (mean  $16.5\pm 7.7\mu\text{m}$ ) compared with NSIP lungs (mean  $12.7\pm 5.1\mu\text{m}$ ;  $p<0.001$ ), AFE lungs (mean  $13.1\pm 5.1\mu\text{m}$ ;  $p<0.001$ , ANOVA), or healthy control lungs (mean  $5.9\pm 1.9\mu\text{m}$ ;  $p<0.001$ , ANOVA). The mean intervascular distances (=distance between adjacent individual vessel segments) yielded similar significant results. The highest intervascular distances were observed in UIP lungs (mean  $59.4\pm 24.1\mu\text{m}$ ) in comparison to NSIP lungs (mean  $18.8\pm 9.0\mu\text{m}$ ;  $p<0.001$ , ANOVA), AFE lungs (mean  $11.6\pm 4.1\mu\text{m}$ ;  $p<0.001$ ), or the healthy controls (mean  $12.0\pm 3.7\mu\text{m}$ ;  $p<0.001$ ). Vascular volumetry was conducted on micro-computed tomography of microvascular corrosion casts (**Supplementary Material 2A-C**) to assess the vascular changes of upstream vasculature with a diameter larger than  $50\mu\text{m}$  (**fig. 4C**). UIP lungs showed a higher, albeit significant vascular volume (mean  $36.1\pm 5.9\%$ ;  $p=0.013$ ) and vascular surface-volume ratio (mean  $0.43\pm 0.7$ ;  $p=0.055$ , ANOVA) compared with NSIP lungs (mean  $18.9\pm 2.0\%$ ;  $0.54\pm 0.6$ ), AFE lungs (mean  $16.6\pm 3.7\%$ ;  $0.39\pm 0.04$ ) and controls (mean  $6.24\pm 0.8\%$ ;  $0.58\pm 0.11$ ) (*data not shown*).

### **Intussusceptive and sprouting angiogenesis accelerate fibrotic neovascularization.**

We identified intussusceptive and sprouting angiogenesis within the microvascular corrosion casts of all analyzed lungs. The formation of intussusceptive pillars was progressed by initial vasodilation followed by incorporation of CD34/31 positive progenitor-like [25,26] as well as the activation of mesenchymal stem cells (MSCs) which span a transluminal bridge, the "intussusceptive pillar" (**fig. 5A, B**) (**Supplementary Material 5**; quantification of proliferation of CD34/CD31 positive cells by Ki-67). The occurrence of sprouting and intussusceptive angiogenesis was observed in all fibrotic lungs whereas NSIP lungs showed significantly higher frequencies of pillar formations in comparison to UIP and AFE lungs (**fig.5C**;  $p<0.001$ , ANOVA). In contrast to intussusception, the highest frequencies (more than tenfold increase) of sprout formation were seen in UIP-lungs compared to NSIP and AFE lungs ( $p<0.001$ , ANOVA) (**fig. 5C**). The high occurrence of intussusceptive angiogenesis in NSIP lungs was predominantly observed in the expanded septa, in



which a prominent expansion of tuft-like blood vessels was observed (**fig. 5D**). In the UIP lungs, blunt, blind-ending vessels with dilated parent venules were located adjacent to fibroblastic foci. At the tip of these blunt vessels, sprouts were mostly aligning centrally towards the fibroblastic foci (**fig. 5E**).

### **Differential regulation of mRNA expression and biological functions in UIP, NSIP and AFE.**

We performed a digital multiplexed gene expression analysis via the NanoString nCounter<sup>®</sup> technology (**Supplementary Material 3A-D**). Transcript analysis showed significant differences in the expression of 20 genes among the three lung injury patterns compared to healthy control lungs (**fig. 6A**). For the sake of validation, the protein expression of selected genes was also analyzed in a compartment specific manner via immunohistochemistry. Here, collagens (Col I, III, IV) and collagen remodeling matrix metalloproteinases (MMP2, 9, 14) correlated well with the mRNA expression in the corresponding sites of neoangiogenesis (**Supplementary material 4**). Comparative gene analysis demonstrated an overlap of statistically significant differentially expressed genes between UIP, NSIP and AFE (**fig. 6B**). 16 genes were significantly upregulated in AFE lungs, whereas only 4 genes were differentially expressed in UIP lungs and one gene in NSIP lungs. One gene (*IGF1*) was significantly upregulated ( $p < 0.001$ ) as a common denominator of AFE and UIP whereas *MEG3* was significantly ( $p < 0.01$ ) expressed in both injury patterns of UIP and NSIP. *COL1A1* and *THY1* are highly significant ( $p < 0.001$ ) expressed in NSIP and AFE lungs (**Supplementary Material 3**). In addition to canonical pathways, differentially expressed genes were also categorized to related functional pathways using Ingenuity Pathway Analysis (**fig. 6C**). By this approach, AFE lungs exhibited an upregulation of different function pathways compared to NSIP and UIP. The analysis argued for significant ( $p < 0.01$ ) and highly significant ( $p < 0.001$ ) activation of epithelial cell and fibroblast migration, as well as macrophage differentiation in AFE and NSIP lungs. Moreover, activation of epithelial-mesenchymal transition (EMT) was observed in AFE lungs. Neoangiogenesis, migration of endothelial cells and fibrogenesis were also significantly activated in AFE compared to UIP lungs ( $p < 0.01$ ). In contrast to AFE, the lungs of NSIP and UIP showed that the pathways are less activated (NSIP>UIP). In the analysis, signaling pathways of inflammation are only upregulated in UIP lungs in comparison to AFE and NSIP.

## Discussion

In this study, we assessed the morphogenetic and molecular aspects of angiogenesis in the interstitial lung injury patterns of UIP, NSIP, and AFE. For this we assembled patient cohorts which showed no significant differences with regard to age or gender, with the exception of the – in general older – UIP group. However, since the statistical analysis of the gene expression data of the healthy control group revealed no age dependent effects, it seems plausible that NSIP, AFE and UIP could be analyzed in comparison to the healthy control group.

First, our data demonstrate that the histopathological morphological features widely depend on the underlying vascular architectural alterations. NSIP and AFE reveal a similar vascular injury pattern with pronounced remodeling in the thickened alveolar septa, whereas UIP lungs are characterized by upregulation of vascular density in the upstream vessels and a reduction of vessel density in the perifocal and alveolar perifocal capillary plexus. Furthermore, the difference in vessel diameters and intervascular distances reflect these individual changes. Second, our data provide evidence for a role of sprouting and intussusceptive angiogenesis in the expansion of perifocal and alveolar blood vessels. Third, our findings on differences and similarities of angiogenesis-related gene expression underline the morphological features of vascular remodeling in UIP, NSIP, and AFE.

The impact of angiogenesis on the pathogenesis and progression of ILD has become a subject of controversy [12,20,27]. While several studies proposed that stimulated aberrant angiogenesis is a core characteristic of ILD, other authors have reported on reduced vascular densities in lung biopsies of especially IPF patients [5,20,28]. The legitimate question "Angiogenesis in Pulmonary Fibrosis – Too much or Not Enough?" raised by Hanumegowda and colleagues [12] cannot be easily addressed due to the architectural complexity of the vascular system and its density on two-dimensional histological slides. In this study, using 3D analysis, we therefore put effort in unraveling the complexity of both spatial and temporal heterogeneity of microvascular changes present in UIP, NSIP and AFE lungs. It seems contradictory that the overall vascular volume in UIP is upregulated, whereas the perifocal vascular density is reduced and thinned out while the exact opposite was evident with NSIP

lungs. The predictive clinical value of vascular volume as a marker for mortality was recently discussed in-depth by Jacob *et al.* [19], using a computer-based algorithm to assess pulmonary vascular volumes measured by CT. This technique, however, only captures the alterations of upstream blood vessels from the alveolar and perifocal capillary plexus, but does not address the heterogeneous vascular morphological aspects of newly formed blood vessels that most likely contribute to the progression of the disease. The formation of fibrotic areas leads inevitably to hemodynamic changes with an opening of anastomoses between the pulmonary and bronchial circulation. These hemodynamic and micromechanical forces are known to enhance the expansion of vascular plexuses by intussusceptive angiogenesis [29, 30]. Thus, this pillar formation and branch remodeling may represent a pivotal adaptive response to the continually increasing blood flow and blood pressure during inflammation and regeneration. Previously, it has been shown by our group that chronic inflammation triggers the migration and recruitment of progenitor-like angiogenic cells to the site of remodeling [25, 26, 31]. In the inflammatory ILD patterns of NSIP and AFE [32,33], we observed a frequent occurrence of intussusceptive pillars.

In contrast, angiogenesis in UIP lungs was driven by hypoxia with perifocal sprouting angiogenesis, which, among other factors, was indicated by the upregulation of IGF-1 [34]. Comparable to malignant tumors, the UIP-specific vascularity showed a chaotic vessel-like arrangement with numerous blunt ends. This hypoxia-induced vascular remodeling is associated with the modification of the EM by MMPs and, as we showed earlier inhibition of IGF-1 can impede sprouting angiogenesis significantly [35]. In addition, localized hypoxia results in metaplasia and hyperplasia of alveolar type II cells by Notch signaling and Krt5<sup>pos</sup> basal-like cell expansion in alveolar repair and remodeling [36].

Nintedanib, a multikinase inhibitor with anti-angiogenic properties, has been shown to have efficacy in reducing the decline of lung function in IPF patients [37]. Besides anti-inflammatory and anti-fibrotic effects, the question remains whether an anti-angiogenic therapy may play a pivotal role in improving the functional outcome in IPF patients. Our own studies in a bleomycin-induced mouse fibrosis model demonstrated that the altered vascular architecture appears to be “normalized” after nintedanib treatment [16], a phenomenon also found in tumors treated with an anti-angiogenic therapy [35,38]. Moreover, intervascular distances and vessel diameters

showed significant differences in nintedanib-treated animals, whereas lung function improved under the therapy. Therefore, the structure-function dynamics of microvascular architecture are likely to underlie the injury and progression patterns of ILD. Otherwise, Farkas *et al.* could show in an IPF rat model with transient overexpression of active TGF- $\beta$ 1 that a decreased vascularity is associated with an extensive remodeling and a secondary PH [39]. In this model, the administration of VEGF showed an amelioration of pulmonary hypertension via inhibition of endothelial apoptosis, yet also an aggravation of pulmonary fibrosis.

Some authors suggest that vascular alterations might represent an initial trigger in the pathogenesis and the progression of ILD [20,40] and conclude that patients with pulmonary fibrosis show aspects of pulmonary venous occlusive disease (PVOD) with aberrant postcapillary expansion by hemangiomatosis. Similar observations were made in non-fibrotic areas of patients with IPF [40], in which 65% of cases demonstrated occlusive venopathy. Our own recent work [41] on PVOD highlights multifocal intussusceptive neoangiogenesis and vascular sprouting as representing the three-dimensional correlate of progressive pulmonary hemangiomatosis. We also described comparable morphogenetic phenomena in chronic thromboembolic PH (CTEPH) in the form of plexiform vasculopathy with pronounced intussusceptive angiogenesis [42].

NSIP and AFE revealed a shared upregulation of Col1A1 and Thy1/CD90. Thy1/CD90 is expressed on endothelial cells (EC) at sites of chronic inflammation and adjacent to malignant neoplasms, as well as on adventitial mesenchymal progenitor cells in adult human arteries, where both are involved in the microvascular expansion by intussusceptive neoangiogenesis [43]. Other studies reported that the intussusceptive capillary growth is the main driver in post injury angiogenesis in a Thy1.1-nephritis model [43], which is consistent with the recovery of septal blood vessels in human NSIP and AFE lungs. We observed a higher frequency of intussusceptive features in NSIP and AFE fibrotic lungs. The expansion of the microvascular network by intussusception is associated with the recruitment of progenitor-like angiogenic cells forming transluminal pillars [29,30]. These circulating progenitor-like angiogenic cells are recruited as tissue-resident or bone-marrow derived monocytes which can transdifferentiate among other types into proangiogenic M2-polarized alveolar macrophages [26,44,45] or into endothelial cells which then incorporate into newly formed intussusceptive blood vessels [42,45].

Alvarez *et al.* [44] characterized endothelial cells isolated from the lung microcirculation as highly vasculogenic and capable of renewing the entire hierarchy of endothelial cell growth.

Recent evidence [46] could confirm that bone marrow derived mononuclear cells are major constituents in the vascular expansion by intussusceptive angiogenesis, controlled by SDF-1/CXCR4 signaling. Our group observed similar effects on the migration of CD11b<sup>+</sup>-monocytes during lung regeneration [26]. In summary, we provide the first evidence that the histopathological injury patterns of life-threatening ILDs are highly dependent on the underlying vascular architectural alterations and vessel densities in UIP, NSIP, and AFE lungs. Whereas UIP lungs showed a higher density of upstream vascularity and lower density in perifocal blood vessels, NSIP and AFE lungs revealed densely packed alveolar and septal blood vessels. Microvascular alterations by sprouting (UIP) and intussusceptive angiogenesis (NSIP, AFE) may contribute as one of the pivotal pathogenetic mechanisms in the progression of disease in the capillary-alveolar interaction. Our data can serve to identify novel therapeutic targets with the potential to favorably alter the course of ILD by influencing aberrant angiogenesis in the different subtypes of ILDs.

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## Figure legends

### **Figure 1: Different morphological patterns in UIP, NSIP and AFE lungs.**

Scanning electron micrographs and histological sections demonstrate the injury-specific morphological pattern. a-c) In healthy control lungs, lung architecture includes thin-walled alveolar ducts and alveoli, with sparse bronchial mucous remnants. d-f) The cardinal features of usual interstitial pneumonia (UIP) represent a loss of architecture with heterogeneous, patchy parenchymal, mostly subpleural fibrotic involvement and fibroblastic foci which are indicative of the progression of the fibrosis d). Adjoining the fibrotic foci, organized thrombotic occlusion (e) (*yellow dotted line*) is frequently observed in the draining veins. f) Adjacent to fibroblastic foci (\*), perifocal alveolar type I cells are replaced by hyperplastic alveolar type II cells (*black arrowheads*). g-i) Non-specific interstitial pneumonia (NSIP) is characterized by a diffuse and uniform injury pattern with a moderate fibrotic remodeling of alveolar septa with an interstitial infiltration by lymphocytes, histiocytes and plasma cells (l). j-l) In contrast to conventional fibrotic remodeling, the development of alveolar fibroelastosis (AFE) involves three stages: i) the “fibrin stage” with fibrin filled alveoli in response to an initial alveolar epithelial damage. ii) the “histiocytic stage” with degradation of alveolar fibrin exudates by local macrophages and accumulation of fibroblasts followed by deposition of collagen within the alveolar space iii) the “full developed stage” of AFE presents a concomitant elastosis of alveolar septa (l, black arrowheads) whereas alveolar spaces are consolidated with collagenous fibers (l, \*); Scanning electron microscopy (SEM) was performed in a Philips XL30 microscope (Philips, Eindhoven; Netherlands) at 15 keV and 21  $\mu$ A. Hematoxylin/Eosin staining 1c, 1f, 1i, and Elastica van Gieson taining 1l; all bars: 200 $\mu$ m).

### **Figure 2: Immunohistochemical detection of CD31, CK7, and podoplanin expression in AFE, NSIP, and UIP.**

Double-staining against the endothelial marker CD31 (brown) and the bronchoepithelial marker cytokeratin CK7 (red; top row) as well as against the lymphatic marker podoplanin (red; bottom row), respectively. Staining results demonstrate the spatial heterogeneity of vascularization in the fibrotic areas in AFE, NSIP and UIP, as compared to controls. All bars: 50  $\mu$ m.

### **Figure 3: Microvascular architectural alterations in UIP, NSIP, and AFE.**

Scanning electron micrographs of microvascular corrosion casts illustrate the substantial architectural differences between the different injury patterns. a) Healthy control lung vasculature is characterized by thin-walled alveolar capillary plexuses aligned along the alveolar duct. b) UIP lungs demonstrate an aberrant vasculature with blunt, sinusoid-like vessels, without a clear vessel hierarchy, but instead high

variability of vessel diameters and small vessel sprouts. c) NSIP lungs present with dense, tortuous dilated tufts of vessel formations in the alveolar septa and frequent intussusceptive pillars. d) AFE lungs resemble the appearance of the NSIP lungs with pronounced vascular alterations in the alveolar septa.

#### **Figure 4: Vascular morphometry of UIP, NSIP, and AFE.**

The morphometrical assessment was carried out in the alveolar plexus of fibrotic areas UIP, NSIP, AFE, and in healthy control lungs. a) Vessel diameters and b) intervascular distances showed significant differences between the different injury patterns. Significant differences ( $p < 0.001$ , ANOVA) are highlighted by \*. Scatter plots show the respective median and the 25<sup>th</sup> and 75<sup>th</sup> percentile in red. c) Micro-computed tomography on corrosion casts were performed to assess the volumetric changes of upstream vasculature. Only vascular changes of  $> 50 \mu\text{m}$  diameter were evaluated. 3D-visualization of microvascular corrosion casts shows exemplarily the upstream vascular hierarchy of a NSIP lung.

#### **Figure 5: Neoangiogenic remodeling of fibrotic lung tissue by intussusceptive and sprouting angiogenesis.**

a) Schematic representation of intussusceptive angiogenesis. Blood flow and velocity are reduced by marked vasodilatation. After the dilatation of the vessel, intraluminal pillars form at vessel bifurcations by an intraluminal intussusception of myofibroblasts and incorporation of tissue resident or blood-borne progenitor-like angiogenic cells. b) The intussusceptive transluminal pillar, a tissue bridge that leads to multiple septations of the vessel lumina, appears as a “hole” in microvascular corrosion cast (*red arrowheads*) whereas sprouting angiogenesis forms little extraluminal „sprouts“ (*blue arrows*) from pre-existing blood vessels; bars:  $100 \mu\text{m}$ . c) The numerical density newly-formed sprouts (SA) and intussusceptive pillars (IA) per field of view (FOV) assessed on microvascular corrosion casts revealed the highest frequency of intussusceptive pillars in NSIP lungs, whereby the highest occurrence of sprouts (red arrows) was observed in UIP lungs. Significant differences ( $p < 0.001$ , ANOVA) are highlighted by \* d) The septal thickening in NSIP lungs is mainly characterized by a dense vascular network which expands by numerous intussusceptive pillars (*red arrowheads*); bar:  $100 \mu\text{m}$ . e) Microvascular architecture of UIP-injured lungs outlines perifocally aberrant blind-ending small calibers with vessel sprouts which are aligned towards the fibroblastic foci (*blue arrows*); bar:  $200 \mu\text{m}$ .

#### **Figure 6: Differential regulation of mRNA expression and biological functions in UIP, NSIP, and AFE.**

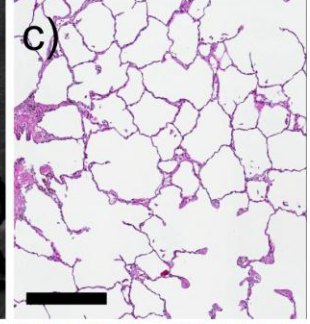
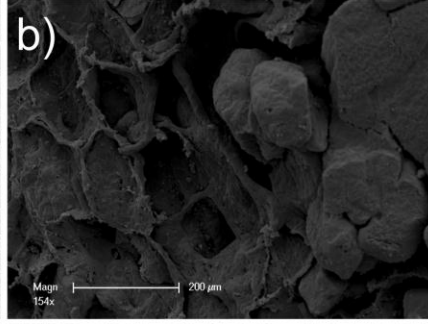
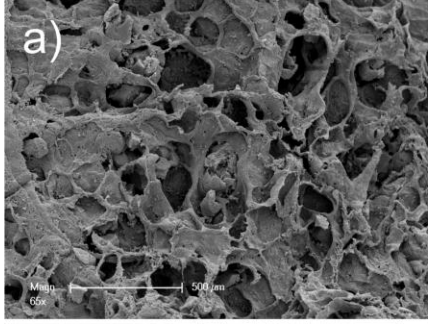
a) A heatmap of hierarchically clustered mRNA expression data shows distinct clusters for AFE and control samples. The displayed gene set is limited to 20 significantly differentially expressed genes in a multigroup comparison of AFE, NSIP, UIP and control samples. b) Venn diagram of genes that are expressed differentially,

with a p-value of at least 0.05, compared to control samples. Arrows indicate up- or downregulation of genes compared to controls. While a large number of genes in AFE samples is significantly upregulated, no gene is commonly regulated in all three entities. c) Significant differences in the presumed regulation of biological functions. Asterisks suffixed to function names indicate the significance level in a multigroup test of all three entities. AFE and UIP frequently exhibit significant differences.

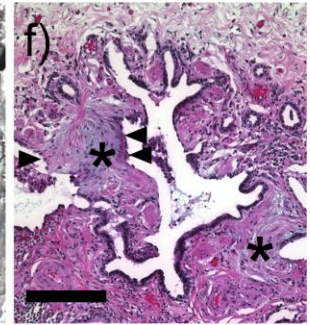
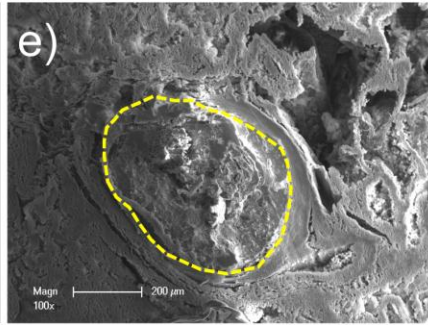
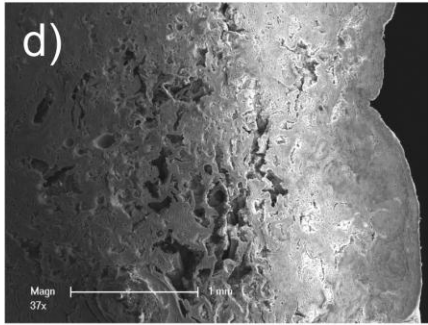
**Figure 7: Schematic illustration of morpho-molecular motifs in histopathological subtypes UIP, NSIP, and AFE.**

UIP is characterized by prominent basophilic fibroblastic foci with adjacent hyperplastic alveolar epithelial cells Type 2. Here, we frequently find newly formed blood vessels via sprouting reaching out towards the fibroblastic foci. In NSIP thickened septa are composed of blood vessels with intussusceptive pillars and increased amounts of lymphocytes. In AFE former alveolar air spaces are filled with collagen, while former alveolar walls are remodeled, showing elastosis and increased amounts of intussusceptive blood vessels.

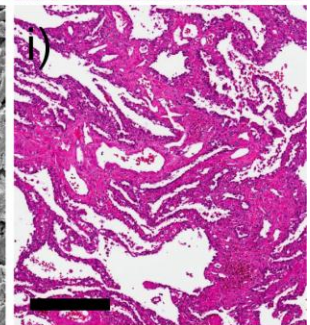
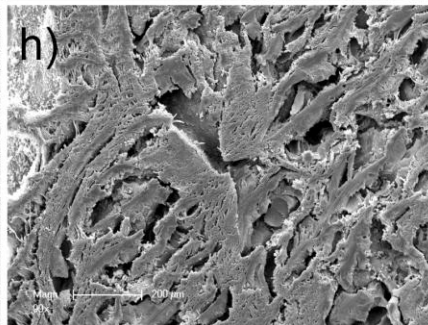
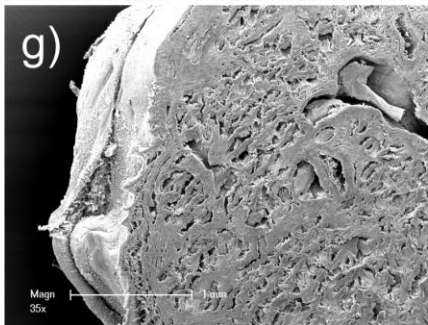
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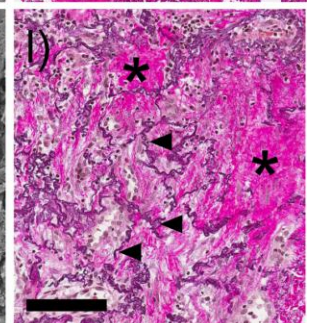
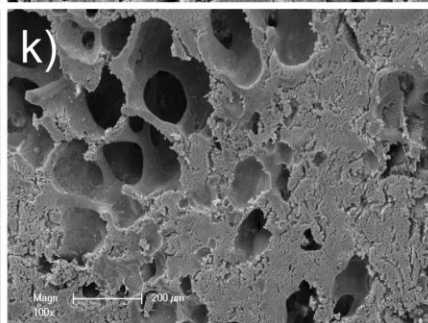
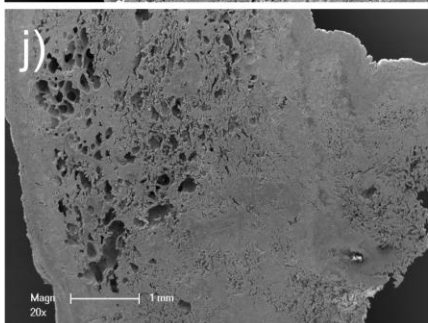
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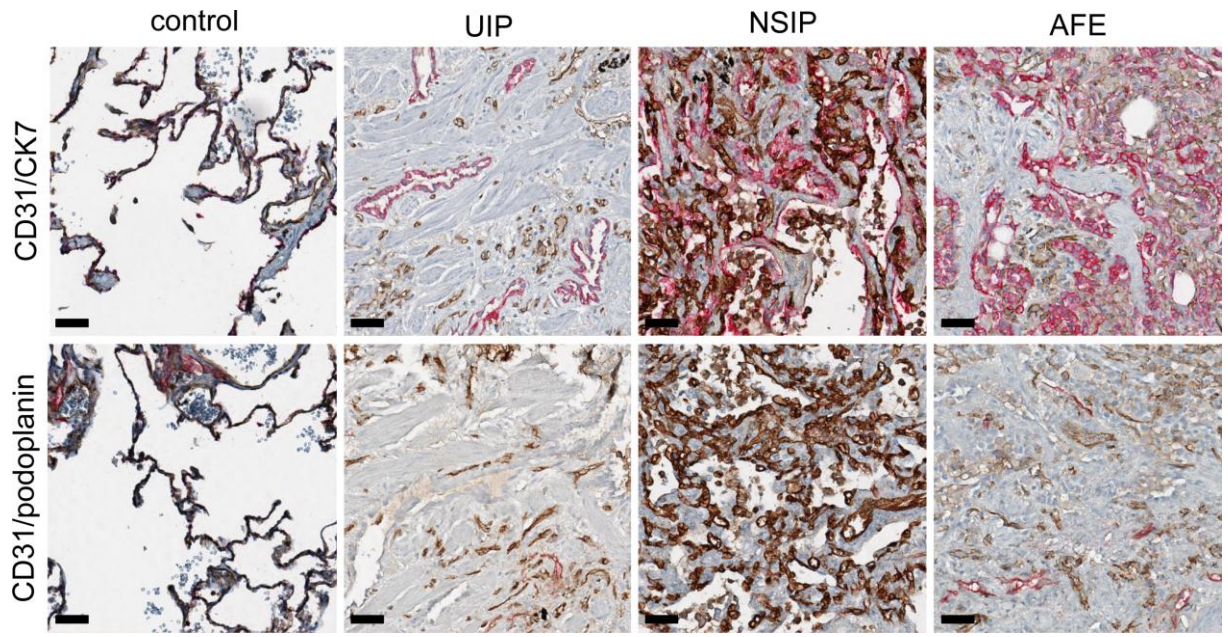
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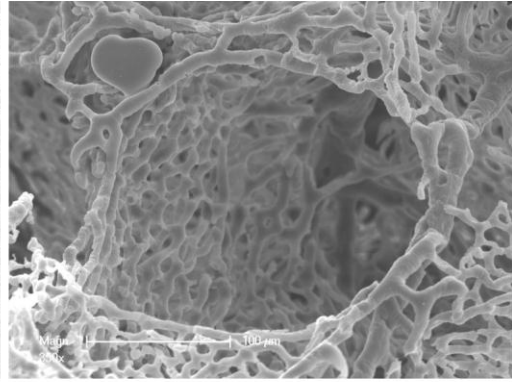
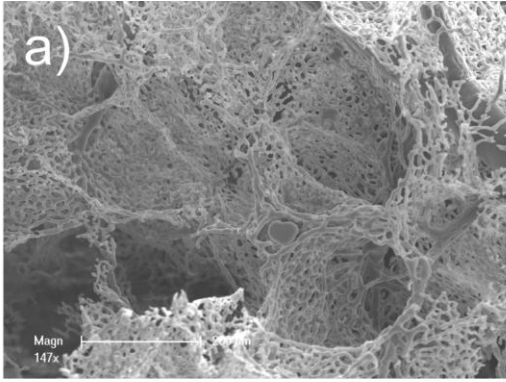
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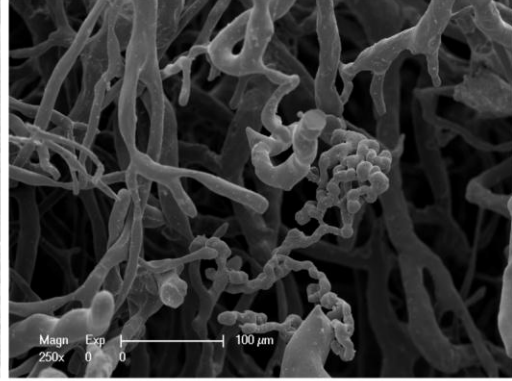
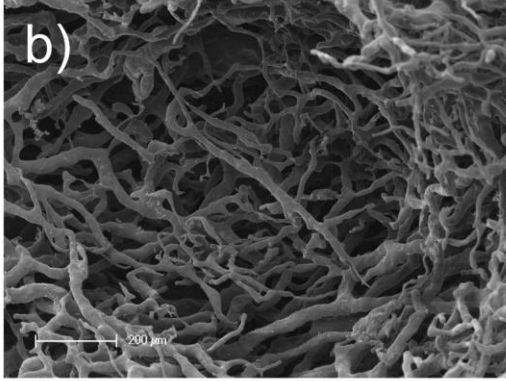




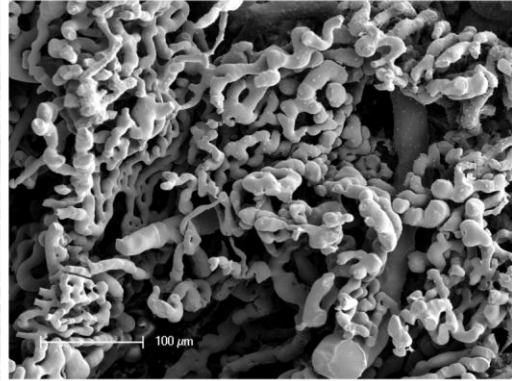
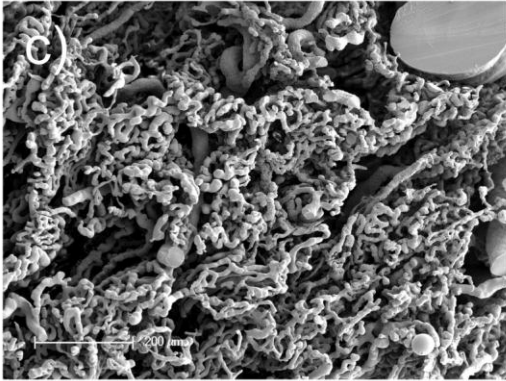
control lung



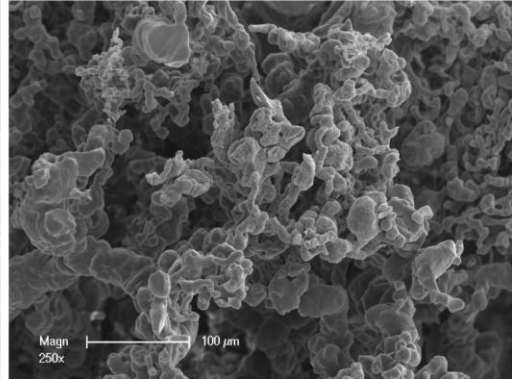
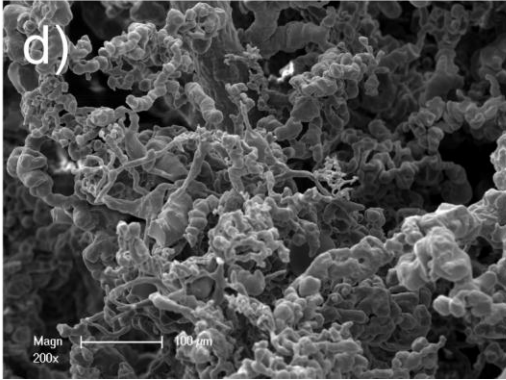
UIP

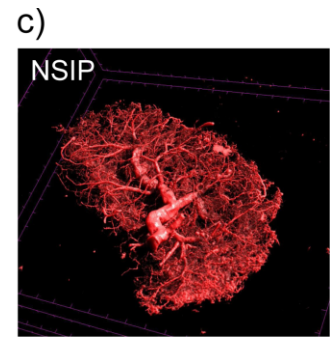
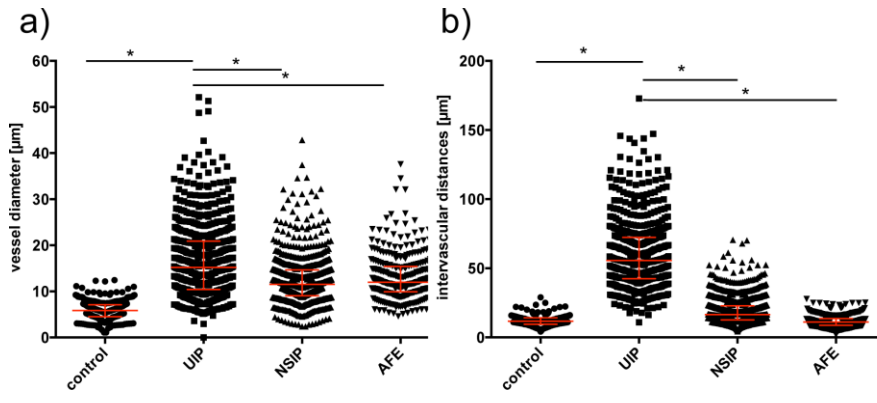


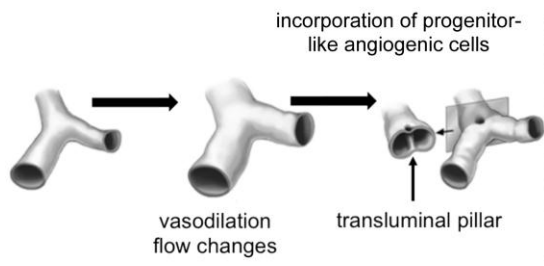
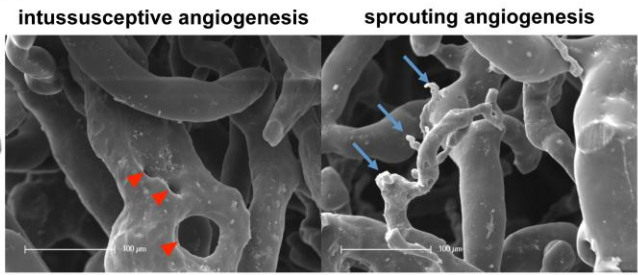
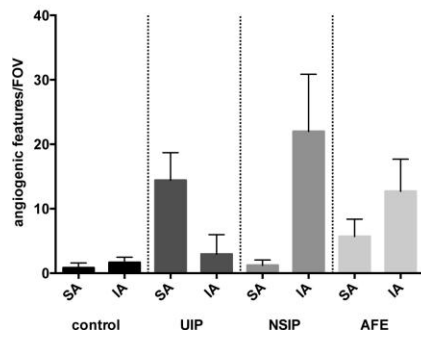
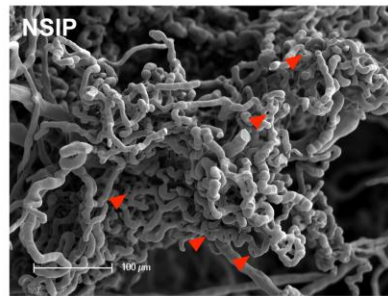
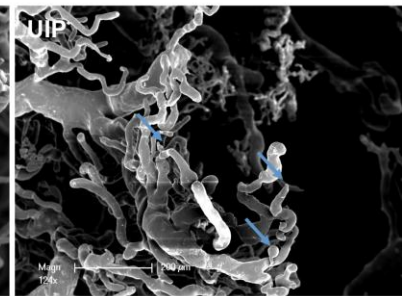
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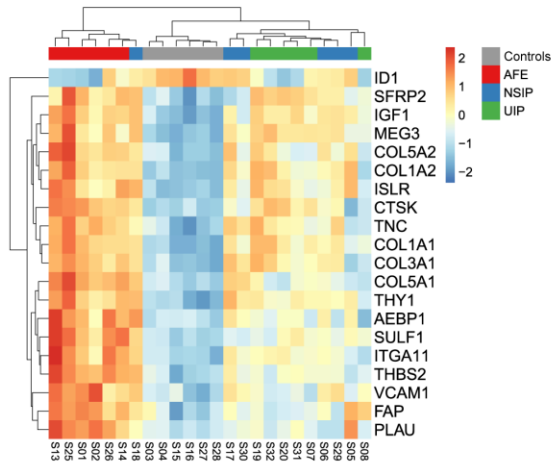




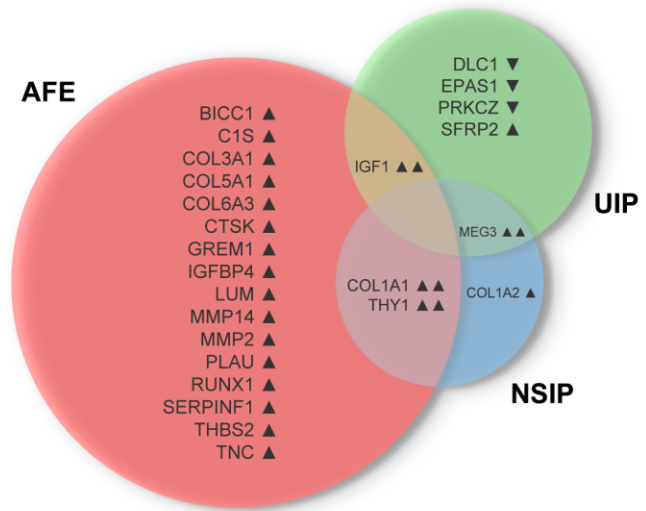
**A****B****C****D****E**



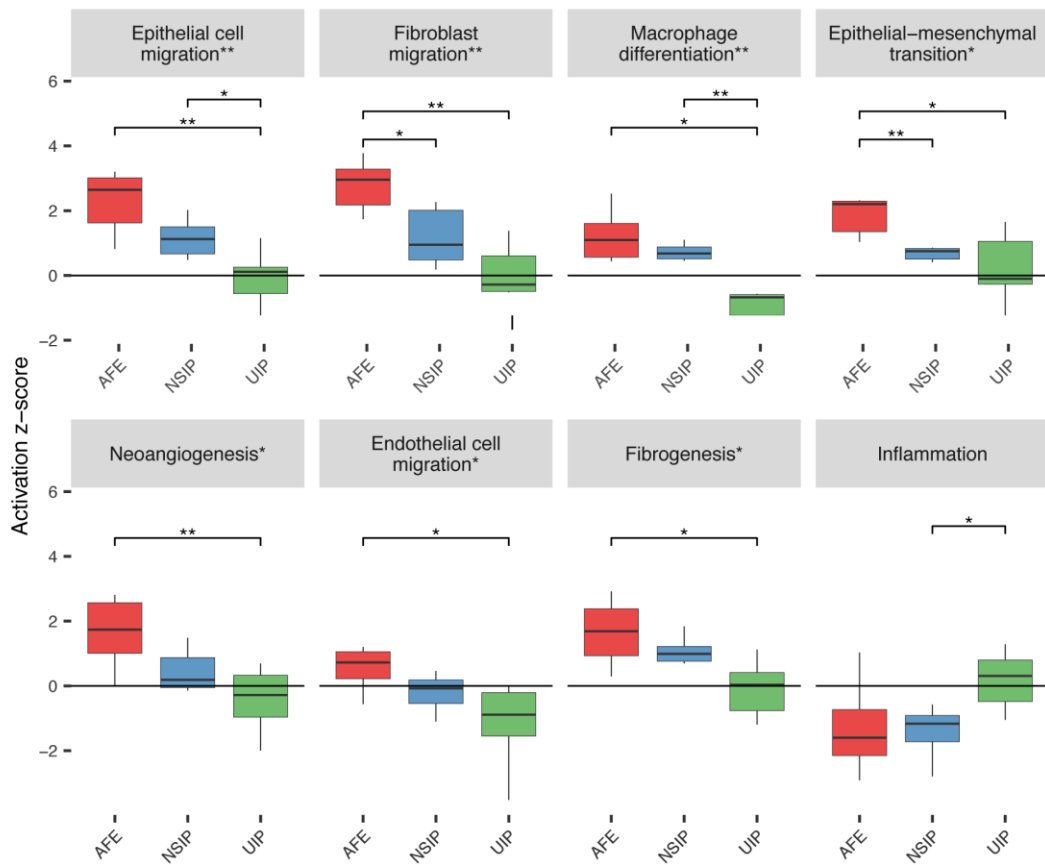
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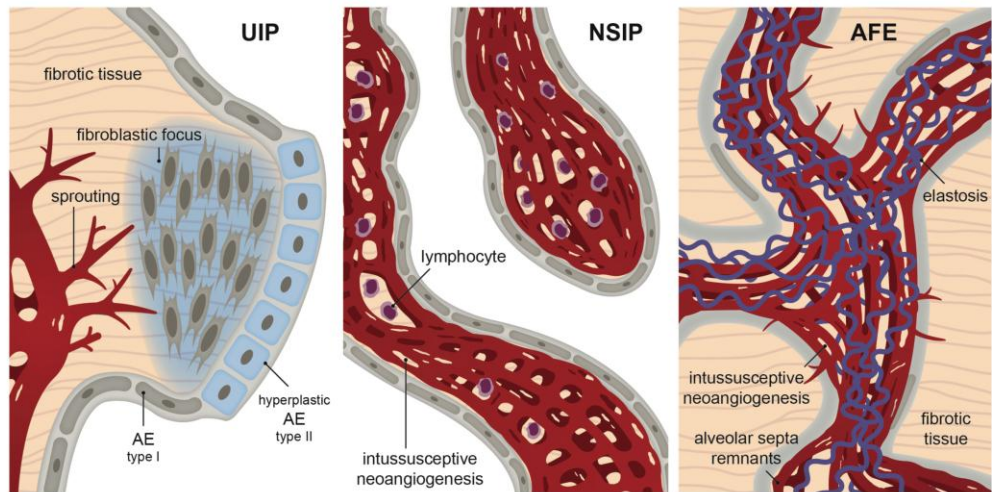


b)



c)





	usual interstitial pneumonia (UIP)	non-specific interstitial pneumonia (NSIP)	alveolar fibroelastosis (AFE)
vascular volume	↑↑	↑	↗
intervascular distances	↑↑	↘	↔
vessel diameter	↑↑	↗	↑
sprouting	↑↑	↔	↑
intussusception	↔	↑↑	↑
gene expression	DLC1, EPAS1, PRKCZ, SFRP2, IGF1, MEG3	COL1A1, COL1A2, THY1	BICC1, C1S, COL1A1, COL3A1, COL5A1, COL6A3, CTSK, GREM1, IGF1, IGFB4, LUM, MMP14, MMP2, PLAU, RUNX1, SERPINF1, THBS2, THY1, TNC

## **Supplemental Methods**

### **Sampling and preparation of fresh human lungs.**

Since 2013, the lung research group of the Institute of Pathology at Hannover Medical School (MHH) provides with a 24h/7d pick-up and work-up service a well-established and unique infrastructure for fast processing of explanted human lungs, long-time storage, and biobanking. With about 130 lung transplantations annually, we provide the basis for comprehensive (histo) pathological and molecular investigations in human lung diseases. Here, the prompt and standardized processing of lung tissue within less than 30 minutes following explantation guarantees incorporation of daily routine work and systematic lung research. The lungs for this study were freshly sampled, followed by routine formalin-fixation and paraffin-embedding (FFPE), conventional light microscopy,  $\mu$ -CT analysis, microvascular corrosion casting, SEM, and gene expression analysis.

### **Conventional light microscopy.**

For (immuno) histochemical staining FFPE lung tissue samples directly adjacent to the samples used for Electron microscopy were cut to 2  $\mu$ m thick slices. Histological staining, including Hematoxylin-Eosin (HE) and Elastica van Gieson (EvG), were performed using routine protocols. Immunohistochemical stainings were performed as follows: CD31 (DACO (No. M0823) at a dilution of 1:75), CK7 (DACO (No. M7018) at a dilution of 1:800) and podoplanin (Zytomed (No. MSK057) at a dilution of 1:25) and detected using DAB detection kit (Ventana, No.760-500) or Phosphatase Red detection kit (Ventana 760-501). Conventional microscopy was then performed at a routine diagnostic light microscope.

### **Vascular Corrosion Casting and scanning electron microscopy.**

Briefly, at the time of tissue collection, the afferent vessels were cannulated with an olive-tipped cannula. The vasculature was flushed with saline (at body temperature) followed by glutaraldehyde fixation solution (2.5%, pH 7.4, Sigma Aldrich, Munich, Germany). Fixation was followed by injection of prepolymerized PU4ii resin (VasQtec, Zurich, Switzerland) mixed with a hardener (40% solvent) and blue dye as

casting medium. After curing of the resin, the lung tissue was macerated in 10% KOH (Fluka, Neu-Ulm, Germany) at 40°C for 2 to 3 days. Specimens were then rinsed with water and frozen in distilled water. The casts were freeze-dried and sputtered with gold in an argon atmosphere and examined using a Philips ESEM XL-30 scanning electron microscope at 15 keV and 21  $\mu$ A (Philips, Eindhoven, Netherlands).

### **3D morphometry.**

For quantitative analyses, stereo-pairs with a tilt angle of 6° were collected from each lung explant using a eucentric specimen holder. The stereo-pairs were used for morphometry of parameters defining the architecture of the microvascular unit. The stereo pairs were color-coded and reconstructed as anaglyphic images. With the known tilt angle, calculations were carried out using macros defined by the KS 300 software (Kontron Electronics, Eching, Germany). Intussusceptive angiogenesis was identified via the occurrence of tiny holes with a diameter of 2-5  $\mu$ m. The quantitation of these features was expressed as numerical density per vessel area (21,22).

### **Micro-computed tomography.**

High-resolution  $\mu$ -CT analyses were performed using a Bruker Skyscan 1176  $\mu$ -CT scanner. The paraffin-embedded specimen was scanned using the following settings: 50 kV tube potential, 0.5 mm aluminum filtration, 500  $\mu$ A tube current, 0.18° rotation step over-rotation of 180° and a detector pixel size of 8.6  $\mu$ m (spatial resolution), applying a frame averaging of 5. Volume image data (2667 slices of 3396x3396 pixels<sup>2</sup> each) was reconstructed with NRecon (v1.7.0.4: Bruker Biospin, Rheinstetten, Germany) and analyzed with CTVox: (v. 3.1.1: Bruker, Biospin). Volumetric analyses were conducted using CTAn (v.1.15.4: Bruker, Biospin).

### **Gene analysis.**

Further analysis of the resulting log<sub>2</sub> mRNA counts was performed using custom R code. A Shapiro-Wilks test was performed on all intra-group gene expressions which showed that the vast majority of expression data is normally distributed (>85%,  $\alpha=0.05$ ). In order to identify significant changes in mRNA expression, we performed t-

tests for pairwise comparisons as well as ANOVA for multigroup comparisons followed by correction for multiple testing via the Bonferroni method. All corrected p-values  $<0.05$  were considered significant.

### **Immunohistochemical analysis**

Selected target proteins were analyzed with regard to their compartment-specific expression assessed via immunohistochemistry. Collagens (Col1, Col3, Col4) and matrix metallo-proteinases (MMP2, MMP9 and MMP14) were analyzed using standard immunohistochemistry as described in [1] with some modifications. Briefly, antibodies were used as follows: Col1 (1:200 from Abcam (ab88147)), Col3 (1:400 from Antibodies-online (ABIN214580)), Col4 (1:50 from Cell Marque (CIV22)), MMP2 (1:200 from Abcam, ab86607), MMP9 (1:100 from Abcam, ab76003) and MMP14 (1:100 from Abcam, ab51074). All antibodies were visualized using the (DAB detection kit, Roche)

### **Proliferation analysis**

The proliferation rate of endothelial cells was determined via Immunohistochemistry using the OPAL 7 System as previously described [2] with some modifications. Briefly, CD34/31 positive cells were detected using the anti CD31 monoclonal antibody (1:100, Dako Agilent, Clone JC70A) and the CD34 monoclonal antibody (1:200 Leica, CL-L-End/10). Proliferation was analyzed using the anti-Ki-67 antibody (1:200 Thermo, Clone SP6).

### **Functional analysis.**

The log<sub>2</sub> gene expression data of each sample relative to the median gene expression in the controls was committed to the software as an individual observation. The subsequent molecule function activity prediction of IPA was executed with the default settings, thus using information from both in vivo and in vitro experiments. Any z-score obtained as a result gives a quantitative estimate of how a biological function is presumably regulated based on the observed differences

in gene expression. <https://www.qiagenbioinformatics.com/products-/ingenuity-pathway-analysis>

## References

- 1 Izykowski N, Kuehnel M, Hussein K, *et al.* Organizing pneumonia in mice and men. *J Transl Med* 2016; **14**: 169
- 2 Mascaux C, Angelova M, Vasaturo A, *et al.* Immune evasion before tumour invasion in early lung squamous carcinogenesis. *Nature* 2019; **571**: 570-575



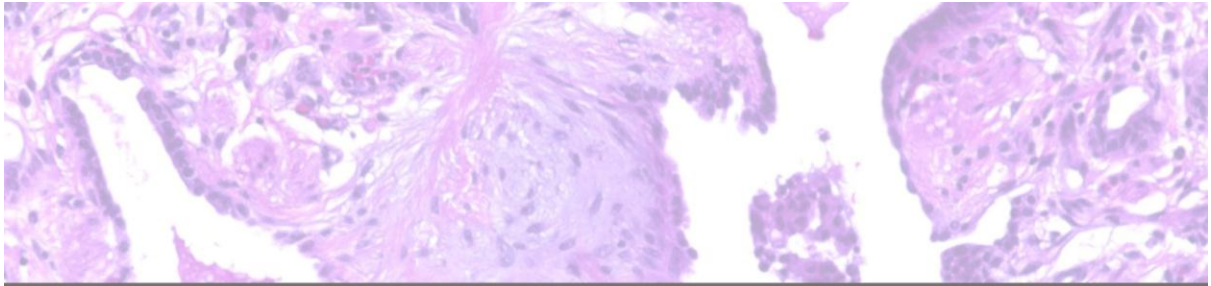
# Supplemental 3D-figures

“Morphomolecular motifs of bronchopulmonary  
neoangiogenesis in interstitial lung diseases (ILDs)”

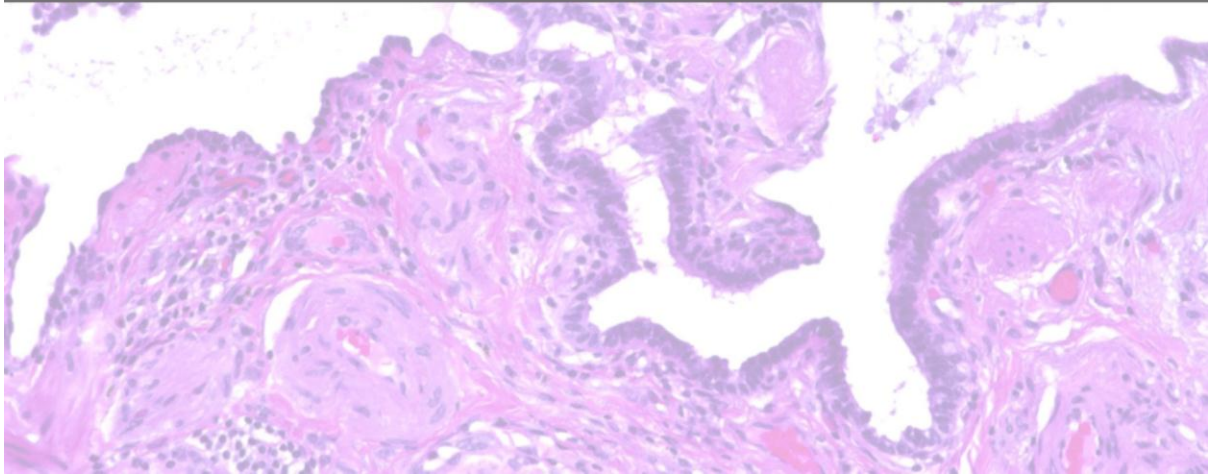
*by Ackermann et al.*

For use with red-green anaglyph glasses

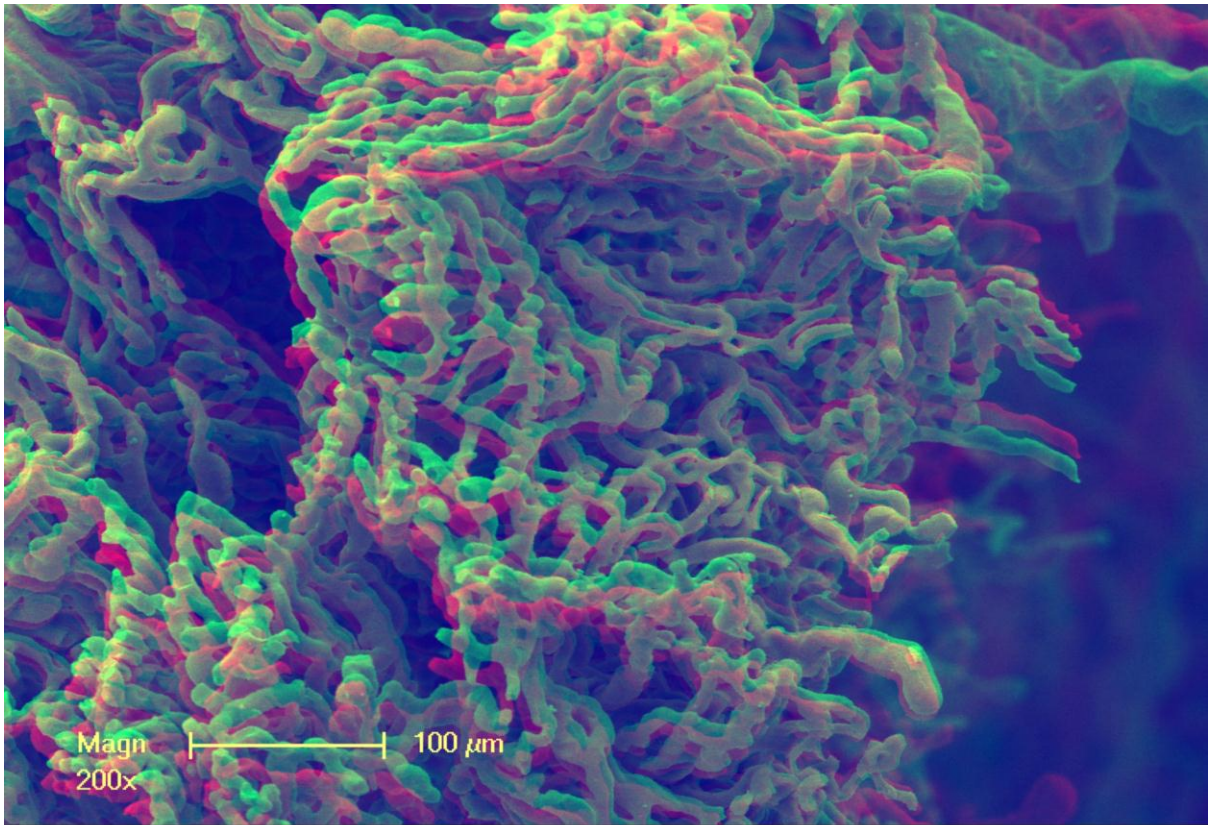




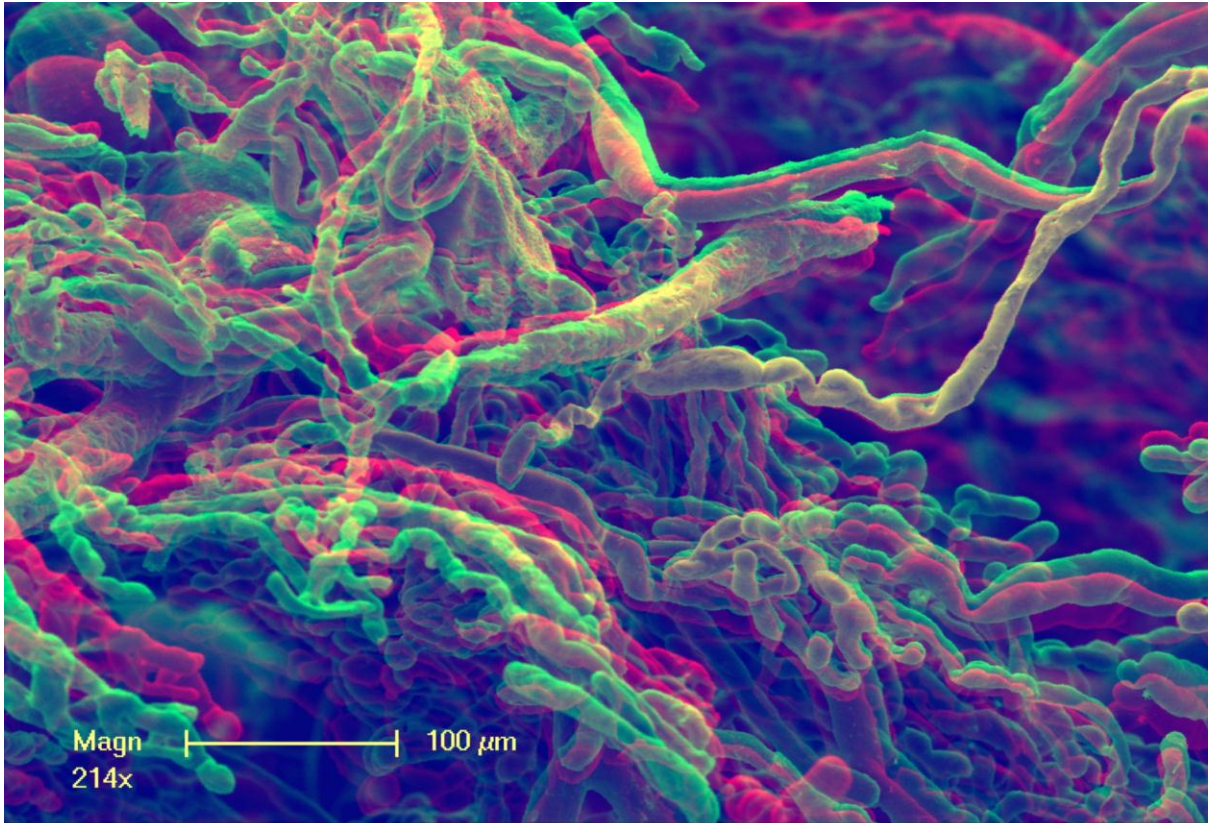
usual interstitial pneumonia (UIP)





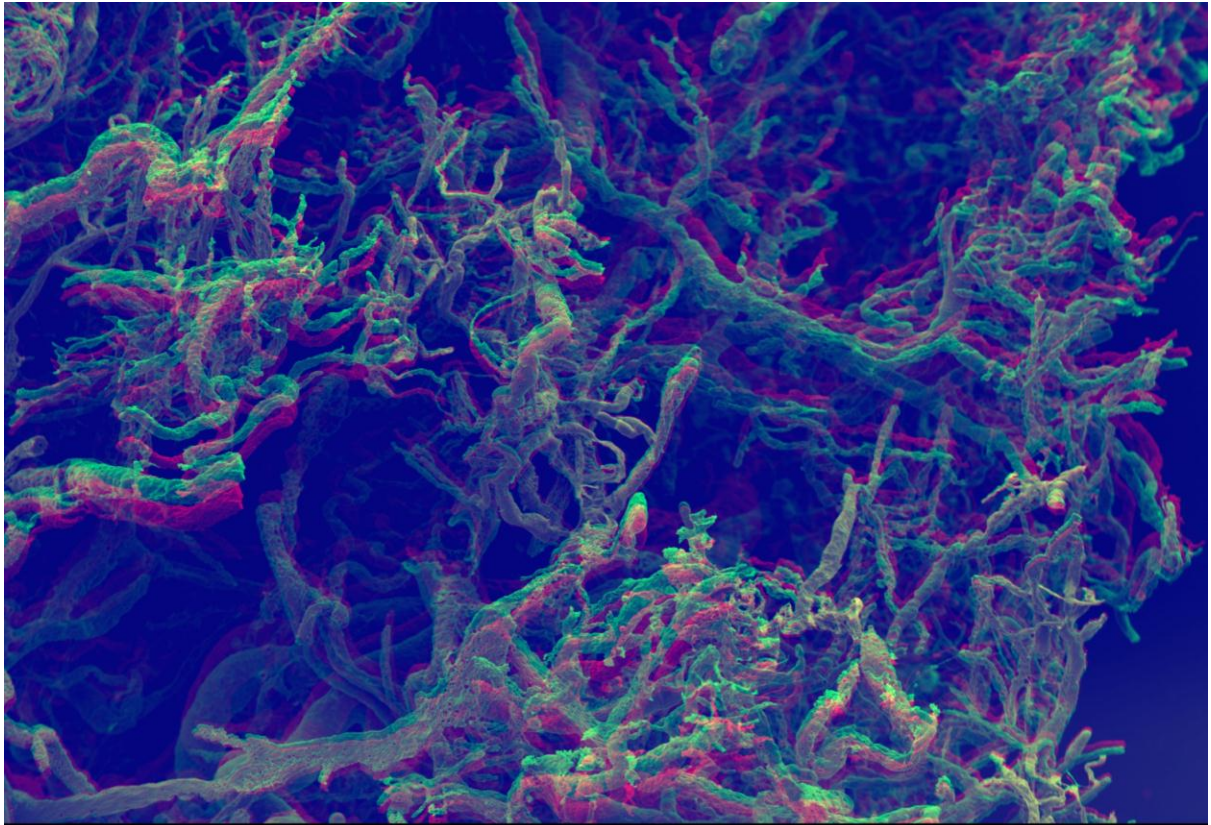


Morphomolecular motifs of bronchopulmonary neovascularization in interstitial lung diseases (ILDs) by Ackermann *et al.*

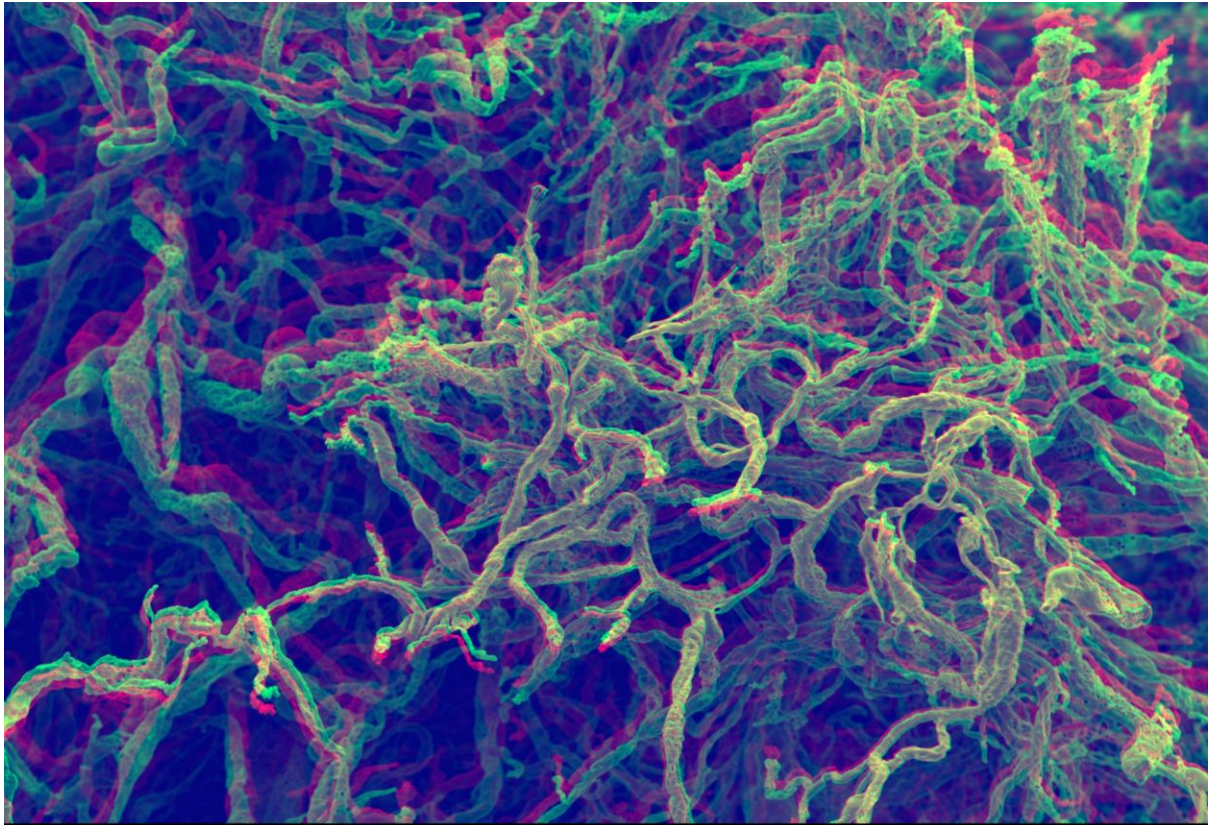


Morphomolecular motifs of bronchopulmonary neoangiogenesis in interstitial lung diseases (ILDs) by Ackermann *et al.*



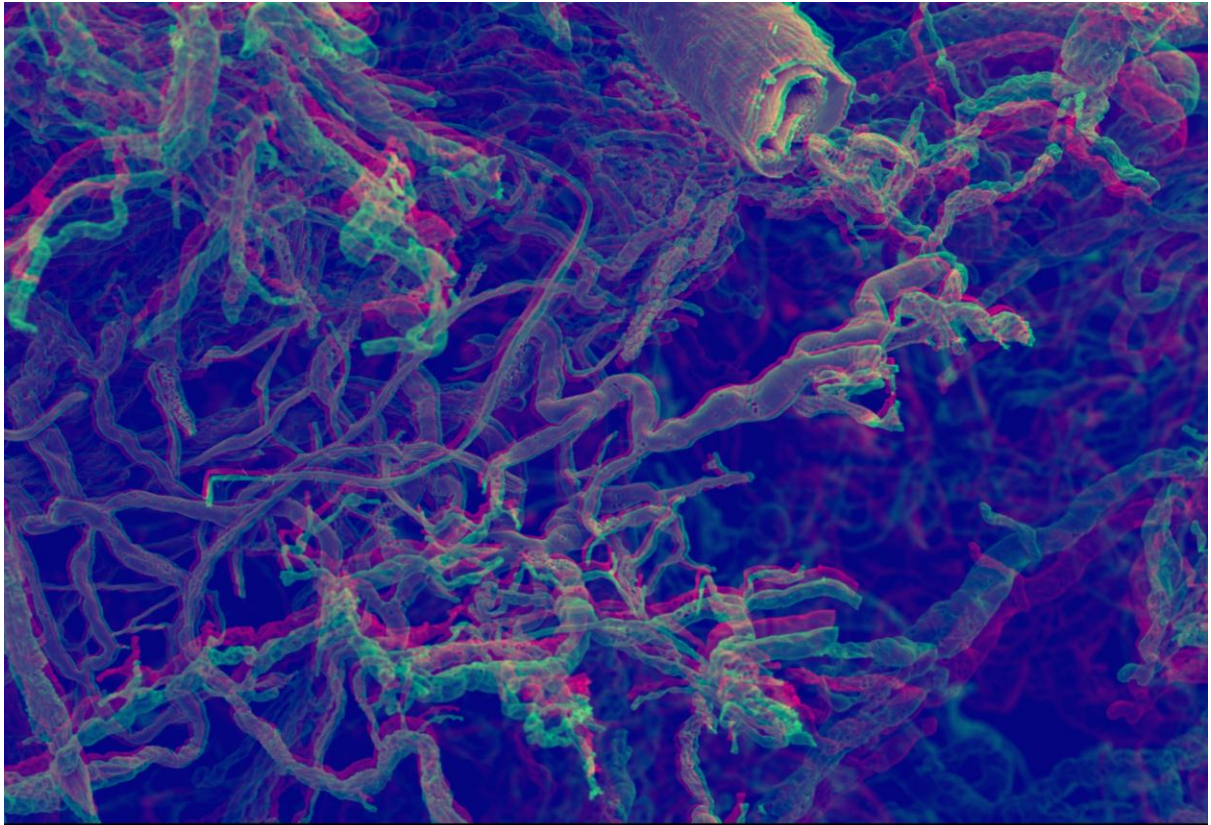


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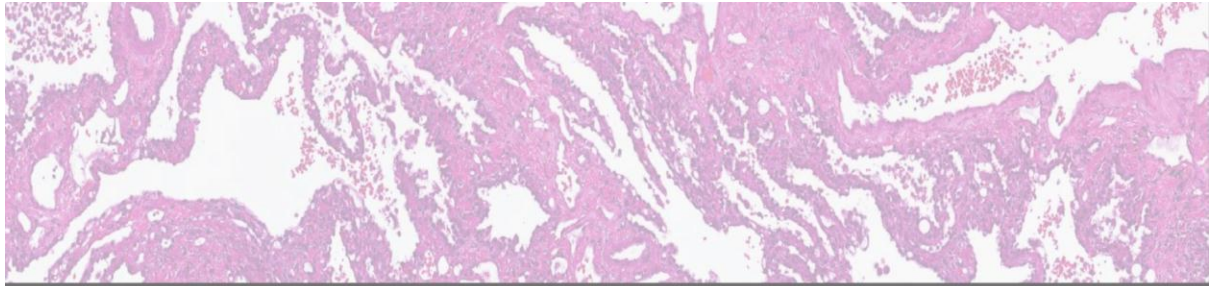


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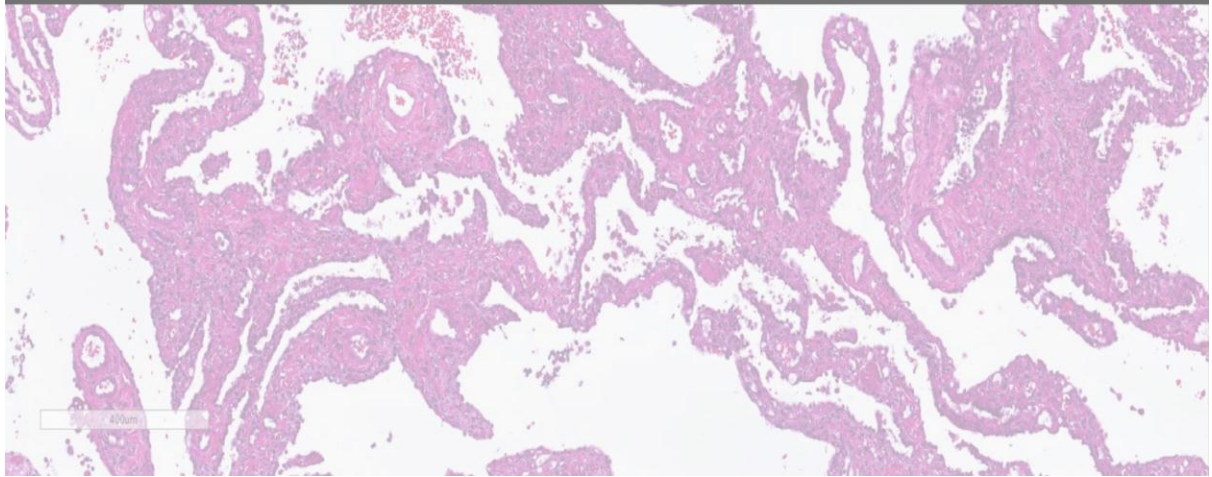




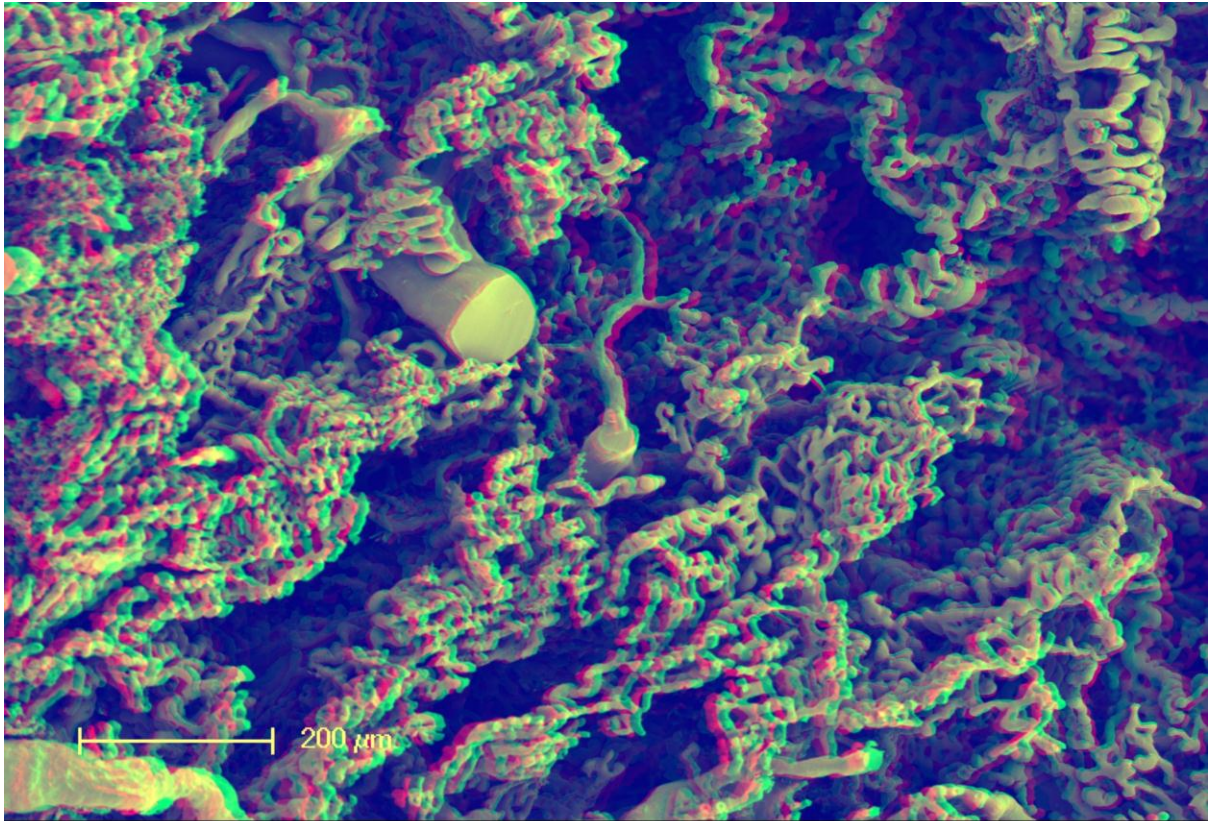
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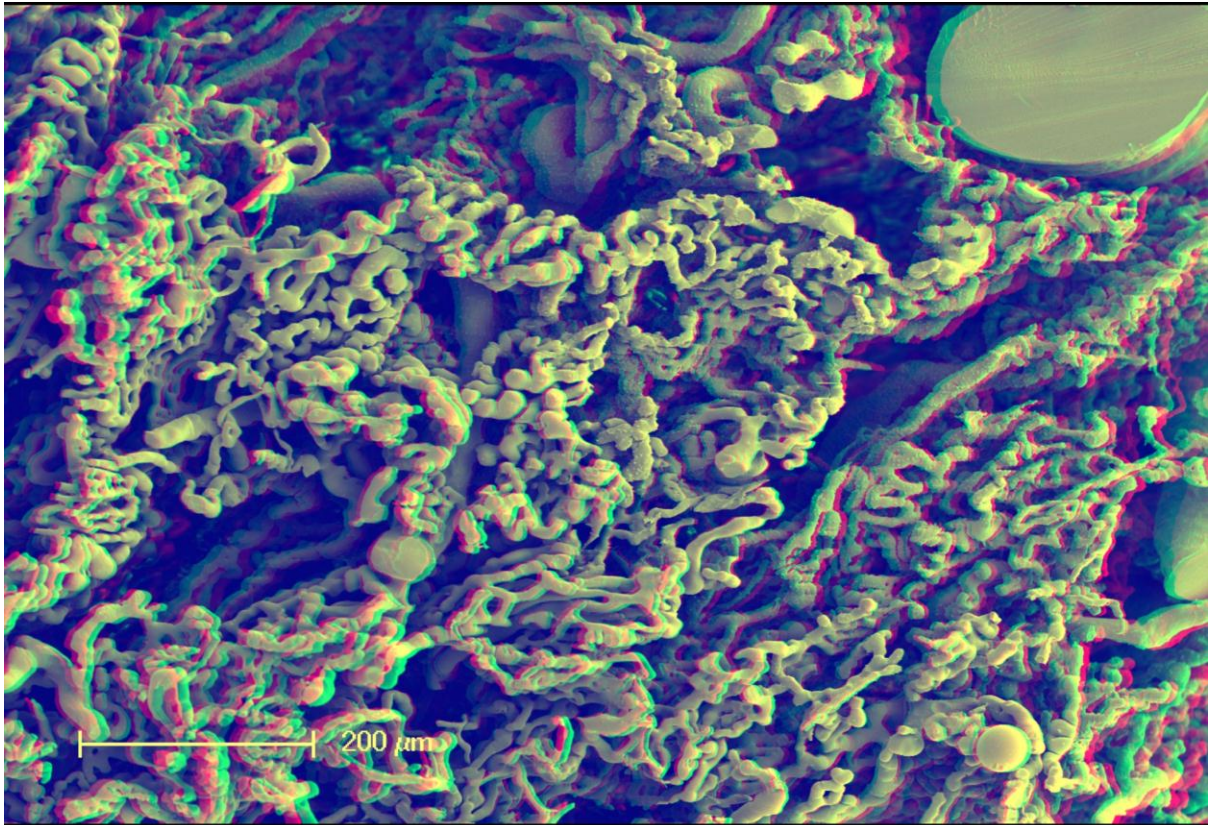
non specific interstitial pneumonia (NSIP)





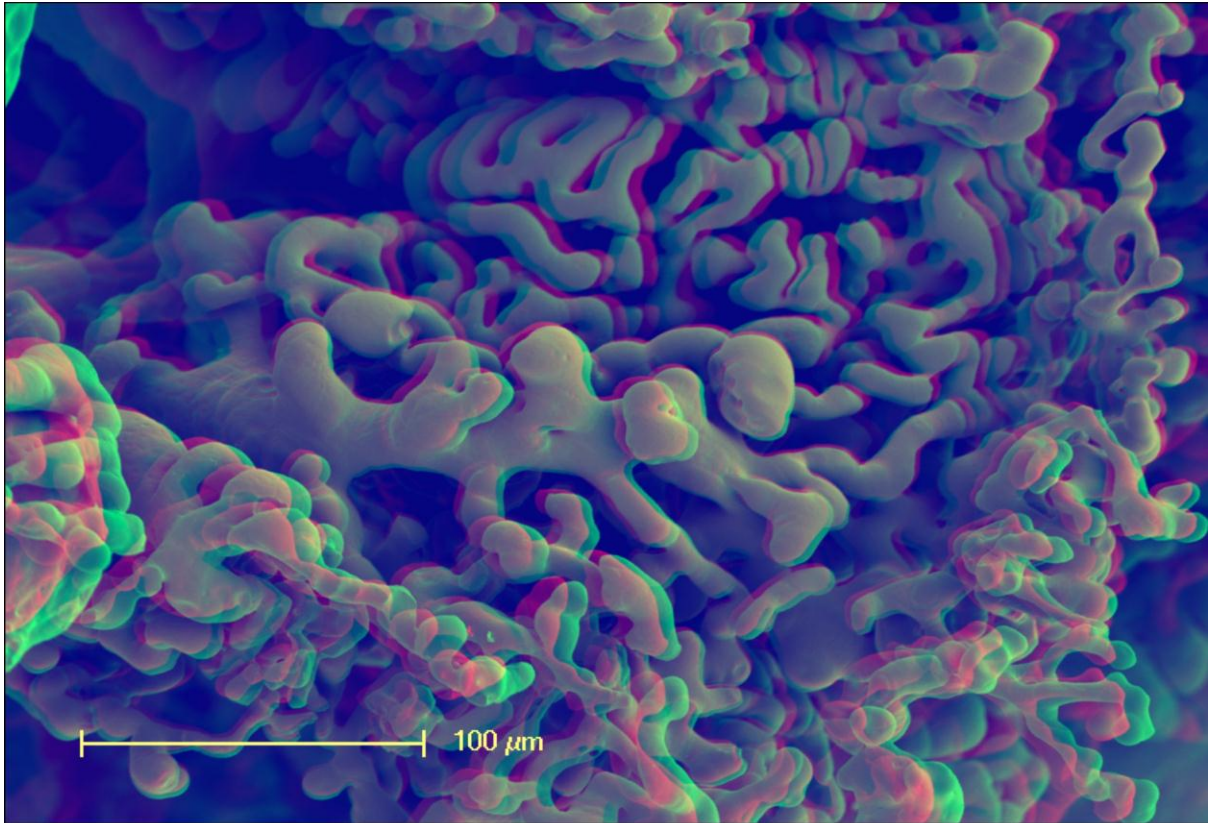


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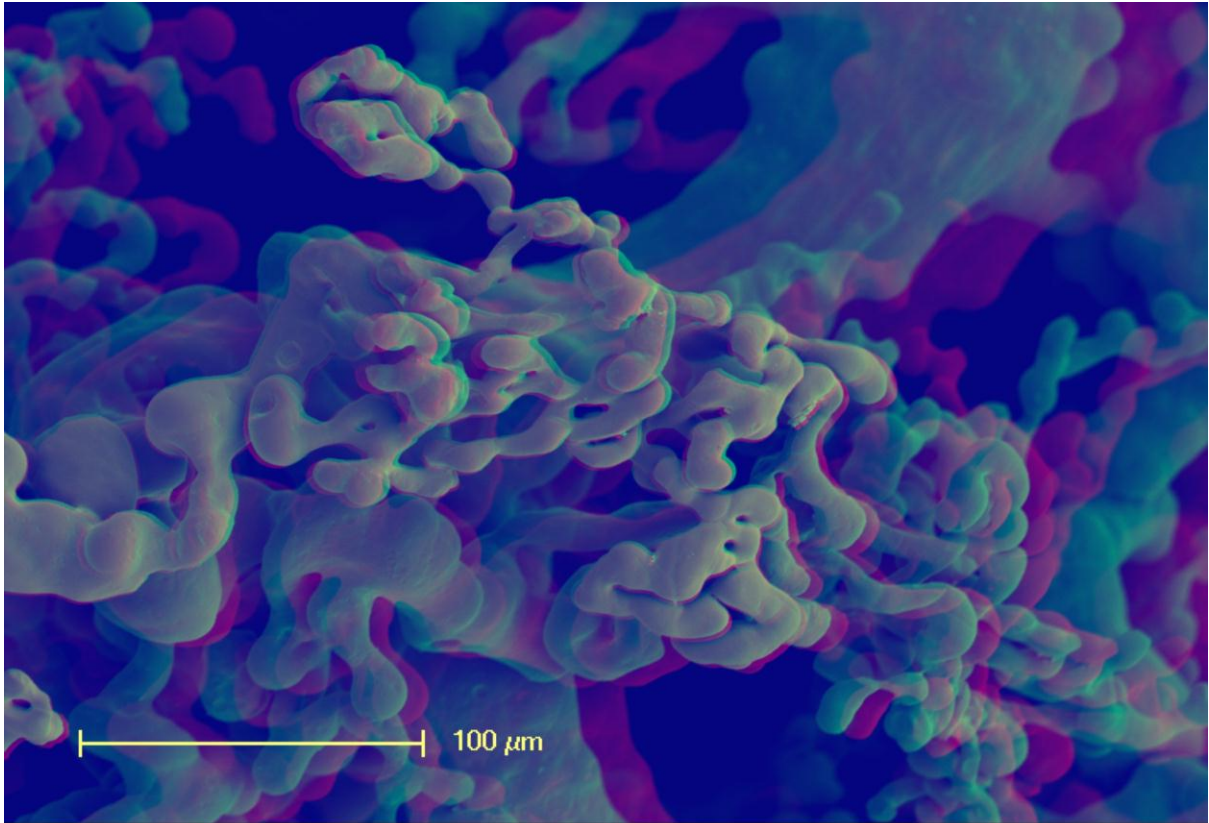


Morphomolecular motifs of bronchopulmonary neovascularization in interstitial lung diseases (ILDs) by Ackermann *et al.*

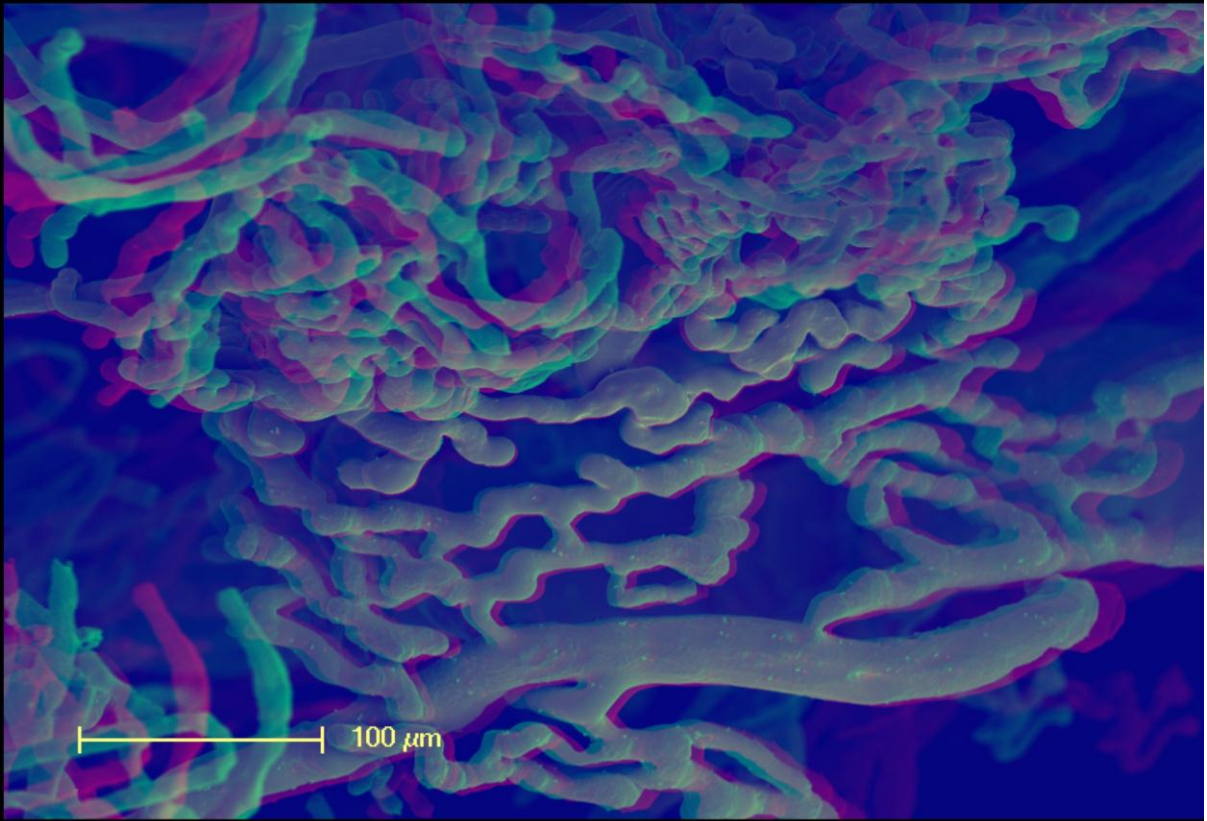




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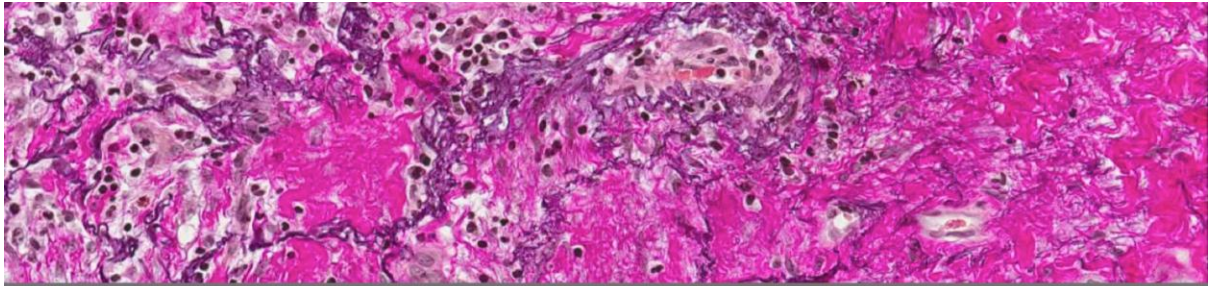


Morphomolecular motifs of bronchopulmonary neovascularization in interstitial lung diseases (ILDs) by Ackermann *et al.*

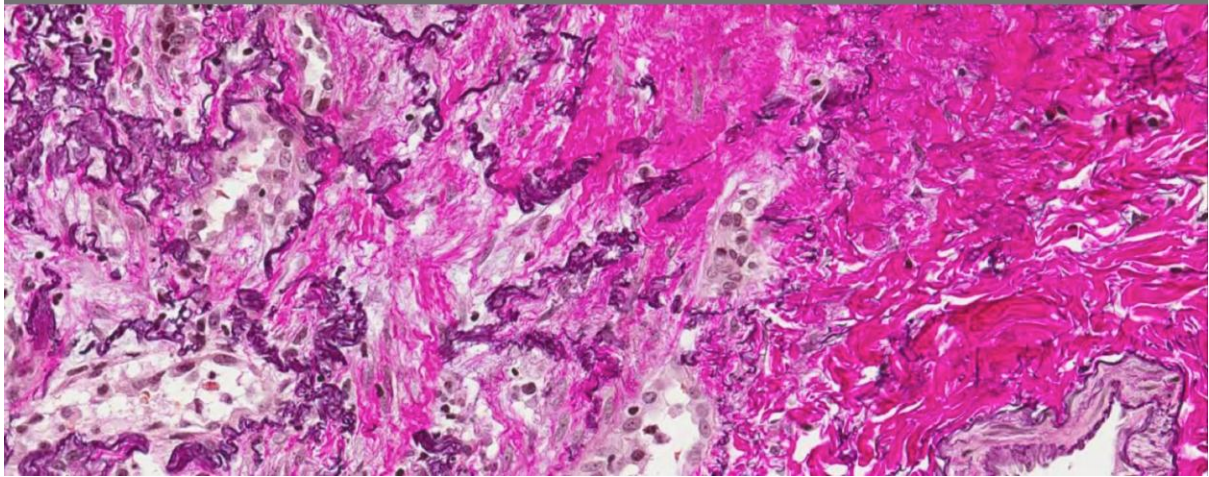


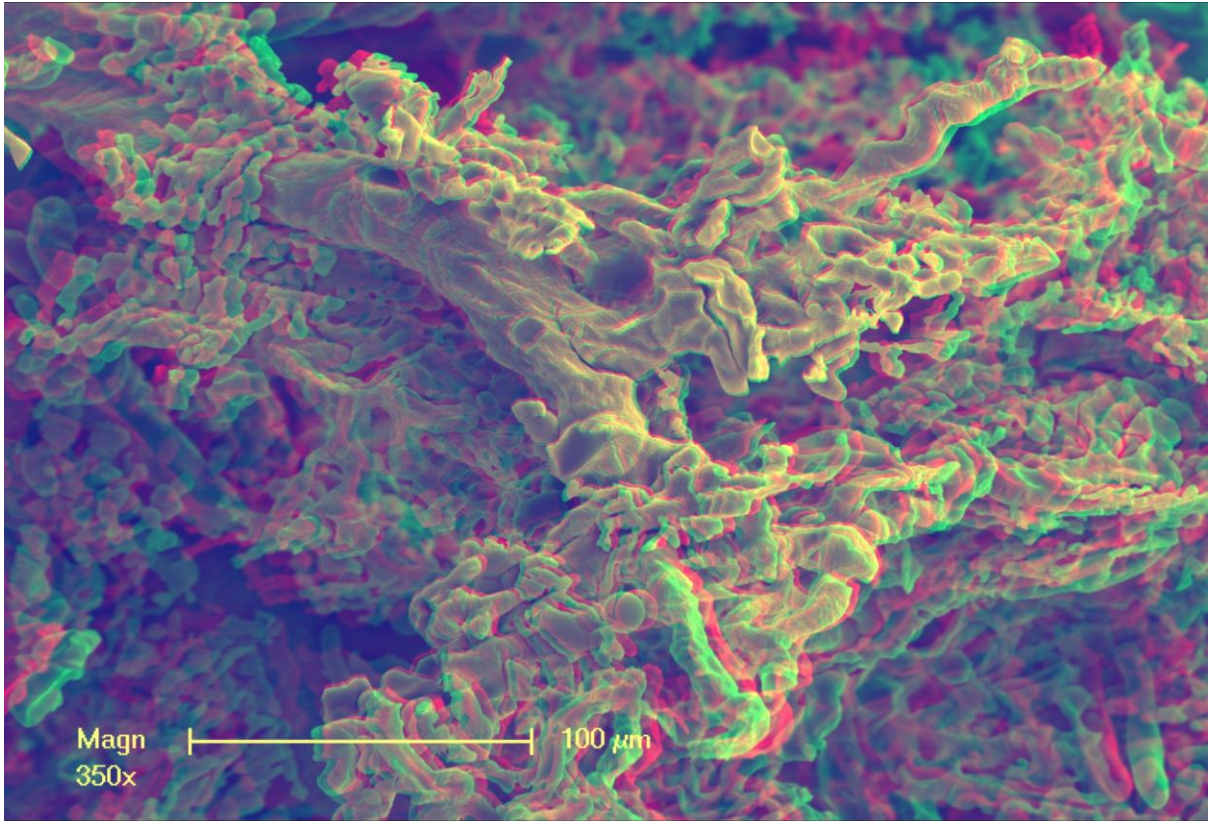
Morphomolecular motifs of bronchopulmonary neovascularization in interstitial lung diseases (ILDs) by Ackermann *et al.*





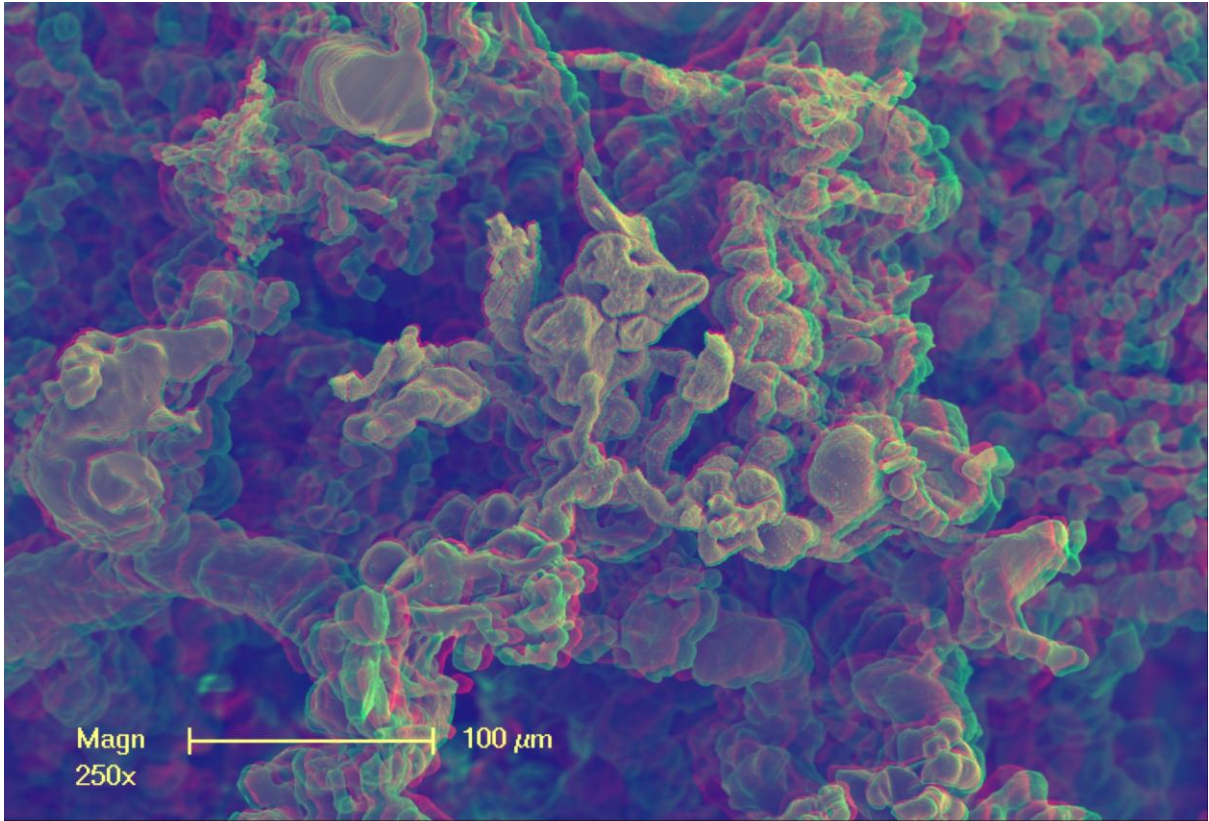
alveolar fibroelastosis (AFE)



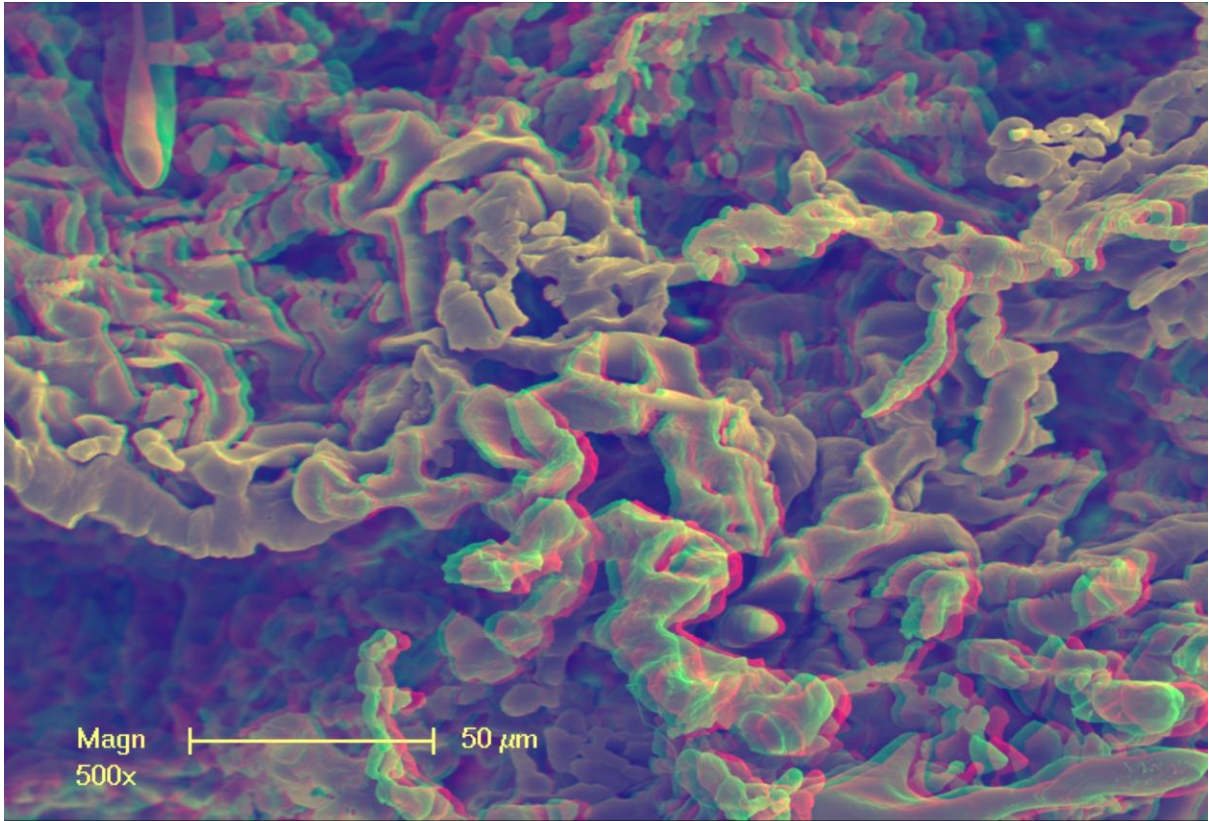


Morphomolecular motifs of bronchopulmonary neovascularization in interstitial lung diseases (ILDs) by Ackermann *et al.*

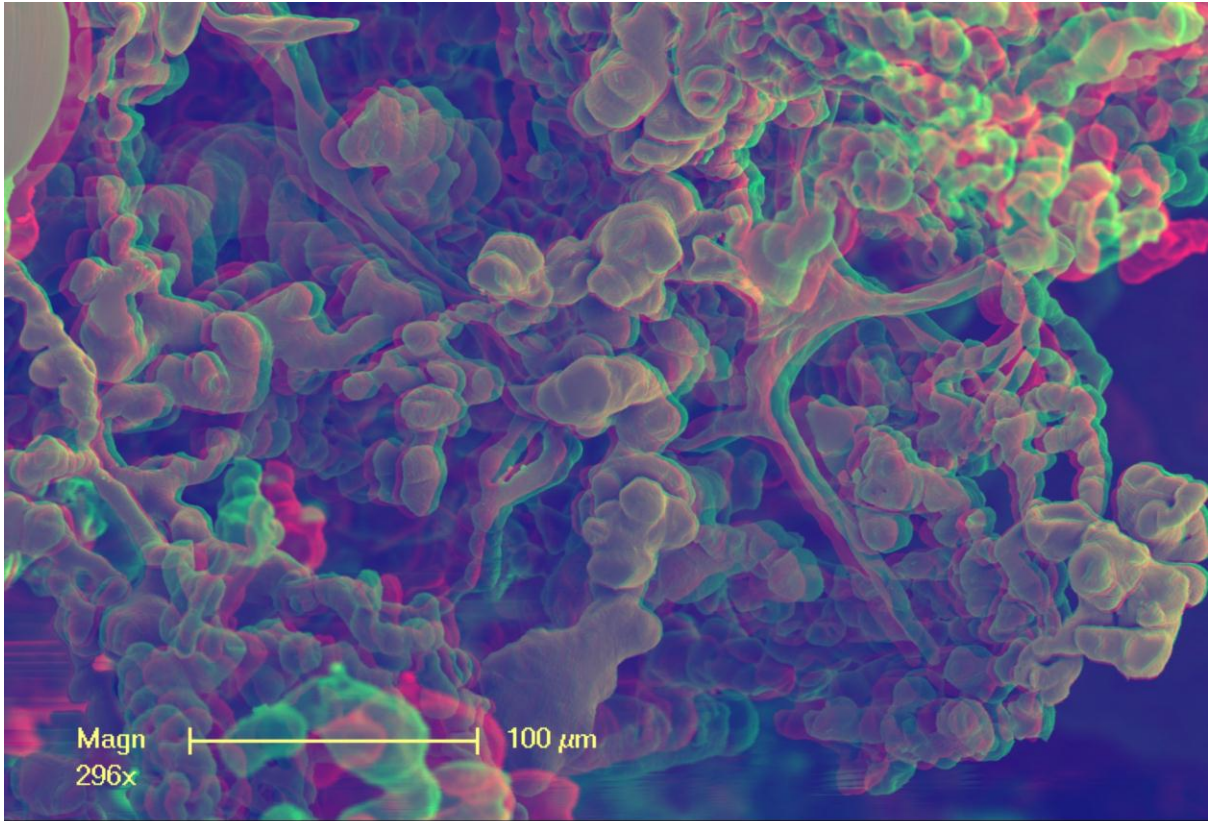




Morphomolecular motifs of bronchopulmonary neoangiogenesis in interstitial lung diseases (ILDs) by Ackermann *et al.*

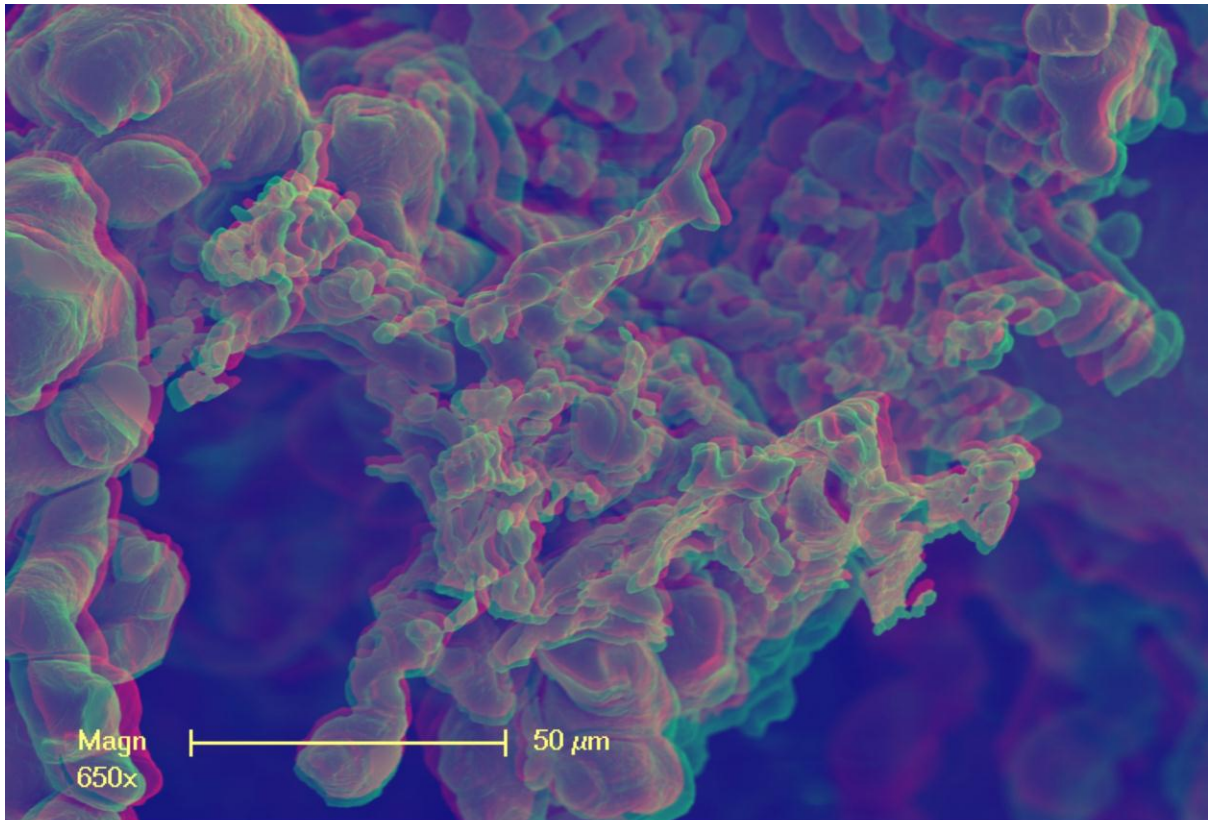


Morphomolecular motifs of bronchopulmonary neoangiogenesis in interstitial lung diseases (ILDs) by Ackermann *et al.*



Morphomolecular motifs of bronchopulmonary neovascularization in interstitial lung diseases (ILDs) by Ackermann *et al.*





Morphomolecular motifs of bronchopulmonary neovascularization in interstitial lung diseases (ILDs) by Ackermann *et al.*

<b>Sample</b>	<b>Group</b>
S01	AFE
S02	AFE
S03	Controls
S04	Controls
S05	NSIP
S06	NSIP
S07	UIP
S08	UIP
S13	AFE
S14	AFE
S15	Controls
S16	Controls
S17	NSIP
S18	NSIP
S19	UIP
S20	UIP
S25	AFE
S26	AFE
S27	Controls
S28	Controls
S29	NSIP
S30	NSIP
S31	UIP
S32	UIP

Gene	S01	S02	S03	S04	S05	S06	S07	S08	S13	S14	S15	S16	S17	S18	S19	S20	S25	S26	S27	S28	S29	S30	S31	S32	
AAMP	1049	1213	657	1387	35	1291	910	246	978	1079	1688	1537	1304	873	1191	1713	924	1371	1560	1411	1941	351	1150	666	
ABI3BP	2832	2945	1408	3044	18	2299	1547	962	1454	2166	7049	2749	3797	2777	2905	2906	2982	3570	3159	3599	2501	1035	3006	814	
ACHE	145	248	315	140	80	86	114	181	89	113	143	102	146	111	139	171	41	81	150	172	446	27	135	102	
ACTG2	2530	1303	925	4141	13	1898	1152	843	1960	3561	1916	2290	2147	2215	2704	2732	845	2892	5151	1458	3062	487	5361	773	
ACVR1	976	831	375	861	3	585	600	165	962	1237	1179	964	961	719	494	565	843	1211	1177	1154	585	361	794	149	
ACVR1C	24	34	213	133	10	25	52	324	36	44	32	94	22	37	26	24	42	33	93	332	64	18	62	22	
ACVRL1	1249	989	2528	5653	86	2015	1563	536	604	1508	4419	4823	3508	1359	946	557	1830	2050	3417	4919	998	1233	1006	250	
ADAM15	1692	1187	2131	2726	156	2104	2519	736	1380	2125	2724	2935	3118	1680	3540	3834	2463	2474	2703	2011	4896	438	2334	2579	
ADAM17	1991	1660	2197	2397	77	3025	1720	900	1168	1589	2410	2404	2789	1112	1813	2454	2310	2431	3160	3297	2670	571	1153	1597	
ADAM28	306	455	96	220	7	161	339	49	313	452	252	262	314	254	183	544	325	172	422	141	330	89	523	116	
ADAM8	160	443	110	213	5	67	159	38	216	263	234	215	117	126	171	208	126	137	179	224	222	27	156	57	
ADAM9	2046	1876	920	2832	15	1749	1097	309	1701	1637	1893	2213	2624	1530	1502	1236	1588	2064	1946	2060	1389	804	1357	414	
ADAMTS1	2430	7159	3437	4557	29	7249	1456	769	3004	1851	7845	6263	5257	1269	5677	8846	13191	10183	11491	8867	6554	1357	1533	1806	
ADAMTS12	336	387	315	353	14	203	229	397	329	457	292	280	488	256	186	171	330	240	409	465	137	138	184	42	
ADAMTS8	493	417	739	666	11	731	228	122	306	739	196	1142	792	363	440	546	452	78	1315	1198	1160	624	95	629	145
ADAP1	196	300	361	464	118	183	339	167	184	279	330	402	315	161	233	276	222	229	471	505	282	60	229	149	
ADD1	1961	1676	826	3285	3	1397	1106	321	1314	2429	3694	4176	1789	1500	880	1074	1763	2297	3565	2902	1016	990	1869	258	
ADM2	34	49	253	109	89	18	57	124	61	55	13	44	23	61	17	80	27	32	41	87	49	5	128	12	
ADRA2B	16	10	61	28	43	16	25	50	23	28	19	31	16	18	20	31	85	32	31	39	38	6	46	14	
AEBP1	11639	6511	2537	5040	188	6810	3052	1378	23969	14285	5514	5337	8814	12468	4063	6544	10704	19377	4643	3891	3683	2044	5607	1461	
AGGF1	159	133	166	202	12	172	173	89	162	216	242	217	172	151	179	233	102	184	226	267	247	49	193	107	
AGK	283	339	402	521	21	185	334	575	233	338	401	520	228	155	173	228	169	246	509	762	229	127	317	77	
AGR2	936	2091	374	3581	18	701	2169	437	713	982	1362	2104	466	194	723	1342	159	1109	1322	991	2232	304	946	354	
AGRN	1549	1435	1044	1519	317	2180	2233	945	1870	2077	2542	1532	2945	1787	3840	3670	1254	1876	2395	1499	3099	461	1922	2248	
AGT	253	66	24	71	4	108	86	20	182	396	83	51	74	183	142	191	435	308	110	95	129	33	212	68	
AHNAK	8468	8490	5494	11737	101	11155	7855	2528	8454	12415	33320	15470	10636	7319	15472	16768	10958	11274	21853	18138	16790	4312	10406	9419	
AKAP12	1793	2410	1382	1574	37	2326	628	499	1138	2232	1943	2092	1420	1276	1164	1659	3276	2920	2623	1442	520	1740	296	262	
AKAP2	1665	1334	1497	2520	17	1203	636	664	804	1153	3702	2356	1362	874	619	518	1022	1950	3311	2934	744	592	1045	119	
AKT1	4072	4044	2789	5926	12	4277	2705	1101	3549	4225	5442	5731	5702	3161	1101	3025	3673	3491	5127	5767	4682	4215	1376	3572	1086
AKT2	1715	2026	1182	1910	135	1791	1513	548	1659	2360	2499	2086	2100	1601	1552	2365	1534	2073	2396	1906	2215	668	1998	726	
AKT3	1303	1122	769	1747	9	1055	838	527	1058	1908	2931	1977	1230	1349	526	1053	1515	2077	2819	3014	886	575	1673	208	
ALB	22	25	39	20	7	19	15	13	17	17	23	24	27	19	38	37	544	37	169	33	22	17	36	37	
ALDOA	8116	8412	4795	10011	84	5683	6538	1881	8577	7865	8288	10519	7084	6271	6029	6593	6631	8322	10175	8951	9693	2205	8893	2812	
ALOX5	4663	3292	4683	4166	97	3071	4657	999	2628	3895	4372	4316	4086	1652	2627	2531	2084	2902	5995	4132	2313	1374	2345	1170	
AMH	40	31	179	73	240	25	59	96	32	26	62	95	41	33	31	32	39	68	94	183	48	30	59	30	
AMMECR1	508	373	675	767	41	398	515	742	320	519	652	651	443	373	294	424	478	428	771	1074	398	112	495	106	
ANG	195	167	504	503	24	295	358	440	240	412	513	601	231	212	215	391	228	448	867	710	344	104	368	183	
ANGPT1	1263	965	736	1648	22	2190	721	596	735	753	1721	1528	5130	1773	1675	1175	481	1558	1705	1839	1399	1315	852	709	
ANGPT2	1143	666	497	246	33	218	285	509	157	288	339	230	240	504	142	164	878	204	734	536	243	153	494	93	
ANGPTL2	1767	1417	670	483	159	989	951	678	2957	1633	1441	379	1699	2183	2465	1629	2565	1980	612	538	2105	239	1750	1492	
ANGPTL4	1111	2084	233	410	3	1145	26	86	384	177	245	257	217	300	261	158	1406	679	106	175	668	100	424	28	
ANPEP	649	580	1024	1472	69	291	1530	426	1077	1484	614	1414	688	359	590	687	1306	790	1282	1132	845	101	767	261	
ANXA2P2	13974	17171	12370	16896	1012	21609	22542	4757	17895	18413	22746	18022	20538	11411	33227	27142	13258	16158	28346	19143	36700	4885	12644	22920	
AP1M2	200	246	172	562	10	198	371	102	236	312	343	485	129	150	150	251	100	389	619	377	262	75	178	106	
APC	251	213	349	478	40	184	394	393	248	308	504	532	350	307	229	237	323	393	739	755	245	97	422	126	
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APOE	12971	23857	7099	8194	463	6898	15133	789	9416	4225	2334	8050	11291	6457	5439	9653	4862	2276	5610	3206	17515	1310	3937	3454	
APOH	56	17	82	159	5	49	18	145	16	40	92	79	24	34	14	14	64	88	114	156	19	10	18	9	
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AREG	841	1885	368	931	17	1106	341	339	471	362	1456	936	1101	66	474	909	2785	1986	2240	1101	1141	235	88	385	
ARHGAP32	230	233	159	329	6	199	314	69	164	297	389	392	232	176	258	401	188	382	579	394	363	86	292	170	
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B3GNT3	44	301	419	331	31	85	526	478	193	168	30	166	60	59	184	302	131	157	230	333	366	26	211	108	
BAD	357	327	424	567	71	369	390	262	465	440	498	575	525	523	700	679	267	464	545	509	740	94	503	326	
BAG2	1052	782	616	1020																					

BCAS1	33	54	90	91	29	33	186	116	20	47	37	45	52	48	107	145	35	113	119	111	205	17	82	103	
BGN	6012	6121	1617	5100	63	8741	2465	908	16156	11100	4810	3160	12855	6680	10513	9585	11398	12463	3425	3491	11718	2450	3950	7119	
BICC1	279	289	56	135	2	143	77	31	286	273	169	123	237	231	83	141	378	276	199	145	111	83	228	31	
BMP4	233	188	227	325	32	149	490	268	650	599	599	302	247	566	334	410	298	455	444	452	197	161	567	145	
BMP5	395	263	397	557	8	451	369	424	92	284	802	414	746	356	576	447	80	129	475	540	472	381	479	268	
BMP7	43	68	23	43	2	35	172	19	20	54	34	46	52	28	169	128	11	38	50	23	158	23	150	144	
BMPER	67	82	187	305	10	412	108	66	98	206	514	501	333	128	277	108	99	163	636	411	150	94	321	62	
BMPR1A	846	804	1462	1434	96	989	1231	1690	1075	1191	1654	1400	1367	1158	1199	1558	862	1788	2245	2280	1304	412	1500	743	
BMPR1B	41	55	305	244	25	71	283	427	106	70	145	115	103	47	206	479	34	180	318	321	430	20	198	215	
BMPR2	1136	1088	824	3265	21	1628	1002	330	1009	1412	3856	4341	2844	1416	1493	1125	1151	2119	2192	2617	1388	974	1070	417	
BNC2	256	183	282	241	27	184	303	364	262	327	302	245	204	410	167	174	270	405	425	464	153	74	501	91	
BRMS1	316	384	249	568	9	321	273	91	324	440	522	636	381	299	256	360	267	431	587	536	380	140	357	86	
BTG1	3404	11347	2378	5533	28	4176	3531	999	2634	5358	7039	7658	5779	2315	3431	6894	4745	3423	7825	7023	7723	1374	2565	1874	
C15	6920	7076	1567	3730	20	4743	1829	643	6700	7640	3327	5012	5770	5719	3424	4830	6401	6729	4359	4047	2990	1455	4775	742	
C3	5211	7311	839	2833	5	2659	929	398	2906	3796	2045	4301	1268	2132	1269	2716	2162	3069	2300	3263	1758	692	3318	344	
C3AR1	975	1299	692	1372	22	839	643	388	1021	835	472	1103	1413	385	661	993	1008	657	1008	992	577	288	492	346	
CADM1	1332	1499	941	2717	28	982	1266	877	913	1218	4079	2657	1298	706	733	420	517	1785	3270	2505	675	858	709	283	
CALCRL	1342	995	1582	9569	6	1455	1566	736	530	2680	6633	6955	3613	1627	1634	925	899	1834	3470	3474	1088	1957	1430	335	
CALD1	6481	3925	2423	6172	28	4690	2542	1374	8992	8767	6389	6117	7744	8548	2117	2549	7736	12928	7866	7202	2718	2074	5812	449	
CAMK2A	25	27	232	79	18	11	117	235	31	29	37	54	42	40	47	18	22	39	73	146	36	12	60	36	
CAMK2B	9	12	7	12	2	14	18	5	10	12	12	15	21	15	7	11	6	18	8	16	17	7	31	15	
CAMK2D	2080	2700	1192	1871	32	2704	1578	460	1885	2467	2726	2522	3220	2286	2063	2821	2883	3171	3037	2457	3504	711	1957	1298	
CAMP	59	25	298	118	32	41	102	170	34	53	39	121	126	20	38	18	26	53	145	306	29	17	77	42	
CASP8	749	1236	792	976	28	637	967	575	689	1051	1024	1313	796	739	696	1343	599	635	1310	1226	1238	237	818	418	
CAV1	3287	2194	2503	6242	38	3646	2262	633	1172	3480	16073	7027	5911	2124	4580	2556	2424	4301	11084	10094	2557	1864	2613	1435	
CBLC	18	28	11	27	1	17	33	9	21	43	14	27	9	12	29	46	6	30	15	21	44	5	28	24	
CC2D1B	81	108	398	254	22	97	151	441	140	112	193	206	83	100	54	85	70	200	258	363	143	20	152	39	
CCBE1	557	322	508	722	33	272	441	403	166	140	1062	652	868	344	472	281	103	285	1250	1369	253	307	534	380	
CCDC80	12090	7468	2430	5695	61	6139	2882	1661	13416	15261	3164	2436	5739	10896	9239	11638	20644	10213	1325	1981	12052	914	7183	4891	
CCL11	298	319	288	217	29	49	407	574	347	202	117	185	51	57	147	69	280	161	449	482	84	38	1130	69	
CCL21	897	2303	1957	1793	125	2278	3582	1074	1323	6342	2047	1084	5352	3865	3498	2161	3376	2315	5613	4601	29517	812	5917	991	
CCL5	1310	8337	745	661	31	467	932	457	1254	2208	1551	907	1098	1208	1149	1838	1208	501	594	1381	914	476	1294	901	
CCL7	26	25	5	6	4	1	11	5	19	9	4	11	9	13	5	9	5	6	7	6	12	3	17	5	
CCL8	273	489	155	184	10	10	61	378	74	64	82	117	23	34	34	22	514	26	123	245	30	19	135	24	
CCR2	222	358	381	531	25	166	295	541	175	1003	280	487	231	257	254	228	64	64	317	681	240	189	562	136	
CCR3	29	30	292	145	16	7	156	397	26	20	26	63	17	11	17	27	31	20	129	250	34	13	92	36	
CD163	3380	3248	3051	6013	67	3417	3190	723	4070	2186	937	8512	4989	996	1905	2533	6678	3400	5218	4164	2448	947	994	515	
CD24	2105	4785	691	1946	26	646	3173	1319	2278	2334	1177	1823	1003	1401	1024	1938	548	2889	2269	984	2489	773	2008	415	
CD2AP	730	866	613	1052	15	667	764	387	663	904	1259	1220	818	587	652	961	561	964	1340	1286	935	194	688	387	
CD34	1887	1018	901	1371	28	1250	1212	598	613	2464	2383	1336	2364	1502	1429	1519	3990	1621	2702	1617	1471	1391	2152	626	
CD36	1661	1544	1379	3933	35	1790	2097	850	835	1936	4435	4115	1425	1559	1429	885	2358	898	4777	5880	1567	501	1595	816	
CD44	7120	8283	4614	7079	910	7188	8801	2489	6456	8851	7605	7618	7358	4923	12897	11112	8221	6367	7361	6022	19016	1669	7252	13915	
CD46	4348	4266	2824	6562	25	3609	2740	996	2878	4924	8739	8108	3689	2408	2255	2874	2296	5222	7645	7298	2708	1874	3169	921	
CD82	957	1144	1148	1617	86	885	1006	444	1089	898	1658	1908	1082	960	1170	1300	302	1539	1431	1416	1208	243	1380	780	
CDC42	3948	4344	2614	5875	39	2965	2622	1647	2702	4208	5996	5623	3700	2156	2081	2471	2473	3611	6209	5921	3164	1673	2634	634	
CDH1	1284	2827	1089	3072	8	1681	1846	494	1694	2274	2511	3246	945	846	1377	1938	464	2664	4494	3245	1907	440	1127	575	
CDH11	4806	4606	1388	2703	44	2418	1566	783	5968	4371	3805	2689	3905	3146	2469	2312	1846	4786	2825	2487	2368	2098	1901	947	
CDH13	414	188	532	534	101	284	211	205	339	271	610	514	253	190	312	159	331	536	975	991	180	47	355	175	
CDH2	105	114	18	42	3	119	82	34	513	432	49	79	92	287	181	172	432	92	441	157	61	97	48	202	26
CDK14	607	369	521	717	16	407	385	525	636	719	779	797	631	565	358	481	603	717	809	867	402	204	629	95	
CDKN1A	7307	9868	2016	1489	45	3248	1559	864	2831	2428	2745	3734	2473	1159	2309	2783	10956	5444	5697	3960	2601	799	1301	902	
CDKN2A	10	33	89	44	2	27	35	98	34	21	12	28	36	19	19	35	40	26	24	69	18	7	30	15	
CDS1	259	388	405	838	25	292	375	459	184	245	570	698	183	132	260	587	108	499	1006	968	735	82	260	292	
CEACAM1	38	60	119	146	11	13	42	191	33	44	54	94	33	34	48	34	28	52	66	167	48	5	45	13	
CEACAM5	66	59	519	582	28	65	2408	299	32	123	26	83	54	18	307	50	52	349	2442	304	758	66	188	318	
CEACAM6	3185	5040	3971	21179	26	3278	10623	1989	2525	7353	3141	9569	2468	1945	3877	3171	2383	7299	16848	18335	5451	1784	5349	1583	
CEP170	1081	1119	592	1170	7	826	744	189	834	1046	1231	1301	1050	741	634	706	944	1005	1202	1070	765	322	814	232	
CEP295	188	210	274	352	11	98	209	358	152	336	318	357	206	226	119	174	141	260	383	459	149	80	251	40	
CFP	122	152	304	473	42	104	151	130	95	233	310	338	214	69	264	156	111	129	384	450	351	59	130	69	
CGN	296	360	547	696	32	396	4																		

CHD4	1941	2051	1012	2512	16	1099	1195	692	1319	2521	2882	2887	1558	1348	1034	1283	1324	1813	2682	2372	1594	717	1755	369
CHI3L1	3023	844	973	1454	70	1775	1072	347	4114	1062	349	1337	222	762	549	1852	1286	2076	314	806	888	105	563	485
CHP1	1532	1516	2472	2729	3894	2798	2044	841	1698	1636	1963	2650	1858	1280	3165	2619	1216	1982	2700	2996	3775	451	1564	4239
CHP2	12	18	65	54	8	15	37	107	7	12	15	21	12	18	24	8	8	16	48	71	45	5	26	28
CHRD1	1706	1913	1126	1911	15	3132	892	551	1762	2041	3149	2615	3039	3061	1743	4415	2675	2588	1672	2072	2045	760	2564	1132
CHRNA7	51	76	319	108	131	46	232	211	47	65	69	126	46	82	43	139	44	52	179	314	190	29	164	156
CIB1	2175	3470	1340	2818	35	1714	2401	1756	1747	2619	2777	3363	1969	1431	1762	2932	1383	2362	3299	2242	3265	725	1907	840
CKMT1A	36	95	594	184	246	53	362	327	74	82	46	140	28	75	115	130	56	28	186	211	218	28	379	505
CLDN1	951	764	172	322	8	494	641	195	1109	574	168	580	145	564	639	987	196	527	438	173	1093	94	929	251
CLDN3	156	251	305	367	291	230	409	224	198	522	345	482	153	119	330	644	94	562	746	448	1032	67	324	208
CLDN4	697	1771	1202	1971	107	1440	1068	408	999	1605	1736	3744	710	482	1206	2460	481	2611	2666	1733	2775	253	804	1028
CLDN7	1061	1438	1658	2161	136	2156	1815	566	983	1221	1958	2410	986	609	1613	1711	564	2088	3421	2043	2808	425	869	1138
CLEC2B	2576	6248	2385	3236	72	1713	1606	869	1907	2406	2910	2744	3473	2003	1830	2007	2473	1841	3031	4003	2355	626	1810	1111
CLEC3B	945	701	1276	2502	304	2158	1851	889	658	2111	8598	4042	1911	1669	3165	1281	4215	2700	4518	3574	1741	1025	1443	1082
CLIC4	2858	2527	1944	4938	14	3873	1444	762	3538	5163	5982	4283	4387	2005	2019	3210	2459	3624	4070	5867	2856	1905	2242	606
CLU	9487	14672	3158	6844	51	13961	11041	2188	13621	11862	12008	9175	16050	12273	16906	32855	4187	13405	12042	12399	26130	3396	17627	13114
CMA1	97	87	6	20	6	10	118	14	30	43	31	13	148	47	64	88	24	17	17	15	77	7	220	75
CNN1	462	313	129	555	13	1024	284	149	590	629	360	293	535	911	733	1181	283	1147	606	213	1152	99	805	515
CNOT10	429	681	437	696	22	531	410	529	367	634	859	662	541	342	355	533	319	471	752	867	548	167	477	229
CNOT4	492	567	471	730	19	412	492	393	439	734	932	870	643	571	326	488	575	732	926	1067	476	214	700	118
COG7	621	780	606	825	34	541	696	576	537	777	949	821	725	577	528	813	509	716	944	1023	732	257	784	310
COL18A1	5021	2709	1390	1835	181	2542	2801	1023	2460	4877	1677	1698	4104	3783	2354	2729	5044	3045	1961	1858	2467	1376	6146	833
COL1A1	91196	60428	4736	8083	323	24854	31890	10754	95394	60631	3761	3437	46297	35083	72301	44796	157439	51782	4951	3574	49316	6045	17530	34951
COL1A2	26692	18419	3342	7753	979	13987	9701	3084	35265	25660	5370	4989	25051	17189	30156	19730	55554	21140	5029	5287	22335	4054	10595	12768
COL3A1	79594	65667	7303	20390	176	35415	24185	7220	70160	78784	8370	7983	73083	35492	70400	34242	89280	38585	7567	6240	46921	14868	21684	22111
COL4A1	10634	8325	5025	6086	345	15604	3029	1199	6816	10125	6664	5191	27573	7710	8812	4964	15600	8259	3579	4510	9097	3456	3675	1660
COL4A2	8163	8348	4557	6124	815	14471	3005	893	6950	10095	8091	5579	22669	6820	13675	7565	10380	7462	4217	5420	13017	3395	3887	6092
COL4A6	78	69	12	59	3	60	39	23	38	48	102	43	69	56	102	164	16	59	49	50	94	10	211	53
COL5A1	8346	7051	1794	3110	53	3100	2960	1204	9625	10725	2476	1806	6546	5309	3145	2053	11688	7621	2570	2130	3009	2006	3107	728
COL5A2	2466	2445	1008	1525	66	2238	997	665	4979	3287	868	1001	3257	1761	2319	1628	4910	2961	1097	1042	1698	420	1106	819
COL6A1	8559	5568	2335	4296	44	3260	3699	1142	6509	9744	4682	3509	4243	5144	3651	2913	11904	7406	5597	5762	3199	1680	7000	1060
COL6A2	18402	12958	4887	10824	157	9117	6332	2578	13796	20054	8687	7877	11443	11360	10954	9269	27910	14366	12479	11039	9030	2854	13969	3024
COL6A3	9838	9845	2071	3494	32	8455	4084	1727	6865	9458	2818	2319	10232	5203	14396	11173	7531	4198	2042	2927	11033	2187	5703	6079
COL7A1	278	215	358	260	260	225	988	391	746	524	175	245	313	485	999	1152	202	516	247	168	870	78	1011	315
COMP	200	57	257	70	217	657	421	263	2602	894	25	37	110	482	569	565	1548	1076	78	75	617	81	302	382
CREBBP	761	881	670	1235	72	705	694	311	769	1026	1348	1273	960	792	416	699	1054	1241	1575	1486	647	230	864	209
CRIP2	1987	1865	1812	3022	222	3332	2818	1338	2384	4150	5195	3368	5352	2963	6018	4623	2580	3564	3789	3657	6152	809	3704	3343
CRISPLD2	1562	1958	1278	1107	8	3629	707	540	1678	1233	1101	1579	2006	697	1313	2121	3061	3501	2641	2026	1779	255	1184	541
CSF2RB	274	262	265	405	51	117	173	215	166	246	253	232	223	159	169	178	135	150	260	281	212	94	322	58
CSPG4	520	360	810	1271	134	1155	421	303	502	500	1017	1591	1456	448	644	450	843	1042	1591	1596	1108	289	708	270
CST7	294	1492	705	953	41	261	268	299	301	513	358	571	281	190	351	587	325	284	653	1022	475	88	346	180
CTNNB1	7533	7822	4247	8921	39	7349	5154	1685	6386	9719	11075	9495	7028	4111	5021	6928	7293	8609	11304	8400	6632	3005	5670	1237
CTNND1	2094	2280	2118	3412	53	2910	2542	949	1966	2655	5664	4319	3424	1986	3472	4016	1377	2658	4174	4300	3748	774	1992	2288
CTSG	286	200	242	212	33	38	406	208	90	93	102	87	626	126	348	273	75	52	149	230	382	65	629	382
CTSH	8371	5006	3440	15702	6	4479	3971	1532	4006	8751	7076	15629	3164	2698	2186	2907	3160	8819	14423	4636	3121	1726	3702	1237
CTSK	5959	4694	778	1431	19	1977	2932	844	6290	4728	1404	1862	2138	2464	2578	5265	4926	3906	1348	1476	3039	521	2575	1790
CTSL	2865	2421	573	2075	8	1383	659	95	866	1228	1241	2799	994	319	713	704	855	653	981	939	873	345	659	171
CUL1	633	760	508	1033	11	750	453	415	459	729	1278	926	656	384	479	798	435	728	1067	1056	849	246	638	276
CX3CL1	591	1210	951	2798	17	1621	561	255	335	1175	3252	1750	1956	485	524	618	496	1154	1828	2118	525	872	640	106
CXADR	374	344	1365	1212	33	238	449	2348	383	422	1179	832	263	289	224	363	151	719	1364	1654	383	111	320	128
CXCL10	236	2920	397	683	21	95	122	417	202	153	488	221	369	60	311	133	189	50	193	357	140	103	135	32
CXCL11	42	718	256	320	9	26	116	458	51	37	155	113	84	20	86	21	105	11	201	311	45	10	81	7
CXCL12	2000	1769	294	633	512	1485	1036	611	2777	1871	860	430	1731	3863	2654	2824	5385	1790	412	495	3550	380	2533	2689
CXCL13	25	849	7	11	1	155	618	6	120	873	43	363	152	128	197	2247	126	27	27	28	302	7	412	107
CXCL17	3736	2353	1907	6355	39	2532	3896	949	1550	4289	2845	6062	683	811	1645	2481	1061	3392	2621	2501	4103	587	2360	1211
CXCL8	1343	1939	2171	3387	33	441	616	477	503	288	2794	3328	310	133	683	1579	4156	1143	3410	2836	486	47	341	242
CXCR2	71	113	888	936	41	44	213	584	65	57	364	505	110	42	161	203	99	195	813	1052	107	23	245	132
CXCR3	177	422	163	131	31	82	1																	

CYP1B1	585	766	528	495	9	706	484	191	977	651	115	492	170	741	274	434	1114	698	535	167	754	84	379	137
DAG1	571	497	666	1016	15	750	592	399	650	941	1200	1153	1097	492	624	752	275	701	1194	1158	823	288	638	278
DCC	82	35	21	42	3	31	30	11	44	38	77	78	44	24	29	43	16	82	28	60	42	7	113	15
DCN	27807	22306	7090	17616	18	22488	10167	3748	19886	28771	30051	16936	19846	24330	22517	28901	30602	28638	25468	19975	17395	10298	22666	9102
DDR2	1463	1166	858	1559	37	965	720	690	1196	1798	1848	1203	1507	1442	757	939	1729	1688	2052	1620	686	591	1839	269
DDX50	584	637	814	821	36	436	499	943	513	717	871	777	588	482	399	586	459	628	957	1307	567	224	652	101
DENND5A	673	511	557	853	17	574	444	316	443	655	975	721	757	438	372	408	564	707	898	860	507	203	516	130
DENR	756	757	402	926	22	387	549	493	581	952	1039	938	557	550	375	383	472	818	839	970	583	356	724	125
DES1	520	359	446	937	20	334	344	355	298	404	728	823	369	334	218	256	398	588	741	815	309	117	421	53
DHX16	464	593	345	633	9	505	455	226	438	509	721	668	533	440	438	712	332	447	673	636	760	176	574	254
DICER1	1330	1549	872	1738	17	1606	956	714	929	1376	2133	1667	1286	720	1210	1968	792	1080	1554	1648	2225	476	1095	624
DLC1	912	833	844	1791	23	840	453	272	447	661	2866	2062	846	426	558	381	806	1324	2250	2424	549	434	402	174
DLG1	933	1044	837	1309	19	776	1152	775	839	1260	1505	1457	1105	986	709	1057	930	1300	1749	1667	1011	408	1301	387
DLL4	696	600	962	1312	58	484	393	321	235	362	1811	874	435	324	633	516	403	445	1394	1208	711	230	428	352
DNAJC14	124	147	223	245	17	209	183	124	135	205	307	266	230	118	193	250	193	195	288	305	289	56	202	129
DPT	464	878	587	740	60	1692	483	786	2769	1282	3024	835	3519	2176	3805	2597	4385	2248	1246	1613	3890	834	1557	1403
DPYSL3	2806	2426	1223	1761	24	1907	1306	1003	3767	4500	4052	1838	2674	2390	3473	3063	3214	3475	2528	2843	3863	857	3090	1297
DSC2	566	537	645	894	41	464	634	549	716	526	599	756	411	288	502	419	377	549	859	807	673	166	360	430
DST	2670	2153	1900	3597	34	2863	2593	1434	2715	2812	4430	3093	4544	3803	2896	2607	2368	4587	4094	4061	3043	1484	3301	1034
ECM1	785	597	465	567	72	640	631	437	671	1398	559	426	1011	546	838	716	890	642	416	622	969	291	843	804
ECM2	742	633	346	530	41	779	398	621	612	962	1200	398	1356	812	936	841	925	992	500	612	764	451	866	319
ECSCR	533	346	600	1027	3	566	454	165	221	628	1617	1147	962	761	580	500	643	641	1035	1048	565	334	844	184
EDC3	546	515	333	696	5	475	527	192	517	619	778	726	591	517	357	456	574	777	878	773	496	163	630	139
EDN1	798	1090	929	843	37	1308	1007	412	386	1082	2423	1454	2251	816	1222	1055	839	1270	2050	1675	856	668	509	635
EGF	46	18	256	219	13	31	82	319	28	46	20	175	34	20	17	16	16	47	117	261	26	18	29	16
EGFL7	1090	523	1494	2496	426	974	1633	875	764	1151	2614	2688	2514	2051	2247	1228	909	1521	2552	3211	3481	463	1333	1728
EGFR	1136	958	1253	2106	31	2387	1337	818	917	1278	3133	2891	1401	862	1312	2566	1119	2013	3381	3188	2098	452	1314	762
EGLN2	1372	1192	1206	2590	18	1297	1423	500	1199	1808	2452	3111	1528	1333	842	1135	1256	2795	2876	1310	400	1409	293	197
EGLN3	334	703	370	273	9	104	203	418	237	274	218	322	92	175	102	147	137	193	431	612	123	28	268	56
EIF2AK3	550	558	499	604	20	633	613	400	436	618	625	828	570	433	499	1028	663	611	876	926	781	113	792	267
EIF2B4	697	732	636	931	27	824	576	551	530	791	1126	913	652	525	550	934	497	697	1050	1134	897	238	737	281
EIF4E2	952	812	1229	1463	48	1086	1039	872	998	1218	1262	1308	1052	856	718	919	1075	1097	1491	1591	863	266	1129	346
EIF4EBP1	434	344	494	987	9	292	377	137	476	530	443	675	511	325	327	414	519	408	664	901	449	147	358	100
ELF3	2830	2719	6117	4468	98	2146	3552	1710	1190	1427	4467	6892	1718	653	1422	3275	1098	5662	7221	2714	4001	222	1282	1421
ELK3	535	555	473	557	48	418	544	228	476	857	816	696	494	616	378	646	649	632	636	633	668	166	842	426
EMCN	435	418	389	2185	14	587	418	371	133	798	2609	2442	1380	691	369	242	387	598	816	1147	300	750	800	61
EMILIN1	3354	3224	1471	2402	252	2371	1167	649	5062	3162	1638	1957	4295	3646	2766	2205	2126	4118	2149	2374	3231	1005	2813	712
EMILIN3	15	24	101	59	8	23	7	122	19	26	45	31	27	15	18	33	22	31	26	57	49	26	18	19
EMP3	1161	987	1204	1476	40	696	1497	448	1164	1378	1119	1402	1753	997	1009	816	1380	1113	1323	1271	969	374	1353	269
ENO1	3077	3315	2691	5159	29	2410	2555	1087	3017	3337	2453	4748	2375	1969	2417	2272	2180	3314	4272	3591	3846	696	2563	863
ENO2	385	501	427	634	13	328	445	383	469	659	614	621	451	391	420	604	419	592	752	1004	631	146	850	202
ENO3	42	56	132	90	11	52	116	130	58	92	59	81	66	70	51	76	52	66	109	114	86	19	126	38
ENPEP	140	243	31	159	1	366	62	23	58	149	214	144	338	97	110	92	144	68	238	504	97	44	93	35
ENPP2	2865	3817	860	1305	39	1996	714	756	2243	2452	6993	764	3141	1806	2586	1842	2694	1851	5328	2698	2155	797	2475	624
EP300	722	605	509	1021	5	541	644	393	701	964	1212	1261	711	746	406	609	650	1014	1314	1319	552	190	925	127
EPAS1	3735	2485	5755	16126	7	5542	3440	985	1781	4314	22554	23264	8742	3851	3127	3062	4105	7755	14608	15425	3107	2152	2644	859
EPCAM	487	605	548	1178	22	864	622	305	460	817	1197	1383	484	323	741	892	205	909	1410	1332	896	158	431	491
EPHA1	66	148	216	208	63	54	173	228	95	155	213	160	59	107	70	109	62	109	182	237	163	38	167	50
EPHA2	935	1154	361	956	5	815	986	228	499	598	1038	984	547	710	653	871	576	1365	1941	1589	1247	252	904	360
EPHB1	26	30	13	24	8	21	24	10	23	24	24	19	34	44	25	25	21	41	34	31	41	7	37	24
EPHB3	233	219	293	189	113	196	194	236	296	341	296	161	152	341	271	359	98	189	209	244	486	103	328	193
EPHB4	724	502	926	1878	242	977	1058	612	763	1305	2140	2193	1503	1266	1124	1214	971	1458	1518	1134	1443	349	1302	538
EPN3	27	27	499	152	208	21	291	277	27	41	28	85	17	42	84	137	36	42	169	233	163	21	210	150
EPS8L1	159	270	237	315	68	189	661	202	284	309	335	248	220	163	383	613	123	326	340	308	672	121	376	342
ERBB2	605	665	610	1059	75	691	940	467	833	914	1130	1069	966	760	921	1328	538	1405	1030	1394	225	1016	745	745
ERBB2IP	2350	2419	1397	3331	45	1538	2148	1061	1756	3066	2963	3518	2029	1876	1030	1557	1977	2659	3325	3337	1483	850	2183	424
ERBB3	256	325	517	785	28	329	544	356	295	611	604	871	291	177	283	536	140	603	946	704	451	125	329	196
ERCC3	266	316	323	367	27	316	398	249	280	344	403	458	410	402	378	343	297	389	510	465	527	67	404	176
EREG	76	95	43	71	2	26	17	20	35	53	150	59	79	9	24	47	382	97	342	144	51	7	33	19
ERMPP1	421	462	188	656	5	34																		

ETV4	38	37	245	97	41	33	171	203	61	91	35	56	41	61	55	39	35	98	108	158	47	19	180	42	
EV12A	601	1062	461	844	18	379	401	348	457	866	592	732	680	276	254	517	434	326	658	902	527	139	415	150	
EVPL	373	422	729	868	119	539	835	397	429	720	1217	996	477	398	558	605	181	927	1606	1154	575	233	525	394	
F11R	939	1183	703	1690	8	1033	712	345	548	933	2244	1901	1059	513	798	913	500	1176	2094	1887	1413	378	713	440	
F3	1280	1548	1205	2538	30	1841	574	436	1339	1007	2214	3700	1895	673	699	1297	1496	2128	2703	1778	1853	293	472	310	
FAM174B	111	102	353	339	9	188	194	293	145	195	416	340	166	105	155	226	83	266	652	573	215	35	184	58	
FAP	784	781	256	245	16	246	170	322	743	685	96	161	274	283	178	181	482	392	143	259	157	60	168	50	
FASLG	50	233	117	75	4	17	58	164	23	57	58	49	22	51	26	49	20	13	64	134	22	13	80	34	
FBLN1	15785	14538	4525	11162	35	18167	7728	3805	10558	15773	11686	8975	14953	14750	15786	22631	12289	17792	15459	12702	13993	5188	16795	7357	
FBLN5	1961	1160	1211	3607	20	1894	851	413	1468	1837	3136	5084	3888	2503	790	1035	2198	4217	6191	4016	1014	1090	1503	176	
FBN1	1978	1603	875	1423	14	2322	931	333	2923	2649	947	1031	3523	2007	2852	2427	5638	2738	1093	970	2447	420	1541	894	
FBN2	38	63	212	187	32	18	148	384	63	98	30	106	54	23	43	51	78	62	136	320	45	12	69	35	
FBP1	5719	1848	5639	3195	27	3508	6772	864	2427	4271	5270	5577	2523	1150	2058	1632	1431	3025	6873	4565	2704	888	1226	1216	
FCF1	1947	2132	4688	4527	453	1436	3830	6427	1784	2624	2789	4407	2078	2264	1569	2076	1733	2603	6034	7829	2486	579	3163	924	
FERMT2	1445	1428	1083	2177	22	2265	628	374	991	1265	2842	1968	1990	848	1628	1884	1108	1778	2465	2503	1892	739	1024	651	
FGF18	51	139	51	83	9	132	60	64	133	160	209	87	191	89	212	101	179	193	100	128	145	41	216	66	
FGF2	712	617	311	521	7	488	180	97	328	414	960	487	338	478	244	373	332	710	705	881	349	125	487	68	
FGF9	57	64	189	165	15	35	84	286	96	95	90	80	24	137	46	68	51	69	187	237	52	9	66	29	
FGFR1	2105	1534	1264	1529	18	2027	995	763	2492	2234	2342	1573	2074	1927	1884	2038	2171	2717	2297	1845	2581	540	2105	816	
FGFR2	159	197	411	424	49	220	375	333	238	310	406	549	239	163	256	451	66	219	562	416	332	173	296	255	
FGFR3	271	139	507	728	49	266	1268	507	256	422	888	1052	406	400	392	630	119	612	855	920	748	261	759	466	
FGFR4	403	231	695	1145	156	582	392	396	154	153	1627	1258	911	797	1260	563	45	507	2200	2104	544	386	768	512	
FGL2	776	1575	369	1029	17	622	550	430	396	1117	1310	753	1194	417	855	924	1059	416	838	989	677	274	716	177	
FHL1	5520	3594	3959	8824	56	9386	3372	2611	2660	6241	13074	9147	12465	6657	10136	9397	5371	9860	12018	12294	10017	3506	8467	4832	
FIGF	1530	428	502	1127	15	376	199	256	445	389	2445	1740	832	1379	225	273	130	890	1710	978	151	453	262	65	
FLI1	748	826	787	1452	45	450	657	407	491	1102	2251	1621	1017	700	418	508	871	754	1658	1775	612	444	874	145	
FLT1	645	1179	672	1124	9	556	408	528	147	551	1902	1877	493	301	310	369	749	714	1435	1574	431	245	494	137	
FLT4	232	192	291	368	7	267	244	91	111	225	625	354	623	445	251	205	212	356	432	498	334	76	330	65	
FMOD	4179	3344	1616	3108	24	2312	1696	1250	4345	4309	2862	2555	3613	4010	1539	1794	5126	4978	3143	3189	2668	1006	3034	494	
FN1	24153	16686	7376	16575	3	17598	9632	2488	31444	24602	19307	14467	29013	11303	14732	8644	15183	19941	11822	15962	11232	8004	10929	2039	
FOXC2	39	42	134	82	68	78	49	105	128	81	68	76	78	78	75	76	185	224	98	103	126	10	89	50	
FOXO4	350	442	549	676	104	464	457	274	510	625	909	951	578	498	520	852	517	709	924	1113	762	118	589	348	
FRAS1	627	371	366	612	26	627	304	377	441	244	1092	601	1707	779	335	254	133	484	521	793	347	376	270	161	
FREM1	301	383	361	287	34	229	318	529	99	405	290	151	489	508	308	282	222	173	450	518	207	205	465	130	
FREM2	141	70	406	655	23	87	195	478	77	242	311	551	79	92	54	78	47	253	452	609	81	23	143	46	
FST	280	250	259	242	6	935	92	351	1378	183	253	275	593	180	388	634	303	364	315	419	542	94	177	234	
FSTL1	7520	7666	3470	5132	28	11307	3982	2000	10612	12704	6207	6304	14998	8530	10788	10570	20310	11172	7562	6091	12992	2791	5324	3381	
FUT3	76	118	345	423	58	106	448	339	131	128	52	315	19	40	144	133	64	118	317	427	243	38	161	111	
FXYD6	870	940	1148	1449	47	1039	991	665	905	1328	2595	1783	2530	1319	1611	1273	898	1413	1630	2236	1481	411	1505	734	
GALNT7	299	299	143	529	7	265	267	63	403	412	302	451	218	167	250	315	196	393	356	379	355	85	227	106	
GATA4	10	11	170	51	35	7	65	119	21	15	10	36	10	12	5	5	25	12	56	92	18	5	69	46	
GDF15	2960	3099	525	598	79	1163	1337	297	1379	1493	321	637	510	1240	1188	725	751	1499	812	389	462	257	534	504	
GDF5	42	22	293	99	22	10	123	290	21	20	22	75	17	11	16	17	18	34	124	197	20	8	99	31	
GDF6	26	9	256	87	26	17	55	303	81	54	6	49	13	46	15	24	46	71	86	256	16	1	82	11	
GIMAP4	1123	3601	1114	2913	51	970	1534	798	977	2188	4058	3512	1727	1439	1220	1574	1081	972	2192	2911	2263	684	1838	479	
GIMAP6	290	469	324	852	5	445	398	279	266	465	1341	1166	500	369	443	372	312	363	702	821	543	206	475	134	
GJAS	1013	782	475	2415	31	538	662	564	708	1385	1886	1700	976	1191	624	272	308	1041	629	973	384	595	804	190	
GLYR1	930	1046	466	1339	10	877	600	354	507	871	1310	1326	749	464	467	803	443	778	1348	1175	807	377	743	225	
GPATCH3	139	170	481	299	53	194	228	392	195	226	212	320	187	177	185	274	144	174	332	399	317	74	261	122	
GPI	2405	2042	1507	2174	41	1740	1977	790	2064	2236	1730	2222	2323	1978	1335	1490	2287	2345	2211	1855	1624	483	2566	529	
GPR124	244	213	112	243	1	239	212	95	313	463	291	198	483	501	309	284	360	407	209	178	328	60	358	132	
GPR56	641	808	1218	1395	52	912	1033	442	759	1074	1233	1277	691	674	918	1413	969	1347	1493	1705	1530	233	1022	528	
GPX1	3107	2303	1678	4080	22	1819	2583	923	3392	2353	1969	5003	3449	2062	2428	2478	2131	2763	3039	3101	3262	723	1994	952	
GREM1	3008	1657	272	128	41	188	720	298	3681	2856	38	75	72	2035	86	719	1040	2016	151	191	922	17	723	356	
GRHL2	92	96	316	356	10	132	233	384	106	127	186	283	128	67	117	174	35	203	361	358	234	42	117	112	
GSN	10607	8259	7569	9918	115	11986	8782	3292	10041	15120	18167	10310	12507	10367	14990	19875	21687	16737	19974	14507	17176	3574	16403	7538	
GTF21	2201	2273	1156	3622	25	1575	2217	595	2076	3037	3812	3564	2973	2320	1531	1717	1978	3171	3766	2823	1859	894	2649	472	
GZMK	404	1709	299	341	25	195	263	374	404	424	596	404	480	277	298	387	882	263	96	168	558	526	70	449	183
HAPLN1	26	12	5	63	2	32	20	2	193	18	122	63	43	26	110	89	138	110	37	13	310	35	74	9	
HAS1	176	223	231	92	44																				

HDAC5	599	689	653	1111	123	903	781	378	851	1169	1603	1194	1342	993	1049	1660	662	1032	1371	1836	1486	287	1166	1069	
HDHD3	289	245	279	326	21	218	308	269	208	388	337	387	226	300	161	362	157	341	396	368	408	91	370	142	
HEG1	2048	1823	1183	3192	33	1570	1294	784	2118	2298	7390	4076	2289	1618	1261	1270	1857	3126	3251	3185	1246	1210	1829	469	
HGF	1532	1261	932	1241	25	802	776	657	647	1295	1033	778	1475	1211	513	634	620	867	762	1150	493	444	1547	239	
HIF1A	8722	10871	3521	5465	75	4738	2142	980	3417	4349	4122	6031	4120	2205	2807	4046	7820	5085	4893	4742	4530	1165	3914	950	
HIPK1	1495	1576	857	1904	13	1174	865	287	807	1400	2443	1908	1409	843	824	1522	1048	1476	2224	1811	1647	548	1141	514	
HIPK2	741	522	786	1444	30	637	739	448	586	962	1676	1730	609	626	443	1026	753	1103	1600	1589	1086	200	1014	271	
HK2	803	846	1152	1553	34	550	1003	589	427	627	848	1572	428	210	274	354	385	442	1372	1738	624	157	374	262	
HK3	429	208	527	659	31	153	516	217	289	261	266	390	343	151	286	164	136	173	300	602	452	75	195	156	
HKDC1	83	63	283	295	45	161	130	346	86	73	58	194	31	51	191	68	47	73	177	362	129	25	78	91	
HLA-DPB1	13562	20740	2593	8078	12	6314	5142	1461	6125	11186	13739	9436	9413	2831	4415	6705	6246	5068	8906	6039	5416	2955	4845	1445	
HMOX1	3042	1624	1302	3544	92	2455	1459	507	755	752	709	11307	6469	700	527	476	1443	588	723	919	1859	415	785	325	
HOXA5	276	197	611	607	18	236	364	540	404	388	1062	1032	439	544	319	447	213	408	893	1096	257	203	841	200	
HOXA7	28	17	273	161	18	21	112	355	34	40	46	49	42	58	18	38	33	39	117	236	19	14	101	38	
HOXB13	6	1	197	84	20	11	82	253	2	9	4	40	9	4	7	6	11	11	100	167	3	1	48	21	
HOXB3	404	399	562	497	33	311	646	720	943	817	697	482	711	940	538	537	284	728	647	958	623	192	978	220	
HPSE	222	373	441	602	22	71	402	591	134	156	144	476	192	73	93	166	137	89	530	743	197	34	285	104	
HRAS	156	161	133	208	37	181	115	60	125	194	260	207	182	121	111	182	112	137	319	284	179	77	151	50	
HSD17B12	1674	2552	1769	3351	18	2452	1657	930	1570	2548	3370	3459	2120	1350	1476	2287	1740	2475	2945	3137	2622	1093	2001	682	
HSP90B1	2530	2444	2180	3048	104	2168	2170	673	2696	3378	2831	2847	2701	2786	1799	2328	4215	3501	3208	3830	2223	777	3757	432	
HSPB1	3521	4263	2366	3545	1070	6113	5673	1561	7441	5519	4360	3749	6731	6383	8764	8592	3955	7388	5746	4795	14547	1094	4826	8960	
HSPG2	8133	6070	3041	5670	135	9193	4147	1484	8313	11520	9751	5429	6062	8570	10907	12182	12314	10277	8249	6860	12649	1948	8616	5217	
HUNK	79	93	279	219	7	69	77	243	122	105	105	182	64	51	79	106	121	144	206	290	126	33	72	47	
IBSP	19	11	149	92	75	12	217	227	232	22	22	113	13	39	10	14	77	43	201	217	23	1	124	27	
ICAM1	8930	8607	5596	9943	41	4346	2417	1522	2245	3897	6774	8427	2116	2406	1649	1308	6346	8040	8735	7088	1686	1241	2152	423	
ID1	1888	1678	5438	11779	196	4880	4273	1377	1772	4737	13340	18773	7550	4204	3353	2137	1432	7220	13099	12112	6592	2361	2207	883	
ID2	1204	2082	683	1287	9	998	585	297	630	983	2331	1950	1339	622	599	856	693	1073	2211	2178	842	306	702	247	
ID4	2232	1583	1562	2627	191	1334	1293	703	1678	2242	5260	4222	2729	3386	1447	1425	4339	4137	6886	4015	1290	1075	3331	620	
IFNG	33	383	323	174	16	20	59	435	26	29	127	100	20	17	10	20	36	21	131	361	22	14	40	7	
IGF1	2069	1223	484	367	38	1516	790	523	2950	2389	339	213	1322	2048	1756	1653	3799	2105	388	320	2023	170	1989	512	
IGFBP4	12587	9491	3496	5951	40	9296	7243	3562	11649	15773	6064	6538	5979	14991	13544	13071	17041	14095	4425	5213	12653	1577	18004	3143	
IGFBP7	21435	22581	3716	14847	96	27259	7110	2498	21165	28356	17171	14382	29357	23677	14414	21669	18907	18120	12209	10994	24714	7075	15616	10466	
IL10RA	1589	2585	739	1391	42	549	1081	557	1002	1703	1262	1524	1058	844	611	1210	1002	531	1209	1108	1227	243	1280	385	
IL11	62	21	166	46	129	59	31	119	34	28	15	30	25	25	14	27	10	94	39	83	45	9	21	21	
IL13RA2	169	157	97	92	8	297	75	193	32	64	9	51	376	116	126	69	11	20	80	192	152	153	188	28	
IL15	179	333	466	396	19	85	358	493	224	221	334	421	226	235	141	165	180	243	423	625	290	67	300	81	
IL18	354	1414	493	785	23	732	894	506	679	533	754	885	500	354	720	949	271	507	657	739	960	217	380	421	
IL1A	69	34	220	179	16	66	72	352	27	20	110	107	31	26	14	22	24	156	264	38	30	44	25		
IL1B	341	424	403	320	30	123	297	453	57	110	733	272	61	55	70	67	466	67	749	610	76	26	166	64	
IL1RL1	305	572	3150	3673	14	1374	294	348	243	568	1994	4060	720	220	555	509	368	663	767	5524	659	405	554	128	
IL1RN	415	478	376	354	24	195	451	217	257	230	101	241	118	114	288	150	153	161	206	413	579	61	262	163	
IL6	988	4122	461	253	9	123	36	4	201	78	834	627	52	70	122	146	5231	1176	825	235	90	21	40	19	
ILK	1072	1035	524	1635	6	1069	869	284	1296	1262	2139	1461	1741	1028	829	934	725	1234	2272	1426	1399	418	1390	439	
INHBA	558	435	450	166	51	221	358	92	748	352	611	150	316	350	230	385	281	797	439	306	227	92	96	105	
INHBE	20	7	253	157	38	16	48	358	16	14	12	38	17	15	18	6	26	23	87	238	23	7	32	32	
IRF6	233	399	516	661	22	305	687	444	173	307	806	648	209	132	452	933	98	401	917	748	95	116	356	366	
ISL1	11	15	352	161	44	5	202	459	13	5	13	96	7	14	10	9	18	10	240	373	28	1	130	36	
ISLR	1564	1293	610	640	63	992	834	553	2979	3210	771	732	1580	1939	1919	2000	2176	1443	898	791	1714	323	1151	665	
ITGA1	2007	2023	1184	4326	5	2851	943	277	1490	2944	4667	4390	5793	2153	1435	1230	1586	3071	2979	3098	1349	1758	1512	316	
ITGA11	662	286	89	142	3	246	194	45	4140	1248	86	84	417	469	197	402	1101	1982	83	51	244	67	191	113	
ITGA2	992	1760	449	946	5	1049	534	189	927	1297	1311	879	754	730	599	757	450	664	903	617	1016	373	691	255	
ITGA3	1468	1648	1614	3168	90	1491	1494	718	1369	1916	4390	3838	2458	1412	1269	965	857	2556	3675	3369	1242	627	1489	367	
ITGA5	2457	2266	1752	2989	5	2731	1009	335	1200	2342	4404	3621	1860	948	1489	2164	2820	2472	3368	3739	2569	725	1567	507	
ITGA6	1490	757	1655	1284	16	899	916	610	630	1221	2976	1899	1127	1057	904	1930	817	735	1554	1630	1588	454	1542	369	
ITGA7	430	564	323	628	228	571	553	430	607	493	822	343	372	659	1108	672	1087	1724	1093	424	342	1261	96	1419	448
ITGA8	1239	697	706	2172	17	952	740	747	305	941	1552	1391	1530	977	818	746	135	1353	1900	1859	785	435	1557	272	
ITGA9	446	479	346	537	4	978	369	388	728	1027	834	513	1291	1034	608	775	364	956	711	606	888	300	595	252	
ITGAM	398	393	403	899	25	220	568	287	512	631	376	572	424	245	320	284	361	257	576	904	275	83	383	108	
ITGB1	9191	8540	4967	11065	30	11849	4815	1975	12365	12011	12334	10267	12884	7338	7200	8177	7332	11700	10719	10981	7565	2904			



ITGB3	144	151	196	229	16	163	140	175	242	231	110	287	244	181	178	193	273	338	183	257	240	61	211	67	
ITGB4	397	679	399	642	270	577	1744	523	754	1135	1903	600	287	1170	1527	2784	1031	1333	1175	636	2360	178	1975	1380	
ITGB6	951	1402	221	1005	13	1041	457	235	999	1455	783	1220	471	524	784	484	181	1534	871	970	665	334	396	301	
ITGB7	156	751	85	140	2	76	171	34	142	324	236	155	122	160	186	313	109	58	94	148	248	73	351	113	
ITGB8	603	266	402	396	25	268	620	438	327	445	214	266	236	353	328	405	164	455	482	484	368	86	495	164	
ITM2A	837	1399	350	1454	6	1214	616	197	357	1237	2512	1744	1172	805	754	1068	897	606	1525	1590	1334	577	844	295	
JAG1	1037	756	508	1378	8	762	555	144	407	1009	1528	1077	1144	758	684	769	1124	925	1472	1368	717	403	775	214	
JAM2	479	366	684	1175	21	530	1081	660	371	864	2132	1408	671	1000	1067	948	1101	979	784	1074	857	304	1184	484	
JAM3	1045	1056	975	1630	37	1360	616	586	1391	1388	1941	1882	2132	1140	1002	1257	1167	1812	1444	1492	1176	606	1016	451	
JUN	2492	6266	2496	2759	36	2187	2989	333	965	1805	16101	10180	2690	515	1113	3025	3595	2729	6491	7331	1613	877	636	667	
KCNJ8	328	435	431	618	14	399	251	483	219	602	751	868	510	345	346	571	396	301	637	871	575	197	400	185	
KDM1A	594	570	433	729	36	486	496	434	438	775	832	814	561	449	433	644	408	601	847	815	631	220	544	195	
KDR	656	453	697	1123	34	576	447	328	508	708	2419	1709	1006	622	476	598	246	655	1708	2383	374	435	688	176	
KIAA1462	416	492	451	981	17	533	388	270	587	512	2185	1224	880	284	686	802	404	775	834	983	654	218	386	368	
KISS1	25	28	324	164	32	22	176	426	18	14	15	103	13	20	17	19	27	20	156	256	22	10	97	42	
KLK3	11	12	125	51	30	7	57	105	11	9	14	32	12	6	8	9	15	15	40	56	13	5	45	21	
KRAS	677	859	884	1340	27	476	773	647	607	796	1248	1045	720	583	500	649	886	1073	1334	1473	704	211	748	164	
KRIT1	652	663	266	809	4	372	566	137	422	831	1033	929	489	573	275	417	379	650	960	874	397	262	789	94	
KRT1	5	10	93	44	3	9	21	133	6	10	8	19	13	7	9	12	9	16	54	100	25	3	26	15	
KRT14	7	13	2	12	2	10	652	4	28	10	9	15	16	4	160	98	8	17	12	17	174	19	29	24	
KRT19	1502	3848	2180	3803	296	2944	7468	885	1687	2746	2488	3462	1127	954	4133	5443	956	2583	5017	4151	6609	716	2335	3195	
KRT7	2482	5005	4318	5365	175	5071	4830	1530	5669	5677	4041	6989	1927	2720	4320	4403	1676	10374	6770	7870	5180	925	2466	1679	
LAD1	296	315	584	502	39	260	542	247	252	316	146	483	71	113	303	240	97	373	320	212	687	42	258	294	
LAMA1	67	36	33	25	2	38	39	7	69	66	28	34	36	35	17	33	65	68	32	61	37	22	29	8	
LAMA3	278	203	314	764	19	363	155	205	127	223	1312	773	321	178	192	301	241	415	1048	1182	293	139	156	86	
LAMA4	4125	2407	1855	2731	147	1853	2202	1375	3061	2728	3827	2117	4467	6061	4120	2213	2744	2428	3086	2975	3067	974	5692	2018	
LAMA5	1108	1192	1902	2149	215	1883	2380	825	1126	1960	2820	2822	2130	1728	2079	2888	1752	2475	3440	2546	2734	498	2588	1478	
LAMB3	652	594	306	806	2	443	512	139	435	686	1255	1058	303	311	463	563	184	708	1273	845	434	156	390	123	
LAMC1	2852	1936	2142	3169	29	2364	1266	731	1835	2236	2462	3176	2962	2677	2351	2015	3900	3622	4914	3819	2032	651	2579	615	
LAMC2	343	489	263	546	10	318	294	229	482	574	803	425	262	206	346	401	137	592	620	771	384	171	224	104	
LDHA	7124	10578	5030	9549	112	5226	3787	3565	6923	6477	5952	9468	3686	3940	2778	2846	9110	9116	7894	8179	4889	1710	5721	647	
LEFTY1	18	20	152	112	14	13	54	232	18	22	59	40	32	17	17	13	21	21	78	186	22	10	25	13	
LGALS1	10209	8052	4983	11054	23	7208	6471	1454	13520	13915	9323	7511	13440	7910	10236	8221	10538	11354	10138	12411	8656	3889	8499	2789	
LHFP	2135	1573	1476	3240	36	2928	1750	910	1317	2772	4362	4146	3860	1756	2264	2894	2920	2900	3063	3762	2482	3133	1274	2434	1181
LIFR	670	713	862	2128	28	1153	1288	725	817	753	6632	3635	1592	1278	1484	1769	1125	1846	4394	4006	1499	372	1104	852	
LLGL2	440	695	842	1110	103	649	724	357	491	932	994	1150	469	319	519	690	284	896	1692	1074	811	237	539	274	
LOX	1210	905	392	1034	2	1380	339	108	1513	1153	880	833	1350	824	463	684	2252	1866	824	780	619	340	653	179	
LOXL2	147	67	347	190	233	100	132	175	145	153	219	182	182	103	145	119	172	183	197	299	166	53	129	76	
LRG1	311	353	526	791	21	219	270	308	192	191	221	676	99	114	148	280	269	576	603	558	485	53	251	89	
LTBP4	2108	1412	2691	2893	153	3693	2941	1778	2128	3241	8182	3285	5632	4577	5920	5018	2634	6189	6920	5088	4281	973	4237	2336	
LUM	50553	39093	4685	18712	21	22781	9701	3408	35981	49790	21124	14267	26562	31693	17260	21404	26737	27409	12483	16829	15955	11129	16372	5609	
LY96	852	1016	267	735	4	586	403	47	579	701	493	718	682	345	535	757	515	430	516	614	790	228	570	299	
MAF	2988	3168	1141	2435	141	1403	1764	722	3086	2427	2211	2424	3500	2674	2463	2151	3178	1967	2913	2839	2492	909	2899	1418	
MAP2K1	977	981	858	1466	18	922	610	438	716	1200	1343	1532	1012	477	638	845	976	1039	1561	1621	1065	373	646	209	
MAP2K2	881	968	965	1419	237	999	1046	517	1065	1119	1037	1296	1240	1081	1415	1769	824	1183	1208	1089	1866	244	1173	1287	
MAP2K4	444	327	473	597	13	321	388	548	522	326	412	494	582	345	397	223	304	263	483	662	836	306	103	388	87
MAP3K7	791	858	568	913	27	607	657	445	684	1020	1138	1065	838	628	474	704	698	949	1179	1187	689	338	774	180	
MAPK1	1313	1270	748	2022	14	984	873	450	758	1372	2063	1889	1248	703	655	843	954	1267	2251	2187	823	457	981	218	
MAPK3	1314	1534	892	2460	9	1354	1151	302	1239	1828	3499	2676	2215	1613	1355	1669	1441	1990	2558	2265	1849	769	1698	866	
MAPKAPK5	264	321	240	380	11	223	265	80	236	319	251	364	318	188	175	189	162	231	395	342	259	95	216	101	
MCAM	1623	837	1321	1377	19	1441	665	411	571	1011	2524	1436	1999	881	1204	1287	853	1271	2045	1253	1566	473	1307	568	
MED1	774	928	393	1151	4	723	603	175	694	983	1378	1151	778	692	593	751	982	970	1174	1160	1010	378	945	205	
MED23	436	473	179	591	3	282	398	88	308	613	723	616	392	344	242	337	255	456	660	585	353	178	499	77	
MEG3	775	641	218	253	12	788	757	313	1149	640	246	285	904	969	841	946	2069	1195	332	269	1071	190	808	470	
MEOX2	574	536	440	850	25	724	691	600	258	1139	629	482	2618	997	667	726	642	367	1110	1394	333	779	637	198	
MET	344	392	367	841	14	458	452	475	308	659	833	935	178	240	621	932	209	522	984	1079	741	131	450	363	
MFAP4	10395	8996	3499	9215	146	12337	5248	2525	11735	10896	23885	8298	12921	14701	14537	19626	6500	22949	7839	10839	15153	3945	16322	10645	
MGAT5	756	817	443	854	21	552	544	417	612	962	914	827	632	356	345	602	537	637	982	936	590	283	550	177	
MGP	23335	17384	5113	20351	17	16654	5475	2953	18911	34300	15372	11636	18226	30604	11302	1777									

MMP10	9	11	19	25	2	30	19	3	16	28	6	6	15	10	56	153	8	23	7	19	198	7	58	11	
MMP12	18	643	11	18	6	11	70	1	435	61	16	32	14	11	13	171	12	7	13	9	62	4	52	22	
MMP13	14	13	251	127	14	13	254	395	59	42	11	73	16	21	186	155	29	19	120	281	103	7	154	70	
MMP14	4543	4433	859	1912	5	2050	1107	213	3035	2969	1385	1475	2244	1249	2290	2362	1994	2578	2112	1921	1942	706	1222	859	
MMP17	53	73	288	97	95	47	94	152	82	97	53	47	119	81	72	92	95	91	77	111	135	11	115	45	
MMP2	16757	12262	1697	5075	17	5415	3246	1608	10579	11647	3648	4522	5549	6017	4572	6141	8632	10702	4330	4478	3642	2759	8048	984	
MMP24	40	69	19	83	5	49	35	21	68	64	74	83	43	30	36	34	21	64	39	75	49	24	34	15	
MMP3	24	23	242	130	26	15	59	372	45	36	21	50	18	23	49	54	447	46	97	244	41	8	60	32	
MMP9	372	460	856	1070	114	108	2016	162	2300	617	238	367	115	153	304	3009	175	118	234	981	1528	36	395	512	
MMRN2	846	595	1054	1294	31	612	906	676	256	1054	975	3412	1480	642	1050	792	1096	1192	1115	1596	1090	1429	306	1408	398
MPDZ	492	416	465	816	26	525	381	500	573	618	1094	736	795	826	361	420	643	1051	946	764	394	239	766	121	
MRC1	6500	5106	4592	5887	27	4395	4930	642	4774	4831	5012	5847	5140	1819	4152	2124	5733	4773	8807	6707	3603	1590	1873	2115	
MRPS5	738	677	801	1332	35	721	776	725	560	1015	1187	1366	922	636	505	723	571	740	1225	1481	690	269	898	198	
MS4A4A	3848	3046	1166	3476	32	1505	2210	782	3095	1770	1460	3899	2014	913	843	896	3503	1874	2130	1907	1139	594	1149	416	
MS4A6A	278	493	287	468	26	198	293	387	312	420	177	443	273	191	122	264	300	172	347	423	239	72	269	111	
MT3	12	4	138	44	96	10	36	89	19	20	8	18	21	34	8	19	15	33	38	63	48	2	73	101	
MTA1	396	445	333	505	46	509	425	179	409	575	686	579	582	493	493	755	475	601	733	541	770	139	556	292	
MTBP	55	99	298	206	12	52	216	408	71	113	111	161	96	93	61	86	67	63	285	508	93	34	189	57	
MTDH	863	1018	559	1037	3	939	752	186	917	1280	1317	1339	1212	836	831	1229	1158	1176	1321	1246	1183	253	970	484	
MTMR14	971	1004	849	1195	19	749	890	533	738	924	1301	1453	832	621	676	1058	527	776	1562	1582	1016	241	747	357	
MTOR	711	926	700	1174	21	714	744	563	673	1030	1237	1073	898	633	638	811	612	780	1191	1246	853	347	869	270	
MUC1	4950	3486	3557	9648	2	4157	6218	1495	2488	4834	3985	10953	1416	1271	2064	2157	1701	5636	9746	4776	3675	852	2669	1229	
MYC	1577	4284	2489	1921	138	1615	1302	397	1689	1230	2094	3250	1273	796	1725	2765	13966	5057	4172	2693	3231	498	903	649	
MYCL	49	52	248	168	174	36	140	155	59	160	85	148	78	53	74	75	41	48	140	182	72	28	102	49	
MYH11	3456	2240	1052	4438	24	1557	2091	1255	3812	4706	4584	3002	3150	4403	2914	4266	1670	8376	4830	3017	3488	735	9580	1196	
MYLK	10314	6745	3847	8154	83	8335	4107	2501	14110	10187	10492	8794	13846	14308	8406	10240	4596	16575	9681	9199	8366	3232	14633	1963	
MYO1D	1186	1040	705	1513	18	982	986	693	1238	1790	1507	1413	772	791	398	806	896	1885	1840	2259	674	443	1029	251	
MYOSC	468	647	800	1319	43	768	1020	582	492	1061	1638	1531	778	471	915	1508	583	910	2365	1537	1377	223	768	747	
NAA15	306	312	427	370	15	328	312	370	265	313	374	473	280	333	182	239	577	632	563	602	383	98	396	77	
NAP1L3	87	93	98	87	10	42	63	126	108	87	61	76	101	100	42	57	67	126	153	234	69	29	109	23	
NCAM1	134	120	406	214	35	195	379	504	237	276	94	198	394	138	198	254	141	246	193	434	139	91	529	96	
NCL	1540	1580	951	1988	12	1505	926	349	1200	1614	2209	2217	1452	1107	989	1462	1393	1738	2610	2004	1675	410	1310	348	
NDNF	2919	2810	1455	2846	105	4044	3618	1640	2128	3592	6274	4219	4297	3100	3192	1882	1045	3751	3348	3321	2193	1601	2940	1082	
NDP	21	10	25	20	6	17	11	38	17	22	9	11	14	11	15	11	7	9	27	39	33	3	26	11	
NDRG1	1872	2849	1929	2488	57	3574	1552	596	1720	2519	6404	4126	2930	1505	3027	3745	3038	3337	5489	4905	4374	924	1948	2204	
NEG_A(0)	9	10	4	8	6	12	6	4	15	11	12	17	17	14	8	13	9	20	17	15	15	4	13	14	
NEG_B(0)	23	37	6	13	3	25	12	4	21	37	18	20	39	12	18	19	15	17	17	28	29	25	13	16	
NEG_C(0)	10	1	5	7	8	12	6	5	8	6	7	8	7	11	12	12	5	12	11	10	14	3	8	10	
NEG_D(0)	17	25	11	10	7	19	4	8	11	13	10	20	15	22	9	12	16	13	14	24	19	13	23	13	
NEG_E(0)	10	17	10	17	9	7	8	11	22	5	21	17	19	27	9	18	13	19	22	22	15	6	14	15	
NEG_F(0)	12	20	16	18	11	22	22	10	24	31	12	28	24	31	15	21	12	20	22	20	26	14	19	21	
NEG_G(0)	9	4	8	1	9	8	11	6	18	7	4	12	13	14	9	10	3	10	10	11	22	2	19	13	
NEG_H(0)	12	8	9	11	9	12	12	6	11	12	8	14	9	19	17	8	6	13	16	17	23	2	12	19	
NF1	883	962	385	1056	5	1087	720	196	773	1119	1491	1087	1180	824	952	1343	606	1178	1185	1103	1399	348	898	579	
NF2	543	491	507	680	45	605	482	272	539	695	784	808	587	481	481	749	442	628	795	800	758	171	712	216	
NFAT5	383	496	333	480	39	228	379	344	275	442	551	390	480	365	279	191	301	286	381	588	576	268	116	415	92
NFATC2	1186	1983	657	601	34	357	538	482	488	931	1334	657	721	628	521	1030	2244	964	871	915	1409	221	941	433	
NFKB1	302	350	205	418	4	232	139	176	150	271	334	327	202	141	170	171	206	237	369	421	284	118	186	59	
NID2	1746	1281	272	643	4	703	465	143	743	877	785	431	1245	1036	859	395	1346	720	551	506	727	361	741	406	
NME1	484	447	425	435	10	439	298	284	373	473	270	350	312	411	331	322	383	313	454	458	457	87	435	88	
NME4	594	436	365	657	59	255	360	409	491	470	591	572	388	546	212	296	265	582	546	698	352	215	589	141	
NODAL	5	15	315	98	43	5	116	213	13	11	19	52	10	15	9	12	17	15	108	156	18	8	67	29	
NOL7	884	837	437	1114	3	720	493	222	604	982	1211	1286	787	474	443	655	619	900	1475	1287	607	356	719	129	
NOS2	42	46	23	48	6	71	19	8	32	39	102	85	68	46	47	21	17	96	50	85	51	71	26	15	
NOS3	245	114	363	252	66	267	201	166	102	242	667	234	144	207	163	325	375	393	334	219	248	41	434	52	
NOTCH1	801	873	1011	1662	206	739	824	313	508	1116	2016	1617	859	937	802	892	800	1034	1647	1805	1136	280	1157	364	
NOK5	14	10	116	57	15	13	59	155	19	16	16	43	17	18	19	13	13	18	82	104	25	4	58	22	
NPR1	396	276	856	1181	52	1043	451	330	424	712	1909	1337	972	506	812	723	841	1500	1535	1930	1252	269	471	553	
NR3C1	2191	3602	1503	2705	16	1707	1791	1278	1521	2420	5043	2993	2252	1723	1995	2687	1643	1710	3176	3444	2818	846	2136	1132	
NR4A1	2543	10899	2425	3842	56	1975	2105	366	2711	826	13550	6881	1797	447	2675	6331	11562	9071	8085	9213	4370	611	421	619	
NR4A3	2019	4465	635	719	55	506	458	576	1135	353	3401	996	571	186	401	1030	3833	2435	1948	2757	805	59	555	260	

NRCAM	83	124	233	223	11	239	181	405	80	210	219	236	358	79	115	85	61	114	280	410	112	116	121	31
NRP1	5694	6107	3386	4921	182	4060	3538	1590	4638	3911	8017	4780	5605	5824	5433	4128	5112	5110	5785	4843	5177	1683	5915	2243
NRP2	1580	1558	835	1535	8	870	2012	455	1494	1647	2106	1508	1702	1691	977	1235	937	1456	2174	1889	1416	323	2277	483
NRXN1	19	26	277	159	43	12	158	397	29	25	35	149	28	18	15	36	28	58	230	355	45	18	141	26
NRXN3	152	119	278	379	33	139	235	283	313	129	244	345	116	162	143	188	58	365	280	231	124	38	304	51
NTRK1	47	75	230	68	134	70	118	136	40	73	53	61	70	75	125	120	114	74	104	109	114	25	164	140
NUBP1	189	226	94	281	2	144	130	26	173	249	286	328	198	111	102	149	139	222	300	247	180	103	175	37
OAS1	792	744	849	977	50	545	793	487	793	691	935	836	2239	532	640	414	663	454	1141	1194	465	311	429	266
OCLN	209	188	190	600	7	171	153	188	121	310	636	716	211	83	120	120	96	360	715	863	157	138	164	60
OGN	1214	1271	524	2282	26	1943	1205	984	657	1925	1297	501	2602	1348	3032	2986	2691	2192	1055	1136	1999	693	2022	1943
OLFML2B	728	542	235	488	72	342	267	282	749	703	456	364	700	622	396	454	1208	605	259	392	350	123	497	209
OVOL2	117	232	449	525	38	398	514	365	156	396	527	459	222	128	336	945	83	397	613	553	787	95	414	412
P3H1	705	632	246	581	9	420	381	131	571	861	565	542	651	482	314	322	695	546	462	509	355	194	509	107
P3H2	371	183	151	905	2	234	71	50	154	190	681	1192	162	147	135	71	137	311	494	541	117	78	118	30
PCOLCE	3277	3621	1150	2738	55	3160	1666	934	4114	3969	1825	1824	3926	2932	4964	3490	6142	2944	1934	1822	4425	862	2144	4741
PDCD10	990	1214	916	1592	22	1055	972	635	840	1207	1604	1666	1025	747	809	1235	676	1118	1860	1943	1451	350	1080	270
PDCL3	270	414	637	566	653	484	406	233	429	338	427	477	535	298	653	695	437	499	641	575	773	109	371	390
PDGFA	519	455	269	350	47	435	246	143	461	454	861	355	607	484	258	326	596	970	691	616	462	131	382	117
PDGFC	388	264	248	385	2	150	206	296	531	375	263	404	159	199	149	179	262	569	571	472	172	62	235	71
PDGFRB	4287	3601	2210	3335	44	4048	1623	914	3610	5929	5507	4307	5769	3600	2183	2395	5044	4931	4927	5324	2437	2576	3637	867
PDK1	744	471	157	368	2	178	340	93	282	1284	356	584	289	599	211	676	306	280	419	403	533	139	1616	60
PDPN	1210	1120	816	819	9	718	417	75	1581	970	1864	1131	668	507	343	690	1097	1498	1672	1132	586	184	574	228
PEBP4	694	661	755	1089	4	631	460	47	557	820	1610	2075	742	239	530	162	195	1335	2464	1567	424	209	254	168
PECAM1	6831	3715	7281	13222	6	6566	4671	1103	2458	6811	15062	16747	11658	4802	3851	4234	7646	6840	11647	14255	4201	3902	6287	1058
PFKFB1	20	32	83	63	18	15	118	130	16	33	26	92	20	24	23	29	25	39	177	270	41	12	120	66
PFKFB4	71	52	36	130	4	46	73	10	54	92	68	122	103	38	73	65	41	63	121	112	62	21	67	30
PGK1	4293	5385	3428	5842	270	4699	4020	1176	4097	3917	5621	5821	4751	2860	5010	4873	3870	4051	5842	5273	6230	953	3500	2441
PIK3CA	477	581	503	808	14	647	445	423	539	667	924	842	835	445	571	1019	603	805	1057	1098	1029	172	578	323
PIK3CD	379	1018	394	805	51	135	374	232	326	703	551	590	287	364	168	337	328	263	575	727	361	85	505	107
PIK3CG	705	1001	652	661	23	295	566	542	463	887	655	604	575	488	457	878	431	307	597	972	749	196	725	214
PIK3R1	1115	2654	983	1373	65	2088	1755	757	2873	2037	3804	2500	3377	1950	3046	4227	2961	2811	5244	3826	2889	669	1988	2067
PIK3R2	766	680	517	716	141	579	681	344	892	827	554	754	977	762	1032	1152	541	862	773	605	1310	160	739	685
PIK3R5	456	641	622	832	18	385	793	447	535	421	494	936	606	235	424	607	784	500	847	797	603	101	387	207
PIK3R6	70	103	225	95	93	76	146	141	86	101	62	85	121	66	135	189	46	45	88	109	101	22	159	109
PITX2	12	17	339	67	116	7	152	176	38	20	14	48	10	41	9	13	37	15	66	117	11	14	162	180
PKM	2729	3185	1940	3775	48	2173	2693	888	3336	3589	2706	3238	2661	1772	3138	3396	1910	2133	3360	2784	4058	714	2833	1446
PKN1	1346	1630	905	2770	8	1672	861	245	1434	1851	2989	3032	2248	1198	1421	1742	1265	1696	2301	2142	1973	702	1342	1122
PKNOX1	103	145	405	284	31	132	457	345	148	121	218	288	175	119	72	222	258	231	288	494	239	87	422	282
PLA2G10	93	150	241	464	7	202	227	265	213	526	220	781	80	66	127	222	193	457	585	505	248	20	118	73
PLA2G2A	854	1647	612	376	56	651	752	552	1379	2453	57	308	136	1641	1043	2354	10105	3807	437	1677	38	1321	1122	
PLA2G2D	19	656	90	58	13	11	121	114	128	70	29	48	20	25	29	123	19	12	57	91	176	5	139	54
PLA2G3	38	11	306	228	22	23	70	379	13	50	40	133	21	19	18	9	22	51	87	264	34	7	29	19
PLAU	2589	3795	653	975	78	479	602	447	3909	1954	701	810	736	823	746	901	2130	2645	872	1021	588	287	1041	206
PLAUR	2404	5070	1501	1972	39	1126	1289	496	1556	1082	1909	1595	1352	424	1154	1326	2003	1272	2164	2196	1445	275	590	739
PLCG1	1087	1747	990	1568	104	1327	1277	573	1033	1842	2953	2140	1808	1286	1091	1469	1247	1734	2152	2161	1547	779	1617	406
PLCG2	548	547	243	596	6	317	550	125	402	908	772	705	434	616	464	883	452	375	625	695	539	178	1153	212
PLEKHO1	2152	3429	1231	2335	44	1176	1440	853	1663	2036	2489	1978	1980	1508	1314	2054	1242	1507	2455	2246	2249	472	1826	690
PLS1	192	222	316	594	16	137	250	459	124	336	352	527	99	101	110	135	98	315	662	660	174	87	149	56
PLXDC1	549	520	337	303	80	296	387	305	722	1029	398	240	568	567	343	553	1697	568	209	333	635	177	820	299
PLXNC1	622	1077	648	1351	14	371	867	633	939	1103	625	1178	877	612	424	708	560	808	835	1405	674	249	809	268
PLXND1	3175	2431	1588	3448	155	2467	2357	783	2081	3143	5755	3902	3483	2744	1685	1954	2996	2372	3261	3026	1787	1003	2752	663
PMP22	2604	2420	1769	1974	28	2206	1318	861	1910	2362	3103	2636	1893	1680	1532	1544	2573	2372	3304	2686	1765	844	2094	501
PNPLA6	1690	1048	1421	1671	7	1520	2258	557	1185	1762	2013	1769	2119	966	1865	1601	990	1426	2268	1705	1966	461	1183	883
POPD3C	13	14	189	126	15	16	25	278	14	18	16	30	11	11	11	15	32	29	54	232	13	10	17	13
POS_A(128)	32927	14042	46311	34090	54230	30492	50042	40610	57743	28181	35282	42273	42644	64650	59062	55100	47056	46782	45492	49769	52842	4458	61168	88548
POS_B(32)	7980	3406	11763	8462	13476	7443	12188	9845	13769	6783	9010	10410	10362	15775	14447	13543	10593	10928	11025	12047	12796	953	14337	21764
POS_C(8)	2263	954	3329	2425	3747	2246	3545	2827	3699	1928	2417	2930	2901	4479	3943	3700	3081	3039	3162	3446	3526	266	4140	5933
POS_D(2)	572	254	793	611	875	550	856	671	942	477	648	771	693	1046	1002	985	812	730	789	961	1002	96	1017	1598
POS_E(0.5)	127	60	157	108	140	88	148	145	226	121	141	155	146	219	187	204	169	164	173	151				

PPFIBP2	280	261	85	320	8	160	267	62	227	449	491	413	336	229	160	224	241	234	368	435	187	117	385	80
PPL	380	361	401	1026	3	328	562	146	426	519	1839	1395	332	405	261	400	237	903	2098	1841	397	141	618	123
PPP1R16B	230	674	415	396	17	166	351	358	192	303	484	525	176	198	124	394	339	270	611	616	349	37	384	46
PPP2CB	3134	2749	2561	5656	38	3337	2473	1802	2343	2980	6142	5462	3302	1999	2104	2894	2067	3624	5665	6102	3082	1496	2622	814
PPP2R1A	3379	3147	1538	3813	15	2771	1844	563	2862	3582	3798	3848	3724	2662	2357	2933	1989	3169	4160	3367	3235	1335	2848	664
PPP3R1	2278	2632	1787	2776	36	2360	1820	1086	1833	2398	3227	2939	2714	1820	2209	2887	2351	2327	2979	3196	3729	676	2097	1303
PRELP	386	159	592	452	29	396	310	552	1060	636	869	963	455	621	251	526	348	1675	1425	1506	210	144	712	81
PRF1	487	2240	1044	1039	68	388	530	468	372	737	751	982	718	265	719	597	1252	742	914	776	619	251	624	337
PRKCB	331	670	272	740	26	268	350	111	310	479	545	558	660	457	571	1041	208	306	549	649	1081	180	436	395
PRKCG	23	14	7	6	1	13	7	8	26	11	10	14	12	8	19	14	11	24	12	9	23	9	25	10
PRKCZ	384	530	597	1195	21	496	460	237	243	546	1231	1528	380	209	264	290	181	716	2013	1360	381	208	388	123
PROK2	51	41	559	735	11	26	97	425	30	59	185	520	40	25	53	88	38	75	521	867	39	12	70	38
PRDM1	77	148	345	307	14	132	422	440	77	135	72	134	112	54	194	867	44	127	386	192	574	50	324	224
PRPF38A	901	974	1285	1523	74	897	825	1442	646	964	1692	1482	793	705	636	966	580	965	1721	2231	1064	376	1095	302
PRR15L	64	145	405	474	18	334	319	429	321	367	317	754	144	66	232	256	111	468	486	523	271	81	109	91
PRSS22	407	256	412	371	70	233	403	228	238	363	156	326	142	146	292	647	136	396	438	250	628	67	328	431
PRSS8	306	332	831	890	188	389	565	371	315	522	870	995	350	218	268	227	163	881	1021	1124	469	89	312	286
PTEN	1725	1938	1359	2819	28	2575	1844	853	2240	3041	3005	3016	3977	1904	2106	2667	3251	3042	2972	3122	2721	987	2074	939
PTGDS	7522	6878	953	1872	1077	6122	3482	1046	3818	4480	4217	2524	8916	9516	6350	11480	1163	2707	1416	1272	7350	2115	6191	7542
PTGIS	1713	1560	719	1029	24	1173	692	435	3657	2801	1785	792	655	1481	1520	1614	1587	2819	1475	855	1269	222	1473	882
PTGS2	904	3547	505	594	38	406	477	479	341	840	2895	702	187	191	334	520	664	1078	1421	1920	596	184	283	313
PTK2	672	581	328	1071	3	620	545	153	489	856	1568	1241	781	651	603	786	657	947	1208	1026	612	329	758	197
PTK2B	691	783	714	1174	26	686	683	320	633	840	783	1248	650	388	499	1403	580	597	1191	952	946	189	937	282
PTK6	40	58	287	111	49	43	218	173	45	56	95	96	36	31	82	60	42	65	144	160	95	28	106	56
PTPRB	426	384	695	1995	12	470	754	334	200	622	5231	2487	394	484	672	619	763	855	3133	2571	531	230	557	272
PTPRC	808	2624	627	1116	8	481	687	363	482	1032	1244	962	749	397	511	1001	490	408	1012	1127	1234	217	598	192
PTPRM	1221	1040	853	2100	16	877	901	564	618	1361	2867	2889	1177	918	537	804	1117	1648	2594	2995	618	535	1037	185
PTRF	808	627	589	818	248	1102	683	274	827	900	1297	997	1263	851	1515	1221	1169	1018	1310	1006	1634	380	1064	1984
PTTG1	276	637	885	897	54	286	607	1162	218	434	272	836	353	167	297	404	266	173	443	1070	513	114	379	198
PTX3	1570	1270	1435	915	44	3468	102	329	308	87	130	367	712	224	177	557	2693	933	449	581	747	118	131	78
PXDN	1476	1146	601	1468	8	1731	388	140	1905	1754	1484	1226	2297	705	965	758	1496	1672	1116	1674	1115	895	771	281
PYCARD	314	348	464	533	25	270	450	268	327	382	376	413	419	299	487	359	176	223	466	439	519	86	320	493
QKI	2962	3593	2178	5094	16	2387	2131	674	2171	3003	6920	5718	3937	2066	1846	1901	2894	3270	5384	4953	1916	1425	2098	450
RAB25	211	339	331	777	46	273	484	211	259	362	456	718	193	142	338	311	112	434	824	592	506	74	246	222
RAC1	3268	2879	1869	5178	10	2921	2403	1065	2859	3360	4923	5163	3433	2348	1808	2183	2213	3525	4959	4362	2635	1202	2655	400
RAC2	1328	2123	1184	1655	58	807	1315	618	1025	1646	1544	1419	899	916	1191	1471	693	686	1547	2187	2479	553	1868	747
RAF1	784	831	671	1252	26	889	704	361	779	1021	1295	1444	885	638	652	999	798	1200	1654	1540	991	356	894	255
RAMP1	382	389	318	327	191	641	252	202	960	391	161	238	660	396	327	699	178	892	368	362	595	60	697	278
RAMP2	591	584	507	3222	16	1128	959	329	373	1249	3671	3969	2273	967	1433	759	621	1165	1193	1430	1424	984	851	555
RB1	745	933	814	1451	32	786	752	641	537	883	1389	1499	1058	508	479	687	624	772	1271	1058	726	352	752	252
RBL1	96	139	47	110	3	80	90	32	112	154	161	147	99	87	76	113	59	93	141	144	115	34	133	37
RBL2	1402	2115	973	2219	12	935	1292	716	920	2035	2215	2450	1256	1307	672	1227	1074	1315	2059	2651	1280	492	1592	249
RBM47	743	587	506	1270	13	396	509	343	387	513	863	1143	344	175	285	397	334	522	1059	1013	365	160	365	154
RBPJ	2039	2383	2146	2577	71	1262	1966	2341	1772	2157	2371	2677	1485	1110	1061	1390	1959	2183	2958	3403	1185	680	1884	499
RBX1	2240	2686	2013	3421	44	2218	2148	939	2087	2818	3340	3626	3241	2107	1869	2321	1760	2834	4298	3915	2783	956	2254	695
RELN	140	145	70	97	2	142	103	24	93	178	140	77	268	363	117	104	124	107	183	152	125	59	301	49
RGCC	14289	15813	17418	28327	84	33804	7957	2833	13737	7043	46174	39124	32664	12509	9062	10119	16755	32509	40695	50999	16919	9716	5451	2412
RHOA	3271	3463	2832	5487	18	3786	2745	909	3782	4388	4770	5576	4456	3113	3563	3602	2135	3240	5923	4851	5107	1039	2753	1020
RNH1	3367	3131	2601	4118	155	2949	3107	994	3211	3683	3881	4226	3587	2764	3014	3485	2687	3194	5179	3812	4351	924	2795	1367
ROBO4	1110	728	854	2033	7	1398	704	225	313	694	3065	1926	2420	871	667	459	615	1106	1691	1869	796	1100	716	202
ROCK1	1729	2609	1742	2697	38	2637	1857	1113	2059	2771	3479	2983	3103	1783	2471	3766	1830	2830	3849	3635	3698	807	2219	1705
ROCK2	1677	1727	1398	2733	29	3171	1508	606	1686	1987	3867	3011	2925	1704	2387	3295	2077	3115	4053	3497	2991	888	2228	1109
RORA	516	892	508	649	28	1275	385	337	630	730	1268	911	1380	673	613	1217	1245	1196	1279	1133	1034	205	662	390
RORB	55	64	70	254	13	45	44	46	102	36	38	90	24	59	27	29	28	100	53	143	24	13	81	26
RPS27A	20622	26760	9951	26950	164	21839	12130	5718	19053	24995	31435	29692	21797	18297	20962	37237	18834	24058	27839	27346	47555	6887	22307	13708
RPS6KB1	767	957	674	1127	22	698	756	541	684	967	1356	1365	871	691	620	1050	889	1072	1544	1638	1016	265	924	289
RPS6KB2	282	290	242	371	54	293	287	83	314	418	417	487	351	326	402	576	201	370	527	361	658	93	389	217
RRAS	504	604	411	1218	22	712	380	142	795	735	1717	1243	1041	380	744	532	532	1079	1351	1249	712	216	637	278
RTN4	5809	4505	4000	7601	54	4403	2976	1208																

S100A14	265	208	375	755	23	167	582	274	178	393	538	1161	175	129	241	211	135	410	513	582	324	88	313	249	
S100A7	32	15	474	251	99	10	228	691	19	17	23	164	19	15	9	10	31	17	330	486	14	8	164	47	
S1PR1	388	525	1119	1273	22	846	430	383	222	459	1378	1415	985	398	897	923	537	677	1312	1214	1370	316	370	350	
SACS	179	175	154	180	10	130	122	158	123	176	184	133	118	140	144	182	146	154	191	199	239	39	199	61	
SAMSN1	797	2240	643	1085	21	446	433	335	545	712	666	912	946	312	419	785	1416	798	1639	956	988	189	628	183	
SAP130	355	382	215	484	11	268	282	107	339	553	554	604	405	366	218	333	382	513	686	541	301	113	407	77	
SCG2	30	40	93	60	10	56	61	126	108	74	13	46	36	27	27	31	65	72	75	113	28	8	52	20	
SCNN1A	916	1061	2074	3333	58	1604	1980	615	1216	2138	2699	4848	846	611	1077	1677	810	2777	5298	3649	1844	272	938	982	
SDC4	6166	6673	4635	9855	31	7216	2669	1523	3914	3478	5136	11870	2155	1685	3564	3904	1224	7058	7704	6654	5732	1224	2380	2293	
SELE	43	93	103	62	6	248	35	136	10	46	114	57	17	71	28	68	786	103	107	234	26	12	34	16	
SEMA3E	117	105	234	254	9	109	53	291	54	112	722	244	103	41	48	116	21	341	366	438	71	35	61	16	
SERINC5	1249	1229	547	1143	26	878	1025	512	757	1310	1342	1261	1273	689	850	1112	920	1036	1332	1218	1360	393	711	383	
SERPINA1	9822	7643	6225	10324	83	5514	4890	1204	4564	8959	4115	6894	3743	2360	2498	1554	3719	8985	4230	5431	4695	1636	1516	1178	
SERPINE1	5668	7345	1104	1425	27	5098	182	139	2658	1277	2352	1106	2867	302	922	2281	8653	4180	1283	2872	3516	511	148	424	
SERPINF1	8774	9398	1723	3565	11	7579	3416	968	9557	10255	2116	3267	7798	6167	10834	14459	9882	4765	3010	8316	1617	7283	2424		
SERPING1	11321	10925	4407	9249	37	10324	4381	1177	10926	9633	16602	12827	10987	8440	7721	10371	8493	13655	19569	14561	6396	3619	7855	2340	
SERPINH1	7323	6940	2410	5420	73	5339	2676	1147	7283	7926	4351	3757	8502	5221	5506	3349	7494	4815	4025	4886	5763	1864	3284	1126	
SET	1149	1195	1112	1901	11	1009	776	864	1011	1099	1611	1700	1144	1013	875	1104	718	1353	1804	1691	1574	273	1158	359	
SETD2	1111	1339	913	1719	24	1120	1138	733	975	1605	1840	1884	1266	1168	801	1229	954	1521	2021	2109	1342	447	1476	367	
SF3A3	953	1083	1086	1197	43	1023	992	1033	1142	1210	1637	1270	1330	1232	945	1111	1034	1415	1621	1930	1375	373	1321	385	
SFRP1	222	174	199	157	23	168	258	378	405	553	141	181	78	656	200	248	1514	1054	274	479	116	18	663	62	
SFRP2	6162	2109	421	1158	24	2114	2640	824	1663	6947	453	186	399	4178	4316	5833	13704	2693	1869	423	2772	214	4476	1499	
SH2B3	1354	860	695	1326	34	549	481	469	659	931	1348	1138	826	649	338	377	1097	607	1372	1489	435	228	806	131	
SH2D3A	291	237	421	483	52	181	423	246	205	327	338	553	105	216	161	268	134	436	751	426	357	100	381	91	
SH3YL1	186	134	219	361	68	275	225	162	206	229	303	246	245	227	386	457	110	282	298	227	624	47	232	420	
SHB	152	111	331	218	36	112	258	282	134	117	219	258	89	129	73	142	464	331	322	351	98	22	251	58	
SIRT1	414	512	470	712	23	358	354	475	360	612	1009	817	437	371	224	439	576	553	946	1432	344	174	506	94	
SKP1	6219	7452	3719	8046	47	7774	4954	2274	5573	8036	9834	9209	8115	5506	6560	8453	5385	8086	9643	9001	9674	2567	6642	4134	
SLC12A6	407	321	444	844	20	209	491	432	273	675	618	693	295	335	146	241	350	429	887	1060	197	143	394	62	
SLC2A1	67	127	105	75	14	62	71	150	85	61	53	75	58	35	64	96	64	94	120	97	160	17	86	28	
SLC35A3	441	667	192	836	1	434	372	92	299	695	971	675	575	250	344	482	269	476	752	707	544	303	437	115	
SLC37A1	155	141	317	302	19	97	254	347	113	163	236	292	139	91	97	123	75	137	380	402	111	36	220	63	
SLC44A4	225	478	114	409	75	526	601	161	221	428	337	367	364	128	1020	2640	101	386	711	228	3021	61	490	2843	
SLIT2	1385	907	655	1509	6	923	307	138	795	882	3292	2439	2003	1033	658	443	500	1407	4176	3265	543	602	694	109	
SLPI	3020	4045	5244	11135	224	6565	12740	1456	1971	2696	8703	14162	2611	1368	6056	21697	830	7419	22306	15165	19015	1335	4778	8430	
SMAD1	706	658	583	604	59	412	587	501	440	847	1069	555	679	670	548	783	674	735	1041	1017	750	218	806	235	
SMAD2	1215	1033	670	1565	20	725	739	555	775	1347	1720	1541	812	680	421	666	690	1271	1541	1992	1640	657	431	929	186
SMAD3	1018	907	751	830	27	640	802	588	774	1037	1458	863	985	1080	783	898	977	1472	1119	1185	860	275	1199	268	
SMAD4	1265	1391	1227	2069	61	1669	1200	888	1440	1600	2649	2005	1845	1522	1536	2163	1462	2148	2237	2609	2170	472	1580	732	
SMAD5	797	608	528	1055	13	487	448	518	443	880	1067	873	664	591	269	326	483	767	1093	1108	368	318	798	68	
SMAD9	161	113	332	447	24	393	373	417	144	406	529	557	447	401	273	511	246	472	567	625	285	141	321	230	
SMC3	741	1009	926	1169	14	663	646	896	637	1153	1488	1268	1058	720	726	971	556	879	1486	1708	1030	351	853	270	
SMOC1	26	15	316	139	11	17	152	392	74	76	45	99	28	50	41	54	24	108	154	295	69	10	168	31	
SMURF1	601	648	713	813	12	678	489	389	567	757	1154	1067	585	530	599	919	686	1365	1389	1074	925	202	615	354	
SMURF2	1049	1129	862	1867	20	837	896	653	663	1296	2626	1690	909	815	468	668	837	1238	1475	1824	662	542	852	203	
SNAI1	261	515	427	302	139	276	227	160	353	162	350	640	214	126	230	149	973	388	766	517	737	99	135	86	
SNAI2	1051	795	278	454	1	906	679	169	1066	1038	633	624	1214	957	915	585	1969	1022	690	427	830	631	915	223	
SNAI3	89	183	250	103	175	55	126	135	117	158	93	153	106	89	136	277	79	78	121	135	302	19	177	114	
SNRPF	1165	1272	761	1727	14	885	704	386	728	1168	1568	1839	1034	709	586	729	776	1165	1732	1705	927	399	803	151	
SOD1	328	392	448	556	131	485	346	186	384	411	638	519	583	339	580	799	344	543	696	588	809	154	417	372	
SORD	279	447	596	648	42	227	442	814	289	368	387	482	381	318	347	768	339	330	588	794	706	114	393	280	
SOX17	110	148	457	336	71	97	361	318	93	244	356	738	159	150	155	208	2276	432	360	433	405	60	209	144	
SOX2	34	70	127	144	79	59	243	146	31	62	80	87	82	61	259	598	29	88	239	137	564	17	295	432	
SOX9	216	238	325	235	32	194	214	303	140	142	380	504	139	126	221	333	265	468	831	788	351	75	365	117	
SP1	693	728	727	1105	25	702	609	615	751	1006	1350	1041	956	819	641	918	619	961	1143	1356	889	264	819	250	
SPARC	29771	24279	7523	14863	97	23803	11970	3561	30503	29246	12836	11642	37067	20299	21337	20703	47143	22598	9263	10291	23187	6279	8778	9537	
SPARCL1	8057	8750	5972	8494	18	15442	4233	2036	6029	13662	20427	11825	8523	7409	14034	26166	11383	11935	20528	24472	16894	2519	12849	7986	
SPDEF	75	96	278	246	215	49	332	187	83	88	50	168	73	65	140	269	70	69	139	163	461	41	187	267	
SPHK2	314	398	563	660	290	391	525	264	549	573	506	647	528	530	465	586	365	457							

SPOCK3	9	14	234	158	13	14	131	316	25	27	15	102	9	15	30	43	19	19	158	296	88	18	127	29
SPP1	1941	1386	296	943	56	290	5760	354	10018	1223	71	401	131	303	1953	6774	293	252	145	273	2030	51	2387	1802
SRC	859	702	656	971	133	486	595	308	537	856	962	976	780	574	400	419	465	873	975	899	413	248	699	110
SRF	1374	1447	1089	1624	84	1564	776	640	884	861	3247	1386	820	757	1015	1698	976	1862	1955	2711	1747	356	1008	696
SRGN	10395	18337	6777	12233	24	12273	6503	1233	6885	8762	10436	11315	15732	3513	8540	14030	12025	8303	11606	14143	14481	2203	4999	3580
SRPK2	689	930	750	1088	42	631	696	550	669	964	1342	1188	862	817	772	1088	884	970	1351	1372	1276	287	798	639
SRPX2	376	321	362	553	11	777	180	139	487	502	222	520	366	285	342	345	447	796	980	912	406	162	267	116
SSTR2	35	61	161	123	14	30	50	215	53	64	31	38	41	66	69	55	128	61	60	134	105	17	80	53
ST14	743	844	595	1293	113	629	1189	411	742	1012	836	1438	665	438	491	745	408	944	1163	1118	745	229	795	302
STAB1	1382	1526	539	1221	41	927	714	280	1367	1144	622	958	1801	1351	1066	1278	1698	1113	995	1022	1424	317	1377	658
STAB2	52	61	214	108	19	59	109	349	13	105	50	88	294	334	56	51	32	20	159	285	159	30	176	29
STAT1	3292	10958	1391	3320	13	1878	1634	693	2472	2395	4012	2537	4630	1900	2385	2145	1921	1652	2508	2180	2365	874	1828	707
STAT3	6724	7379	5811	8511	98	10281	3543	2048	5667	5394	6752	9396	7448	5301	5258	6880	8836	11268	8029	7814	9553	1523	5321	1891
SULF1	1472	827	231	338	16	488	410	309	5090	3973	209	277	327	872	287	723	2562	2717	229	270	444	93	827	99
SV2B	68	89	315	159	20	49	80	436	84	81	82	66	72	81	61	93	105	112	113	277	120	13	179	35
SYK	1227	1280	669	1641	6	776	1002	176	957	1476	1063	1493	1174	563	784	883	721	656	1381	1116	776	358	745	315
SYNE1	1038	1013	457	1288	6	814	692	300	676	1106	1279	1721	997	800	678	914	532	1312	1601	1339	973	321	1077	252
TACSTD2	1713	2478	2742	5141	19	2072	4549	997	2268	2323	7648	6817	1314	1948	3374	5060	815	6358	12162	6956	6923	939	1984	2164
TAL1	85	127	749	1008	50	322	435	578	140	254	946	985	740	249	601	342	191	505	932	1038	617	183	326	199
TBX1	54	112	163	130	52	124	170	110	71	148	176	95	248	197	147	199	70	113	245	153	352	72	206	70
TBX4	407	389	479	577	23	422	363	376	297	624	1477	707	790	427	408	305	61	586	1129	1450	233	469	595	147
TBXA2R	77	86	226	200	217	116	137	136	136	115	158	215	210	124	208	136	108	164	143	160	190	42	238	293
TCEB1	2151	3099	2837	3394	91	3053	1979	2251	1506	2172	2890	3103	1945	1094	2128	3035	1881	2098	3310	4371	3067	600	1655	1328
TCEB2	105	56	177	167	29	99	140	169	110	114	158	169	120	113	86	92	88	146	231	297	83	60	148	29
TCF20	591	684	472	882	24	385	674	456	508	761	931	980	650	594	314	454	505	717	965	947	508	182	734	88
TCF3	225	217	162	198	51	176	305	115	319	335	228	220	381	383	364	496	213	321	236	193	537	33	354	163
TCF4	2549	2310	2294	2588	56	3236	1934	1214	2798	3765	4965	2975	6288	3785	3108	3800	3130	3692	3329	3865	4089	1429	3459	1387
TDFG1	26	27	278	149	34	28	68	388	27	29	45	91	36	22	25	36	31	22	170	409	38	18	44	19
TEK	181	188	167	1037	3	248	295	88	74	360	1653	1527	372	232	240	212	273	479	798	838	202	177	300	69
TF	47	75	17	25	13	28	46	26	35	46	79	47	61	39	153	239	124	52	49	44	92	23	72	121
TFDP1	682	722	860	1231	56	789	781	841	724	867	998	1047	952	589	744	887	666	764	1191	1129	895	257	765	300
TFPI2	171	218	41	74	10	264	111	15	182	63	218	53	253	105	126	196	83	102	189	212	363	396	210	64
TGFB1	2725	3899	2391	2700	151	3564	2552	1105	2826	3142	3538	3223	4236	2344	5105	5675	2415	2450	2727	2854	6465	903	2436	4035
TGFB2	398	330	113	519	6	332	355	64	282	527	1412	572	552	252	239	237	142	617	533	422	184	449	248	50
TGFB1	5770	5865	2419	4137	14	2595	5919	1225	5291	6315	3396	4701	4817	2719	5858	3762	7870	3510	2727	3082	5481	1104	5133	1335
TGFB2	4617	4838	3669	6994	34	6758	3441	1452	4561	5596	9213	8642	6575	4854	5705	6983	5114	6033	9951	9543	7382	2040	4291	2560
THBS1	17087	26135	8793	6009	26	19312	1315	1000	17427	4571	6946	7107	7093	2319	4983	7962	19160	18936	13703	17030	14378	1341	1829	974
THBS2	5272	5121	933	1112	16	1339	1244	606	14809	6688	353	565	2461	4009	1093	1790	6298	9049	725	926	1528	374	1734	248
THBS4	77	93	46	25	9	94	81	83	144	936	59	54	53	140	190	148	12731	362	214	36	254	9	211	97
THY1	2750	1705	326	427	45	1298	1201	357	4659	4619	534	209	4353	3027	1482	1136	7176	2171	178	306	1479	617	1732	372
TIE1	527	428	982	1444	118	848	845	434	330	933	2544	1693	1531	1183	1152	1153	1119	1016	1441	1276	1140	435	979	519
TIMP1	16335	16975	5719	10237	7	9313	2888	600	19125	23393	2779	6215	12532	5949	3307	4026	12268	8228	3701	6621	5537	2605	5575	787
TIMP2	7974	5505	2511	4983	44	6643	5088	1549	11913	9150	8299	4943	8773	8882	7372	9530	10044	13807	6768	5790	7316	1883	6732	3702
TIMP4	50	42	356	280	18	83	100	261	73	65	24	149	80	123	73	159	279	228	402	568	107	23	168	98
TJP2	476	443	544	924	19	516	399	280	337	473	867	909	718	421	382	382	317	799	1208	1115	423	249	458	182
TJP3	194	372	554	823	75	430	864	538	200	329	525	804	294	173	430	987	97	447	1006	618	969	68	642	692
TLK2	787	919	1243	1329	47	890	1088	1015	713	884	1245	1282	798	693	651	1083	671	992	1363	1345	1028	247	985	436
TLR4	1200	1600	1171	2288	13	1249	1275	702	1491	1351	1897	2697	1586	958	1314	1281	1400	1380	2275	2127	1522	439	1049	568
TMC6	772	1048	505	979	1	474	889	173	1048	1037	1087	595	629	565	829	366	593	866	691	1134	213	867	215	
TMEM100	142	163	1563	7703	9	1695	1172	316	161	826	4139	11088	4392	457	1418	308	222	1024	2229	3585	775	1221	252	212
TMEM30B	678	616	753	1202	29	656	473	610	557	747	1100	1296	427	502	475	969	332	1169	1470	1413	914	210	660	250
TMPRSS2	1171	784	1069	2374	39	1012	550	470	645	1934	2045	3607	575	414	362	348	420	2509	1860	1783	578	288	508	157
TMPRSS4	25	80	13	116	1	31	550	25	99	89	13	30	32	44	186	191	13	46	64	9	342	20	207	114
TMPRSS6	5	12	52	17	28	9	30	44	13	5	9	13	5	3	8	1	7	20	21	27	11	6	16	11
TMUB2	352	363	438	560	18	335	417	357	356	474	545	558	362	335	364	494	256	375	557	663	489	109	484	199
TNC	1923	2933	779	928	16	952	801	443	2229	2152	529	387	2210	974	2166	1510	2846	2117	639	863	2386	574	1264	582
TNF	93	99	239	114	10	37	85	241	52	55	330	184	44	65	33	66	65	32	160	327	71	13	164	31
TNFRSF12	593	489	459	419	54	441	213	191	363	169	266	270	169	173	319	312	169	565	575	558	674	63	160	193
TNFRSF1A	3975	3780	2137	4330	53	4387	1885	881	3188	3042	4943	4865	3482	2431	2642	3178	3590	4223	3824	4284	3698	939	2708	1112
TNFSF10	1370	2405																						

TNFSF13	1362	1438	1257	1285	1586	1351	1788	685	1345	1247	1128	1431	1362	771	2458	1518	515	775	1246	1132	1926	264	808	2211
TNMD	10	2	129	62	9	9	45	173	6	8	7	41	8	5	11	12	76	11	127	266	13	3	30	11
TNN	17	10	244	138	31	33	120	399	33	47	50	93	88	16	45	56	33	33	169	316	37	10	127	29
TNS1	3657	3341	3191	6662	26	3958	3254	1477	4062	5577	13714	10006	5628	5042	4254	5508	3707	8524	12310	11212	4630	1723	5921	2112
TNXB	1371	796	1186	970	483	1388	1675	1008	1115	1858	1954	1028	1836	1832	4727	2379	2236	2121	1541	1428	3965	461	2623	3331
TOM1L1	237	289	417	748	6	313	350	390	214	432	577	791	229	168	190	347	99	415	682	758	262	114	301	170
TP53	710	798	647	804	49	658	821	471	688	987	917	911	709	609	489	534	682	697	1063	991	637	279	990	250
TPM2	7069	5811	3933	10374	2218	13735	5209	2589	14494	8534	7879	7576	11479	11683	15289	19321	7996	17345	10911	6864	22080	1927	12460	14572
TPSB2	5793	8217	3046	4505	263	10262	4652	4019	4137	14510	8667	9082	10475	6276	11899	11305	2892	3284	14854	12897	6566	6049	13195	3734
TPSD1	19	32	265	73	110	256	177	176	53	137	25	175	120	79	195	368	33	16	443	271	91	194	80	267
TRIM39	233	303	481	490	15	213	325	641	220	325	461	516	212	232	157	287	196	361	660	901	287	95	370	105
TSHR	4	5	4	11	2	10	9	2	8	18	6	10	9	11	8	10	14	8	11	8	11	1	21	4
TSPAN1	273	831	29	655	1	287	753	94	162	305	247	304	283	91	603	1389	48	191	756	157	1819	65	540	521
TWIST1	119	63	81	45	323	66	94	145	164	67	21	35	114	62	270	227	681	169	48	117	223	36	123	155
TWIST2	191	170	251	238	44	184	125	104	204	137	181	299	120	148	124	93	249	404	393	317	196	48	192	86
TXNIP	8144	13926	15846	18628	4746	39309	32441	6145	24694	31224	21376	48001	64446	22108	43969	73289	22735	28310	29071	25769	80666	11953	20327	22215
TYMP	2668	4045	1709	2236	113	1172	1815	708	2095	1894	1847	1858	2789	1415	2109	2378	1948	1503	1642	1585	2236	291	1537	828
UBA52	6796	6765	3166	8888	69	5582	4287	1640	6273	8100	7859	9347	6152	5559	4427	7372	5973	7866	8908	8137	9701	2306	6999	2160
USP39	351	347	255	664	4	336	227	356	236	390	519	591	255	169	171	290	158	272	512	637	315	141	287	88
UTS2	23	21	251	131	21	9	34	347	14	58	31	30	29	14	26	22	22	15	70	262	51	30	38	26
VAMP8	868	1088	682	1293	14	815	982	250	662	923	1155	1589	931	454	927	1004	471	752	1411	1239	1092	216	572	439
VASH1	465	388	558	565	57	268	540	320	354	499	548	514	523	421	408	414	363	359	418	397	498	113	517	313
VAV2	375	301	437	353	56	233	294	245	283	373	614	515	434	412	363	271	244	476	537	570	304	120	434	106
VAV3	122	126	87	231	2	86	157	33	71	163	237	236	164	92	135	148	88	129	174	186	201	47	144	57
VCAM1	1417	2518	257	349	8	579	189	326	1559	874	540	217	720	707	339	331	899	584	189	330	910	174	359	98
VCAN	1646	1423	776	1394	6	1318	564	188	2507	2262	517	1047	1442	711	1008	836	1350	1360	1074	851	1176	505	929	285
VEGFA	2815	6300	1445	2755	35	1193	1228	503	1147	1551	6889	4065	1896	974	1151	966	4748	2690	4621	3622	1021	754	1407	343
VEGFB	1703	1228	1120	1656	52	817	1188	627	1773	1571	1387	1472	1314	1461	788	1218	1734	2329	1820	1467	990	308	1614	321
VEGFC	456	372	406	518	11	192	150	206	231	201	655	388	637	252	198	104	189	210	398	416	155	102	248	53
VEZF1	550	558	650	1133	43	568	591	613	499	799	1353	1206	555	432	435	651	467	844	1382	1417	649	207	683	226
VHL	1104	1390	1021	1653	15	1093	1110	771	1081	1690	1407	1652	1206	1139	1078	1563	829	1079	1544	1619	1690	489	1397	377
VIM	48328	38394	24356	39561	219	40057	33425	8777	37767	50003	52482	34460	46928	30970	39761	39927	53194	40086	40890	47477	46290	13599	40164	15368
VIT	40	43	293	185	18	46	198	387	36	97	53	139	45	67	60	104	113	104	250	345	74	7	180	39
VPS13A	508	556	364	725	3	363	598	173	596	918	915	890	463	611	260	417	449	887	1002	721	428	207	783	111
VSIG4	4633	3006	7505	6364	86	4224	6057	812	3992	4451	3048	7407	3877	1495	3298	3528	3486	2867	6796	3422	4269	931	1280	2480
VWA1	65	88	77	57	55	39	59	72	66	81	63	52	23	78	52	66	81	93	45	89	159	9	86	27
VWA2	140	146	228	249	16	144	312	315	221	293	419	281	93	141	259	396	86	264	433	405	269	42	257	165
WARS	1869	4767	1533	5781	17	2099	1560	660	1266	1396	4184	3991	4935	1304	1926	1132	1188	1381	2195	1703	1798	987	1322	375
WIPF1	1383	3001	612	1362	10	693	900	524	1153	1834	1339	1313	1169	792	825	1490	1386	841	1182	1379	1718	380	1282	401
WNT5A	231	339	451	479	29	748	615	571	1118	1721	792	860	905	583	550	787	270	1305	966	881	464	313	613	182
WNT5B	88	86	322	246	19	61	239	368	295	203	125	277	112	121	117	222	127	192	187	318	181	59	248	88
WVTR1	2222	1801	2389	3020	36	2701	1421	883	2010	2875	4067	3689	3308	2231	1674	2313	3587	4591	4263	4318	2322	714	2233	755
ZC3H12A	502	437	844	680	40	274	243	232	208	184	487	965	160	130	103	300	499	696	688	594	309	40	157	74
ZC3H14	658	619	542	1096	15	443	555	572	643	808	1498	1193	687	703	351	393	671	989	1436	1463	452	285	755	92
ZCCHC24	1053	909	461	802	9	1060	691	354	1301	1196	877	841	1065	1515	848	964	929	1583	981	686	998	275	1433	326
ZEB1	516	477	713	849	16	686	566	509	794	952	1083	1101	1124	814	542	722	1101	1259	1000	1235	659	294	774	198
ZEB2	1288	1173	699	1385	8	691	1092	309	975	1622	1659	1487	1768	1814	968	757	1226	1186	1611	1442	681	417	1192	310
ZFPM2	156	125	231	188	7	97	116	243	163	195	190	170	177	136	88	75	166	200	249	290	72	41	165	29
ZFYVE16	960	938	623	1275	46	509	858	626	628	942	1155	1216	827	714	369	478	882	882	1232	1522	479	303	854	136
ZFYVE9	367	224	441	674	9	307	330	530	339	459	985	639	449	428	223	269	298	587	737	925	247	100	401	72
ZKSCAN5	44	40	108	87	7	29	55	154	33	56	67	77	40	44	37	30	32	44	88	119	41	8	60	7
ZNF143	325	378	169	496	5	257	265	71	256	442	542	574	382	274	193	244	251	421	598	546	228	148	386	56
ZNF346	188	172	365	326	24	158	320	424	187	330	336	396	217	328	121	179	165	330	392	560	230	71	429	45

Gene	S01	S02	S03	S04	S05	S06	S07	S08	S13	S14	S15	S16	S17	S18	S19	S20	S25	S26	S27	S28	S29	S30	S31	S32
AAMP	9.820572	9.857054	9.223786	9.663713	10.06138	10.12336	9.725134	8.199107	9.917732	9.567394	9.792636	9.791153	10.02811	9.832946	10.28859	10.23597	10.09737	10.11532	9.662511	9.416877	10.38778	9.738689	9.881554	10.54602
ABI3BP	11.25338	11.13674	10.32347	10.79771	9.102023	10.95588	10.49067	10.16649	10.40895	10.57273	11.85474	10.62994	11.57002	11.50242	11.57495	10.99848	11.78768	11.49602	10.68043	10.76775	10.75349	11.29878	11.26776	10.83553
ACHE	6.965682	7.566887	8.163244	6.355244	11.25403	6.215355	6.728301	7.756439	6.459775	6.312094	6.231408	5.877677	6.869204	6.857524	7.189572	6.911513	5.603169	6.034161	6.284	6.380639	8.266098	6.038249	6.790951	7.839069
ACTG2	11.09069	9.960312	9.717346	11.24172	8.632538	10.67935	10.06534	9.975982	10.92068	11.28998	9.975418	10.36638	10.74749	11.1762	11.47151	10.9094	9.968425	11.19216	11.38582	9.464149	11.04546	10.21114	12.10242	10.76097
ACVR1	9.716511	9.311395	8.414783	8.975831	6.517061	8.981384	9.12423	7.622193	9.893935	9.764545	9.274885	9.118141	9.587772	9.552956	9.018998	8.635768	9.965006	9.936294	9.256079	9.126802	8.657491	9.779216	9.347131	8.35812
ACVR1C	4.370736	4.700153	4.987746	6.281244	8.254026	4.432947	5.95851	8.596443	5.133967	4.951347	4.071537	4.138811	4.138811	4.138811	4.771071	4.078623	5.637935	4.738705	5.59434	7.329414	5.465198	5.453286	5.668332	5.626075
ACVRL1	10.07233	9.562517	11.16782	11.69076	11.35836	10.76565	10.50551	9.322682	9.222446	10.05034	11.18104	11.44097	11.45581	10.47144	9.956327	8.615194	11.08325	10.69572	10.7937	11.21852	9.428094	11.55132	9.68855	9.132428
ADAM15	10.51029	9.825795	10.92135	10.63853	12.2175	10.82801	11.19405	9.780155	10.41449	10.54516	10.48305	10.7244	11.28578	10.77735	11.86016	11.3983	11.51182	10.96694	10.45553	9.928072	11.72259	10.05815	10.90272	12.49924
ADAM17	10.74505	10.30966	10.96536	10.45298	11.19888	11.35181	10.6436	10.07037	10.17387	10.12582	10.30635	10.43647	11.12491	10.18205	10.89479	10.75458	11.41929	10.94165	10.68089	10.64131	10.84782	10.44071	9.885312	11.80779
ADAM28	8.043161	8.442413	6.448999	7.007321	7.739453	7.120008	8.300552	5.871303	8.27406	8.312094	7.048816	7.238675	7.974	8.051793	7.586331	8.581124	8.589913	7.120576	7.77628	6.093926	7.83152	7.759095	8.744803	8.024625
ADAM8	7.107701	8.403853	6.645396	9.606671	7.254026	5.85518	7.208294	5.50452	7.738929	7.530834	6.941901	6.953445	6.549744	7.040388	7.488483	7.194101	7.222897	6.792343	6.538997	6.761729	7.259614	6.038242	6.999538	6.999534
ADAM9	10.78436	10.48613	10.99526	10.609357	8.838989	10.56141	9.994759	8.528056	10.71621	10.16875	9.957995	10.31704	11.103693	10.64238	10.6233	10.765124	10.87861	10.70554	9.981477	9.962803	9.905029	10.93441	10.12034	9.860131
ADAMTS1	11.03251	12.41823	11.61097	11.37983	9.790079	12.61266	10.40321	9.843433	11.53671	10.346	12.00909	11.81789	12.0394	10.37258	12.54154	12.60447	13.93288	13.00819	12.5434	12.0686	12.14336	11.68957	10.29628	11.98523
ADAMTS12	8.178091	8.20888	8.163244	7.689486	8.739453	7.454227	7.734615	8.889588	8.345985	8.327965	7.261361	7.334535	8.610117	8.063108	7.60979	6.911513	8.61194	7.601202	7.731138	7.815461	6.56233	8.391886	7.237698	6.558961
ADAMTS8	8.731217	8.316594	9.393467	8.60534	8.39153	9.302818	7.723081	7.18733	8.241429	7.106625	9.228883	8.834608	8.183205	8.844468	9.631388	8.31384	6.53102	10.05516	9.281593	9.134283	8.7506	9.553217	9.011052	8.346553
ADAP1	7.400483	7.841509	8.359891	8.083942	11.81474	7.304791	8.300552	7.640297	7.507604	7.616036	7.437859	7.856304	7.978587	7.394025	7.934817	7.602185	8.040033	7.533515	7.934764	7.934514	7.604749	7.190252	7.553339	8.385812
ADD1	10.72315	10.3235	9.554034	10.90764	6.517061	10.23721	10.00655	8.583022	10.34379	10.73806	10.9225	11.23316	10.48432	10.61386	9.851991	9.562439	11.02943	10.85983	10.85487	10.45721	9.453882	11.23465	10.58219	9.177871
ADM2	4.873236	5.2274	7.84703	5.994146	11.40783	3.959016	5.728301	7.210789	5.914779	5.273275	2.771976	4.664683	4.202941	5.993846	4.158094	5.505589	5.000505	4.694311	4.412733	5.397318	5.079988	3.605289	6.714136	4.751606
ADRA2B	3.785773	2.934618	5.794773	4.033316	10.35836	3.789091	4.539267	5.900449	4.507604	4.29927	3.319464	4.159448	3.679379	4.233033	4.392559	4.447857	6.655008	4.694311	4.009377	4.239777	4.713125	3.868324	5.237698	4.973999
AEBP1	13.29245	12.28135	11.17294	11.52517	12.48669	12.52253	11.47095	10.68495	14.53292	13.29413	11.50042	11.58707	12.78496	13.66905	12.05896	12.16962	13.63148	13.93637	11.23602	10.8803	11.31186	12.28054	12.16715	11.67938
AGGF1	7.098656	6.667973	7.239076	6.884173	8.517061	7.215535	7.330039	6.732326	7.232892	6.9904	6.966803	7.105644	7.360153	7.554447	7.357847	6.918043	7.217873	6.87536	7.01507	7.131365	6.898071	7.306593	7.908711	7.908711
AGK	7.930432	8.017832	8.515088	8.251101	9.324416	7.320472	8.279115	9.424011	7.848228	7.892794	7.718995	8.22762	7.512269	7.339233	7.505259	7.326551	7.646497	7.636826	8.046703	8.528022	7.304401	8.272046	8.022475	7.43343
AGR2	9.656138	10.64267	8.410931	11.03211	9.102023	9.242361	10.97823	9.028082	9.4618	9.431494	9.483047	10.24417	8.543565	7.663021	9.568483	9.88383	7.5585	9.809355	9.423687	8.907116	10.58932	9.531289	9.599832	9.634249
AGRN	10.38289	10.09553	9.891942	9.794867	13.24044	10.8792	11.02018	10.14076	10.85286	10.5122	10.38328	9.786452	11.20343	10.86643	11.97752	11.33253	10.53794	10.56776	10.28099	9.504159	11.06278	10.13198	10.62253	12.30107
AGT	7.768767	5.657084	4.448999	5.375708	6.932098	6.543978	6.321676	4.578521	7.491836	8.121272	5.446576	4.877677	5.888833	5.758808	7.220378	7.07109	9.010489	7.961098	5.836541	5.52423	6.476425	6.327755	7.442056	7.254107
AHNAK	12.83358	12.66242	12.28768	12.74474	11.59031	13.23449	12.83481	11.56037	13.02946	13.09171	14.09564	13.12244	13.05605	12.90054	13.988	13.52708	13.66531	13.15502	13.47072	13.1011	13.50051	13.3575	13.05926	14.368
AKAP12	10.59393	10.84751	10.29658	8.946181	10.14155	10.97273	9.190032	9.219489	10.13633	10.61604	9.995607	10.23592	10.15105	10.38052	10.25551	10.18976	11.92334	11.33907	10.56693	10.31138	9.959053	10.30573	10.47901	9.376091
AKAP2	10.48708	9.994233	10.41189	10.52517	9.019561	10.02151	9.208294	9.631632	9.635093	9.663092	10.92563	10.40738	10.09089	9.834598	9.344426	8.510469	10.2428	10.62357	10.74823	10.47303	9.004357	10.49281	9.743423	8.061462
AKT1	11.7773	11.59426	11.30957	11.75588	8.517061	11.85147	11.29682	10.36119	11.77724	11.53665	11.48146	11.68982	12.15663	11.68927	11.63335	11.3364	12.01504	12.01821	11.54879	11.14728	11.50651	11.70963	11.51665	11.25145
AKT2	10.52977	10.59711	10.07105	10.12532	12.00891	10.59564	10.45861	9.356425	10.68014	10.69649	10.35867	10.23178	10.71555	10.70787	10.67054	10.70129	10.8287	10.71182	10.28159	9.850707	10.57829	10.66707	10.67848	10.67047
AKT3	10.13339	9.744547	9.450876	9.996625	8.102023	9.832118	9.606217	9.298252	10.03117	10.38976	10.58871	10.15435	9.943822	10.46078	9.10955	9.533951	10.81072	10.7146	10.51615	10.51184	9.256361	10.45078	10.42236	8.867084
ALB	4.245205	4.265647	5.149438	3.547889	7.739453	4.037018	3.802301	3.957033	4.071504	3.579378	3.595098	3.790214	4.434267	4.311036	5.318558	4.703314	9.33308	4.903764	6.45606	3.998769	3.924629	5.370824	4.848401	6.376097
ALDOA	12.77233	12.65092	12.09135	12.51526	11.32442	12.46153	12.57004	11.13388	13.0503	12.43315	12.08834	12.56596	12.46973	12.62833	12.18038	12.94063	12.71703	12.36792	12.08221	12.70793	12.38992	12.83259	12.62402	
ALOX5	11.97282	11.29744	12.05725	11.25041	11.53201	11.37358	12.0806	10.22093	11.34379	11.41932	11.16561	11.28073	11.67585	10.75311	11.42983	10.79915	11.27076	11.19714	11.60472	10.967	10.64075	11.70753	10.90951	11.35894
AMH	5.107701	4.566887	7.347852	5.415786	12.83899	4.432947	5.778054	6.841555	4.984042	4.192355	5.025733	5.775107	5.036931	5.107503	5.024827	4.493661	5.53102	5.781774	5.60977	6.470074	5.50516	6.190252	5.596779	6.073534
AMMECR1	8.774458	8.155722	9.26278	8.809044	10.28965	8.425715	8.90384	9.791868	8.30597	8.511506	8.420265	8.551766	8.470542	8.60614	8.270303	8.221581	9.146484	8.435778	8.645768	9.023153	8.10182	8.090716	8.66542	7.894564
ANG	7.393104	6.996395	8.841316	8.200376	9.517061	7.993662	8.379227	9.037953	7.890932	8.178415	8.074352	8.436473	7.531128	7.791029	7.818824	8.104686	8.078507	8.501666	8.815069	8.42605	7.891462	7.983801	8.237698	8.682344
ANGPT1	10.08841	9.527075	9.387598	9.912462	9.39153	10.88581	9.389266	9.475611	9.505642	9.048421	9.820568	9.782681	12.00412	10.85509	10.78058	9.69								



BCAS1	4.830167	5.367578	6.355889	5.733756	9.790079	4.833485	7.43457	7.114574	4.30597	5.046504	4.28099	4.697105	5.379819	5.648071	6.812098	6.67357	5.3749	6.51449	5.949999	5.74879	7.144678	5.370824	6.071688	7.853144
BGN	12.3394	12.19224	10.52314	11.54224	10.90938	12.88267	11.16278	10.08314	13.96382	12.93019	11.30336	10.83096	13.32942	12.76874	13.43052	12.72022	13.72211	13.29967	10.79707	10.7238	12.98164	12.54193	11.66177	13.9641
BICC1	7.909895	7.878616	5.671391	6.302777	5.932098	6.948962	6.162197	5.210789	8.143913	7.584672	6.472416	6.147766	7.568122	7.914857	6.44567	6.633212	8.80786	7.802836	6.691805	6.134283	6.259614	7.658401	7.547026	6.12084
BMP4	7.649959	7.167279	7.690585	7.572057	9.932098	7.008259	8.832049	8.322682	9.328337	8.718327	8.297949	7.443657	7.627746	9.207767	8.454335	6.733141	8.464786	8.524036	7.849597	7.774553	7.08725	8.614278	8.861341	8.346503
BMP5	8.411482	7.651609	8.497031	8.347495	7.932098	8.606074	8.422888	8.984513	6.507604	7.641662	8.718995	7.898739	9.222411	8.538842	9.240556	8.297792	6.567545	6.705538	7.946965	8.03119	8.347841	9.857009	8.618017	9.232733
BMP7	5.212038	5.700153	4.387598	4.652226	5.932098	4.918374	7.321676	4.50452	4.30597	5.246802	4.158999	4.728814	5.379819	4.870463	7.47151	6.493662	7.305049	4.942239	4.699307	3.477936	6.768978	5.806923	6.942954	8.336569
BMPER	5.851862	5.970242	7.410931	7.478627	8.254026	8.475591	6.650298	6.300987	6.598751	7.178415	8.077161	8.173919	8.058758	7.063108	8.184373	6.248548	6.874974	7.043209	6.368064	7.637369	6.694016	7.83795	8.040565	7.12084
BMPR1A	9.510287	9.263742	10.37776	9.711791	11.51706	9.738917	10.16103	10.9794	10.05416	9.709873	9.76328	9.656463	10.09618	10.24053	10.29825	10.09914	9.997161	10.49844	10.18768	10.10919	9.813926	9.969862	10.26488	10.70386
BMPR1B	5.143325	5.39405	8.116702	7.156699	9.575954	5.938838	8.040069	8.994685	6.711962	5.621198	6.251446	6.050742	6.36588	5.617697	7.757131	8.397543	5.33308	7.186164	7.368064	7.280804	8.213391	5.605289	7.343492	8.914837
BMPR2	9.975552	9.700153	9.550537	10.89883	9.324416	10.45798	9.864078	8.622915	9.962752	9.955439	10.98443	11.28906	11.15309	10.16463	9.62937	10.41429	10.74348	10.15321	10.30807	9.90399	11.21114	9.777531	9.870545	
BNC2	7.785773	7.12839	8.003587	7.138851	9.686986	7.312653	8.138585	8.764387	8.017465	7.845062	7.309941	7.14189	7.351805	8.742588	7.454335	6.936604	8.322433	8.356089	7.7865	7.812355	6.722586	7.492815	8.682802	7.674439
BRMS1	8.089554	8.197653	7.824038	8.375708	8.102023	8.11552	7.988168	6.764387	8.323892	8.273275	8.099442	8.518135	8.253026	8.28711	8.070631	7.985514	8.306313	8.445855	8.252398	8.020464	8.035053	8.412644	8.193916	7.592909
BTG1	11.51879	13.08271	11.07957	11.65981	9.739453	11.817	11.68127	10.22093	11.34708	11.87939	11.85269	12.108	12.17598	11.2399	11.81504	12.24479	12.45781	11.98906	11.73225	12.38014	11.70753	11.03888	12.35356	
C15	12.54233	12.40141	10.47783	11.09092	9.254026	12.00067	10.73225	9.585268	12.69399	12.39127	10.77154	11.49642	12.17373	12.54466	11.8121	11.73147	12.8897	12.41049	11.14496	10.93701	11.01113	11.79016	11.93542	10.70192
C3	12.13312	12.44854	9.575663	10.69408	7.254026	11.16576	9.754946	8.893217	11.48886	11.38218	10.06942	11.27571	9.987718	11.1211	10.38011	10.90093	11.32377	11.27786	10.2226	10.62636	10.24972	10.71799	11.41023	9.592909
CHAR1	9.715032	9.955876	9.298664	9.648026	9.39153	9.501618	9.224086	8.565506	9.979809	9.917547	7.95418	9.312469	10.14393	8.651823	9.439137	9.449311	10.2229	9.054061	8.908571	8.637625	9.453286	8.65665	9.601272	
CADM1	10.16515	10.16247	9.742087	10.63376	9.739453	9.72867	10.20147	10.03303	9.818513	9.742213	11.06554	10.58083	10.02145	9.526633	9.5883	8.207906	9.259638	10.49602	10.73026	10.24497	8.863941	11.0282	9.183777	9.311302
CALCLR	10.17594	9.571243	10.49157	12.45011	7.157061	10.29589	10.50828	9.780155	9.03389	10.87993	11.76698	11.96909	11.49836	10.73111	10.74482	9.34697	10.05779	10.53509	10.8159	10.71676	9.526661	12.21799	10.19594	9.554661
CALD1	12.44777	11.55117	11.10661	11.81748	9.739453	11.98446	11.20716	10.168076	13.11847	11.82798	11.71291	11.78386	12.59824	13.12448	11.11844	10.80938	13.16299	13.35252	11.9966	11.76856	10.87353	12.12016	12.21895	9.977215
CAMK2A	4.429629	4.367578	7.722017	5.529742	9.102023	3.248522	6.765776	8.13311	4.938238	4.349896	4.28099	4.960139	5.071697	5.385036	5.62522	3.663586	4.705049	4.979713	5.245005	6.144199	4.635123	4.868324	5.621026	6.336569
CAMK2B	2.955698	3.197653	2.671391	2.810924	5.932098	3.596446	4.065336	2.578521	3.30597	3.076877	2.656499	3.112142	4.071697	3.969999	2.877986	2.953092	2.83058	3.864236	2.055181	2.954374	3.526661	4.090716	4.668332	5.073534
CAMK2D	10.80814	11.01143	10.0832	10.09556	9.932098	11.18997	10.51929	9.102083	10.86439	10.76046	10.48411	10.5056	11.33222	11.21272	11.08116	10.9565	11.73897	11.62361	10.21706	11.23998	10.75707	10.64856	11.50872	
CAMP	5.668416	4.256547	8.083205	6.108604	9.932098	5.146643	6.567836	7.665984	5.071504	5.219835	4.356939	6.124115	6.656659	4.385036	5.318558	3.663586	4.946057	5.422232	6.23509	7.211762	4.323179	5.370824	5.980922	6.558961
CASP8	9.334595	9.884153	9.493393	9.156699	9.739453	9.10424	9.812783	9.424011	9.412402	9.529462	9.071537	9.563903	9.316004	9.592539	9.513574	9.884904	9.47203	9.004924	9.410532	9.214118	9.738993	9.172105	9.390093	9.874003
CAV1	11.46829	10.71204	11.15348	11.83375	10.18003	11.62219	11.03879	9.562654	10.1788	11.25679	11.98395	12.20857	11.11568	12.23176	10.81333	11.48879	11.76477	12.49137	12.25558	10.78543	12.14755	11.06563	11.65543	
CBLC	3.955698	4.420045	3.323468	3.980849	4.932098	3.876554	4.939805	3.426518	4.376359	4.91818	2.878891	3.960139	2.849304	3.648071	4.928612	5.017223	2.83058	4.601202	2.962071	3.346692	4.924629	3.605289	4.521491	5.751606
CC2D1B	6.125623	6.367578	8.500661	7.214646	9.39153	6.389004	7.133816	9.041228	7.113325	6.29927	6.663994	6.891752	6.054419	6.706965	5.825518	5.903052	6.3749	7.338167	7.066408	7.4582	6.625069	5.605289	6.962063	6.452046
CCBE1	8.907307	7.943607	8.852721	8.721816	9.976492	7.876554	6.880406	8.911229	7.359081	6.621198	9.124105	8.55398	9.44093	8.983973	8.953274	7.628087	6.932118	7.849129	9.342898	9.373281	7.448191	9.545456	8.747832	9.763499
CCDC80	13.3473	12.4792	11.11078	11.70144	10.86284	12.37288	11.38827	10.95443	13.69571	13.38948	10.69907	10.45555	12.16596	13.47462	13.24415	13.00022	14.57905	13.01243	9.426957	9.906388	13.02218	11.11941	12.52451	13.42256
CCL11	8.004942	7.930103	8.033961	6.987513	7.900797	5.403801	8.564296	9.4215	8.422833	7.150126	5.941901	6.736633	5.351805	5.895998	7.270303	5.602185	8.3749	7.025228	7.865752	7.867264	5.875515	6.531289	9.856243	7.275168
CCL21	9.594737	10.78199	10.79846	10.03412	11.89788	10.94264	11.70196	10.32537	10.35364	12.12264	10.07083	9.287401	12.06524	11.97936	11.84295	10.57114	11.96672	10.87111	11.50974	11.12211	14.31446	10.9487	12.24479	11.19397
CCL5	10.14112	12.638	9.405133	8.594468	9.886294	8.656369	9.759597	9.092643	10.27636	10.60044	9.670519	9.030211	9.780042	10.30151	10.23679	10.33758	10.48402	8.662978	8.2695	9.385872	9.301248	10.17818	10.05176	10.98203
CCL7	4.486213	4.256547	2.185964	1.810924	6.932098	-0.21091	3.354843	2.578521	4.231969	2.66184	1.071537	2.664683	2.849304	3.763548	2.392559	2.663586	2.567545	2.279274	1.862536	1.539337	3.05016	2.868324	3.801598	3.488572
CCL8	7.87853	8.546381	7.140161	6.749523	8.254026	3.11019	5.826148	8.523379	6.193495	5.491915	5.429089	6.075617	4.202941	5.150571	5.158094	6.953092	9.251242	4.394751	5.997695	6.891012	4.372088	5.531289	6.905951	5.751606
CCR2	7.580189	8.096506	8.437683	8.278529	9.575954	7.16413	8.099982	9.336078	7.435253	9.462021	7.20082	8.13303	7.531128	8.068733	8.059316	7.326551	6.245617	5.694311	7.36352	8.365885	7.372088	8.845604	8.848562	8.254107
CCR3	4.643754	4.519581	8.053861	6.40587	8.932098	2.596446	7.180813	8.889588	6.484481	3.813843	3.771976	5.182532	3.766842	3.52254	4.158094	4.248548	5.199814	4.016239	6.066408	6.920159	4.526661	4.983801	6.237698	6.336569
CD163	11.50858	11.27803	11.4391	11.77983	10.99819	11.52761	11.53475	9.754445	11.97485	10.58599	8.943442	12.26053	11.97391	10.02311	10.96621	10.80029	12.95082	11.42563	11.40446	10.97813	10.72259	11.17058	9.671238	10.17507
CD24	10.82538	11.83699	9.296578	10.15226	9.632538	9.124481	11.52704	10.62182	11.13759	10.6805	9.272435	10.03735	9.649485	10.51535	10.07063	10.41401	9.343649	11.19067	10.20302	8.896889	10.74655	10.87769	10.68568	9.863611
CD2AP	9.297526	9.370914	9.123779	9.26488	8.838989	9.170634	9.47284	8.852783	9.356907	9.312094	9.369599	9.												

CHD4	10.70836	10.6148	9.84703	10.52058	8.932098	9.891066	10.11821	9.691221	10.34927	10.7917	10.56439	10.70061	10.28486	10.45971	10.08465	9.818966	10.6163	10.51847	10.44427	10.16626	10.10363	10.76919	10.49139	9.694121	
CHI3L1	11.34754	9.33379	9.790332	9.731773	11.06138	10.58269	9.9615	8.695385	11.99037	9.544483	7.51862	9.590036	7.473795	9.636756	9.171293	10.34853	10.57429	10.7139	7.349802	8.60901	9.259614	7.997607	8.851127	10.08848	
CHP1	10.36697	10.17874	11.13355	10.60412	16.85914	11.23927	10.89259	9.972555	10.71366	10.16787	10.10138	10.57703	10.53891	10.38504	11.69862	10.48466	10.49354	10.64705	10.45392	10.5032	11.34746	10.10034	10.32516	13.21615	
CHP2	3.37036	3.782615	5.886404	4.980849	7.932098	3.695981	5.104864	6.998506	2.791397	3.076877	2.978427	3.597569	3.264349	4.233033	4.655593	2.893661	3.245617	3.694311	4.640143	5.104122	4.957051	3.605289	4.414575	5.973999	
CHRD1	10.52218	10.51431	10.00103	10.12607	8.838989	11.40196	9.696311	9.362501	10.76704	10.48698	10.69221	10.55785	11.24876	11.6429	10.83799	11.60186	11.63094	11.03193	9.76254	9.971183	10.46308	10.85322	11.03832	11.3113	
CHRNA7	5.458199	5.860618	8.181449	5.980849	11.96552	5.312653	7.75392	9.777692	5.53863	5.514283	5.180061	6.182532	5.202941	6.42066	5.496896	6.612602	5.705049	5.394751	6.538997	7.248995	7.035053	6.141342	7.071688	8.452046	
CIB1	10.87257	11.37341	10.25205	10.68642	10.06138	10.53224	11.12483	9.818835	10.75471	10.84672	10.51085	10.92078	10.62263	10.54592	10.85363	11.01133	10.6729	10.9001	10.74299	10.08494	11.13806	10.7852	10.61122	10.80809	
CKMT1A	4.955698	6.182546	9.078355	6.749523	12.87461	5.517011	8.395257	8.60974	6.193495	5.849467	4.595098	6.334535	4.486734	6.291927	6.916121	6.516029	6.052972	4.501666	6.59434	6.675474	7.233382	6.090716	8.28019	10.14678	
CLDN1	9.679075	9.190119	7.290301	7.556878	7.932098	8.737458	9.219591	7.863923	10.09909	8.556822	6.463854	8.385161	6.859288	9.20266	9.390303	9.440567	7.860327	8.73597	7.829968	6.389003	9.59275	7.83795	9.57367	9.138187	
CLDN3	7.071176	7.584234	8.116702	7.745598	13.11697	7.634581	8.571368	8.063948	8.163398	8.819528	7.501989	8.118141	6.936767	6.957926	8.436953	8.824578	8.800206	8.828737	8.598213	7.761729	9.476425	7.349451	8.053986	8.867084	
CLDN4	9.230788	10.40304	10.09526	10.17067	11.67357	10.28094	9.956107	8.929018	9.948382	10.14027	9.833088	11.07562	9.151054	8.975998	10.30665	10.7581	9.15551	11.0447	10.43564	9.71343	10.90347	9.266355	9.365187	11.17227	
CLDN7	9.836982	10.10254	10.55926	10.30344	12.01956	10.86233	10.72116	9.401251	9.925089	9.745762	10.0067	10.44007	9.624823	9.313407	10.72616	10.23428	9.385169	10.72222	10.79538	9.950848	10.92052	10.10468	9.477348	11.31893	
CLEC2B	11.11669	12.22187	11.08381	10.88596	11.10202	10.5314	10.54467	10.01981	10.88113	10.72434	10.57834	10.62732	11.41133	11.03106	10.90826	10.46449	11.51766	10.54059	10.62076	10.92124	10.66671	10.57338	11.18249	11.28429	
CLEC3B	9.669944	9.065961	10.18145	10.51483	13.18003	10.86457	10.7495	10.05263	9.345985	10.53563	12.14132	11.18611	10.57949	10.76788	11.69862	9.816716	12.28693	11.09305	11.19665	10.7577	10.2309	11.28477	10.20899	11.24613	
CLIC4	11.26656	10.9159	10.78885	11.49567	8.739453	11.70833	10.39127	9.83024	11.77276	11.82591	11.61795	11.26966	11.7784	11.03249	11.05006	11.14202	11.50947	11.51768	11.04599	11.47278	10.94498	12.17894	10.84471	10.40982	
CLU	12.99551	13.45347	11.48883	11.96659	10.60452	13.32599	13.55281	13.32599	13.51199	13.71159	13.02597	12.63224	12.36874	13.64966	13.64631	14.11588	14.49749	12.27732	13.40479	12.61097	12.55231	14.13862	13.01298	13.81963	14.84546
CMA1	6.385686	6.055634	2.448999	3.547889	7.517061	3.111019	6.778054	4.063948	4.890932	4.91818	4.025733	2.905692	6.888833	5.617697	6.070631	5.953092	4.83058	3.781774	3.142644	2.861265	5.731984	4.090716	7.495495	7.395463	
CNN1	8.637522	9.702709	6.875263	8.342305	8.632538	9.780991	8.045158	7.475761	9.188613	8.788831	7.56339	7.400009	8.742774	9.894416	9.5883	6.999454	8.390276	9.857961	8.298355	6.689084	9.656123	7.912718	9.366981	10.17507	
CNOT10	8.530607	9.024021	8.635526	8.684905	9.39153	8.841659	8.571989	9.303717	8.503678	8.800254	8.818051	8.575939	8.758864	8.480961	8.542306	8.551653	8.56303	8.60977	8.714263	8.635233	8.667066	8.611981	9.005848		
CNOT4	8.728288	8.759895	8.743619	8.737714	9.180026	8.475591	8.837925	8.874978	8.762119	9.011551	8.935723	8.970123	9.008054	9.220455	8.419359	8.424398	9.413035	9.210011	8.910049	9.013719	8.360015	9.024828	9.165347	8.049287	
COG7	9.064223	9.220021	9.10721	8.914212	10.01956	8.868575	9.338354	9.426518	9.05282	9.093866	8.961801	8.88649	9.181216	9.235536	9.115025	9.160772	9.237139	9.178127	8.937824	8.952965	8.980898	9.288986	9.328845	9.442768	
COL18A1	10.72953	11.01624	10.30491	10.06753	12.43194	11.10084	11.34714	10.25518	11.24848	11.74369	9.783203	9.934873	11.68219	11.94842	11.27153	10.90782	12.54597	12.66549	9.992555	9.813909	10.73374	11.70963	12.29957	10.86882	
COL1A1	16.26246	15.49562	12.07349	12.20664	13.26749	14.39028	14.85623	13.64918	16.52565	15.37968	10.94844	10.95219	15.17801	15.16159	16.21236	14.94474	17.51005	15.35447	11.32869	10.7577	15.05497	13.84489	13.81167	16.25969	
COL1A2	14.48899	13.78116	11.57053	12.1465	14.86726	13.56089	13.13933	11.84718	15.08999	14.13915	11.46224	11.48979	14.29196	14.13231	14.95079	13.76176	16.00722	14.062	11.35124	11.32261	13.91222	13.26849	13.08523	14.80689	
COL3A1	16.06115	15.61557	12.69831	13.54154	12.39153	14.90116	14.45724	12.70438	16.0824	15.75753	12.10255	12.16797	15.83663	15.17831	16.17392	14.55714	16.69167	14.93006	11.94069	11.56714	14.98314	15.14328	14.11848	15.59912	
COL4A1	13.16217	12.63592	12.15894	11.79724	13.36255	13.71872	11.46004	10.48421	12.71875	12.79755	11.77371	11.54705	14.43035	12.97562	13.17588	11.77095	14.17488	12.70606	10.86052	11.09329	12.61637	13.03825	11.55766	11.86361	
COL4A2	12.78066	12.63991	12.01179	11.80622	14.60275	13.60997	11.44856	10.05911	12.74684	12.79327	12.05364	11.65104	14.14781	12.79866	13.80988	12.37879	13.58714	12.55966	11.09718	11.35845	13.13331	13.01256	11.63858	13.73934	
COL4A6	6.071176	5.721215	3.448999	5.108604	6.517061	5.695981	5.180813	4.780155	5.231969	5.743967	5.743962	4.631517	5.787904	5.870463	6.743056	6.851123	4.245617	5.576954	4.669891	4.598231	6.019787	4.605289	7.435235	6.894564	
COL5A1	12.81264	12.3963	10.673	10.82866	10.66002	11.38714	11.42679	10.49021	13.21661	12.8806	10.34533	10.02383	12.35578	12.43733	11.68948	10.49718	13.75836	12.59008	10.38273	10.01101	11.02027	12.25347	11.31544	10.67444	
COL5A2	11.05373	10.86631	9.841316	9.800555	10.97649	10.91709	9.856861	9.633803	12.26568	11.17447	8.833088	9.172478	11.34871	10.84529	11.24992	10.16255	12.50712	11.22618	9.154529	8.979514	10.19482	9.997607	9.825271	10.84436	
COL6A1	12.849	12.05663	11.05324	11.29474	10.39153	11.45975	11.77833	10.41394	12.65226	12.74221	11.26445	10.9821	11.73025	12.39178	11.90471	11.00195	13.78478	12.14475	11.90966	11.44673	11.1086	11.99761	12.48277	11.21649	
COL6A2	13.95335	13.27425	12.11877	12.62791	12.22672	12.94343	12.52386	11.58863	13.736	13.78352	12.15618	12.14868	13.16156	13.53478	13.4898	12.67186	15.01411	13.50468	12.6624	12.3847	12.60571	12.76213	13.48408	12.72889	
COL6A3	13.04992	12.87787	10.88015	10.99663	9.932098	12.83468	11.89118	11.01065	12.72909	12.69923	10.53199	10.38454	13.00018	12.40824	13.88401	12.94139	13.12424	11.7298	10.05095	10.46958	12.89474	12.3781	12.19164	13.73626	
COL7A1	7.904714	7.360883	8.347852	7.248329	12.95447	7.602872	9.843778	8.867616	8.075703	8.525338	6.522748	7.14189	7.969398	8.984949	10.03497	9.663586	7.903829	8.705538	7.003548	6.346692	9.230069	7.568764	9.695703	9.465852	
COMP	7.429629	5.44558	7.869661	5.355244	12.69365	9.14884	8.613087	8.295512	11.32945	9.296046	3.715393	4.414705	6.460739	8.975998	9.222916	8.635768	10.84181	9.765773	5.340583	5.183193	8.734324	7.623211	7.95254	9.744073	
CREBBP	9.357526	9.395689	9.252053	9.496257	11.10202	9.25057	9.334203	8.537364	9.570881	9.49473	9.468141	9.519269	9.58627	9.692465	8.771071	9.84281	10.28728	9.971599	9.676317	9.491593	8.80282	9.128851	9.469023	8.874003	
CRIP2	10.74215	10.47765	10.6874	10.78725	12.72651	11.49126	11.35587	10.64246	11.20321	11.51081	11.41444	10.92293	12.06524	11.26682	12.6257	11.66827	11.57877	11.49359	10.94278	10.79082	12.05204	10.94336	11.569	12.87357	
CRISPLD2	10.39495	10.54786	10.18371	9.338401	7.932098	11.61445	9.360977	9.333408	10.69657	9.759872	9.176135	9.830047	10.64949	9.508123	10.42928	10.54419	11.8254	11.46786	10.42205	9.938793	10.26205	9.277715	9.923589	10.24613	
CSF2RB	7.883805	7.646113	7.913885	7.887739	10.																				

CYP1B1	8.978066	9.193891	8.90843	8.177246	8.102023	9.252615	8.814274	7.834022	9.916256	8.838429	5.917027	8.147766	7.08877	9.596438	8.168663	8.255212	10.36715	9.141394	8.118576	6.338079	9.023618	7.675679	8.28019	8.264676
DAG1	8.94312	8.569792	9.243414	9.214646	8.838989	9.339837	9.104864	8.896838	9.328337	9.369966	9.300355	9.376429	9.778727	9.005623	9.356033	9.04825	8.348905	9.147582	9.276768	9.131794	9.149946	9.453286	9.031548	9.285585
DCC	6.143325	4.741973	4.256354	4.618279	6.517061	4.743287	4.802301	3.716024	5.444373	4.739842	5.338323	5.490654	5.138811	4.648071	4.928612	4.919926	4.245617	6.051863	3.862536	4.861265	4.857515	4.090716	6.534315	5.073534
DCN	14.54893	14.05783	12.65561	13.33056	9.102023	14.24596	13.20702	12.1285	14.26351	14.30424	13.94666	13.25306	13.95594	14.63356	14.52936	14.31249	15.14696	14.49995	13.69158	13.24028	13.55158	14.61344	14.18238	14.13861
DDR2	10.30049	9.800042	9.60887	9.832367	10.14155	9.703476	9.387264	9.687045	10.20804	10.30409	9.923286	9.437673	10.23684	10.55696	9.63478	9.368642	11.00134	10.41541	10.058	9.616152	8.887262	10.49038	10.55884	9.238106
DDX50	8.975598	8.92784	9.532921	8.9072	10.10202	8.557275	8.858307	10.13771	9.988657	9.977744	8.838065	8.807023	8.879052	8.975998	8.710876	8.688418	9.087968	9.889932	8.957556	9.306418	8.612403	9.090716	9.062864	7.824855
DNVNSDA	9.180236	8.60987	8.98557	8.962363	9.019561	8.953998	8.689827	8.560374	8.752504	8.847266	9.000795	8.699107	9.243529	8.837895	8.60979	8.166086	9.385169	9.159878	8.865752	8.702567	8.45104	8.948697	8.725363	8.189012
DENR	9.348016	9.17684	8.515088	9.08083	9.39153	8.38528	8.996073	9.202037	9.166436	9.386733	9.092516	9.078696	8.800913	9.166396	8.621378	8.074861	9.12826	9.370268	8.767708	8.876215	8.65255	9.759095	9.213981	8.132428
DES1I	8.808141	8.10053	8.664936	9.097867	9.254026	8.172795	8.321676	8.728268	8.20321	8.150126	8.579331	8.89	8.206856	8.446813	7.838815	7.493661	8.882242	8.893983	8.588511	8.625031	7.736661	8.153726	8.431812	6.894564
HLX16	8.643754	8.824579	8.294489	8.532023	8.102023	8.76923	8.725134	8.076772	8.758829	8.483437	8.565392	8.588956	8.737371	8.844468	8.845418	8.969394	8.620657	8.498442	8.449644	8.267257	9.035053	8.742793	8.879043	9.155329
DICER1	10.16298	10.20981	9.63222	9.989174	9.019561	10.43835	9.796278	9.736373	9.843576	9.91818	10.1302	9.90829	10.00805	9.554961	10.31142	10.43618	9.874974	9.771127	9.656952	9.640875	10.58479	10.17818	9.810851	10.45205
DLC1	9.618663	9.314863	9.585135	10.03251	9.45566	9.503336	8.718778	8.344056	8.788173	8.860421	10.55636	10.21508	9.403893	8.797818	9.194752	8.067308	9.900253	10.065	10.19089	10.19755	8.56586	10.04491	8.365187	8.609587
DLG1	9.651507	9.640596	9.57312	9.580211	9.180026	9.389004	10.06534	9.854645	9.696569	9.791123	9.627084	9.714037	9.78921	10.00855	9.540273	9.539421	10.1067	10.03861	9.827495	9.657413	9.446765	9.955787	10.05954	9.762834
DLL4	9.228717	8.841509	9.773929	9.583513	10.79008	8.707954	8.513796	8.583022	7.860559	7.991761	9.894107	8.976741	8.444251	8.402958	9.376693	8.504888	8.900253	8.491973	9.500196	9.192779	8.938903	9.128851	8.455603	9.626075
DNAJC14	6.73997	6.812363	7.664936	7.162599	9.019561	7.49645	7.411111	7.210789	7.060857	7.171395	7.333631	7.260534	7.524869	9.645751	7.663088	7.459445	7.838074	7.301641	7.225106	7.20704	7.640123	7.090716	7.372347	8.177871
DPT	8.643754	9.390767	9.061253	8.757343	10.83899	10.5136	8.81129	8.974978	11.41919	8.616095	10.63378	8.910884	11.460383	11.15057	11.96431	10.83629	12.34398	10.82874	9.338269	9.609905	11.39075	10.98726	10.31869	11.62094
DPYSL3	11.24007	10.85705	10.12024	10.00814	9.517061	10.68618	10.24635	10.2267	11.86324	11.62762	11.05595	10.04917	11.06416	11.2859	11.8326	11.07439	11.89577	11.45711	10.35896	10.42757	11.3807	11.02651	11.30753	11.50761
DSC2	8.930432	8.681469	9.197191	9.030092	10.28965	8.647072	9.20375	9.357255	9.467857	8.530834	8.297949	8.767494	8.362374	8.233033	9.042174	8.204467	8.804038	8.794973	8.801695	8.610799	8.85966	8.658401	8.205989	9.914837
DST	11.1684	10.68482	10.75582	11.03854	10.01956	11.2724	11.23582	10.72424	11.39078	10.9493	11.18463	10.80004	11.82913	11.95603	11.57048	10.84184	11.45507	11.85765	11.05448	10.94199	11.03648	11.81864	11.40282	11.18066
ECM1	9.402322	8.834277	8.725123	8.373166	11.10202	9.111019	9.196907	9.028082	9.374211	9.941064	8.198241	7.939961	9.660947	9.155866	9.781437	8.977477	10.04328	9.020741	7.755621	8.235145	9.385551	9.468237	9.433524	10.8177
ECM2	9.321049	8.918752	8.298664	8.27581	10.28965	9.39457	8.532036	9.350442	9.241429	9.401808	9.300355	7.841876	10.08452	9.728444	9.940996	9.209623	10.09893	9.648507	8.020965	8.211762	9.042627	10.10034	9.472359	9.484056
ECMR	8.843765	8.047319	9.092855	9.230182	6.517061	8.933479	8.721959	7.622915	7.711944	8.786536	9.73064	9.368902	9.589272	9.634861	9.25054	8.459445	9.574292	9.018492	9.070596	9.987797	9.607305	9.667066	9.435235	8.690206
EDC3	8.87853	8.621119	8.243414	8.668905	7.254026	8.680874	8.93707	7.841555	8.998062	8.765711	8.675163	8.709078	8.886394	9.077129	8.550411	8.326551	9.410524	9.296082	8.833258	8.548699	8.419394	8.632089	9.013344	8.285585
EDN1	9.426018	9.702803	9.723571	8.984535	10.14155	10.14224	9.871259	8.943093	8.576499	9.5714	10.31412	9.711063	8.105173	9.735534	10.32666	9.536868	9.958144	10.00492	10.05659	9.66432	9.206665	10.66707	8.705671	10.47726
EGF	5.309353	3.782165	8.640306	7.000748	8.632538	4.743287	6.259632	8.574005	4.791397	5.015477	3.393465	6.656463	4.766842	9.385036	4.158094	3.493661	4.254617	5.2489	5.925546	6.98228	4.165637	5.453286	4.572117	5.166644
EGFL7	9.875886	8.643357	10.409	10.51136	13.66681	9.716869	10.56872	10.02973	9.56147	9.660587	10.42358	10.59757	10.97515	11.06522	11.20442	9.755756	10.07375	10.26512	10.37259	10.60318	11.23048	10.13823	10.0946	11.92153
EGFR	9.93552	9.516572	10.15521	10.26625	9.886294	11.01007	10.28019	9.92255	9.82482	9.811587	10.68487	10.7026	10.13162	9.814652	10.42818	10.81897	10.37361	10.66944	10.77842	10.59281	10.5	10.10354	10.07389	10.74029
EGLN2	10.20784	9.831859	10.10005	10.5647	9.102023	10.13005	10.37013	9.223377	10.21166	10.33129	10.80841	10.25681	10.44357	9.788307	9.642137	10.54024	10.60645	10.50381	10.44422	9.820549	9.927218	10.17459	9.361401	
EGLN3	8.169478	9.070071	8.395418	7.318718	8.102023	6.48953	7.560747	8.963952	7.872785	7.589947	6.839721	7.536169	6.202941	7.514319	6.743056	6.693333	7.343649	7.286768	7.806725	8.211762	6.407712	6.090716	7.780225	6.973999
EIF2A3	8.889061	8.736812	8.826932	8.464366	9.254026	9.095152	9.155154	8.93255	8.752226	8.763378	8.359249	8.898739	8.834197	8.821332	9.033527	9.499285	9.618482	8.94934	8.829968	8.809243	9.047376	8.10354	9.343492	9.22734
EIF4E2	9.680591	9.278026	10.12731	9.740675	10.51706	9.873899	9.916391	10.02478	9.946938	9.742213	9.373033	9.558399	9.718298	8.804575	9.558471	9.337582	10.31574	9.793659	9.597245	9.590093	9.218414	9.338644	9.854965	9.601272
EIF4EBP1	8.547325	8.038955	8.812403	9.172868	8.102023	7.978915	8.453832	7.354625	8.878859	8.541763	7.862699	8.603996	8.676559	8.407404	8.423778	8.187148	9.265208	8.366736	8.43022	8.769758	8.275769	8.483034	8.197951	7.8105
ELF3	11.25236	11.02155	14.42264	11.35137	11.54681	10.85653	11.68983	9.728268	10.20079	9.970685	11.19663	11.95596	10.42589	9.414048	10.54434	11.17094	10.34628	12.16141	11.87316	10.36058	11.43134	9.077777	10.03832	11.63933
ELK3	8.849168	8.729034	8.749732	8.347495	10.51706	8.49645	8.982874	8.089483	8.878859	9.235066	8.743962	8.648195	8.627746	9.329895	8.628783	8.829051	9.587692	8.998092	8.368064	8.260436	8.848902	8.658401	9.431812	9.901353
EMCN	8.550645	8.320049	8.467662	10.31938	8.739453	8.986307	8.60277	8.791868	7.039324	9.13216	10.42082	10.4591	10.10983	9.49565	8.598108	7.412524	8.841807	8.918313	8.727606	9.118024	7.694016	10.83411	9.357992	7.097381
EMILIN1	11.49744	11.26733	10.38662	10.45598	12.90938	11.00037	10.084	9.598667	12.28953	11.11854	9.749256	10.13968	11.74782	11.89521	11.50422	10.60022	11.29954	11.70204	10.12463	10.16748	11.12996	11.25634	11.17203	10.64238
EMILIN3	3.692664	4.197653	6.522248	5.108604	7.932098	4.312653	2.702766	1.78733	4.231969	4.192355	4.56339	4.159448	4.434267	3.969999	4.240556	4.538055	4.705049	4.648507	3.755621	4.787264	5.098098	5.983801	3.884061	5.414571
EMP3	9.966926	9.559597	10.09766	9.753438	10.25403	9.232034	10.44327	9.063948	10.16892	9.920275	9.199531	9.658522	10.45499	10.02456	10.04934	9.166086	10.67607	9.814549	9.424778	9.266123	9.385551	9.830256	10.11608	9.238106
ENO1	11.37308	11.30748	11.25796	11.55884	9.790079	11.02391	11.21452	10.34273																

EV2A	9.016994	9.665258	8.712659	8.94706	9.102023	8.355145	8.542869	8.699536	8.820092	9.250138	8.28099	8.720952	9.08877	8.171633	8.059316	8.507681	9.007169	8.043039	8.417125	8.771358	8.506857	8.402302	8.411103	8.395463
EVPL	8.328805	8.33379	9.373811	8.987513	11.82692	8.863232	9.601043	8.889588	8.728875	8.983768	9.32065	9.165254	8.577225	8.699733	9.194752	8.734452	7.745463	9.550737	9.704437	9.126802	8.632616	9.147547	8.750309	9.788696
F11R	9.660555	9.820925	9.321417	9.948769	7.932098	9.801715	9.371144	8.687045	9.082074	9.357648	10.20339	9.079779	9.727866	9.065923	9.710876	9.328132	9.211402	9.893983	10.08723	9.836253	9.929743	9.845604	9.191894	9.948004
F3	10.1077	10.20888	10.09885	10.63544	9.838989	10.63536	9.060318	9.024777	10.37098	9.567763	10.18398	11.05856	10.56736	9.457571	9.51978	9.834624	10.79251	10.74959	10.45553	9.750414	10.32084	9.478118	8.596779	9.442768
FAM174B	6.580189	6.285116	8.32756	7.631103	8.102023	7.34368	7.495324	8.45135	7.163951	7.099245	7.771976	7.614643	7.054419	6.777354	7.346755	7.31384	6.620657	7.749594	8.403909	8.116766	7.213391	6.412644	7.237698	7.024625
FAP	9.400483	9.221869	7.864036	7.162599	8.932098	7.731605	7.304802	8.58751	9.52126	8.911875	6.565499	6.536169	7.777411	8.207767	7.546364	6.993507	9.158507	8.309021	6.215052	6.971183	6.759818	7.190252	7.106435	6.8105
FASLG	5.429629	7.476876	6.734401	5.45478	6.932098	8.376554	5.753392	7.614145	4.529064	6.324807	4.929517	4.819962	4.138811	5.735534	4.771071	5.169370	4.565754	3.934751	5.055181	6.020464	3.924629	4.983801	6.036064	6.254107
FBLN1	13.73204	13.44023	12.00774	12.67227	10.06138	13.93812	12.81129	12.15027	13.35009	13.43708	12.58403	12.33695	13.54753	13.91154	14.01699	13.95967	13.8307	13.81325	12.97134	12.58714	13.23762	13.62432	13.74988	14.01155
FBLN5	10.72315	9.792599	10.10602	11.04255	9.254026	10.67631	9.628426	8.946591	10.50368	10.33505	10.68625	11.517	11.60419	11.35255	9.96634	9.509076	11.34759	11.73631	11.65114	10.92592	9.45104	11.37347	10.26776	8.626075
FBN1	10.7356	10.25295	9.637175	9.700681	8.739453	10.97024	9.758048	8.635971	11.49728	10.76135	8.958757	9.21508	11.46197	11.03393	11.54839	10.73862	12.70659	11.11322	9.149259	8.876215	10.722	9.997607	10.30379	10.61077
FBN2	5.033701	5.58997	7.591957	6.772856	9.932098	3.959016	7.104864	8.841555	5.961322	6.106625	3.978427	5.933172	5.434267	4.58667	5.496896	5.166086	6.53102	5.648507	6.142644	7.276302	4.957051	4.868324	5.82266	6.295927
FBP1	12.26732	10.46444	12.32526	10.86756	9.686986	11.56552	12.62078	10.10148	11.229	11.55227	11.43512	11.65053	10.9803	12.23053	11.07766	10.16609	10.72843	11.25703	11.80191	11.11077	10.86608	11.07778	9.973879	11.41457
FCF1	10.71281	10.67068	12.05879	11.3703	13.75547	10.27693	11.79854	12.90612	10.78494	10.84947	10.51707	11.31083	10.70036	11.20777	10.68626	10.51325	11.00467	11.04027	11.61408	11.88899	10.74481	10.46078	11.34121	11.01839
FERMT2	10.28263	10.09247	9.944854	10.31409	9.39153	10.93439	9.190032	8.803487	9.936783	9.796837	10.54423	10.14777	10.63793	9.791029	10.73952	10.37324	10.35936	10.49035	10.32255	10.24382	10.35089	10.81279	9.714136	10.51316
FGF18	5.458199	6.731631	5.536461	5.601001	8.102023	6.833485	5.802301	6.256593	7.039324	6.813843	6.778896	5.648195	7.256808	6.538842	7.798551	6.151872	7.729433	7.286768	5.699037	5.954374	6.645107	6.640913	7.211038	7.211038
FGF2	9.261507	8.881817	8.144807	8.251101	7.739453	8.719828	7.387264	6.856506	6.341594	8.85402	8.784227	4.13303	8.080259	8.963975	8.063667	8.206567	9.165986	8.51666	8.737373	7.912281	6.249146	8.644914	7.254107	7.254107
FGF9	5.618663	5.61269	7.426279	6.592284	8.838989	4.918374	6.287728	8.416464	6.569004	6.061771	5.56339	5.52718	4.264342	7.16114	5.594193	5.581124	5.918043	5.802836	6.602075	6.843118	5.165637	4.453286	5.75853	6.024625
FGFR1	10.82538	10.19577	10.16782	9.804334	9.102023	10.77422	9.853964	9.832132	11.26713	10.61733	10.26506	9.824555	10.69758	10.97525	10.95021	10.4866	11.32976	11.10211	10.22072	10.803779	10.79892	10.36018	10.75374	10.83907
FGFR2	7.098656	7.234742	8.547031	7.953882	10.54681	7.57045	8.446158	8.635914	7.878859	7.768039	7.736872	8.305914	7.580246	7.411837	8.070631	8.310644	6.290011	7.469098	7.654814	10.740237	8.71799	7.923589	9.160797	9.160797
FGFR3	7.867922	6.731631	8.849878	8.733756	10.54681	7.844373	10.20375	9.242435	7.984042	8.213014	8.865952	9.244171	8.344715	8.706965	8.685341	8.792869	7.140435	8.951699	8.794961	8.799864	9.012092	9.311267	9.282092	10.03083
FGFR4	8.440409	7.464439	9.304905	9.387093	12.2175	8.973966	8.510121	8.885949	7.250828	6.749303	9.739535	9.502168	9.510686	9.701544	10.36984	8.630652	5.73747	8.680153	10.15847	9.993293	8.552661	9.875818	9.299098	10.16664
FGFL2	9.385686	10.23383	8.931513	9.232989	9.019561	9.069861	8.998699	9.004786	8.613398	9.617328	9.426888	8.761715	9.900966	8.767012	9.810412	9.34541	10.2941	8.394753	8.904201	8.86821	9.381393	9.197951	8.634249	8.634249
FHL1	12.21623	11.42407	11.81496	12.33318	10.73945	12.98539	11.6148	11.60698	11.36125	12.09948	12.74595	12.36433	13.28497	12.76376	13.37783	12.69165	12.63659	12.96168	12.60809	12.54004	12.75536	13.05897	12.76177	13.40505
FIGF	10.36509	8.354157	8.83558	9.364233	8.838989	8.34368	7.532036	8.256593	8.781703	8.095541	10.32716	9.970123	9.379819	10.49252	7.884412	7.586418	7.267988	9.491973	10.1253	8.888065	6.703602	10.10673	7.747559	7.189012
FL1	9.322668	9.302688	9.484256	9.279787	10.42395	8.820872	9.25516	8.925478	8.926361	9.597823	10.20789	9.86792	9.669483	9.514319	8.77799	8.482346	10.01215	9.252732	9.750409	9.747978	8.722586	10.07778	9.845625	8.365553
FLT1	9.118929	9.816038	9.256354	9.360388	8.102023	8.908032	8.567836	9.300987	7.183714	8.597823	9.964838	10.07946	8.624823	8.296728	8.346755	8.021138	9.794439	9.174091	9.542016	9.574594	8.216742	9.219999	8.662503	8.264676
FLM4	7.643754	7.197653	8.048911	7.749523	7.739453	7.849787	7.826148	6.764387	6.778457	7.305696	8.359249	6.7672857	8.962468	8.86077	8.042174	7.173141	7.973538	8.170045	7.810068	7.914376	7.848902	7.531289	8.080458	7.189012
FMOD	11.81472	11.32005	10.52225	10.82773	9.517061	10.96407	10.62333	10.54431	11.06918	11.56505	10.55434	10.52436	11.023249	10.65841	10.30263	12.56924	11.97566	10.67311	10.59326	10.84674	11.25778	11.28114	10.11501	10.11501
FN1	14.34569	13.63904	12.71266	13.24268	6.517061	13.89221	13.12903	11.53736	14.92454	14.0784	13.30837	13.02573	14.50379	13.52753	13.9173	12.57114	14.13579	13.97776	12.58437	12.91673	12.92052	14.24987	13.13001	12.16029
FOX2	5.071176	5.005008	6.930125	5.583513	11.01956	6.074493	5.510121	6.970838	6.984042	5.831762	5.158999	5.453179	5.964781	6.348511	6.29945	5.741588	7.677699	7.501666	5.669891	5.640875	6.442478	4.605289	6.189869	6.8105
FOX4	8.236984	8.400593	8.964698	8.626841	11.63254	8.647072	8.731461	8.354625	8.978395	8.779627	8.998573	9.098553	8.854305	9.02311	9.092999	9.22837	9.259638	9.163953	8.90693	9.074612	9.038845	8.166004	9.816259	9.609587
FRAS1	9.078095	8.147966	8.379736	8.483349	9.632538	9.081412	8.143338	8.815014	8.768676	7.422652	9.164294	8.436473	10.41663	9.668588	8.458648	7.482346	7.3009	8.613174	8.08032	8.585551	7.90399	9.83795	7.790951	8.497561
FREM1	8.019393	8.193891	8.359891	7.390868	10.01956	7.628295	8.028294	9.303717	6.613398	8.153693	7.251446	6.443657	8.61307	9.051793	8.337417	7.633212	8.040033	7.128939	7.868962	7.971183	7.158685	8.962841	8.575222	8.189012
FREM2	6.925325	5.741973	8.259372	8.581312	9.45566	6.232034	7.502741	9.15746	8.250828	7.410778	7.352307	8.31116	5.98316	6.58667	5.825518	5.779063	5.800206	7.677305	7.87536	8.204673	8.505048	8.069293	6.874007	6.690206
FST	7.915056	7.578475	7.880844	7.144825	7.517061	9.657913	6.418973	8.71192	10.4124	7.007615	7.05453	7.30854	8.891268	7.554961	8.670544	8.802	8.488791	8.202106	7.354389	7.665181	8.547347	7.83795	7.181741	9.037009
FSTL1	12.66229	12.51695	11.62447	11.55127	9.739453	13.25402	11.85469	11.22238	13.35745	13.12491	11.67122	11.8273	13.55186	13.12144	13.46777	12.86135	14.55552	13.14191	11.93973	11.52684	13.13053	12.72993	12.09243	12.88988
FUT3	6.033701	6.495333	8.294489	7.950475	10.79008	6.517011	8.702766	8.661734	7.017465	6.491915	4.771976	7.50446	3.927307	3.585036	7.240556	6.548943	6.245617	6.576954	7.36352	7.692467	7.39001	6.531289	7.045052	7.96106
FXYD6	9.550645	9.489207	10.02894	9.726803	10.48669	9.810071	9.848152	9.633803	9.805816	9.866954	10.41306	10.00534	10.9843	10.42834	10.72437	9.807678	10.05619	10.15886	9.725837	10.08108	9.997554	9.966356	10.26968	10.68628
GALNT7	8.009775	7.836692	7.023907	8.273085	7.739453	7.838939	7.956107																	

HDHD3	7.960699	7.549328	7.988157	7.574689	9.324416	7.557275	8.162197	8.328055	7.684481	8.091828	7.468141	7.801442	7.499558	8.291927	7.401548	7.993507	7.540238	8.107939	7.684537	7.477936	8.137623	7.791156	8.245517	8.316391
HEG1	10.78577	10.44479	10.07227	10.86621	9.976492	10.40564	10.23303	9.871303	11.03253	10.65808	11.9229	11.19819	10.83988	10.7231	10.37098	9.804274	11.10438	11.30441	10.72185	10.59145	9.748286	11.52415	10.55097	10.04009
HGF	10.36697	9.913043	9.728222	9.503249	9.575954	9.436549	9.495324	9.616342	9.321663	9.830651	9.084161	8.808878	10.20588	10.30509	9.073446	8.802	9.521247	9.454199	8.628828	9.121793	8.410642	10.07778	10.30939	9.067511
HIF1A	12.87622	13.02089	11.64581	11.64197	11.16092	11.99915	10.96015	10.19323	11.72256	11.57838	11.10867	11.76343	11.68781	11.16967	11.52544	11.47902	13.17857	12.00634	11.31168	11.16565	11.61049	11.46948	11.63486	11.05843
HIPK1	10.3317	10.23474	9.607188	10.12078	8.632538	9.986307	9.651967	8.4215	9.640466	9.943126	10.32597	10.1031	10.13984	9.782497	9.757131	10.06541	10.27904	10.22179	10.17412	9.776945	10.15082	10.38139	9.870219	10.17227
HIPK2	9.319103	8.640596	9.482422	9.721816	9.838989	9.10424	9.424841	8.99806	9.178798	9.401808	9.782343	9.961808	8.929678	9.353127	8.861794	9.946716	8.802123	9.801528	9.699037	9.588278	9.500066	8.927218	9.699978	9.248793
HK2	9.435029	9.337204	10.03396	9.826803	10.01956	8.892379	9.865517	9.458717	8.722134	8.784237	8.799457	9.823637	8.420846	7.777354	8.168663	9.961266	8.834332	8.482214	9.477246	9.717587	8.7506	8.9277982	8.26103	9.200067
HK3	8.530607	7.31313	8.905695	8.590096	9.886294	7.046479	8.906638	8.018144	8.158967	7.519821	7.126819	7.812582	8.101444	7.301513	8.230502	6.851213	7.33308	7.128939	7.284	8.187994	8.285377	7.51218	7.321466	8.452046
HKDC1	6.160813	5.58997	8.008694	7.430532	10.42395	7.120008	6.917779	8.691221	6.140306	5.681739	4.929517	6.805165	4.633576	5.735534	7.64806	5.581124	5.800206	5.884136	6.522786	7.45422	6.476425	5.927218	5.999538	6.774439
HLA-DB1	13.51306	13.95282	11.20444	12.20574	8.517061	12.41343	12.22352	10.76933	12.56454	12.94132	12.81753	12.40921	12.87982	11.5302	12.17883	12.20468	12.85433	12.00151	12.17574	11.51447	11.86821	12.8123	11.95642	11.6635
HMOX1	11.35658	10.27803	10.21055	11.01712	11.45566	11.0506	10.40618	9.242435	9.544374	9.046504	8.541178	12.67018	12.33871	9.514319	9.11229	8.388479	10.74047	8.893983	8.553033	8.798295	10.32551	9.980329	9.330684	9.51094
HOXA5	7.894298	7.234742	9.119065	8.471514	9.102023	7.671734	8.403206	9.333408	8.642253	8.091828	9.124105	9.216479	8.457456	9.150571	8.388044	8.297792	7.980327	8.366736	8.857697	9.052406	7.470822	8.948697	9.430098	8.8105
HOXA7	4.593128	3.700153	7.956793	6.556878	9.102023	4.181408	6.702766	8.728268	5.071504	4.813843	4.595098	4.819962	5.071697	5.102109	4.240556	4.741588	5.290011	4.979713	5.925546	6.837017	3.713125	5.090716	6.372347	6.414571
HOXB13	2.370736	-0.38731	7.486088	5.618279	9.254026	3.248522	6.252963	8.239586	0.984042	2.66184	1.071537	4.52718	2.849304	2.063108	2.877986	2.078623	3.705049	3.153743	5.699037	6.338079	1.05016	1.283361	5.299098	5.558961
HOXB3	8.443898	8.252935	8.998462	8.183063	9.976492	8.069861	9.230801	9.748446	8.651516	9.166107	8.516551	8.118141	9.153085	9.939625	9.142093	8.562439	8.395364	9.202106	8.392803	8.858256	8.748286	8.668324	9.647826	9.848004
HPSE	7.580189	8.155722	8.648671	8.459581	9.39153	5.938838	8.546463	9.463607	9.001311	6.773217	6.241462	8.10007	7.264302	6.252933	6.60979	6.8687	7.343649	6.170045	8.105029	8.491593	7.08725	6.370824	7.868954	7.867084
HRAS	7.071176	6.943607	6.919319	6.926401	10.14155	7.288937	6.740901	6.163483	6.949826	7.091828	7.093904	6.898739	7.187174	6.981972	6.865047	7.001456	7.052972	6.792343	7.372593	7.104122	6.949013	7.550148	6.95254	6.8105
HSD17B12	10.49486	10.9301	10.65275	10.93634	9.102023	7.671734	10.04883	10.58977	10.11768	10.60059	10.87007	10.96139	10.72923	10.46185	10.59811	10.6529	11.01049	10.96752	10.57923	10.56954	10.82165	11.37744	10.68064	10.58027
HSP90B1	11.09069	10.86772	10.95415	10.79961	11.63254	10.87124	10.97889	9.651056	11.38065	11.21387	10.53863	10.68048	11.07866	11.50709	10.88361	10.67854	12.26893	11.46786	10.70264	10.8575	10.82349	10.88513	11.5895	9.921531
HSPB1	11.56754	11.67034	11.07227	11.01753	14.99549	12.36676	12.36531	10.86485	12.84532	11.92211	11.16165	11.07754	12.39598	12.70313	13.168	12.56244	12.19508	12.54528	11.54352	11.18169	13.29363	11.37876	11.95075	14.29593
HSPG2	12.77535	12.18017	11.43437	11.69509	12.00891	12.95541	11.91326	10.79187	13.0052	12.98377	11.61172	12.24496	13.12819	13.4836	13.26612	13.83363	13.02144	12.06518	11.69837	13.09193	12.21114	12.78694	13.51565	
HUNK	6.089524	6.150189	7.988157	7.000748	7.739453	5.997615	6.162197	8.181405	6.914779	6.20616	5.782882	6.713047	5.679379	5.735534	6.374412	6.221581	7.164481	6.864236	6.741681	7.134283	6.442478	6.327755	5.884061	6.712133
IBSP	4.033701	3.072122	7.083205	5.749523	11.16092	3.374053	7.656962	8.083141	7.842023	3.951347	3.530968	6.025431	3.379819	5.348511	3.392559	3.301016	6.512404	5.120576	6.706233	6.715926	3.98876	1.283361	6.668332	5.921531
ICAM1	12.91022	12.68399	12.31422	12.50543	10.28965	11.87456	11.13441	10.82835	11.11654	11.42006	11.79733	12.24606	10.7265	11.29553	10.75801	9.846808	12.87725	12.66729	12.14777	11.74554	10.18459	11.56065	10.7856	9.891558
ID1	10.66842	10.32522	12.2729	12.74989	12.54681	12.04176	11.95644	10.68391	10.7752	11.70167	12.77501	13.40162	12.56164	12.10066	11.78187	10.55503	10.72943	12.51209	12.73235	12.51852	12.1517	12.48854	10.82201	10.95291
ID2	10.01939	10.63644	9.279778	9.555758	8.102023	9.751987	9.087704	8.470912	9.28325	9.432963	10.25827	10.13451	10.06632	9.343879	9.297043	9.235128	9.682329	9.761745	10.16566	10.04316	9.182874	9.540749	9.169463	9.115011
ID4	10.90989	10.24114	10.47321	10.58516	12.50953	10.17063	10.23192	9.713974	10.69657	10.62249	11.43238	11.24896	11.09354	11.78847	10.56948	9.970407	12.32876	11.70868	11.80463	10.92556	9.798353	11.35348	11.41588	10.44727
IFNG	4.830167	8.193891	8.199426	6.668905	8.932098	4.111019	5.778054	9.021464	6.684481	4.349896	6.060221	5.849108	4.001307	4.150571	3.392559	3.51589	5.415542	4.086629	6.088604	7.450229	3.924629	5.090716	5.036064	9.373999
IGF1	10.80049	9.868899	8.782899	7.745598	10.18003	10.35514	9.52112	9.28726	11.51054	10.71411	7.476678	6.939961	10.04789	11.06311	10.84871	10.18453	12.13702	10.73392	7.655094	7.276302	10.44748	8.692752	10.67196	10.16664
IGFBP4	13.40542	12.82503	11.63553	11.76488	10.25403	12.97149	12.71778	12.05506	13.49196	13.43708	11.63759	11.87989	12.22507	13.93492	13.796	13.16774	14.30234	13.47721	11.16664	11.30227	13.09239	11.96633	13.85017	12.78457
IGFBP7	14.17345	14.07551	11.72357	13.08385	11.51706	14.52354	12.69104	11.54315	14.35343	14.28328	13.13922	13.01723	14.5208	14.59431	13.88581	13.89701	14.45225	13.83961	12.63084	12.3788	14.05924	14.07188	13.64487	14.52007
IL10RA	10.41968	10.94864	9.393467	9.667868	10.32442	8.889753	9.973562	9.378126	9.952708	10.22578	9.373033	9.778899	9.726503	9.784208	9.325659	9.734452	10.21428	8.746879	9.294779	9.068117	9.726117	9.208174	10.03606	9.755358
IL11	5.73997	4.005008	7.239076	4.749523	11.94333	5.671734	4.849607	7.154141	5.071504	4.29927	2.978427	4.112142	4.323235	4.709665	3.877986	4.248548	3.567545	6.2489	4.340583	5.329414	4.957051	4.543286	4.106453	5.558961
IL13RA2	7.186653	6.907311	6.463949	5.749523	7.932098	8.00341	6.12423	7.84905	4.984042	5.491915	2.241462	4.877677	6.233968	6.921089	7.047911	5.602185	3.705049	4.106239	5.377109	6.539337	6.713125	8.450749	7.268724	5.973999
IL15	7.269589	7.992069	8.728222	7.855318	9.180026	6.198482	8.379227	9.202037	7.791397	7.279817	7.455241	7.922928	7.499558	7.939625	7.210182	6.859983	7.73747	7.619124	7.779695	8.242087	7.645107	7.349451	7.942954	7.506494
IL18	8.253379	10.07826	8.80948	8.84251	9.45566	9.304791	9.699542	9.239586	9.391309	8.549907	8.629957	8.994786	8.645164	8.530714	9.562484	9.383925	8.327766	6.860153	8.41493	8.483805	9.372088	9.044913	8.238991	9.88432
IL1A	5.894498	4.700153	7.645396	6.709777	8.932098	5.833485	6.065336	7.160204	4.738929	3.813843	5.852896	5.946719	4.633576	4.763548	3.877986	3.953092	5.000505	4.729274	6.340583	6.998769	4.713125	6.190252	5.173567	5.8105
IL1B	8.199401	8.340611	8.518672	7.547889	9.838989	6.731605	8.10973	9.07996	5.816932	6.273275	5.89206	7.292715	5.610117	5.844468	6.199914	5.55975	9.109803	5.7604	8.604003	8.20704	5.713125	5.983801	7.089175	7.166644
IL1RL1	8.038439	8.772562	11.48517	11.0687	8.739453	10.12326	8.9058																	

ITGB4	8.418768	9.019958	8.504281	8.552391	13.00891	8.961518	10.6636	9.28726	9.542462	9.640392	9.965596	8.434071	7.844286	10.2554	10.64712	10.9366	10.25545	10.07477	9.253626	8.267257	10.66977	8.759095	10.66177	11.5971
ITGB6	9.679075	10.06596	7.651939	9.198941	8.632538	9.812845	8.731461	8.13311	9.948382	9.998718	8.684405	9.457917	8.558963	9.096531	9.685341	8.412524	7.745463	10.27739	8.82171	8.876215	8.842408	9.667066	8.343492	9.400264
ITGB7	7.071176	9.165359	6.273427	6.355244	5.932098	6.037018	7.313263	5.340035	7.133789	7.831765	6.95418	6.481376	6.610117	7.385036	7.60979	7.78368	7.013802	5.552292	5.60977	6.163828	7.419394	7.473186	8.169463	7.986233
ITGB8	9.021787	7.667973	8.515088	7.855318	9.575954	7.85518	9.171535	9.031038	8.7637188	8.289576	6.813003	7.562022	8.526633	8.428183	8.155439	8.036169	8.524034	7.96807	7.873238	7.98876	7.709626	8.65642	8.524196	
ITM2A	9.494857	10.06287	8.315247	9.731773	7.517061	10.03464	9.162197	7.878645	8.463822	9.764545	10.36616	9.973436	9.874136	9.715953	9.629052	9.554357	10.05458	8.937485	9.629774	9.589185	9.846741	10.45579	9.435235	9.371215
JAG1	9.803973	9.174933	8.852721	9.654321	7.932098	9.362738	9.011755	7.426518	8.652927	9.470625	9.648695	9.278054	8.939251	9.629162	9.488483	9.080501	10.38004	9.547621	9.578743	9.372227	9.851027	9.937997	9.312188	9.080811
JAM2	8.689655	8.12839	9.281889	9.424406	9.324416	8.838939	9.973562	9.622915	8.519317	9.246802	10.12953	9.664683	9.069548	10.02889	10.12998	9.382404	10.35022	9.629476	8.669891	9.023153	9.203249	9.932589	10.08551	
JAM3	9.815061	9.657084	9.793295	9.896618	10.14155	10.19848	9.162197	9.45135	10.42595	9.930707	9.994121	10.0833	10.73737	10.21793	10.0393	9.78943	10.43421	10.51768	9.551036	9.497406	9.66487	10.52654	9.70282	9.983627
JUN	11.06886	12.22602	11.14944	10.65589	10.10202	10.88383	11.44086	8.635971	9.898427	10.3097	13.0464	12.5187	11.07277	9.071357	10.19087	11.05638	12.05739	11.10847	11.71941	11.79417	10.12073	11.05979	9.027019	10.54819
KCNJ8	8.143325	8.377562	8.61558	8.497424	8.739453	8.429336	7.866954	9.172472	7.758829	8.725535	8.624206	8.966803	8.673733	8.493561	8.505259	8.651008	8.874974	7.927931	8.37033	8.720903	8.632616	8.905413	8.357992	8.698025
KDM1A	9.000092	8.767508	8.622259	8.735736	10.10202	8.713903	8.849607	9.018144	8.758829	9.089967	8.771976	8.874137	8.811236	8.87368	8.828854	8.824578	8.918043	8.925532	8.781399	8.625031	8.766694	9.064721	8.801598	8.773974
KDR	9.143325	8.436058	9.309051	9.359104	10.01956	8.959016	8.699542	8.614145	8.972726	8.95952	10.31173	9.944189	9.653794	9.343879	9.965449	8.717663	8.188132	9.049662	9.669891	10.17294	8.012092	10.04823	9.1404	8.626075
KIAA1462	8.486213	8.555205	8.68102	9.164019	9.019561	8.847082	8.495324	8.333408	9.181258	8.491915	10.16495	9.46264	9.607739	8.212856	9.492469	9.141119	8.903829	9.292366	8.895422	8.818345	9.051546	8.306593	9.690206	
KISS1	4.429629	4.420045	8.203886	6.583513	9.932098	4.248522	7.354843	8.991302	4.153967	3.29927	2.978427	5.891752	3.379819	4.385036	4.158094	3.741588	5.000505	4.016239	6.340583	6.954374	3.924629	4.605289	6.314048	6.558961
KLK3	3.245205	3.197653	6.82982	4.898387	8.938899	2.596446	5.728301	6.970838	3.444373	2.66184	2.878891	4.205252	3.264342	2.648071	3.070631	2.663586	4.152508	3.601202	4.377109	4.761729	3.165637	3.605289	5.205989	5.558961
KRAS	8.188785	9.359205	9.651939	9.613979	9.686986	8.683908	9.489736	9.594215	9.229594	9.12854	9.356939	9.234539	9.171232	9.25046	9.036415	8.835736	10.03678	9.761745	9.436724	9.478916	8.924629	9.000461	9.26103	8.524196
KRIT1	9.134501	8.985555	7.919319	8.885957	6.932098	8.32825	9.040069	7.354625	8.705141	9.19062	9.084161	9.064787	8.61307	9.2255	8.173919	8.197564	8.811671	9.038607	8.962071	8.725864	8.098193	9.316784	9.338017	7.721233
KRT1	2.107701	2.934618	6.403195	4.685393	6.517061	2.959016	4.287728	7.311875	2.569004	2.813843	2.071537	3.453179	3.379819	2.870463	3.240556	3.078623	3.415542	3.694311	4.810068	5.598231	4.109054	2.868324	4.414575	5.073534
KRT14	2.593128	3.31313	8.064036	8.102924	5.932098	3.111019	2.256599	3.111019	2.256599	3.111019	2.256599	3.111019	2.256599	3.111019	2.256599	3.111019	2.256599	3.111019	2.256599	3.111019	2.256599	3.111019	2.256599	3.111019
KRT19	10.33844	11.52258	10.95415	11.11888	13.14155	11.31265	12.76192	10.04613	10.70429	10.91503	10.35231	10.96264	9.817651	9.960954	12.0836	11.90385	10.14648	11.02914	11.34779	10.97362	12.15541	10.76718	10.90334	12.80824
KRT7	11.06306	11.90184	11.94018	11.61532	12.38331	12.09715	12.13322	10.83591	12.45292	11.96283	10.31173	9.944189	9.653794	9.343879	9.965449	8.717663	8.188132	9.049662	9.669891	10.17294	8.012092	10.04823	9.1404	8.626075
LAD1	7.995227	7.911898	9.053861	8.197505	10.2175	8.711459	8.97756	8.20496	7.961322	7.795696	6.261361	8.121131	5.829126	6.883287	8.313805	7.509593	6.84553	8.237343	7.377109	6.682295	8.889364	6.675679	7.725363	9.366316
LAMA1	5.851862	4.782615	4.90843	3.869817	5.932098	5.037018	5.180813	3.063948	6.092566	5.536309	3.878891	4.292715	4.849304	5.192391	4.158094	4.538055	6.267985	5.781774	4.055181	4.885112	4.674651	5.742793	4.572117	4.166644
LAMA3	7.904714	7.278026	8.158657	8.80339	9.180026	8.292916	7.171535	7.936073	6.972726	7.292815	9.429089	8.799576	8.005809	7.538842	7.655593	7.727281	8.158507	8.391279	9.088604	9.161389	7.659955	8.402302	6.999538	7.529209
LAMA4	11.79595	10.84571	10.72124	10.64117	12.13177	10.64474	11.00001	11.56383	10.90554	10.97353	10.25306	11.80447	12.62845	12.07906	10.60245	11.66768	10.75008	10.4647	10.49305	11.04781	11.21114	12.18886	12.14395	
LAMA5	9.899515	9.831859	10.75734	10.29541	12.68029	10.66791	11.11216	9.944843	10.12103	10.42855	10.53302	10.66775	10.73602	10.818	11.0923	10.98952	11.0204	10.96752	10.80337	10.26839	10.882	10.24336	11.05176	11.69607
LAMB3	9.134501	8.827009	8.121424	8.880597	5.932098	8.580254	8.895411	7.375534	8.748913	8.91398	9.365008	9.252376	7.922553	8.343879	8.925499	8.630652	7.769179	9.161917	9.369198	8.677182	8.226749	8.568764	8.321466	8.109158
LAMC1	11.26353	10.53155	10.92878	10.85577	9.970079	10.99611	10.20147	9.77032	10.83251	10.61862	10.33715	10.83825	11.21174	11.44951	11.26969	10.47022	12.17488	11.15688	10.85335	10.45388	10.62988	11.04673	10.43109	
LAMC2	8.207838	8.546381	7.902955	8.318718	8.254026	8.101974	8.095083	8.095797	8.896931	8.656822	8.720793	7.936571	7.712802	7.749609	8.505259	8.141119	7.343649	8.903764	8.331305	8.544961	8.05016	8.701214	7.521491	7.867084
LDHA	12.58425	12.98147	12.16038	12.4471	11.73945	12.14058	11.78225	12.05628	12.74122	12.15302	11.6107	12.4141	11.52722	10.20709	11.51046	10.96838	13.39885	12.8485	12.00172	11.95208	11.72052	12.02314	12.19619	10.50427
LEFTY1	3.955698	3.934618	7.111964	6.033316	8.739453	3.48953	5.650298	8.114574	4.153967	3.951347	4.95418	4.52718	4.679379	4.150571	4.158094	3.194101	4.637935	4.086629	5.340583	6.493533	3.924629	4.605289	3.357992	4.867084
LGALS1	13.10333	12.58782	12.14683	12.65824	9.45566	12.60447	12.55518	10.7624	13.70685	13.25627	12.25812	12.08004	13.39362	13.01257	13.392	12.49876	13.60893	13.16522	12.36267	12.55371	12.54468	13.20854	12.76721	12.61218
LHFP	10.84579	10.23199	10.39151	10.88774	10.10202	11.30479	10.66855	10.08632	10.34708	9.02863	11.16231	11.22276	11.59376	11.20777	11.56948	11.00541	11.74745	11.27504	10.93246	10.23166	11.07853	11.59851	10.96325	11.37244
LIFR	9.173791	9.090449	9.61558	10.28124	9.739453	9.960268	10.22633	9.75843	9.658234	9.048421	11.76676	11.03299	10.316	10.38278	10.60591	10.28238	10.38133	10.5445	11.1565	10.92232	10.01498	9.82252	9.82266	10.10545
LLGL2	8.567133	9.053559	9.581713	9.342305	11.6186	9.131165	9.395257	8.736373	8.923621	9.356101	9.028639	9.37267	8.552823	8.380521	9.090222	8.924113	8.395364	9.501666	9.779695	9.023153	9.128756	9.172105	8.788277	9.264676
LOX	10.02656	9.434464	8.478746	9.239982	5.932098	10.21954	8.300552	7.01148	10.54724	9.663092	8.852896	8.907425	10.07812	9.749609	8.925499	8.911513	11.38261	10.56004	8.741681	8.561705	8.738993	9.692752	9.065075	8.65046
LOXL2	6.985446	5.67878	8.302828	6.795817	12.79628	6.432947	6.939805	7.707804	7.163951	6.749303	6.846324	6.713047	7.187174	6.749609	7.25054	6.388479	7.671882	7.210011	7.178376	6.840237	7.011282	6.725363	7.414571	
LRG1	8.066544	8.076215	8.902955	8.853495	9.324416	7.563878	7.972226	8.523379	7.569004	7.069344	6.859439	8.606131	6.308736	6.895998	7.280084	7.622944	8.31708	8.864236	8.291195	8.078496	8.387039	7.011282	7.685679	7.642377
LTBP4	10.82743	10.07621	11.25796	10.72431	12.18949	11.63967	11.4175	11.05263	11.03932	11.15414	12.06977	10.8												

MMP12	3.955698	8.941365	3.323468	3.395886	7.517061	3.248522	6.024694	0.256593	8.748913	5.422652	3.071537	4.205252	3.486734	3.52254	3.771071	6.911513	3.83058	2.501666	2.755621	2.124299	5.419394	3.283361	5.414575	5.626075
MMP13	3.593128	3.31313	7.83558	6.214646	8.739453	3.48953	7.884096	8.882302	5.866685	4.884232	2.530968	5.395076	3.679379	4.455426	7.60979	6.769785	5.103598	3.942239	5.962071	7.088801	6.151698	4.090716	6.980922	7.295927
MMP14	11.9352	11.72676	9.61055	10.12683	7.254026	10.7905	10.00785	7.991302	11.55152	11.02768	9.507207	9.731751	10.81124	10.34967	11.23176	10.69945	11.20707	11.02635	10.09957	9.862016	10.38853	10.74689	9.969164	10.91316
MMP17	5.513694	5.802515	8.033961	5.825874	11.50195	5.34368	6.45	7.50452	6.341594	6.091828	4.799457	4.759841	6.574197	6.402958	6.240556	6.017223	6.815473	6.202106	5.321967	5.74879	6.542013	4.742793	6.559626	6.658497
MMP2	13.81825	13.1946	10.59281	11.53515	9.019561	12.19184	11.55986	10.90764	13.35296	12.99959	10.90443	11.348	12.11739	12.61794	12.22924	12.07792	13.3211	13.0799	11.13533	11.08301	11.29571	12.71329	12.68855	11.10916
MMP24	5.107701	5.721215	4.111964	5.601001	7.254026	5.405801	5.024694	4.748951	6.071504	5.491195	5.461915	5.28099	5.580291	5.105644	4.969999	5.240556	4.581124	4.637935	5.694311	4.340583	5.183193	5.079098	5.868324	4.801598
MMP3	4.370736	4.136252	7.828299	6.248329	6.393885	3.639581	7.778054	6.495782	5.477589	4.69184	3.463854	4.849108	3.849304	4.58667	5.685341	5.248548	9.049748	5.217873	5.655094	6.885112	4.82275	4.283361	5.621026	5.106634
MMP9	8.324932	8.45818	9.605503	9.289356	11.76499	6.543978	10.87269	7.596443	11.15146	8.761042	6.966354	7.724888	6.524869	7.320496	8.318558	11.04873	7.696828	6.576954	6.925546	8.892484	10.04263	6.453286	8.339844	10.16664
MMRN2	9.510287	8.829436	9.905695	9.563583	9.886294	9.046479	9.718778	9.654772	8.011948	9.421173	10.80794	9.736633	9.005809	10.09928	9.699988	9.591693	10.46479	9.817139	9.695426	9.044487	9.945988	9.540749	10.17357	9.803268
MPDZ	8.728288	8.31313	8.725123	8.898387	9.632538	8.825264	8.469058	9.222377	9.146433	8.763378	9.166934	8.728814	9.31419	9.753106	8.566486	8.207906	9.574292	9.731858	8.940877	8.531803	8.08725	9.184228	9.295336	8.085517
MRC1	12.452	11.93067	12.02894	11.74928	9.686986	11.89074	12.16278	9.583022	12.20502	11.73002	11.36271	11.71873	12.00693	10.89204	12.09022	10.54623	12.73069	11.91499	12.15962	11.66583	11.28018	11.91817	10.58527	12.21309
MRP55	9.31325	9.015702	9.509695	9.60534	10.06138	9.282946	9.495324	9.758473	9.113325	9.491719	9.284641	9.620994	9.528002	9.375991	9.50707	8.991513	9.402964	9.225693	9.313747	9.48673	8.89565	9.354824	9.524707	8.796
MS4A4A	11.69567	11.18539	10.50139	10.98917	9.932098	10.34464	11.00524	9.876618	11.57977	10.28195	9.83289	11.13414	10.165523	9.897579	9.97902	9.310016	12.01999	10.11182	10.56622	10.11182	9.851464	9.61875	10.49768	9.867084
MS4A6A	7.904714	8.558134	8.028943	8.096326	9.632538	7.418447	8.090168	8.852783	8.269444	8.20616	6.539142	7.996415	7.772136	7.640537	7.001368	7.538055	8.474436	7.120576	7.493973	7.678888	7.366065	7.453286	7.785598	7.96106
MT3	3.370736	1.61269	6.477561	4.685393	11.51706	3.111019	5.065336	6.732326	4.231969	3.813843	2.071537	3.375177	4.071697	5.150571	3.076361	3.741588	4.152508	4.303108	4.931654	5.05016	2.283361	5.90396	7.824855	7.854585
MTA1	8.41513	8.410352	8.243414	8.206101	10.45566	8.780613	8.62673	7.740409	10.45566	8.659999	8.959333	8.382671	8.864255	8.908552	9.016075	9.035994	9.137401	8.57285	8.803859	9.053912	8.402302	8.833077	9.565438	9.825517
MTBP	5.567133	6.242047	8.083205	6.912462	8.517061	5.48953	7.650298	8.929018	6.133789	6.312094	5.865952	6.536169	6.264342	6.602267	6.001368	5.919926	6.311707	5.671591	7.209999	7.943059	6.004357	6.370824	7.276378	6.999534
MTDCH	9.53899	9.604212	8.990741	9.244161	6.517061	9.664072	9.45	7.795752	9.82482	9.813843	9.434576	9.592192	9.922553	9.770468	9.769336	9.576693	10.42304	9.893983	9.422596	9.237463	9.673432	9.266355	9.639597	10.08511
MUD1	12.05899	11.38005	11.66048	12.46198	5.932098	11.81042	12.49765	10.80252	11.4445	11.73092	11.0319	12.62429	10.14698	10.17486	11.08186	10.95647	10.97778	12.15477	12.30578	11.17596	11.30873	11.01807	11.09622	11.42991
MYC	10.40874	11.67743	11.14539	10.1336	12.04062	10.44641	10.24192	8.889588	10.706	9.756358	10.10358	10.87148	9.993396	6.999733	10.82301	10.92672	14.01525	11.99838	11.0817	10.34937	11.12296	10.24336	9.532718	10.50872
MYCL	5.400483	5.31313	7.818232	6.618279	12.37504	4.959016	7.024694	7.532717	5.866685	6.813843	5.480927	6.414705	5.964781	5.791029	6.280084	5.72248	5.603169	5.279274	6.184464	6.462169	5.635123	6.090716	6.386561	6.781354
MYH11	11.54066	10.74197	9.902955	11.34166	9.517061	10.39364	10.92539	10.50006	11.88037	11.6922	11.23393	10.75696	11.30052	12.16738	11.57942	11.55233	10.95125	12.7638	11.29299	10.51327	11.63338	10.80496	12.3995	11.39065
MYLK	13.11809	12.33229	11.77355	12.21925	11.30714	12.81406	11.89928	11.54488	13.76847	12.80636	12.42854	12.30756	13.43656	13.86764	13.10783	12.81559	12.41178	13.71103	12.29612	12.12164	12.49552	12.94157	13.55107	12.10549
MYO1D	9.977662	9.635058	9.325516	9.789158	9.102023	9.72867	9.840855	9.693304	10.25784	10.29766	9.629	9.669798	9.271836	6.996642	8.707256	9.148297	10.05297	10.57466	9.900671	10.09584	8.86180	10.07452	9.721163	9.138187
MYO5C	8.656138	8.950312	9.507892	9.59119	10.35836	9.374053	9.889764	9.441468	8.926556	9.53124	9.749259	9.78551	8.980265	9.426292	9.908259	10.05208	9.432969	9.524034	10.26281	9.540276	9.982511	9.084261	9.299098	10.71161
NAA15	8.043161	7.898093	8.602128	7.757343	8.838989	8.146643	8.180813	8.787974	8.03389	7.781934	7.618431	8.090948	7.808662	8.442487	7.578426	7.394528	9.418045	8.998092	8.192172	8.187994	8.046398	7.898071	8.343492	7.43343
NAP1L3	6.228717	6.151849	6.478746	5.668905	8.254026	5.181408	5.872691	7.233873	6.738929	5.934858	5.002274	5.453179	6.337591	6.706665	5.462948	5.326551	6.311707	6.671591	6.312569	6.824739	5.573722	6.141342	6.48232	5.690206
NCAM1	6.851862	6.519581	8.529372	6.967428	10.06138	7.396421	8.461465	9.233873	7.872785	7.600439	5.626125	6.834608	8.301431	7.171663	6.799988	7.482346	7.858169	7.6736826	7.715926	6.584139	7.791156	8.671259	7.915206	7.854606
NCL	10.37449	10.2384	9.757338	10.18306	8.517061	10.34464	9.750279	8.703676	10.21286	10.14834	10.18071	10.31964	10.1832	10.17555	10.02046	10.00739	10.6896	10.45752	10.40501	9.923041	10.17514	9.962841	10.06949	9.609587
NDNF	11.29703	11.06904	10.37084	10.70068	11.64634	11.77066	11.71639	10.93607	11.03932	11.30249	11.68671	11.24794	11.74849	11.66116	11.71088	10.37171	10.2749	11.56737	10.76426	10.65178	10.56389	11.92812	11.23574	11.24613
NDP	4.17891	2.934618	4.507892	3.547889	7.517061	3.876554	3.354843	5.50452	4.071504	3.951347	2.241462	2.664683	3.486734	3.52254	3.977521	2.953092	3.052972	2.864236	3.810068	4.239777	4.509592	2.868324	4.414575	4.626075
NDRG1	10.65614	11.08893	10.77767	10.50673	10.76499	11.59241	10.49532	9.475761	10.73223	10.79055	11.71629	11.21578	11.19606	10.61866	11.6343	11.36441	11.81452	11.39865	11.47751	11.21441	11.55994	11.13511	10.64191	12.27255
NF1	9.572043	9.522583	8.452751	9.270355	7.254026	9.875227	9.387264	7.817303	9.578366	9.619909	9.613601	9.213988	9.88395	9.749609	9.965449	8.984904	9.488791	9.986435	9.265852	9.061591	9.915378	9.726305	9.524707	10.34406
NF2	8.870582	8.55227	8.849878	8.635352	10.42395	9.029883	8.8083	8.344056	9.058183	8.932784	8.686246	8.863463	8.876596	8.973001	8.980524	9.042483	9.03352	8.988932	8.689992	8.598231	9.031252	8.701214	9.189869	8.921531
NFAT5	8.366974	8.566887	8.243414	8.132852	10.2175	7.621981	8.461465	8.682858	8.087329	8.279817	8.177445	8.112142	8.191132	8.18723	7.64806	7.727281	8.405489	8.267958	8.254853	8.124299	7.531287	8.141342	8.411103	7.690206
NFATC2	9.977662	10.56616	9.223786	8.457182	10.01956	8.268871	8.966873	9.169482	8.914779	9.345552	9.453079	8.656001	9.173235	9.357729	9.09577	9.502089	11.37747	9.6072	8.82171	8.792002	9.925654	9.071264	9.592186	9.924867
NFKB1	8.024178	8.063901	7.543516	7.93332	6.932098	7.647072	7.014352	7.716024	7.21286	7.574064	7.455241	7.558399	7.337591	7.20266	7.480022	6.911513	7.932118	7.583054	7.582658	7.672051	7.614945	8.166004	7.253294	7.049287
NID2	10.55561	9.935745	7.951499	8.554636	6.932098	9.246472	8.756498	7.416464	9.52126	9.268348	8.688085	7.956796	9.961309	10.07992	9.817145	8.11937	10.64008	9.186164	8.161089	7.937368	8.971009	9.779216	9.247465	9.83198
NME1	8.704637	8.416821	8.593535	7.990833	8.254026	8.567168	8.114579	8.40																



OVOL2	6.656138	7.470671	8.674608	8.262135	10.18003	8.425715	8.901035	8.768345	7.269444	8.121272	8.113196	8.047602	7.473795	7.063108	8.462948	9.377831	6.620657	8.327306	8.314924	8.06551	9.085418	7.853217	8.407623	9.853144
P3H1	9.247253	8.916471	7.806551	8.408356	8.102023	8.503336	8.469058	7.290016	9.141389	9.241784	8.213644	8.287401	9.025893	8.975998	8.365252	7.824578	9.686487	8.787068	7.90693	7.945896	7.936873	8.883274	8.705657	7.908111
P3H2	8.321409	7.12839	7.102441	9.047735	5.932098	7.659455	6.045158	5.900449	7.250828	7.066177	8.483307	9.42442	7.019229	7.262781	7.147446	5.643408	7.343649	9.975082	8.003548	8.033859	6.335652	7.568764	6.596779	6.073534
PCOLCE	11.61693	11.43486	10.03145	10.64487	10.171346	11.4148	10.59758	10.12387	11.199037	11.46467	9.905217	10.03814	11.61822	11.58078	12.34792	11.26267	12.83011	11.21787	9.972553	9.785682	11.57666	11.03491	10.78022	12.58713
PDCL3	7.862589	8.306177	9.179186	8.37062	14.28304	8.707954	8.560747	8.120779	8.728875	7.892794	7.809629	8.103097	8.742774	8.282277	9.42157	8.93453	9.017107	8.657207	8.379361	8.121793	9.059522	8.051546	8.249411	9.773974
PDGFA	8.805364	8.442413	7.935498	7.677172	10.48669	8.553962	7.837925	7.416464	8.832665	8.318463	8.821406	7.676927	8.924932	9.981972	8.081858	8.742389	9.464786	9.616152	8.487723	8.221161	8.316947	8.316784	8.291564	8.307609
PDGFC	8.385686	7.657084	7.818232	7.814676	5.932098	7.017969	5.811911	8.466046	9.03661	8.042662	7.110455	7.863463	6.992262	6.799733	7.287999	6.974777	8.27904	8.846596	8.212598	7.837017	6.891462	7.237558	7.095653	7.316391
PDGFRB	11.85153	11.42687	10.97387	10.92943	10.39153	11.77208	10.55986	10.09264	11.80182	12.02549	11.49859	11.27772	12.17348	11.87689	11.16273	10.71947	12.54597	11.96198	11.32167	11.33267	10.71609	12.61428	11.54267	10.92653
PDK1	9.324932	8.492274	7.158657	7.749523	5.932098	7.264824	8.304802	6.795752	8.123593	9.818344	7.54727	8.395076	7.854305	9.289521	7.79173	8.89454	8.503005	7.823594	7.765987	7.60901	8.523189	8.402302	10.37235	7.073534
PDPN	10.02656	9.741973	9.536461	8.903681	8.102023	9.276931	5.899314	6.485411	10.61066	9.413756	9.935723	9.348635	9.063084	9.04895	8.492696	8.924113	10.34497	10.24313	9.76254	9.099033	8.659955	8.806923	8.879043	9.095934
PEBP4	9.224565	8.981197	9.424369	9.31475	6.932098	9.090587	8.740901	5.811182	9.105575	9.171395	9.724381	10.22415	9.214655	7.963975	9.120479	6.833511	7.852948	10.07694	10.32197	9.568164	8.193118	8.99072	7.70282	8.558961
PECAM1	12.52365	11.47184	12.69396	12.91661	7.517061	12.46989	12.08493	10.36381	11.24731	12.22557	12.95016	13.23687	13.18841	12.29253	11.98165	11.54147	13.14611	12.43409	12.56285	12.75355	11.50171	13.21336	12.33229	11.21377
PFKFB1	4.107702	4.61269	6.239076	5.203241	9.102023	3.695981	6.778054	7.278961	3.984042	4.536309	3.771976	5.728814	10.001307	4.629571	4.594193	4.351642	4.889474	4.979713	6.522786	7.03119	4.82275	4.868324	6.621026	7.121038
PFKFB4	5.93552	5.31313	5.033961	6.248329	6.932098	5.312653	6.085235	3.578521	5.738929	6.015477	5.158999	6.135989	6.36588	5.311036	6.260455	5.516029	5.603169	5.671591	5.974044	5.761729	5.419394	5.675679	5.780225	6.073534
PGK1	11.85354	12.00742	11.60719	11.73821	13.00891	11.98723	11.86839	10.45627	11.98439	11.42745	11.52815	11.7123	11.89339	11.54491	12.36123	11.74426	12.16374	11.67837	11.56743	11.31878	12.07021	11.17969	11.48727	11.52109
PIK3CA	8.683619	8.795085	8.838451	8.884173	8.739453	9.126713	8.693072	8.981107	9.058183	8.873458	8.923286	8.922928	9.385012	8.86077	9.227978	9.486599	9.481632	9.347156	9.10094	9.055037	9.472225	8.709626	8.889061	9.240394
PIK3CD	8.351827	9.604212	8.486088	8.878806	10.60452	6.865906	8.442305	8.114574	8.33277	8.949296	8.177445	8.409823	7.844286	8.570903	7.462948	7.890266	8.603169	7.73323	8.222599	8.460186	7.961053	7.692752	8.694275	7.908111
PIK3CG	9.247253	9.579917	9.212764	8.594468	9.45566	7.993662	9.040069	9.338742	8.83891	9.284705	8.426888	8.443657	8.846797	8.993846	8.906681	9.271738	8.997161	7.956406	8.276768	8.879187	9.01402	8.898071	9.125973	9.808111
PIK3R1	9.908761	10.98864	9.605084	9.940777	10.95447	10.817	10.67267	9.820742	11.47238	10.48415	10.96488	10.49296	11.40091	11.02166	11.64333	11.53908	11.77749	11.15118	11.41163	10.856	10.96155	10.66922	10.67124	12.17997
PIK3R2	9.366974	9.022081	8.878057	8.709777	12.07165	8.96651	9.306922	8.682858	9.784941	9.183658	8.185279	8.763673	9.611594	9.636756	10.08186	9.663586	9.325102	9.445855	8.649505	8.195166	9.820549	8.605289	9.243566	10.5866
PIK3R5	8.618663	8.936871	9.144807	8.926401	9.102023	8.377805	9.526588	9.060724	9.047437	8.209591	8.019904	9.075617	8.922553	7.939625	8.798551	8.739214	8.960327	8.660095	8.781399	8.59281	8.712312	7.941573	8.310325	8.860131
PIK3R6	5.915056	6.299191	7.677817	5.795817	11.47126	6.037018	7.085235	9.367144	6.410306	6.510126	5.025733	5.614643	6.598242	6.107503	7.147446	7.055903	5.769179	5.186164	5.514612	5.722559	6.120409	5.472793	7.027019	7.934828
PITX2	3.370736	3.700153	8.269178	5.29205	11.79008	2.596446	7.143338	7.716024	5.231969	3.813843	2.878891	4.790214	3.001307	5.42066	3.240556	3.194101	5.455071	3.601202	5.099575	5.824739	2.924629	5.090716	7.053986	6.658497
PKM	11.19993	11.24977	10.78588	11.10822	10.51706	10.87456	11.29041	10.05101	11.68795	11.30128	10.47348	10.86614	11.05713	10.85427	11.68626	11.22328	11.14497	10.75298	10.76943	10.39732	11.45175	10.76314	11.18225	11.6645
PKN1	10.18024	10.28335	8.68581	10.66163	7.932098	10.49645	9.64528	9.195231	10.46987	10.346	10.61698	10.77131	10.81381	10.28952	10.54332	10.26019	10.550504	10.42223	10.01912	10.41137	10.73869	10.1043	10.6645	
PKNOX1	6.472274	6.792599	8.525814	7.375708	9.886294	6.833485	8.731461	8.687045	7.193495	6.410778	6.839721	7.375177	7.13059	6.957926	6.240556	7.288077	8.256845	7.54606	7.225106	7.902742	7.366065	7.726305	8.435235	9.306195
PLA2G10	6.324932	6.841509	7.776925	8.083942	7.739453	7.447302	7.721959	8.306441	7.718751	8.530834	6.852896	8.144431	6.001307	6.107503	7.059316	7.288077	7.838074	8.530361	8.247474	7.934514	7.419394	5.605289	6.596779	7.356468
PLA2G2A	9.523866	10.29832	9.121424	7.78055	10.73945	9.135604	9.45	9.365117	10.41345	10.75225	4.904427	7.472038	7.666842	10.74347	10.09715	10.69456	13.5484	11.58875	8.043866	7.725864	10.17686	6.531289	10.08155	11.2985
PLA2G2D	4.033701	8.970242	6.355889	5.083942	8.632538	3.248522	6.814274	7.089483	6.984042	5.621198	3.929517	4.790214	4.001307	4.706965	4.928612	6.436175	4.493545	3.279274	4.888071	5.462169	6.924629	3.605289	6.833077	6.921531
PLA2G3	5.033701	3.072122	8.121424	7.058851	9.39153	4.312653	6.024694	8.822644	3.684481	5.135771	4.393465	6.260534	4.071697	4.311036	4.240556	5.366586	4.705049	5.366736	5.4988124	6.998769	4.552661	4.090716	4.572117	5.414571
PLAU	11.12395	11.50257	12.214975	9.55522	11.2175	8.692973	9.129031	9.060724	11.91663	10.42413	8.524807	8.86703	9.202941	9.747857	9.613663	6.290344	11.30226	11.06336	8.560992	8.950142	8.66487	9.442868	9.73789	8.853144
PLAUR	11.01699	11.92046	10.41574	10.17141	10.2175	9.926082	10.22745	9.210789	10.58767	9.5714	9.970138	9.844593	10.08026	8.791029	10.24306	9.866526	11.21356	10.00719	10.13467	10.05504	9.962051	9.386649	8.918707	10.69607
PLCG1	9.87191	10.38335	8.915321	9.840671	11.63254	10.16304	10.21395	9.418984	9.996666	10.33897	10.59995	10.26865	10.409956	10.39178	10.16207	10.01428	10.52986	10.45452	10.12664	10.03186	10.06046	10.88884	10.37324	9.83198
PLCG2	8.883805	8.708087	7.888849	8.44513	7.517061	8.09743	8.998699	7.223377	8.635093	9.318463	8.663994	8.666731	8.44093	9.329895	8.928612	9.27993	9.065796	8.245058	8.342893	8.395244	8.539339	8.759095	9.885312	8.994564
PLEKHO1	10.85724	11.35626	10.12965	10.41517	10.39153	9.988763	10.38726	9.992995	10.68361	10.48344	10.35289	10.15508	10.63066	10.62153	10.43038	10.49788	10.52407	10.25177	10.31669	10.08752	10.60027	10.166	10.54861	10.5971
PLS1	7.370736	7.407106	8.167817	8.44028	8.932098	6.887123	7.861195	9.098943	6.938238	7.884232	7.530968	8.246911	6.308736	6.72132	6.851991	6.570476	6.860327	7.993519	8.425868	8.320697	6.908141	7.726305	6.933304	6.973999
PLXDC1	8.886436	8.635058	8.606641	7.469135	11.25403	7.998544	8.491601	8.509258	9.479897	9.498942	7.708161	7.112142	8.829126	9.210313	8.492696	8.604797	9.197439	8.844058	6.76254	7.333753	8.77581	8.759067	9.393616	9.390646
PLXNC1	9.066544	9.685493	9.203886	9.625773	8.739453	8.324366	9.655299	9.562654	8.959023	9.599132	8.359249	9.407376	9.455812	9.320496	8.798551	8.961266	9.3749	9.352523	8.760813	9.410729	8.861802	9.243363	9.374131	9.232733
PLXND1	11.41831	10.86002	10.49703	10.9775																				

PTGDS	12.66267	12.36046	9.760369	10.09633	15.0049	12.36888	11.66111	10.28726	11.88264	11.6212	11.11354	10.50675	12.80156	13.27925	12.70317	12.9805	10.42925	11.09679	9.522786	9.267257	12.30873	12.3298	12.31009	14.04738
PTGIS	10.52808	10.22002	9.353884	9.232989	9.517061	9.985078	9.330039	9.021464	11.82049	10.94364	9.873245	8.834608	9.03473	10.59546	10.64049	10.15009	10.8777	11.15528	9.58168	8.694155	9.774674	9.077777	10.23868	10.95128
PTGS2	9.605952	11.40507	8.844176	8.44028	10.18003	8.454227	8.793256	9.160475	8.39767	9.20616	10.57088	8.660579	7.226274	7.640537	8.454335	8.516209	9.620657	9.768453	9.527872	9.861265	8.684366	8.806923	7.858794	9.456663
PTK2	9.178091	8.795085	8.221588	9.290704	6.517061	9.065525	8.985523	7.513981	8.917732	9.223382	9.686246	9.482539	9.288558	9.409622	9.306645	9.112046	9.605367	9.581532	9.293586	9.957189	8.722586	9.645305	9.82019	8.788666
PTK2B	9.218315	9.225559	9.343816	9.423178	9.632538	9.211155	9.311153	8.578521	9.290103	9.20616	8.684405	9.490654	9.023675	8.663021	9.033527	9.94796	9.425526	8.915898	9.273139	8.849192	9.350894	8.845604	9.586041	9.306195
PTK6	5.107701	5.470671	8.028943	6.020377	10.54681	5.215355	7.663595	7.691221	5.475895	5.29927	5.641392	5.790214	8.489304	5.017305	6.428183	5.400551	5.637935	5.716679	6.225106	6.276302	6.035053	6.090716	6.442056	6.973999
PTPRB	8.520483	8.197653	9.304905	10.18813	8.517061	8.665608	9.453832	8.640297	10.178788	8.772686	11.42441	10.48544	8.301431	8.981972	9.462948	8.767456	9.821157	9.434092	10.66881	10.28249	8.517766	9.128851	8.835669	9.254107
PTPRC	9.443985	10.97024	9.156358	9.350083	7.932098	8.698984	9.319577	8.760419	8.896931	9.503142	9.352307	9.115145	9.228201	8.696104	9.06781	9.460887	9.182255	8.366736	9.038174	9.092646	9.734324	9.044913	8.938137	8.751606
PTPRM	10.03962	9.635058	9.600438	10.26213	8.932098	9.565524	9.710794	9.396144	9.255505	9.902366	10.55686	10.70161	9.880278	9.905459	9.139409	9.144713	10.37103	10.38081	10.39614	10.50271	8.736661	10.34676	9.732336	6.698205
PTRF	9.443985	8.905012	9.06616	8.901918	12.88629	9.894999	9.311153	8.356425	9.675785	9.305696	9.412499	9.166702	9.982018	9.796124	10.63573	9.747508	10.43668	9.685833	9.410532	8.928789	10.13939	9.853217	9.792418	12.12084
PTTGT1	7.894298	8.92784	9.65357	9.034925	10.68699	7.948962	9.140964	10.43899	7.752226	8.253466	7.158999	8.912611	8.142904	7.446813	8.28495	8.151872	8.3009	7.128939	7.846344	9.017769	8.468013	8.116251	8.28019	8.796
PTX3	10.40232	9.923303	10.35087	9.063589	10.39153	11.54898	6.567836	8.618537	8.250828	5.934858	6.093304	7.724888	9.155113	8.70463	7.538236	8.615914	11.64062	9.560044	7.865752	8.136769	9.010162	8.166004	6.747559	7.452046
PXDND	9.131325	9.775082	9.059257	9.745598	7.932098	10.45648	8.495324	7.385876	10.87962	10.26835	9.606812	9.464995	10.84491	9.524588	9.985016	9.951975	10.79251	10.104167	9.179302	9.663458	9.588026	11.08911	9.304723	9.30107
PYCARD	8.080394	8.055634	8.722017	8.283953	9.575954	7.865906	8.709192	8.322682	8.337188	8.069344	7.626125	7.89525	8.390186	8.28711	8.998409	7.981501	7.705049	7.495211	7.919367	7.732452	8.484788	7.709626	8.036064	10.11209
QKI	11.31813	11.42366	10.95282	11.54054	8.932098	10.01007	10.95273	9.653198	11.06819	11.0441	11.82809	11.68655	11.62226	11.07573	10.92082	10.3862	11.74447	11.36939	11.44964	11.22846	10.36908	11.76011	10.74893	9.980425
RAB25	7.506872	8.017832	8.234724	8.827732	10.45566	7.881848	8.814274	7.977692	8.00085	7.994761	7.904227	8.693092	7.21836	7.122856	8.47151	7.774342	7.052972	8.455862	8.741681	8.163828	8.468191	7.492815	7.65665	8.96106
RAC1	11.45997	11.10404	10.73209	11.56414	8.254026	11.30134	11.12603	10.31323	11.46534	11.20616	11.33686	11.53925	11.42463	11.26033	10.89081	10.58576	11.35741	11.47772	11.33101	11.04515	10.82878	11.51458	11.08863	9.8105
RAC2	10.16081	10.66458	10.07349	9.918577	10.79008	9.445516	10.25626	9.528056	9.98545	10.17666	9.663994	9.675911	9.491557	9.902312	10.28859	10.01624	9.682329	9.116376	9.650438	10.04911	10.74074	10.3945	10.58141	10.71161
RAF1	9.400483	9.311395	9.254205	9.51598	9.632538	9.885113	9.354843	8.752448	9.589525	9.487682	9.517586	9.701107	9.578736	9.902521	9.419359	9.458002	9.885862	9.923124	9.543089	9.417939	9.759059	9.518267	9.160997	
RAMP1	8.363202	8.216317	8.176919	7.579108	12.50953	9.113271	7.872691	7.914804	9.890932	8.10294	6.402453	7.10007	9.045701	8.692465	8.423778	8.94281	7.721351	9.495211	7.578743	7.45422	8.681944	7.190252	9.15915	9.285585
RAMP2	8.992788	8.802515	8.849878	10.8797	8.932098	9.928642	9.800798	8.618537	8.527073	9.778473	10.91349	11.15981	10.82976	9.98048	10.55545	9.061617	9.524067	9.880425	9.275559	9.436174	9.940931	11.22588	9.447151	10.28299
RB1	9.32687	9.478424	9.532921	9.728793	9.932098	9.407476	9.45	9.808773	9.05282	9.781835	9.511367	9.755037	9.726503	9.051793	8.974513	9.817827	9.53102	9.286768	9.366929	9.573677	9.869023	9.742793	9.268724	14.39294
RBL1	6.370736	6.731631	5.418625	6.007321	6.517061	6.111019	6.387264	5.256593	6.791397	6.758701	6.402453	6.404924	6.308736	6.506052	6.318558	6.31384	6.12826	6.23347	6.194732	6.124299	6.310688	6.370824	6.769418	6.376097
RBL2	10.23294	10.65913	9.790332	10.34166	8.517061	9.657913	10.2308	9.740409	9.829532	10.48273	10.18463	10.46382	9.974	10.41515	9.462948	9.75458	10.3144	10.05516	10.06291	10.3267	9.787126	10.22588	10.35076	9.126646
RBM47	9.229902	8.809907	8.84703	9.536574	8.632538	8.418447	8.886933	8.678658	8.620831	8.94743	8.824753	9.363862	8.105644	7.514319	8.225449	8.126656	8.629322	8.722217	9.106698	8.938793	9.797169	9.859725	8.35288	8.43343
RBPJ	10.77942	10.83125	10.93147	10.55744	11.08185	10.09059	10.83646	11.4495	10.7752	10.56673	10.28282	10.59165	10.21563	10.17945	10.12184	9.93453	11.18152	10.78641	10.58559	10.68697	9.675869	10.69275	10.59372	10.12954
RBX1	9.915056	11.00393	10.87319	10.96616	10.39153	10.90413	10.96419	10.13157	11.01126	10.95237	10.77717	11.02942	11.34416	11.10408	10.93868	10.67419	11.02698	11.16294	11.12463	10.88917	10.90762	11.18423	10.85241	10.60751
RELN	10.915056	6.792599	5.993319	5.825874	5.932098	6.938838	6.581911	4.841555	6.5232	6.967648	6.20082	5.472038	7.745468	8.566934	6.940996	6.194101	7.199814	6.435778	6.570881	6.202302	6.430982	7.166004	7.947755	6.781354
RGCC	13.58839	13.56151	13.95233	14.01585	11.32442	14.834	12.85342	11.72471	13.72982	12.27389	14.56633	14.46102	14.67479	13.67379	13.21624	12.79844	14.27792	14.68286	14.36774	14.59256	13.51155	14.52951	12.12644	12.40266
RHOA	11.46129	11.3705	11.33164	11.64776	9.102023	11.67555	11.318	10.08473	11.86898	11.59126	11.29131	11.65027	11.80091	11.6672	11.86951	11.30824	11.30564	11.35609	11.58729	11.19844	11.78346	11.30434	11.14092	11.161
RNH1	11.50302	11.2251	11.20889	11.23369	12.20822	11.3151	11.46672	10.21367	11.63285	11.33858	10.99375	11.25033	11.48794	11.49565	11.62809	11.2606	11.6374	11.33546	11.39364	10.85071	11.55233	11.13511	11.16277	11.58344
ROBO4	9.902117	9.120485	9.602128	10.21536	7.739453	10.23824	9.354843	8.070374	8.27406	8.930707	10.65321	10.11664	10.92017	9.829637	9.452174	8.336011	9.51006	9.805447	9.778842	9.822425	9.101822	11.38665	9.197951	8.824855
ROCK1	10.5415	10.96197	10.63057	10.6231	10.18003	11.15377	10.75417	10.37683	10.99177	10.92811	10.83599	10.7478	11.27883	10.8632	11.34151	11.37248	11.08325	11.16609	10.96545	10.78211	11.31773	10.93979	10.82983	11.9022
ROCK2	10.49744	10.36674	10.31318	10.64223	9.790079	11.41981	10.45383	9.499769	10.70343	10.44829	10.98854	10.76128	11.1936	10.79782	11.29161	11.17972	11.2659	11.22993	11.03996	10.72628	11.01163	11.07778	10.83567	11.28169
RORA	8.797001	9.41359	8.852721	8.568036	9.739453	10.10537	8.484126	8.653198	9.28325	9.003668	9.379876	9.036559	10.10983	9.457571	9.330374	9.742774	10.52755	9.918313	9.375981	9.100307	9.479218	8.962841	9.084823	9.773974
RORB	5.567133	5.161269	5.993319	7.214646	8.632538	5.280944	5.354843	5.780155	6.656467	4.66184	4.319464	5.697105	4.264342	5.945751	4.825518	4.351642	5.052972	6.338167	4.783101	6.114246	4.05016	4.983801	6.053986	5.867084
RPS27A	14.11767	14.32048	13.14466	13.94396	12.28965	14.20371	13.4617	12.73789	14.20177	14.10127	14.01162	14.06304	14.09122	14.22243	14.42612	14.67811	14.24667	14.24854	13.82	13.69342	15.00251	14.03302	14.15934	14.90737
RPS6KB1	9.368856	9.515065	9.260641	9.364233	9.39153	9.236174	9.457653	9.336078	9.401894	9.409287	9.476678	9.619937	9.445908	9.49565	9.346755	9.529834	10.04166	9.7604	9.647638	9.632094	9.453882	9.33321	9.565885	9.34157
RPS6KB2	7.925325	7.792599	7.782899	7.761237	10.68699	7.983848	8.060318	6.631632	8.278662	8.1														

SETD2	9.903416	9.999631	9.698507	9.973315	9.517061	9.918374	10.0477	9.774262	9.9133	10.14027	9.917027	10.08484	9.985441	10.25293	9.716289	9.75693	10.14346	10.26512	10.03603	9.996718	9.855367	10.08749	10.24161	9.68628
SF3A3	9.682106	9.693508	9.948845	9.451169	10.35836	9.787681	9.849607	10.26922	10.14139	9.732706	9.748375	9.515865	10.05659	10.32989	9.954801	9.611304	10.25964	10.1609	9.717849	9.86876	9.890414	9.826393	10.08155	9.755358
SFRP1	7.580189	7.055634	7.500661	6.520582	9.45566	7.181408	7.906638	8.18835	8.64582	8.603051	6.211088	6.705098	5.964781	9.42066	7.714487	7.407857	10.80977	9.73597	7.153213	7.858256	6.323179	9.453286	9.087001	7.12084
SFRP2	12.37496	10.65503	8.581713	9.403381	9.517061	10.83485	11.26173	9.943093	10.68361	12.25409	7.894904	6.744411	8.319624	12.09171	12.14611	10.20368	13.98793	11.08931	8.483541	6.788888	10.90191	9.024828	11.84213	11.71634
SH2B3	10.18879	9.360883	9.304905	9.598826	10.01956	8.889753	8.805304	9.130037	9.348176	9.354552	9.468141	9.357537	9.369377	9.405183	8.47151	8.052082	10.34497	8.939864	9.477246	9.494502	8.230069	9.116251	9.368772	8.200067
SH2D3A	7.970649	7.501434	8.581713	8.141841	10.63254	7.288937	8.619295	8.199107	7.663522	7.845062	7.472416	8.316388	6.393625	7.817996	7.401548	7.55975	7.311707	8.462495	8.60785	7.689084	7.944978	7.927218	8.287783	7.674439
SH3Y1L	7.324932	6.67878	7.638823	7.721816	11.01956	7.892379	7.709192	7.596443	7.670542	7.331119	7.31471	7.147766	7.616017	7.889657	8.663088	8.329711	7.026977	7.833862	7.274349	6.780923	8.7506	6.83795	7.572117	9.880889
SHB	7.033701	6.407106	8.234724	6.994146	10.10202	6.596446	7.906638	8.396144	7.050131	6.36228	6.846324	7.216479	6.155113	7.074336	6.260455	6.643408	9.103598	8.064999	7.386098	7.409702	6.079908	5.742793	7.685679	7.024625
SIRT1	8.47926	8.61269	8.740553	8.701695	9.45566	8.272906	8.363016	9.148377	8.475895	8.749303	9.050247	8.879444	8.450869	8.598384	7.877986	8.271738	9.415542	8.805447	8.940877	9.43819	7.891462	8.726305	8.697129	7.721233
SKP1	12.38824	12.4761	11.72474	12.20002	10.48669	12.71353	12.16979	11.40761	12.42828	12.46418	12.3351	12.37408	12.66575	12.4899	12.75011	12.53891	12.64035	12.67552	12.29045	12.09024	12.70509	12.69923	12.41154	13.17997
SLC12A6	8.454658	7.93912	8.658452	8.94706	9.254026	7.49645	8.83499	9.01148	8.076799	8.890659	8.343	8.641963	7.88395	8.451126	7.260455	7.40655	8.696828	8.439145	8.847971	9.004223	7.08725	8.443233	8.336187	7.12084
SLC2A1	5.851862	6.601375	6.578282	5.45478	8.739453	5.743387	6.045158	7.485411	6.393433	5.422652	4.799457	5.434071	5.53736	5.192391	6.070631	6.078623	6.245617	6.2489	5.962071	5.554287	6.787126	5.370824	6.1404	5.973999
SLC35A3	8.570408	8.994233	7.448899	8.93332	4.932098	8.50642	4.43457	6.780155	8.208043	8.932784	8.984864	6.603996	8.846797	8.028893	8.469896	8.40655	8.31708	8.589129	6.60977	8.419941	8.552661	9.526355	8.658565	8.012134
SLC37A1	7.061898	6.752242	8.172375	7.464366	9.180026	6.389004	7.884096	8.695385	6.804221	6.840643	6.95418	7.395076	6.79832	6.570903	6.670544	6.436175	6.474436	6.792343	7.625036	7.605426	6.259614	6.453286	7.495495	7.143924
SLC44A4	7.599554	8.513557	6.696926	7.901918	11.16092	8.82801	9.126632	7.58751	7.771944	8.233382	7.468141	7.724888	8.187174	7.063108	10.06498	10.05998	9.603829	8.286768	8.528887	6.787264	11.02601	7.214099	8.650774	12.63984
SLIT2	10.22144	9.437649	9.219387	8.785338	7.517061	9.639278	8.157506	7.365117	9.818853	9.27655	10.75629	10.45733	10.64733	10.07573	9.432575	8.284824	9.211402	10.15272	11.08309	10.62724	8.550006	10.51698	9.912927	7.934828
SLPI	11.34611	11.59461	12.22049	12.66878	12.73945	12.46967	13.53249	10.76439	10.92875	10.88852	12.15883	12.99499	11.02977	10.48096	12.63478	13.89887	9.942585	12.55132	13.50033	12.84283	13.68005	11.66599	11.93633	14.20796
SMAD1	9.249298	8.974634	9.051388	8.464366	10.81474	8.479591	9.092628	9.22526	8.765401	9.218133	9.133583	8.321596	9.086647	9.451126	9.168663	9.106529	9.642222	9.215912	9.078935	8.944478	9.015944	9.051546	9.368772	9.043161
SMAD2	10.03251	9.625315	9.252033	8.937908	9.254026	9.290928	9.424841	9.372937	9.582094	9.887449	8.919729	9.794903	9.344715	9.472499	8.788307	8.873039	9.67607	10.00606	10.01518	9.633854	8.824947	10.03491	9.57367	8.705313
SMAD3	9.777295	9.437649	9.416705	8.922929	9.686986	9.111019	9.542869	9.456265	9.580231	9.510115	9.581312	8.958469	9.623359	10.13992	9.683499	9.304233	10.17783	10.21787	9.183175	9.165046	9.213391	9.386649	9.941752	9.232733
SMAD4	10.09069	10.0546	10.12496	10.24068	10.86284	10.49386	10.12423	10.05101	10.47589	10.13577	10.17464	10.52878	10.63486	10.65559	10.57248	10.75934	10.76309	10.18253	10.30366	10.54868	10.166	10.33984	10.68234	
SMAD5	9.424209	8.860618	8.90843	9.268989	8.632538	8.168669	8.702766	9.273401	8.775204	9.237275	9.130881	8.97509	9.054419	9.270123	8.142093	8.542389	9.161497	9.277394	9.149299	9.068117	10.88766	9.596244	9.354381	7.254107
SMAD9	7.11669	6.432869	8.239076	8.030092	9.517061	8.407476	8.438443	8.960496	7.153967	8.157251	8.11866	8.326785	8.48351	8.710567	8.163388	8.49084	8.188132	8.576954	8.202386	8.242087	7.620016	8.422913	8.040565	9.012134
SMC3	9.319103	9.591401	9.718905	9.417021	8.739453	9.161956	9.230801	10.06395	9.299191	9.639092	9.610695	9.513591	9.726503	9.554961	9.574457	9.416988	9.364558	9.47403	9.592399	9.692467	9.473626	7.938689	9.450538	9.243459
SMOC1	4.486213	5.951981	8.167817	6.344902	8.39153	3.876554	7.143388	7.817303	6.193495	5.778406	4.56339	5.834608	4.486734	5.509665	5.428183	5.248548	8.830568	6.491919	6.321967	7.158946	5.573722	4.605628	7.945063	6.12084
SMURF1	9.016994	8.95254	9.341794	8.893073	8.517061	9.194232	8.829102	8.860219	9.131247	9.056064	9.243964	9.264596	8.871672	9.112957	9.297043	9.337582	9.667682	10.109	9.495012	9.023153	9.318507	8.941573	8.978578	9.634249
SMURF2	9.820572	9.75352	9.61558	10.09247	9.254026	9.498175	9.702766	9.607532	9.356907	9.831765	10.43019	9.928059	9.507516	9.733765	9.840996	8.877365	9.954701	9.968107	9.58168	9.787264	8.835885	10.36551	9.448845	8.33198
SNAI1	7.813679	8.621119	8.602128	7.464366	12.05104	7.897615	7.721959	7.578525	9.446756	6.831765	7.522748	8.52718	7.420846	7.040388	7.916121	10.17191	8.294224	8.636381	7.968395	8.990719	7.912718	6.790951	8.532909	
SNAI2	9.82332	9.247501	7.982977	8.05251	4.932098	9.612458	9.302679	7.657472	10.04203	9.511506	8.377598	8.490654	9.924932	9.965484	9.908259	8.685954	11.18886	9.691491	8.485633	7.692467	9.162165	10.58486	9.551764	8.967544
SNAI3	6.261507	7.12839	7.82982	5.912462	12.38331	5.57045	6.872691	7.333408	6.854406	6.795966	5.610695	4.46264	6.4073	6.538842	7.158904	7.607403	6.549398	5.979713	5.974404	6.03119	7.703602	5.931289	7.181741	7.999534
SNRPF	9.971888	9.925573	9.435789	9.980014	8.739453	9.578624	9.354843	8.84905	9.491836	9.681739	9.686246	10.04996	9.60934	9.53275	9.265388	9.003436	9.84553	9.880425	9.813404	9.68993	9.321623	9.932606	9.363392	8.405049
SOD1	8.143325	8.2274	8.671391	8.344902	11.96552	8.710932	8.330039	7.795752	8.569004	8.17491	8.388949	8.224843	8.866731	8.46825	9.25054	9.135713	8.671882	8.77912	8.498124	8.154047	9.125194	8.550148	8.418039	9.705803
SOD2	7.909895	8.416821	9.080205	8.565811	10.32442	7.615639	8.683313	9.925478	8.158967	8.015477	7.667726	8.118141	8.253026	8.375991	8.509423	9.078623	8.650759	8.060633	8.254853	8.58737	8.928772	8.116251	8.332521	9.295927
SOX17	6.567133	6.822144	8.700086	7.618279	11.08185	6.389004	8.391266	8.569476	6.5232	7.422652	7.54727	8.732729	6.992262	7.291927	7.346755	7.194101	11.3979	8.449199	7.547034	7.712598	8.282676	7.190252	7.421495	8.365659
SOX2	4.873236	5.741973	6.852721	6.395886	11.23588	5.671734	7.820223	7.446417	4.938238	5.446111	5.393465	5.648195	6.036931	5.993846	8.087439	8.717663	5.103598	6.153743	6.956048	6.052406	8.604749	5.370824	7.918707	9.921531
SOX9	7.540661	7.507508	8.208332	7.102478	9.932098	7.389004	7.636878	8.499776	7.113325	6.641662	7.641392	8.182532	6.79832	7.040388	7.858533	7.873039	8.295466	8.564676	8.753885	8.576426	7.920525	7.51218	8.225888	8.037009
SPARC	14.64739	14.18011	12.74113	13.0854	11.53201	14.32795	13.44255	12.05466	14.88071	14.32787	12.71944	12.7123	14.85723	14.37223	14.4517	13.83121	15.77037	14.15822	12.23244	12.28347	13.96623	13.89968	12.81381	14.38596
SPARCL1	12.7618	12.70776	12.40803	12.27819	9.102023	13.70366	11.94288	11.24811	12.54174	13.2298	13.38973	12.7348	12.73652	12.91817	13.84727	14.16907	13.72021	13.23722	13.38049	13.53322	13.50942	12.582	13.3635	14.1299
SPDEF	6.014592	6.197653	7.982977	7.168476	12.68029	5.403801	8.27045	7.803487	6															

TBX1	5.540661	6.420045	7.212764	6.248329	10.63254	6.743287	7.304802	7.037953	6.133789	6.701368	6.530968	5.775107	7.633576	7.68516	7.270303	7.130285	6.3749	6.51449	6.991819	6.211762	7.924629	7.453286	7.400636	7.295927
TBX4	8.454658	8.216317	8.767918	8.398389	9.45566	8.51019	8.399237	8.811182	8.198361	8.777317	9.599991	8.670818	9.305088	8.801201	8.743056	7.746326	6.176355	8.889068	9.196011	9.456212	7.329384	10.15681	8.930881	8.366316
TBXA2R	6.05256	6.038955	7.684215	6.869817	12.69365	6.647072	6.993443	7.344056	7.071504	6.337405	6.375317	6.953445	7.393625	7.017305	7.771071	6.581124	7.000550	7.051863	6.215052	6.276302	7.035053	6.675679	7.608953	9.361401
TCEB1	10.85657	11.21028	11.33419	10.95473	11.43989	11.3651	10.84597	11.32924	10.54055	10.56762	10.56839	10.8047	10.60493	10.15851	11.12591	10.11624	11.1229	10.72911	10.7478	11.04812	11.04781	10.51218	10.40675	11.54168
TCEB2	6.500019	5.420045	7.331642	6.609666	9.790079	6.418447	7.024694	7.657472	6.765401	6.324805	6.375317	6.606131	6.58627	6.883287	6.496896	6.017223	6.705049	6.884136	6.90693	7.168694	5.840237	7.190252	6.923589	6.024625
TCF20	8.992788	9.030543	8.746679	9.010596	9.517061	8.377805	9.292106	9.089483	8.972726	9.063668	8.934174	9.14189	9.023675	9.277428	8.365252	8.320209	9.225757	9.18014	8.969566	8.841595	8.453882	8.791156	9.233772	7.626075
TCF3	7.599554	7.374242	7.203886	6.855318	10.60452	7.248522	8.148076	7.102083	8.301454	7.879932	6.904427	6.986612	8.253026	8.644309	8.578426	8.447857	7.980327	8.020741	6.937824	6.546831	8.533976	6.327755	8.181741	8.515372
TCF4	11.10149	10.78637	11.02769	10.56358	10.73945	11.44909	10.81278	10.50215	11.43422	11.37035	11.34911	10.74393	12.29776	11.94919	11.6724	11.38544	11.85756	11.5445	10.75605	10.87063	11.46273	11.76415	11.47027	11.6044
TDFG1	4.486213	4.367578	7.982977	6.44513	10.01956	4.596446	5.982874	8.856506	4.738929	4.349896	4.56339	5.713047	4.849304	4.52254	4.714487	4.663586	5.199814	4.153743	4.464572	7.630331	4.713125	5.453286	5.173567	5.414571
TEK	7.285619	7.167279	7.24774	6.517061	7.743287	8.099982	6.716024	6.193495	7.983768	9.762408	9.781736	8.218538	7.921088	9.757521	7.221581	8.338374	8.598193	8.695426	8.665181	7.123409	8.5750967	7.942954	7.275168	
TF	5.340362	5.841509	3.951499	3.869817	8.632538	4.596446	5.418973	4.957033	5.113325	5.015477	5.375317	4.759841	5.610117	5.348511	7.328019	7.394528	7.199814	5.394751	4.669891	4.413806	5.98876	5.806923	5.884061	8.085507
TFDP1	9.199401	9.108545	9.612229	9.491576	10.73945	9.412972	9.50459	9.72555	9.483887	9.251803	9.034433	9.237298	9.574197	9.265232	9.60979	9.286451	9.624996	9.27174	9.273139	9.095204	9.709042	9.288986	9.293452	9.395463
TFPI2	7.203626	7.380875	5.221588	5.435415	8.254026	7.833485	6.689827	4.163483	9.491836	5.469195	6.839721	4.933172	7.662373	7.777354	7.047911	7.108371	6.260267	6.366736	6.617423	6.682295	7.969023	9.912718	7.428381	7.166644
TGFB1	11.19781	11.54158	11.08743	10.6247	12.1705	11.58837	11.21282	10.36642	11.44859	11.10938	10.86025	10.85944	11.72787	11.25787	12.38833	11.96407	11.48342	10.95288	10.46828	10.43314	12.12363	11.10194	10.96443	13.145
TGFB2	8.422398	9.797013	6.684215	8.245552	7.517061	8.16413	8.367086	6.256599	8.123593	8.533574	9.535601	8.365123	8.787904	8.040388	7.971498	7.382404	7.395364	8.963438	8.113173	7.675474	6.98876	10.09393	7.668332	6.8105
TGFB1	12.28013	12.13061	11.10423	11.24033	8.739453	11.13061	12.42655	10.55156	12.35337	12.11648	10.80116	11.404	11.9133	11.47197	12.58682	11.37095	13.18777	11.47157	10.46828	10.54403	11.88542	11.39189	12.03972	11.54927
TGFB2	11.95851	11.85289	11.70521	11.99786	10.01956	12.51147	11.64402	10.76042	12.13918	11.9421	12.24099	12.2824	12.36215	12.30807	12.54864	12.26329	12.56585	12.25297	12.33581	12.1746	12.31499	12.27771	11.78123	12.88857
THBS1	13.84638	14.28639	12.96618	11.77887	9.632538	14.0263	10.25626	10.22268	14.07308	11.65021	11.8335	12.00028	12.47156	11.2424	12.35343	12.45258	14.47143	13.90316	12.79738	13.01017	13.27677	11.67245	10.55097	11.09442
THBS2	12.14991	11.94329	9.729769	9.244902	8.932098	10.17603	10.17618	10.49937	8.833823	12.19927	7.535061	8.347359	10.94441	12.03214	10.16471	10.2994	12.8663	12.83785	8.809243	10.04263	9.830256	10.47402	9.92587	9.12084
THBS4	6.05256	6.151849	5.387598	3.869817	8.102023	6.34368	6.235261	6.631632	7.153967	9.36228	4.95418	4.960139	5.4073	7.192391	7.640487	6.703114	13.88168	8.194157	6.796648	4.124299	7.453882	4.453286	7.435235	7.766557
THY1	11.21099	10.34825	8.212764	7.964054	10.42395	10.13117	10.12543	10.25483	12.16985	11.66528	8.132232	9.912611	11.76717	11.62678	10.60396	9.643408	13.05458	10.77846	6.530914	7.211762	9.995604	10.55249	10.47236	9.705803
TIE1	8.827432	8.354157	9.803615	9.721816	11.81474	9.517011	9.618218	9.018144	8.350364	9.357648	10.38442	10.25964	10.27134	10.24056	9.664838	10.37361	9.682996	9.548035	9.271787	9.620016	10.04823	9.649301	10.8623	
TIMP1	13.78145	13.66381	12.34558	12.54747	7.739453	12.97412	11.39127	9.485411	14.20721	14.0057	10.51189	11.80679	13.29271	12.60154	11.76194	11.46879	13.82823	12.70064	10.90888	11.64721	11.90009	12.63043	12.15889	10.78686
TIMP2	12.74686	12.03922	11.15808	11.50876	10.39153	12.48671	12.20829	10.85371	13.52429	12.65147	12.19026	11.47642	12.77823	13.17978	12.91847	12.71192	13.53966	13.44742	11.77969	11.45372	12.30204	12.16218	12.43096	13.02073
TIMP4	5.429629	5.005008	8.33977	7.35244	9.102023	6.16413	6.539267	8.284499	6.173866	5.514283	3.656499	6.42442	6.001307	7.005623	6.260455	6.806544	8.369739	7.527201	7.706233	8.104122	6.206665	5.806923	7.106435	7.781354
TJP2	8.680591	8.403853	8.951499	9.07771	9.180026	8.800318	8.535656	8.385876	8.380646	8.377611	8.831425	9.033388	9.167219	8.780785	8.64806	8.07109	8.553956	9.336363	9.293586	9.077202	8.189712	9.243363	8.553339	8.674439
TJP3	7.385686	8.151849	8.977778	8.91071	11.16092	8.537284	9.650298	9.328055	7.627898	7.853859	8.10771	8.856304	7.879052	7.497737	8.818824	9.440467	6.84553	8.498442	9.029595	8.225837	9.385551	7.370824	9.040565	10.60127
TLK2	9.405993	9.456611	10.14365	9.602087	10.48669	9.586758	9.828274	10.24386	9.4618	9.279817	9.353467	9.529432	9.19624	9.49982	9.417145	9.574478	9.635786	9.648507	9.467751	9.347765	9.470822	9.231729	9.608115	9.934828
TLR4	10.01459	10.25655	10.05756	10.38583	8.632538	10.07565	10.21169	9.71192	10.52611	9.891727	9.96104	10.60239	10.31056	9.96699	10.43038	9.816716	10.69683	10.12476	10.20683	10.00898	10.03695	10.06144	9.748935	10.31639
TM6	9.37823	9.646113	8.844176	9.161126	4.932098	8.677834	6.991451	7.691221	9.05282	9.579378	9.089737	9.291388	8.896125	9.360025	9.212738	9.188889	8.761317	9.806199	8.813404	8.386916	9.612403	9.018071	9.474024	8.914837
TMEM100	6.93552	6.961418	10.47414	12.13717	8.102023	10.15616	10.09017	8.560374	7.314958	9.18913	11.0866	12.64196	11.78004	8.899159	10.54027	7.760447	8.040033	9.694311	10.17736	10.76213	9.06325	11.53721	7.691416	8.894564
TMEM30B	9.190915	8.879477	9.420542	9.457182	9.790079	9.146643	8.781107	9.509258	9.105575	9.036879	9.174824	9.545102	8.417472	9.034652	8.962415	9.414014	8.620657	9.88537	9.576781	9.41892	9.301248	8.997607	9.080458	9.132428
TMPRSS2	9.979299	9.2274	9.926082	10.43907	10.2175	9.772084	8.998699	9.13311	9.317197	10.40929	10.06942	11.02184	8.846797	8.756959	8.570477	7.936604	8.959863	10.98721	9.916268	9.754465	8.640123	9.453286	8.70282	8.461265
TMPRSS4	4.429629	5.934618	3.564476	6.083942	4.932098	4.743287	8.998699	4.900449	6.613398	5.967638	7.271976	4.112142	4.679379	5.52254	7.60979	7.07109	3.946057	5.217873	5.055181	2.124299	7.88305	5.605289	7.407623	7.995934
TMPRSS6	2.107701	3.197653	5.564476	3.313424	9.739453	2.959016	4.802301	5.716024	3.684481	1.813843	2.241462	2.905692	2.001307	1.648071	3.070631	-0.50634	3.052972	4.016239	3.447498	3.709262	2.924629	3.868324	3.714136	4.626075
TMU82	8.245205	8.116516	8.638823	8.355244	9.102023	8.177108	8.599314	8.736373	8.459775	8.380658	8.161649	8.329373	8.179225	8.451126	8.578426	8.442028	8.245617	8.245058	8.176714	8.327239	8.398888	8.051546	8.632999	8.803268
TNC	10.69492	11.13085	9.469516	9.083942	8.932098	9.683908	9.541069	9.047756	11.10622	10.60338	8.11866	7.801442	10.78921	9.990886	11.15145	10.05399	11.72034	10.74212	8.374853	8.707591	10.68558	10.44827	10.01792	10.35152
TNF	6.324932	6.242047	7.764903	6.058851	8.254026	4.998544	6.304802	8.169482	5.684481	5.273275	7.437859	6.728814	5.138811	6.085476	5.115025	5.538055	6.267985	4.694311	6.377109	7.307521	5.614945	4.983801	7.071688	6.12084
TNFRSF12	8.997662	8.546381	8.684215	7.936768	10.68699	8.573726	7.630121	7.834022																

UTS2	4.309335	4.005008	7.83558	6.259384	9.324416	2.959016	4.982874	8.695385	3.791397	5.349896	4.025733	4.112142	4.53736	3.870463	4.771071	3.953092	4.705049	3.601202	5.184464	6.987797	5.137623	6.190252	4.962063	5.867084
VAMP8	9.547325	9.700153	9.277664	9.562468	8.739453	9.459747	9.83499	8.222377	9.354729	9.342102	9.245214	9.839155	9.542017	8.889657	9.927056	9.465204	9.125201	9.2489	9.517683	9.229335	9.557955	9.038249	8.874007	9.944721
VASH1	8.64686	8.212603	8.988157	8.368068	10.76499	7.85518	8.972226	8.578521	8.451647	8.454811	8.169569	8.210876	8.710046	8.780785	8.743056	8.187148	8.749443	8.182151	7.76254	7.58737	8.4252	8.10354	8.728156	9.456663
VAV2	8.33652	7.84631	8.635526	7.689486	10.73945	7.653277	8.095083	8.193231	8.1287	8.034947	8.333631	8.21368	8.44093	8.749609	8.574457	7.57581	8.176355	8.589129	8.123959	8.109192	7.713125	8.190252	8.475687	7.894564
VAV3	6.716511	6.58997	6.30698	7.07771	5.932098	6.215355	7.190032	5.300987	6.133789	6.840643	6.96028	7.087895	7.036931	6.58667	7.147446	6.703114	6.705049	6.705538	6.498124	6.493533	7.116249	6.83795	6.884061	6.999534
VCAM1	10.2544	10.91075	7.869661	7.673045	7.932098	8.96651	7.457653	8.605321	10.59045	9.263404	8.148352	6.966803	9.171232	9.528675	8.475772	7.864348	10.05779	8.884136	6.617423	7.320697	9.29492	8.726305	8.201976	7.781354
VCAN	10.47052	10.08741	9.463949	9.670976	7.517061	10.15323	9.034962	7.811182	11.27579	10.6353	8.085557	9.237298	10.17323	9.536814	10.04791	9.20102	10.64436	10.1037	9.123959	8.68739	9.66487	10.2635	9.57367	9.321462
VEGFA	11.24469	12.23383	10.36089	10.6538	10.06138	10.00947	10.15751	9.231007	10.14769	10.0909	11.82162	11.19429	10.56812	9.990886	10.2393	9.40954	12.45872	11.0877	11.22917	10.77695	9.460965	10.84178	10.17254	9.588709
VEGFB	10.51964	9.874785	9.993319	9.919448	10.63254	9.463283	10.10973	9.548914	10.77602	10.10938	9.509289	9.728814	10.03913	10.57585	9.692683	9.743959	11.00551	10.87981	9.884904	9.473028	9.416482	9.550148	10.37056	9.493073
VEGFC	8.618663	8.151849	8.529372	8.24277	8.39153	7.374053	7.12423	7.943093	7.835791	7.142967	8.426888	7.805165	8.994529	8.040388	7.699988	6.194101	7.80786	7.408557	7.691805	7.654814	6.741322	7.955787	7.668332	6.894564
VEZF1	8.889061	8.736812	9.208332	9.371893	10.35836	8.938838	9.102425	9.516336	8.946938	9.133967	9.473483	9.441266	8.795723	8.817996	8.835502	8.840175	9.112896	9.41541	9.487723	9.422998	8.807272	8.976848	9.129877	8.986823
VHL	9.894298	10.05356	9.859803	9.916832	8.838989	9.883168	10.01175	9.84718	10.06219	10.21472	9.529943	9.89525	9.915393	10.21666	10.14477	10.10376	9.940846	9.76979	9.647638	9.615262	10.18801	10.21705	10.16225	9.725065
VIM	15.34634	14.84128	14.43603	14.49775	12.70689	15.07886	14.92405	13.3561	15.18888	15.10164	14.75107	14.27789	15.19754	14.98169	15.3497	14.77874	15.94459	14.98512	14.37464	14.48932	14.96361	15.01457	15.00775	15.07429
VIT	5.107701	5.038955	8.058793	6.757343	9.102023	5.312653	7.524768	8.852783	5.153967	6.091828	4.799457	6.324193	5.171232	6.129198	5.977521	6.194101	7.065796	6.394751	7.020965	7.384827	5.674651	4.090716	7.205989	6.452046
VPS13A	8.774458	8.731631	8.371831	8.727798	6.517061	8.292916	9.119413	7.691221	9.20321	9.334265	8.909164	9.002913	8.534248	9.318137	8.092999	8.197564	9.056189	9.487101	9.023848	8.44823	8.206665	8.976848	9.327004	7.96106
VSIG4	11.9635	11.16632	12.73767	11.86168	11.35836	11.83348	12.4598	9.921929	11.94694	11.61183	10.64518	12.05993	11.6001	10.60904	11.75801	11.2783	12.01297	11.17964	11.78565	10.695	11.52488	11.146	10.03606	12.44277
VWA1	5.808141	6.072122	6.130823	5.058851	10.71346	5.074493	5.778054	6.426518	6.028436	5.831765	5.048816	4.905692	4.202941	6.348511	5.771071	5.538055	6.585467	6.23347	4.547034	5.430108	6.778081	4.453286	6.1404	5.921531
VWA2	6.915056	6.802515	7.696926	7.185963	8.932098	6.959016	8.180813	8.555801	7.771944	7.686672	7.782343	7.339678	6.218538	7.20266	8.087439	8.123017	6.671882	7.738705	7.813404	7.616152	7.53666	6.675679	7.71976	8.532966
WARS	10.65382	11.83156	10.44618	11.72306	9.019561	10.82458	10.50274	9.622915	10.2901	9.938998	11.1022	11.16779	11.94821	10.41184	10.98202	9.638319	10.45994	10.12581	10.15519	9.688237	10.27738	11.23027	10.08264	9.717391
WIPF1	10.21936	11.16392	9.121424	9.637472	8.254026	9.225802	9.709192	9.290016	10.15522	10.33269	9.458477	9.563903	9.870438	9.692465	9.758881	10.03476	10.68233	9.410273	9.262195	9.383781	10.21171	9.853217	10.03832	9.814102
WNT5A	7.637522	8.017832	8.68102	8.129843	9.790079	9.335985	9.159854	9.41394	10.11075	10.24095	8.700893	8.953445	9.501153	9.25046	9.173919	9.113881	8.322433	10.04415	8.97106	8.737373	8.323179	9.57338	8.973879	8.674439
WNT5B	6.245205	6.038955	8.194953	7.168476	9.180026	5.719828	7.796278	8.780155	8.188613	7.157251	6.037321	7.318994	6.486734	6.981972	6.940996	7.288077	7.234302	7.279274	6.602075	7.267257	6.965044	7.166004	7.668332	7.626075
WWTR1	10.90342	10.42727	11.08623	10.78629	10.10202	11.18837	10.3681	10.04286	10.95702	10.98126	11.06129	11.05427	11.37112	11.18658	10.77971	10.66921	12.05418	11.8589	11.11283	11.03052	10.64635	10.76314	10.8389	10.72698
ZC3H12A	8.757317	8.38418	9.585135	8.635352	10.25403	7.887123	7.820223	8.114574	7.684481	7.015477	7.999314	9.119637	7.001307	7.085476	6.757131	7.72248	9.208513	9.137255	8.481446	8.168694	7.736661	6.605289	7.008756	7.376097
ZC3H14	9.147717	8.886486	8.946185	9.323993	8.838989	8.580254	9.011755	9.416464	9.312717	9.150126	9.620358	9.42563	9.103546	9.520489	8.525958	8.112046	9.635786	9.644138	9.543021	9.469088	8.285377	9.438179	9.274468	7.690206
ZCCHC24	9.826063	9.440827	8.712659	8.87342	8.102023	9.838939	9.327953	8.724198	10.32945	9.715917	8.84797	8.921214	9.736017	10.62821	9.798551	9.40655	10.10515	10.32276	8.99329	8.376439	9.428094	9.386649	10.19896	9.515372
ZEB1	8.797001	8.510536	9.341794	8.955582	8.932098	9.211155	9.040069	9.248115	9.617037	9.386733	9.152354	9.309851	9.813806	9.731993	9.15278	8.989516	10.35022	9.992374	9.020965	9.22467	8.829332	9.483034	9.310325	8.796
ZEB2	10.11669	9.808678	9.313185	9.661632	7.932098	9.221633	9.988168	8.528056	9.9133	10.15547	9.767635	9.743441	10.46728	10.88807	9.989494	9.05781	10.50536	9.906199	9.708922	9.44823	8.876709	9.987265	9.933304	9.442768
ZFPM2	7.071176	6.578475	7.715785	6.78055	7.739453	6.389004	6.753392	8.181405	7.33277	7.099245	6.641392	6.614643	7.146985	7.150571	6.530063	5.72248	7.620657	7.338167	7.015183	7.134283	5.635123	6.640913	7.080458	6.024625
ZFYVE16	9.692664	9.486134	9.147124	9.542243	10.45566	8.780613	9.640245	9.546612	9.278662	9.371498	9.245214	9.453179	9.371123	9.542889	8.598108	8.388479	10.03025	9.478946	9.321967	9.526127	8.36908	9.526535	9.452228	8.254107
ZFYVE9	8.30541	7.420045	8.648671	8.622566	8.102023	8.051186	8.261733	9.306441	8.389183	8.334265	9.015516	8.524924	8.489951	8.804575	7.871531	7.565123	8.464786	8.891528	8.580702	8.807684	7.413565	7.927218	8.361594	7.336569
ZKSCAN5	5.245205	4.934618	6.618924	5.668905	7.739453	4.647072	5.676771	7.523379	5.028436	5.29927	5.137626	5.472038	5.001307	5.52254	5.280084	4.400551	5.245617	5.153743	5.514612	5.849192	4.82275	4.283361	5.621026	3.973999
ZNF143	8.130069	8.174933	7.264916	8.180158	7.254026	7.794715	7.945259	6.40634	7.984042	8.279817	8.153686	8.370159	8.256808	8.16114	7.663088	7.424398	8.217161	8.411988	8.279182	8.047132	7.298088	8.492815	8.306593	6.973999
ZNF346	7.340362	7.038955	8.375789	7.574689	9.517061	7.092871	8.217339	8.984513	7.530936	7.858237	7.463854	7.834608	7.44093	8.42066	6.989494	6.977477	7.61194	8.060633	7.669891	8.083657	7.310688	7.433108	8.458969	6.658497

Gene	Controls	AFE	NSIP	UIP
AAMP	9.591779	9.895907	10.02871	9.812729
ABI3BP	10.84234	11.12273	10.86377	10.88898
ACHE	6.548702	6.490295	7.583409	7.202641
ACTG2	10.35847	10.73704	10.41536	10.88094
ACVR1	9.027753	9.764614	8.84598	8.689142
ACVR1C	6.105853	4.925474	5.502805	5.722732
ACVRL1	11.2488	10.11443	10.83845	9.536782
ADAM15	10.52515	10.62908	11.14823	11.27244
ADAM17	10.58056	10.61922	10.8577	10.67608
ADAM28	6.935669	8.13037	7.745978	7.851456
ADAM8	6.800356	7.466093	6.6662	6.899078
ADAM9	10.10373	10.62327	10.31987	9.815285
ADAMTS1	11.90496	12.04576	11.44127	11.27903
ADAMTS12	7.665871	8.212344	7.97037	7.490361
ADAMTS8	9.079696	8.163674	8.554306	8.291744
ADAP1	7.934546	7.65653	8.214524	7.902834
ADD1	10.6549	10.66963	9.756828	9.627343
ADM2	5.181314	5.163918	5.708139	5.729752
ADRA2B	4.259359	4.479431	5.106886	4.915305
AEBP1	11.31699	13.49478	12.50927	11.70517
AGGF1	6.995147	7.078873	7.408535	7.364894
AGK	8.214588	7.828768	7.845473	7.998474
AGR2	9.58351	9.426659	9.11193	9.782117
AGRN	9.940283	10.4922	11.23071	11.23288
AGT	5.251622	7.668424	6.62465	6.647971
AHNAK	13.13705	13.07322	12.9399	13.22292
AKAP12	10.20877	10.90937	10.31844	9.784982
AKAP2	10.58189	10.10764	9.743955	9.083284
AKT1	11.48929	11.78645	11.23843	11.23265
AKT2	10.15319	10.674	10.87889	10.42233
AKT3	10.20309	10.30403	9.674314	9.472902
ALB	4.422912	5.064913	4.969538	4.840194
ALDOA	12.28517	12.76072	12.30518	12.32821
ALOX5	11.38762	11.41688	11.28047	11.13316
AMH	5.94072	5.027296	6.442797	5.634735
AMMECR11	8.785462	8.554986	8.664098	8.624596
ANG	8.465606	7.839837	8.118024	8.376788
ANGPT1	9.748854	9.604142	10.78269	9.903807
ANGPT2	7.852052	8.544564	8.348531	7.956373
ANGPTL2	8.511333	10.75822	10.53966	10.52481
ANGPTL4	7.0069	9.312391	8.16271	6.765124
ANPEP	9.349401	9.65351	8.966793	9.358471
ANXA2P2	13.44025	13.77046	14.13606	14.18867
AP1M2	7.852192	7.636041	7.444301	7.534799
APC	8.307769	7.949227	8.21793	8.21064
APOD	9.96172	10.43526	10.22279	10.47667
APOE	11.5723	12.61079	12.89838	12.24153
APOH	5.998735	5.081754	5.065192	4.483578
AQP1	11.03674	10.21811	10.41717	10.54675



ARAP2	8.492991	8.333025	7.765502	7.379365
AREG	9.269231	9.996562	8.932071	8.530145
ARHGAP32	7.678163	7.704652	7.613554	7.876354
ARHGDIB	11.62406	12.3461	12.08479	11.98846
ASPN	7.442192	9.855052	9.130173	9.186636
ATPIF1	10.16892	10.20952	9.879985	9.898199
B3GNT3	6.827439	6.970036	6.930249	8.129136
BAD	8.24342	8.368067	9.007045	8.903242
BAG2	9.219206	9.429916	9.389633	9.077279
BAI1	5.298038	4.787987	6.299081	6.20439
BAI3	7.421257	6.340226	7.36116	7.191667
BCAS1	5.461088	5.239935	6.361159	6.993274
BGN	10.95343	13.07457	12.56896	12.17042
BICC1	6.23674	8.006132	7.047009	6.353289
BMP4	7.7711	8.308787	8.246233	8.49835
BMP5	8.240069	7.247573	8.750712	8.799417
BMP7	4.350768	4.852042	5.612776	6.845148
BMPER	7.857678	6.586214	7.730575	7.090935
BMPR1A	9.967695	9.838945	10.22941	10.41776
BMPR1B	7.037409	5.898297	6.886175	8.241293
BMPR2	10.53069	10.11861	10.43022	9.729845
BNC2	7.532187	7.909202	7.884905	7.941859
BRMS1	8.181697	8.272757	8.200896	7.765921
BTG1	11.7369	11.95352	11.51	11.50658
C1S	10.98645	12.55486	11.4624	11.08307
C3	10.41079	11.67572	10.08192	10.15539
C3AR1	9.025728	9.687537	9.296634	9.204494
CADM1	10.49957	9.940668	9.818058	9.420964
CALCRL	11.3684	10.04232	10.30215	10.0218
CALD1	11.69767	12.70378	11.77029	11.00198
CAMK2A	5.647015	4.628351	5.385121	6.024214
CAMK2B	2.710085	3.205169	4.202269	3.7028
CAMK2D	10.33486	11.08474	10.94551	10.63591
CAMP	6.353286	5.097432	5.969073	5.959308
CASP8	9.318363	9.439594	9.443889	9.649895
CAV1	12.127	11.14492	11.34307	11.06094
CBLC	3.408685	4.183677	3.972658	4.764209
CC2D1B	7.299277	6.603144	6.795379	6.886287
CCBE1	8.994799	7.602073	8.796166	8.780661
CCDC80	10.55003	13.41719	12.16965	12.42235
CCL11	7.238837	7.818022	6.471748	7.998283
CCL21	10.47044	10.94847	12.02471	11.30093
CCL5	9.059284	10.46715	9.683941	10.07673
CCL7	1.85583	3.413898	3.208754	3.046613
CCL8	6.380516	6.959386	5.103656	6.000545
CCR2	7.963245	7.418983	8.09294	8.320766
CCR3	6.066801	4.479619	4.725731	6.175218
CD163	11.13425	11.62065	11.06766	10.48367
CD24	9.643089	10.8358	10.09101	10.53047
CD2AP	9.323737	9.387019	9.14043	9.341711

CD34	9.878987	10.47319	10.50525	10.2459
CD36	11.10201	10.29051	10.30215	10.3241
CD44	11.92119	12.67292	12.98057	13.11083
CD46	11.88863	11.70515	11.17184	11.01361
CD82	9.79064	9.600356	9.929604	9.990046
CDC42	11.56457	11.5625	11.21578	10.93408
CDH1	10.6344	10.4534	9.702412	10.17483
CDH11	10.54104	11.82097	11.28432	10.67454
CDH13	8.605435	8.164415	8.103248	7.919804
CDH2	5.013739	7.571231	6.760893	6.554475
CDK14	8.758518	9.018659	8.7747	8.580407
CDKN1A	10.76835	12.24341	10.80117	10.62271
CDKN2A	4.399552	4.447136	4.560376	5.088677
CDS1	8.707351	7.768176	8.08086	8.570325
CEACAM1	5.866426	5.163465	5.068476	5.571923
CEACAM5	7.359677	6.138571	6.929536	8.304687
CEACAM6	12.45762	11.82481	11.16653	11.91579
CEP170	9.280621	9.768448	9.198221	8.999534
CEP295	7.69167	7.480891	7.389026	7.403247
CFP	7.764285	6.872116	7.582159	7.219756
CGN	9.058178	8.446907	8.387362	8.708956
CHAD	5.995143	4.551404	6.275277	7.063003
CHD4	10.37386	10.59982	10.07343	9.983093
CHI3L1	8.764929	10.58406	9.335308	9.519386
CHP1	10.55336	10.42797	11.74503	11.15892
CHP2	4.531252	3.326926	4.614632	4.940125
CHRD1	10.18515	10.82556	10.74148	10.64138
CHRNA7	6.552147	5.578588	7.013029	7.227386
CIB1	10.53301	10.90445	10.61424	10.71679
CKMT1A	6.671221	5.622641	7.082397	8.14402
CLDN1	7.319194	9.0369	8.354788	9.104374
CLDN3	7.973729	7.736262	8.578687	8.469653
CLDN4	10.22062	9.987115	10.0419	10.08122
CLDN7	10.34262	9.95296	10.45937	10.31319
CLEC2B	10.78624	11.16705	10.89099	10.62624
CLEC3B	10.99634	10.33292	11.15127	10.62876
CLIC4	11.28182	11.46805	11.06376	10.61135
CLU	12.26845	13.14611	13.10172	13.65941
CMA1	3.15537	5.143798	5.492885	6.29278
CNN1	7.528068	8.794319	9.10111	9.058454
CNOT10	8.670409	8.665944	8.783885	8.765066
CNOT4	8.885158	8.980817	8.878162	8.628549
COG7	8.960084	9.141003	9.262462	9.302047
COL18A1	9.982828	11.65008	11.60113	11.15834
COL1A1	11.37786	16.08799	14.48287	14.95565
COL1A2	11.55715	14.59497	14.00552	13.59853
COL3A1	12.33546	15.85723	14.73901	14.66338
COL4A1	11.53846	13.03256	13.35698	11.71873
COL4A2	11.66407	12.85124	13.55084	12.17904
COL4A6	4.7002	5.320635	5.749414	6.314173

COL5A1	10.37743	12.94243	11.68567	11.01559
COL5A2	9.296913	11.51592	10.71333	10.26213
COL6A1	11.32515	12.70477	11.51325	11.46212
COL6A2	12.34977	13.87765	12.87239	12.74785
COL6A3	10.55231	12.70169	12.24134	12.60919
COL7A1	7.101843	8.321229	9.051753	9.595251
COMP	5.31313	9.018047	8.93946	8.743983
CREBBP	9.483938	9.679617	9.593833	8.988079
CRIP2	10.92427	11.1677	11.81239	11.78915
CRISPLD2	9.814856	10.78209	9.873986	9.972929
CSF2RB	7.347623	7.428165	7.858553	7.474234
CSPG4	9.499038	9.001738	10.0093	8.874507
CST7	8.620572	8.547922	8.275532	8.411032
CTNNB1	12.28337	12.73632	12.06225	11.9068
CTNND1	11.13378	10.85337	11.10203	11.27534
CTSG	6.533859	6.596391	7.728609	8.562149
CTSH	12.29643	12.32171	10.8854	11.30995
CTSK	9.61747	12.09589	10.55544	11.2777
CTSL	9.51645	10.10852	9.186771	8.708374
CUL1	9.109322	9.05251	8.972844	9.014579
CX3CL1	10.1741	9.329207	9.770376	8.67967
CXADR	9.507227	8.30301	8.290151	8.706329
CXCL10	7.702659	7.72174	7.404093	7.274097
CXCL11	6.954399	5.791677	5.435104	6.043341
CXCL12	8.169374	11.01304	11.29747	10.90098
CXCL13	4.189243	6.932787	6.297008	7.772884
CXCL17	10.93185	11.05425	10.34711	10.97037
CXCL8	10.75667	9.908436	8.142012	9.189123
CXCR2	8.705848	6.312703	6.577988	7.916482
CXCR3	6.660812	7.071486	7.348906	7.413933
CXCR4	10.37948	11.62703	10.73985	10.50197
CYB561	9.564157	9.570767	10.16714	10.08878
CYBB	10.53031	11.09985	10.34878	10.85866
CYP1B1	7.601187	9.405865	8.456524	8.269506
DAG1	9.257234	8.951284	9.261068	9.12052
DCC	4.737902	5.227682	4.999243	4.995785
DCN	13.35296	14.47024	13.35042	13.77973
DDR2	9.746057	10.33824	10.00275	9.64578
DDX50	9.058197	8.990823	9.036244	8.880504
DENND5A	8.869359	8.992937	8.90912	8.490075
DENR	8.901842	9.262759	9.025961	8.706793
DESI1	8.740946	8.506372	8.328479	7.951466
DHX16	8.449627	8.638283	8.705156	8.775181
DICER1	9.826286	9.963442	9.963982	10.09052
DLC1	10.12959	9.424562	9.295247	8.549945
DLG1	9.663227	9.820851	9.628224	9.803675
DLL4	9.486878	8.552462	9.068833	8.843346
DNAJC14	7.308974	7.15405	7.619579	7.549109
DPT	9.385239	10.40709	11.05692	10.57108
DPYSL3	10.33667	11.49015	10.82675	11.03253

DSC2	8.784204	8.868267	8.841698	8.988079
DST	10.96258	11.251	11.32204	11.16234
ECM1	8.204543	9.435982	9.647274	9.539187
ECM2	8.324906	9.438412	9.773359	9.362352
ECSCR	9.246829	8.673725	8.824886	8.696717
EDC3	8.613086	8.995005	8.491651	8.492419
EDN1	9.735835	9.539965	10.11813	9.643269
EGF	6.303756	4.732224	5.357771	5.369581
EGFL7	10.48621	9.680028	11.13213	10.59579
EGFR	10.53003	10.02193	10.24103	10.37901
EGLN2	10.45875	10.28502	9.946703	9.759824
EGLN3	7.684752	7.888783	6.801207	7.452552
EIF2AK3	8.698083	8.95155	8.863771	9.198558
EIF4E2	9.664458	9.792861	9.745149	9.715576
EIF4EBP1	8.608657	8.606474	8.320617	8.071306
ELF3	11.53006	10.82551	10.45873	10.80184
ELK3	8.519647	9.046319	9.079742	8.977908
EMCN	9.585431	8.46705	9.309895	8.310107
EMILIN1	10.17061	11.52907	11.65535	10.60025
EMILIN3	4.816096	4.278033	5.285454	4.661223
EMP3	9.566675	10.01772	9.863569	9.679472
ENO1	11.07457	11.35736	10.80235	10.91132
ENO2	8.581575	8.754928	8.531593	8.886353
ENO3	5.789359	5.690066	6.203329	6.437164
ENPEP	6.571152	6.700497	6.798012	6.008033
ENPP2	10.26676	11.13958	10.76801	10.39688
EP300	9.272022	9.374549	8.718128	8.884001
EPAS1	13.09307	11.62627	11.35555	11.09918
EPCAM	9.362691	8.835036	8.965324	9.192644
EPHA1	6.880807	6.439426	7.027528	6.964937
EPHA2	9.215276	9.437851	9.00557	9.300818
EPHB1	3.756049	4.546679	5.219392	4.597682
EPHB3	7.051968	7.542226	8.486665	8.099938
EPHB4	9.830573	9.607369	10.47749	9.949924
EPN3	6.344829	4.833134	6.42097	7.554851
EPS8L1	7.430447	7.65275	8.383868	8.73953
ERBB2	9.224405	9.420303	9.769688	9.848791
ERBB2IP	10.70718	10.98983	10.56942	10.35834
ERBB3	8.726162	8.163924	8.302797	8.557945
ERCC3	7.930108	8.091151	8.431991	8.44105
EREG	5.941932	6.277779	4.811027	4.739723
ERMP1	8.440852	8.550144	8.242757	8.326432
ESRP1	9.368345	8.567471	8.907386	9.22379
ETV4	5.818033	5.575709	6.117498	6.605199
EVI2A	8.641691	8.967115	8.604455	8.435995
EVPL	9.279744	8.611906	9.291212	9.159807
F11R	9.915809	9.504464	9.383825	9.372849
F3	10.34713	10.28291	10.04971	9.246508
FAM174B	7.977659	6.916459	7.150585	7.478265
FAP	6.734256	9.087169	7.766492	7.391523

FASLG	5.502384	5.116868	4.931904	5.922858
FBLN1	12.52658	13.60057	13.05342	13.44994
FBLN5	10.98814	10.73973	10.6186	9.445712
FBN1	9.256195	11.19585	10.48753	10.32593
FBN2	6.28256	5.811857	5.622904	6.454665
FBP1	11.53186	11.24975	10.73453	10.87741
FCF1	11.46001	10.84381	11.19102	11.37736
FERMT2	10.25288	10.15974	10.31976	9.888929
FGF18	5.869661	6.8432	7.002863	6.781563
FGF2	8.460233	8.742827	8.27749	7.696308
FGF9	6.425721	5.930501	5.800295	6.277111
FGFR1	10.01438	10.88958	10.45136	10.45262
FGFR2	8.064687	7.289901	8.277928	8.424665
FGFR3	8.881431	7.814791	8.961037	9.372886
FGFR4	9.680911	7.387101	9.805363	9.310384
FGL2	8.913889	9.423182	9.167834	9.165251
FHL1	12.40109	12.11655	12.59799	12.57635
FIGF	9.585076	8.726075	8.977556	7.699338
FLI1	9.798039	9.403613	9.501831	8.878859
FLT1	9.629609	8.947506	8.561391	8.527316
FLT4	7.925831	7.511524	8.132111	7.512553
FMOD	10.61584	11.88565	11.01941	10.58747
FN1	12.96509	14.18354	12.60183	12.74086
FOXC2	5.73943	6.361776	6.742519	6.253728
FOXO4	8.928551	8.803198	9.226979	8.988884
FRAS1	8.521621	8.221911	9.423517	8.197976
FREM1	7.547668	7.691558	8.572374	8.374479
FREM2	8.142364	6.634403	6.644916	6.971499
FST	7.401385	8.267407	8.334417	8.137031
FSTL1	11.69019	13.22651	12.58787	12.39808
FUT3	7.262898	6.476831	6.756789	7.693352
FXYP6	9.996843	9.821278	10.27888	10.16166
GALNT7	7.613419	8.139431	7.683732	7.575752
GATA4	4.880155	3.687289	4.424603	4.965034
GDF15	8.257843	10.5032	9.637917	9.491718
GDF5	5.910825	4.439622	4.643736	5.898419
GDF6	5.407537	5.07546	4.537357	5.488408
GIMAP4	10.56269	10.29871	10.43555	10.24018
GIMAP6	8.860652	8.262217	8.432733	8.441003
GJA5	9.390263	9.433935	9.531383	8.950181
GLYR1	9.325122	9.308877	9.155374	9.026839
GPATCH3	7.595895	7.23051	8.01206	7.938789
GPI	10.14364	10.92241	10.50791	10.41134
GPR124	6.850972	8.130903	7.543682	7.807379
GPR56	9.656457	9.624894	9.669702	9.791012
GPX1	10.74716	11.16708	10.73863	10.85981
GREM1	6.126064	10.8981	8.203533	8.699632
GRHL2	7.469891	6.405683	6.984555	7.506209
GSN	12.85486	13.46865	13.0714	13.40236
GTF2I	10.73521	11.03954	10.64321	10.418

GZMK	7.682585	8.463745	8.160756	8.648331
HAPLN1	4.24891	5.45867	5.790725	4.759246
HAS1	5.796533	7.530451	5.695788	6.284831
HDAC3	8.745865	8.851743	8.561116	8.912284
HDAC5	9.496072	9.462518	10.17021	9.958277
HDHD3	7.665817	7.822419	8.100326	8.074536
HEG1	10.89548	10.88833	10.53626	10.14511
HGF	9.145855	9.734712	9.668649	9.394003
HIF1A	11.43487	12.39716	11.51625	11.14363
HIPK1	10.01802	10.10848	9.845566	9.656416
HIPK2	9.705951	9.357326	9.283876	9.288324
HK2	9.613115	8.932525	8.739787	8.81921
HK3	7.984531	7.664091	8.022214	7.963335
HKDC1	6.858486	5.921195	6.719452	7.08536
HLA.DPB1	12.05452	12.97126	11.67017	11.83271
HMOX1	9.96506	9.976656	10.77752	9.331834
HOXA5	8.973544	8.035031	8.466884	8.777174
HOXA7	6.115216	4.741392	5.513343	6.200016
HOXB13	5.123366	2.08135	3.291414	5.051203
HOXB3	8.511213	8.887609	9.125946	9.213268
HPSE	8.007734	7.179509	7.050953	7.870766
HRAS	7.052513	6.983625	7.683132	6.755654
HSD17B12	10.74822	10.80177	10.59017	10.53656
HSP90B1	10.7555	11.38462	11.09302	10.61719
HSPB1	11.1757	12.12428	12.85563	12.53455
HSPG2	11.8046	12.96659	12.60676	12.59291
HUNK	6.89395	6.565177	6.303702	6.590815
IBSP	5.968547	5.088695	4.755903	5.837257
ICAM1	12.12606	12.27922	10.98858	10.54072
ID1	12.74172	11.11867	12.31518	11.12536
ID2	9.90619	9.802687	9.331305	9.062543
ID4	11.07832	11.08459	11.119	10.39074
IFNG	6.719416	5.260101	5.035057	5.169621
IGF1	7.646089	10.96083	10.13107	10.11337
IGFBP4	11.56447	13.48984	12.39737	13.06189
IGFBP7	12.66225	14.19626	13.88097	13.36366
IL10RA	9.42936	10.08466	9.609862	9.700537
IL11	4.791528	4.822033	6.009266	4.965494
IL13RA2	5.208176	5.381868	7.724073	6.64435
IL15	7.997248	7.614911	7.635375	7.850146
IL18	8.695911	8.880129	9.058888	9.342308
IL1A	6.582357	4.737834	5.844347	5.599418
IL1B	8.126587	7.25007	6.620351	7.200862
IL1RL1	10.63392	8.532979	9.123814	8.576883
IL1RN	7.224356	7.8086	7.704703	7.992751
IL6	8.128158	9.543474	6.339761	5.242903
ILK	9.714634	9.884694	9.631351	9.548581
INHBA	7.514079	8.747088	8.296278	7.556311
INHBE	5.637434	3.829165	4.964239	5.23679
IRF6	8.689706	7.712945	8.24877	9.082167



ISL1	6.317002	3.282482	4.069277	5.96363
ISLR	8.749221	10.75553	10.29484	10.13832
ITGA1	10.84844	10.8413	10.62684	9.701539
ITGA11	5.644645	9.950511	7.718981	7.393259
ITGA2	8.882748	9.656019	9.195142	8.906245
ITGA3	10.87165	10.40102	10.59062	9.985584
ITGA5	10.86824	10.89637	10.08801	10.03051
ITGA6	10.01633	9.611407	9.777998	9.923595
ITGA7	7.852225	9.362692	9.760944	9.454462
ITGA8	9.786431	9.023967	9.681245	9.597404
ITGA9	8.383891	9.073301	9.252909	8.960745
ITGAM	8.42462	8.478722	8.16188	8.286582
ITGB1	12.46915	13.09011	12.4225	12.21919
ITGB1BP1	7.422826	6.26419	6.769476	6.557686
ITGB2	10.73199	10.88166	10.76567	10.4946
ITGB3	6.882974	7.581155	7.638196	7.338825
ITGB4	8.829537	9.491966	9.916497	10.63224
ITGB6	8.781855	9.619166	9.101725	8.784365
ITGB7	6.306304	7.294697	6.809475	7.367846
ITGB8	7.714209	8.240621	8.203029	8.662692
ITM2A	9.600929	9.463027	9.574054	9.171783
JAG1	9.397505	9.50502	9.275379	8.871259
JAM2	9.365592	9.093976	9.333572	9.852992
JAM3	9.80263	10.13011	10.24779	9.68812
JUN	11.814	11.11148	10.38511	10.14988
KCNJ8	8.632541	8.301359	8.645685	8.541952
KDM1A	8.73509	8.909995	9.055376	8.849459
KDR	9.794484	8.791571	9.339429	8.793879
KIAA1462	9.187865	8.818464	8.901688	8.909891
KISS1	6.158756	4.219943	5.079232	6.186473
KLK3	4.658531	3.383647	4.186462	4.866384
KRAS	9.462172	9.450775	9.120279	9.123554
KRIT1	8.773693	8.977683	8.418982	8.304238
KRT1	4.5036	2.922503	3.783956	4.567815
KRT14	2.451757	3.423148	4.537506	5.887564
KRT19	10.95156	10.77599	11.19257	11.75118
KRT7	11.71005	11.89535	11.58085	11.5961
LAD1	7.615544	7.791169	7.717736	8.331426
LAMA1	4.315024	5.718852	5.238043	4.279945
LAMA3	8.906784	7.666345	8.179975	7.513821
LAMA4	10.62146	11.28643	11.57806	11.45009
LAMA5	10.55421	10.37815	11.0046	10.98111
LAMB3	8.944297	8.75925	7.929049	8.376287
LAMC1	10.85519	11.15518	10.7552	10.53159
LAMC2	8.292551	8.425898	8.094964	8.037639
LDHA	12.09768	12.78455	11.85967	11.50297
LEFTY1	5.743459	4.120032	4.931475	5.057024
LGALS1	12.34327	13.23807	12.36993	12.43129
LHFP	10.80474	10.896	11.14756	10.94424
LIFR	10.7959	9.649453	10.03933	10.26618

LLGL2	9.354696	8.966241	9.330661	9.033153
LOX	8.797072	10.269	9.06852	8.47743
LOXL2	7.085604	6.909895	7.836255	7.071094
LRG1	8.265285	7.993737	7.581891	7.787782
LTBP4	11.33633	11.16593	11.82164	11.82969
LUM	12.9292	14.98032	13.52213	13.41482
LY96	8.277541	9.154176	8.618279	8.468777
MAF	10.35254	11.23347	11.17921	10.86426
MAP2K1	9.647035	9.724837	9.451882	9.117916
MAP2K2	9.407771	9.765929	10.36934	10.23714
MAP2K4	8.449152	8.325323	8.20774	8.21943
MAP3K7	9.164322	9.489378	9.341224	9.031784
MAPK1	10.00497	9.94613	9.537614	9.326955
MAPK3	10.34439	10.3866	10.16553	10.10014
MAPKAPK3	7.562664	7.762804	7.821117	7.399234
MCAM	9.87491	9.729157	10.03327	9.787081
MED1	9.189593	9.497305	9.048454	8.935418
MED23	8.231737	8.470334	7.986164	7.873047
MEG3	7.278559	9.743698	9.299063	9.431272
MEOX2	8.776697	8.842698	9.776082	9.181385
MET	8.866821	8.370252	8.301362	9.128213
MFAP4	12.37027	13.22924	13.22116	13.28617
MGAT5	8.873889	9.266999	8.973637	8.770568
MGP	12.88866	14.38661	13.10312	13.04528
MISP	8.597397	8.109761	8.617368	8.726634
MMP1	6.931633	7.694372	7.722659	9.652607
MMP10	2.748889	3.629104	4.797443	4.80202
MMP12	3.14601	5.566812	4.412935	4.66742
MMP13	5.837857	4.450502	5.101034	7.57047
MMP14	9.822988	11.41243	10.05681	10.13545
MMP17	5.748315	6.127868	6.851266	6.571737
MMP2	11.09979	13.2944	11.65929	11.76206
MMP24	5.016337	5.454097	5.613617	4.895069
MMP3	5.814066	5.485391	5.145101	6.215894
MMP9	8.234022	8.494899	8.108374	9.390485
MMRN2	9.792294	9.342462	9.587433	9.774128
MPDZ	8.83199	9.042897	9.132763	8.641112
MRC1	11.78085	12.16057	11.27917	11.19677
MRPS5	9.470191	9.258352	9.416466	9.269457
MS4A4A	10.28688	11.22141	10.15766	9.951879
MS4A6A	7.638948	8.088911	7.880502	7.871505
MT3	4.389905	3.653409	5.197311	5.389783
MTA1	8.322083	8.701291	9.094216	8.771125
MTBP	7.091808	6.039727	6.541397	7.12942
MTDH	9.320288	9.849814	9.135657	9.415583
MUC1	11.87673	11.6245	10.09853	11.24611
MYC	10.61419	11.42703	10.59108	10.15378
MYCL	6.496463	5.712764	6.802618	6.621315
MYH11	10.84029	11.5888	10.90282	11.48963
MYLK	12.19111	13.02467	12.81042	12.50402

MYO1D	9.734997	10.13597	9.454916	9.374844
MYO5C	9.739488	9.172189	9.372021	9.883713
NAA15	8.074836	8.362202	8.196875	7.953111
NAP1L3	5.956735	6.339609	6.365842	6.011431
NCAM1	7.224504	7.311111	7.88436	8.231756
NCL	10.12814	10.35353	9.893073	9.693479
NDNF	10.9037	11.09169	11.55311	11.20282
NDP	3.501962	3.508795	4.296801	4.138438
NDRG1	11.1514	11.08017	11.14453	10.98071
NF1	9.159256	9.613021	9.400749	9.496282
NF2	8.720527	8.906045	9.172649	8.881127
NFAT5	8.174168	8.329076	8.315079	8.103495
NFATC2	8.88546	9.969638	9.302719	9.375211
NFKB1	7.624197	7.731696	7.483395	7.237415
NID2	8.208246	9.851201	9.16167	8.86482
NME1	7.844385	8.472882	8.259939	8.14865
NME4	8.359095	8.641279	8.831588	8.340656
NODAL	5.713153	3.366232	4.559862	5.478121
NOL7	9.28272	9.429483	8.753217	8.664087
NOS2	5.103321	5.114676	6.230024	4.399873
NOS3	7.544641	7.557383	7.915414	7.629697
NOTCH1	9.866067	9.500088	10.05427	9.450987
NOX5	5.091911	3.676987	4.620135	5.336937
NPR1	9.684232	9.003765	9.701414	9.155715
NR3C1	10.76028	10.82663	10.50369	10.88043
NR4A1	11.85877	11.87955	10.48853	10.35957
NR4A3	9.704201	10.61403	8.70143	9.0668
NRCAM	7.25127	6.490564	7.504244	6.981107
NRP1	11.54965	12.10287	12.12038	11.85012
NRP2	9.872375	10.27597	9.70613	10.11209
NRXN1	6.578097	4.654981	5.477087	6.241776
NRXN3	7.400593	7.104679	7.295921	7.542177
NTRK1	5.739429	5.858642	7.040409	7.154448
NUBP1	7.126661	7.41746	6.997381	6.47869
OAS1	9.165338	9.207666	9.545331	8.99526
OCLN	8.367788	7.39135	7.322788	7.081213
OGN	9.178042	10.35567	10.49675	10.96502
OLFML2B	7.692633	9.314949	8.98762	8.486281
OVOL2	8.246329	7.410915	8.34688	8.961821
P3H1	8.094796	9.170075	8.571233	8.093779
P3H2	8.349175	7.513461	6.962982	6.234462
PCOLCE	10.06299	11.7306	11.32314	11.28323
PDCL3	8.327281	8.410792	9.521185	8.843502
PDGFA	8.136648	8.913307	8.930214	7.917868
PDGFC	7.776062	8.374613	6.961837	7.537046
PDGFRB	11.22232	11.93561	11.59073	10.83398
PDK1	7.704254	8.680957	7.877707	8.205451
PDPN	9.431012	10.06351	8.826311	8.396685
PEBP4	9.762963	9.068769	8.397526	7.794642
PECAM1	12.85233	12.17476	11.69716	11.58632

PFKFB1	5.749514	4.518322	5.189743	6.139152
PFKFB4	5.718842	5.712969	5.836123	5.549
PGK1	11.57868	11.85249	11.94739	11.72289
PIK3CA	8.954136	9.039855	9.048966	9.129975
PIK3CD	8.439158	8.595751	8.256571	8.085413
PIK3CG	8.638955	8.984059	8.867009	9.113552
PIK3R1	10.52993	10.96341	10.9708	11.08784
PIK3R2	8.563576	9.354769	9.785391	9.594232
PIK3R5	8.756823	8.888831	8.497465	8.882589
PIK3R6	5.891863	5.955004	7.01337	7.274429
PITX2	5.359108	4.195496	5.137306	6.16775
PKM	10.73341	11.22281	10.91965	11.18295
PKN1	10.32968	10.37537	10.11366	9.901804
PKNOX1	7.540711	7.112009	7.650111	8.114762
PLA2G10	7.951697	7.630744	6.720041	7.388173
PLA2G2A	7.508028	11.02084	9.015587	10.16448
PLA2G2D	5.084967	5.563667	5.186542	6.503859
PLA2G3	6.388528	4.499643	5.121715	5.289695
PLAU	8.878861	11.22215	9.495735	9.283916
PLAUR	10.0986	10.71955	9.727262	9.860434
PLCG1	10.11377	10.26249	10.60604	10.00242
PLCG2	8.383807	8.809384	8.447292	8.868249
PLEKHO1	10.24283	10.69273	10.39979	10.40904
PLS1	8.188757	7.409026	7.247287	7.381651
PLXDC1	7.441062	9.386463	9.136465	8.813769
PLXNC1	9.127971	9.489602	8.990882	9.264106
PLXND1	10.90263	11.18265	11.28642	10.64376
PMP22	10.52613	11.04502	10.53901	10.31424
PNPLA6	10.03369	10.16555	9.890694	10.39394
POPDC3	5.405937	4.026234	4.51006	4.752349
POSTN	9.758833	11.9639	11.28376	11.70788
PPFIBP2	7.504278	7.898652	7.697157	7.441982
PPL	9.533074	8.556948	7.994019	8.301178
PPP1R16B	8.196586	8.061089	7.57001	7.870165
PPP2CB	11.53451	11.23746	11.15921	11.04127
PPP2R1A	10.90007	11.33891	10.97307	10.69239
PPP3R1	10.66303	10.96346	10.84802	10.91631
PRELP	9.018972	8.872551	8.615319	8.467962
PRF1	9.058906	9.460231	9.113773	9.151788
PRKCB	8.275359	8.285148	8.958523	8.736283
PRKCG	2.442138	3.891588	3.865187	3.737583
PRKCZ	9.508048	8.408398	8.518342	8.183006
PROK2	8.227237	5.351768	5.368043	6.582145
PROM1	6.91372	6.347051	7.239165	8.60109
PRPF38A	9.901157	9.483347	9.822197	9.723844
PRR15L	8.12485	7.417517	7.56703	7.79888
PRSS22	7.49547	7.81303	8.150998	8.620191
PRSS8	9.121054	8.317603	8.823171	8.435395
PTEN	10.58378	11.07069	10.92651	10.74943
PTGDS	10.0445	11.6755	13.01552	12.33158

PTGIS	9.26176	10.9242	9.664131	10.05534
PTGS2	9.317509	9.667328	8.498759	8.706592
PTK2	9.155309	9.218531	8.774724	8.83118
PTK2B	9.177397	9.213594	9.121148	9.293899
PTK6	6.330389	5.451358	6.292424	6.766601
PTPRB	10.39231	8.728995	8.685448	9.069052
PTPRC	9.184119	9.393882	8.889104	9.049739
PTPRM	10.33665	9.930732	9.561129	9.30357
PTRF	9.147767	9.575498	10.42534	9.98988
PTTG1	8.604036	8.042945	8.468321	8.848827
PTX3	8.205962	9.285329	9.357042	7.589901
PXDN	9.459237	10.40508	9.920869	8.921954
PYCARD	8.029861	7.957137	8.385595	8.693323
QKI	11.44769	11.32799	10.79489	10.44038
RAB25	8.427581	7.837692	8.127201	8.275936
RAC1	11.25808	11.3451	10.76395	10.63583
RAC2	9.838587	9.964368	10.12745	10.23036
RAF1	9.546482	9.599679	9.558993	9.277319
RAMP1	7.381919	8.631659	9.205527	8.599803
RAMP2	10.08577	9.25089	10.13963	9.627757
RB1	9.578121	9.325681	9.471614	9.222627
RBL1	6.092059	6.502366	6.354063	6.236962
RBL2	10.19501	10.26333	9.762855	9.777691
RBM47	9.102447	8.7599	8.208865	8.429502
RBPJ	10.60599	10.82009	10.32269	10.51093
RBX1	10.93762	11.01209	10.9722	10.69476
RELN	6.044206	6.805683	7.130054	6.547945
RGCC	14.32597	13.68573	13.75801	12.52032
RHOA	11.45112	11.49229	11.22225	11.14707
RNH1	11.15517	11.4454	11.53239	11.22422
ROBO4	10.03143	9.257146	9.869329	8.872701
ROCK1	10.76417	10.94458	10.95556	11.09617
ROCK2	10.74524	10.76352	10.88178	10.75705
RORA	9.052247	9.490561	9.642381	9.178211
RORB	5.68698	5.648212	5.526256	5.372204
RPS27A	13.77945	14.2394	13.97376	14.06209
RPS6KB1	9.500203	9.58286	9.392726	9.429629
RPS6KB2	7.833279	8.053037	8.644506	8.220529
RRAS	9.336881	9.219534	9.291012	8.724202
RTN4	12.00692	12.09311	11.63582	11.10207
RUNX1	8.600584	10.04277	9.048506	9.301473
RUNX1T1	9.086784	9.020935	9.430988	9.23179
S100A14	8.487954	7.735842	7.730204	8.293999
S100A7	6.901479	4.183048	5.020949	6.211083
S1PR1	9.552734	8.593165	9.450088	9.094702
SACS	6.654646	7.101322	7.125788	7.179446
SAMSN1	9.096705	9.709294	9.014527	8.813499
SAP130	8.149516	8.493329	8.161505	7.760221
SCG2	5.015898	5.699967	5.345614	5.539424
SCNN1A	10.99051	10.18597	9.938884	10.23505

SDC4	12.04903	11.80825	11.25294	11.44361
SELE	5.882442	5.988358	5.712334	5.466017
SEMA3E	7.658745	6.294524	6.412238	6.147259
SERINC5	9.325091	9.857662	9.743484	9.583942
SERPINA1	11.75419	12.54255	11.6606	10.95714
SERPINE1	9.847594	11.82141	10.46391	8.69421
SERPINF1	10.7369	13.12469	11.74639	12.05353
SERPING1	12.73485	13.18914	12.44771	12.21359
SERPINH1	11.20116	12.55014	12.09082	11.35019
SET	9.885588	9.862773	9.584607	9.7498
SETD2	9.951073	10.06087	9.936111	9.870512
SF3A3	9.708477	9.945041	10.04156	9.920306
SFRP1	6.991483	8.738405	7.299829	8.015943
SFRP2	8.13114	11.84082	10.115	11.48553
SH2B3	9.450193	9.589538	9.171699	8.671295
SH2D3A	8.134882	7.792478	8.000882	7.957092
SH3YL1	7.313065	7.311035	8.334361	8.291907
SHB	7.347912	7.336969	6.958436	7.319492
SIRT1	8.958501	8.756356	8.565931	8.34658
SKP1	12.1691	12.51211	12.27837	12.40965
SLC12A6	8.740445	8.416201	8.102672	7.995084
SLC2A1	5.630491	6.127307	6.228407	6.299037
SLC35A3	8.501815	8.601946	8.072938	8.102655
SLC37A1	7.536077	6.78763	6.941859	7.387603
SLC44A4	7.518004	7.884839	8.913219	9.821621
SLIT2	10.32144	9.653102	9.491064	8.387963
SLPI	12.73104	11.20865	12.01098	12.82914
SMAD1	8.832391	9.1776	9.315933	9.167502
SMAD2	9.725605	9.801584	9.370337	9.1231
SMAD3	9.204606	9.783499	9.526888	9.526892
SMAD4	10.24487	10.3799	10.53917	10.40425
SMAD5	9.083461	9.128699	8.876492	8.428189
SMAD9	8.193181	7.60431	8.526924	8.517644
SMC3	9.590846	9.451896	9.399198	9.496698
SMOC1	6.398605	5.203152	5.440132	6.653111
SMURF1	9.210265	9.322254	8.992667	9.156129
SMURF2	9.905873	9.780929	9.532479	9.234914
SNAI1	8.1202	8.363378	8.552221	7.385548
SNAI2	8.180307	9.917453	9.030332	9.012278
SNAI3	6.303475	6.594852	7.355799	7.358812
SNRPF	9.77589	9.799499	9.464909	9.040193
SOD1	8.380376	8.427607	9.281129	8.772648
SORD	8.379518	8.202092	8.602341	8.970881
SOX17	7.976333	7.863705	7.845378	7.87661
SOX2	6.216454	5.37615	7.152327	8.318663
SOX9	8.077508	7.61055	7.765419	8.021852
SPARC	12.62903	14.66078	13.82589	13.49665
SPARCL1	12.95408	13.03309	12.4253	13.11679
SPDEF	6.490273	6.116735	7.498918	7.887891
SPHK2	8.557259	8.559408	9.462145	8.8591



SPINK5	6.762361	5.599663	6.016514	6.86145
SPINT1	9.525798	9.22087	9.388535	9.515408
SPOCK3	6.107173	3.947705	5.071034	6.35235
SPP1	7.25613	9.982033	8.522631	11.20836
SRC	9.039881	9.242893	9.434794	8.610963
SRF	10.09494	10.01142	10.1176	9.942671
SRGN	12.63115	13.12331	12.3379	12.41022
SRPK2	9.406819	9.518715	9.635684	9.630524
SRPX2	8.262272	8.672574	8.491524	7.829142
SSTR2	5.470813	5.755504	6.021689	6.321476
ST14	9.239523	9.357667	9.476938	9.308249
STAB1	8.974119	10.20816	10.07078	9.728843
STAB2	6.240614	5.030356	7.357659	6.601589
STAT1	10.52944	11.33562	10.63923	10.54936
STAT3	12.1263	12.63555	12.36396	11.95979
SULF1	7.227682	11.005	8.599646	8.588646
SV2B	6.387383	6.271885	6.377663	6.79503
SYK	9.432684	9.779743	9.135841	9.211076
SYNE1	9.440806	9.623868	9.220686	9.258633
TACSTD2	11.84919	10.91094	10.73278	11.46145
TAL1	9.102649	7.31466	8.910536	8.695216
TBX1	6.495125	6.280876	8.012079	7.239984
TBX4	9.01489	8.118679	8.926388	8.4995
TBXA2R	6.729025	6.592132	7.910397	7.610008
TCEB1	10.90965	10.83935	10.85474	11.0624
TCEB2	6.833063	6.433242	7.118095	6.69075
TCF20	8.94075	9.077604	8.906834	8.654468
TCF3	6.905816	7.859375	8.268685	8.162259
TCF4	10.88517	11.34908	11.6104	11.24124
TDGF1	6.466574	4.549362	5.692377	5.800932
TEK	8.899442	7.594455	7.712392	7.538872
TF	4.506695	5.650873	5.997216	6.511353
TFDP1	9.290646	9.323395	9.591964	9.510383
TFPI2	5.954936	6.755487	8.068163	6.600769
TGFB1	10.72221	11.28894	11.6617	11.67351
TGFB2	8.1031	8.23623	8.265363	7.409402
TGFBI	10.927	12.25665	11.08877	11.74808
TGFBR2	12.12281	12.11858	11.96566	11.91436
THBS1	12.39773	13.70511	12.05367	11.15501
THBS2	8.720559	12.63774	10.32626	9.955821
THBS4	5.015447	8.466081	6.492094	7.068714
THY1	7.494056	11.5379	10.74953	9.881222
TIE1	9.776715	9.157702	10.25516	9.729549
TIMP1	11.62797	13.69784	11.85639	11.17553
TIMP2	11.57782	12.99149	12.21674	12.35735
TIMP4	6.931048	6.336621	6.714445	7.129762
TJP2	9.044135	8.62217	8.89357	8.478076
TJP3	8.684656	7.727211	8.638561	9.47993
TLK2	9.574025	9.481419	9.599239	9.801883
TLR4	10.20377	10.25176	9.847354	10.03934

TMC6	8.931125	9.220676	8.416093	9.02886
TMEM100	11.21323	8.021359	9.982974	8.922874
TMEM30B	9.432225	9.119812	9.114617	9.146613
TMPRSS2	10.18786	9.813376	9.281065	8.633829
TMPRSS4	3.952003	5.351537	5.560941	7.331197
TMPRSS6	3.530302	2.978815	3.8568	3.570471
TMUB2	8.331507	8.282138	8.393319	8.632068
TNC	8.592667	10.99297	10.08832	10.02728
TNF	6.945843	5.747839	5.845934	6.386649
TNFRSF12A	7.888494	8.261497	8.326858	7.904402
TNFRSF1A	11.16714	11.61972	11.29662	10.96395
TNFSF10	10.86185	10.04428	10.04657	10.42504
TNFSF12	9.887546	10.38391	9.662771	10.26563
TNFSF13	9.508295	9.833304	10.86685	10.57018
TNMD	5.25844	3.071433	3.693236	4.822379
TNN	6.38388	4.485252	5.700273	6.548347
TNS1	12.29835	11.95058	11.59149	11.80858
TNXB	9.586223	10.3386	11.17503	11.29432
TOM1L1	8.567797	7.783449	7.697509	8.217879
TP53	9.007294	9.35968	9.39135	9.178225
TPM2	12.10796	13.00595	13.73571	13.30934
TPSB2	12.1383	12.22284	12.96496	12.88513
TPSD1	6.430732	4.98877	7.885329	7.672938
TRIM39	8.377405	7.859655	7.862417	8.161784
TSHR	2.200349	2.852259	3.270492	2.913541
TSPAN1	7.107139	7.56012	7.480149	9.080995
TWIST1	4.864162	6.98708	7.558322	7.408929
TWIST2	7.315546	7.53164	7.585208	6.961314
TXNIP	13.82141	14.05921	15.49002	14.75061
TYMP	10.044	10.92986	10.57514	10.57128
UBA52	12.06067	12.55883	12.20165	12.02534
USP39	8.214581	7.931614	7.739758	7.853576
UTS2	5.734183	4.293648	5.336522	5.538595
VAMP8	9.445253	9.386402	9.204513	9.378059
VASH1	8.181097	8.449586	8.77329	8.777628
VAV2	8.184246	8.185327	8.581108	8.134805
VAV3	6.73742	6.61525	6.620876	6.704196
VCAM1	7.432663	9.993489	8.936623	8.064404
VCAN	9.044855	10.53618	9.551451	9.165035
VEGFA	11.00612	11.21059	10.15543	9.799768
VEGFB	9.751467	10.52752	9.946238	9.826487
VEGFC	8.058469	7.827614	7.916268	7.254051
VEZF1	9.400949	9.039181	9.11584	9.068523
VHL	9.744121	9.989235	9.876545	9.999131
VIM	14.47112	15.23464	14.65719	14.74844
VIT	6.724263	5.808833	5.913412	7.034534
VPS13A	8.747297	9.097809	8.307646	8.39821
VSIG4	11.63085	11.64687	11.34531	11.31614
VWA1	5.186887	6.093233	6.261795	5.929272
VWA2	7.572411	7.264462	7.254108	8.199966

WARS	10.71378	10.55004	10.61864	10.09101
WIPF1	9.404542	10.3273	9.517943	9.774211
WNT5A	8.695606	9.062271	9.295706	9.084985
WNT5B	7.098179	7.023933	7.083268	7.683319
WWTR1	11.0219	11.19701	10.87626	10.57096
ZC3H12A	8.66493	8.364537	7.761647	7.466544
ZC3H14	9.388046	9.296162	8.961139	8.671816
ZCCHC24	8.787499	9.956694	9.519989	9.495264
ZEB1	9.167536	9.442316	9.33357	9.089468
ZEB2	9.607174	10.06762	9.562176	9.489933
ZFPM2	6.983639	7.173415	6.783675	6.715404
ZFYVE16	9.372642	9.556359	9.340983	8.979963
ZFYVE9	8.700011	8.300869	8.13142	8.117165
ZKSCAN5	5.710216	5.151148	5.336081	5.412635
ZNF143	8.049205	8.199668	7.876265	7.453279
ZNF346	7.833748	7.573511	7.86922	7.714382

CCL7  
FCF1  
TSHR

Gene Name	Gene	Order selected by geNorm	SD after normalization
EIF2B4-mRNA	NM_172195.3:1390	1	0.154
MTMR14-mRNA	NM_022485.3:720	2	0.166
MTOR-mRNA	NM_004958.2:5095	3	0.125
PDCD10-mRNA	NM_145859.1:320	4	0.127
SP1-mRNA	NM_003109.1:5970	5	0.166

Gene	Probe	RefSeq	Entrez	Ensembl	p-value	p-value bonferroni	Ingenuity fold-change
MMP2	NM_004530.2:2360	NM_004530	4313	ENSG00000087245	2.91738E-07	0.000222596	4.577659302
RUNX1	NM_001754.4:635	NM_001754	861	ENSG00000159216	5.70574E-07	0.000435348	2.717320792
COL1A1	NM_000088.3:4272	NM_000088	1277	ENSG00000108821	1.48924E-06	0.001136291	26.17529733
CTSK	NM_000396.2:415	NM_000396	1513	ENSG00000143387	2.32697E-06	0.001775477	5.572867651
COL5A1	NM_000093.3:6345	NM_000093	1289	ENSG00000130635	2.43954E-06	0.001861371	5.917566238
COL3A1	NM_000090.3:180	NM_000090	1281	ENSG00000168542	3.19983E-06	0.002441471	11.48573509
THBS2	NM_003247.2:4460	NM_003247	7058	ENSG00000186340	3.65192E-06	0.002786417	15.10741091
SERPINF1	NM_002615.4:888	NM_002615	5176	ENSG00000132386	3.98881E-06	0.003043461	5.233549121
PLAU	NM_002658.2:793	NM_002658	5328	ENSG00000122861	8.38629E-06	0.006398738	5.074582224
C1S	NM_001734.2:775	NM_001734	716	ENSG00000182326	1.16026E-05	0.008852758	2.96578966
IGF1	NM_000618.3:491	NM_000618	3479	ENSG0000017427	1.33109E-05	0.010156206	9.950301665
COL6A3	NM_004369.3:2782	NM_004369	1293	ENSG00000163359	1.39255E-05	0.010625153	4.436388941
MMP14	NM_004995.2:1470	NM_004995	4323	ENSG00000157227	1.71288E-05	0.013069296	3.009327489
THY1	NM_006288.2:135	NM_006288	7070	ENSG00000154096	1.72934E-05	0.01319484	16.49370266
BICC1	NM_001080512.1:2155	NM_001080512	80114	ENSG00000122870	1.91194E-05	0.014588103	3.409102464
IGFBP4	NM_001552.2:1520	NM_001552	3487	ENSG00000141753	2.4191E-05	0.018457706	3.798356348
LUM	NM_002345.3:1285	NM_002345	4060	ENSG00000139329	2.65667E-05	0.020270412	4.144280191
TNC	NM_002160.3:1215	NM_002160	3371	ENSG00000041982	2.92128E-05	0.022289388	5.279140091
GREM1	NM_013372.5:575	NM_013372	26585	ENSG00000166923	3.97374E-05	0.030319616	27.3228668
P3H1	NM_001146289.1:860	NM_001146289	64175	ENSG00000117385	7.52675E-05	0.057429078	2.107129675
CCDC80	NM_199511.1:3235	NM_199511	151887	ENSG00000091986	7.56103E-05	0.057690636	7.296291697
GDF15	NM_004864.2:180	NM_004864	9518	ENSG00000130513	9.93808E-05	0.075827539	4.741531349
FBLN1	NM_006487.2:965	NM_006487	2192	ENSG00000077942	0.000101838	0.077702758	2.105244694
VCAM1	NM_001078.3:2535	NM_001078	7412	ENSG00000162692	0.000103416	0.078906181	5.90045108
ZCCHC24	XM_005269604.1:379	XM_005269604			0.000109827	0.083798131	2.248861937
COL1A2	NM_000089.3:2635	NM_000089	1278	ENSG00000164692	0.000111817	0.085316192	8.212513145
SERPINH1	NM_001235.2:880	NM_001235	871	ENSG00000149257	0.000118381	0.090324793	2.547319301
SPARC	NM_003118.2:910	NM_003118	6678	ENSG00000113140	0.000123139	0.093954685	4.088995495
COL5A2	NM_000393.3:4075	NM_000393	1290	ENSG00000204262	0.000126456	0.096486092	4.655715407
SULF1	NM_001128204.1:3004	NM_001128204	23213	ENSG00000137573	0.000131144	0.100062735	13.71148974
EMILIN1	XM_006711928.1:724	XM_006711928			0.000136254	0.103961895	2.564117544
PROK2	NM_021935.3:827	NM_021935	60675	ENSG00000163421	0.000160054	0.1221212394	-7.338420243
CXCL12	NM_199168.3:69	NM_199168	6387	ENSG00000107562	0.000182143	0.138975401	7.178409238
CXCR2	NM_001168298.1:840	NM_001168298	3579	ENSG00000180871	0.000186799	0.142527952	-5.253010557
MGP	NM_000900.2:305	NM_000900	4256	ENSG00000111331	0.00020118	0.15350067	2.824413719
FAP	NM_004460.2:1490	NM_004460	2191	ENSG00000078098	0.000201308	0.153598055	5.108546365
ANGPTL2	NM_012098.2:540	NM_012098	23452	ENSG00000136859	0.00021547	0.164403793	4.746573126
PTGIS	NM_000961.3:1409	NM_000961	5740	ENSG00000124212	0.000216014	0.164818852	3.165519113
TCF3	NM_003200.3:858	NM_003200	6929	ENSG00000071564	0.000255685	0.195087603	1.936643981
COL4A2	NM_001846.2:1150	NM_001846	1284	ENSG00000134871	0.000265529	0.202598691	2.277057261
BGN	NM_001711.3:1935	NM_001711	633	ENSG00000182492	0.000266092	0.203027994	4.350391503
ITGA11	NM_012211.3:650	NM_012211	22801	ENSG00000137809	0.000278333	0.212367845	19.77856726
SFRP2	NM_003013.2:840	NM_003013	6423	ENSG00000145423	0.000281764	0.21498585	13.08354977
AKT2	NM_001626.2:1450	NM_001626	208	ENSG00000105221	0.000292976	0.223540307	1.43476735
FN1	NM_212482.1:1776	NM_212482	2335	ENSG00000115414	0.000306368	0.233759139	2.326959969
CFP	NM_002621.2:380	NM_002621	5199	ENSG00000126759	0.000384194	0.293139672	-1.859564374
ISLR	NM_005545.3:2072	NM_005545	3671	ENSG00000129009	0.000385551	0.29417535	4.01752473
PCOLCE	NM_002593.3:1258	NM_002593	5118	ENSG00000106333	0.000392027	0.299116852	3.176895468
MGAT5	NM_002410.4:1233	NM_002410	4249	ENSG00000152127	0.000397415	0.303227387	1.31322096
CDH11	NM_001797.2:1835	NM_001797	1009	ENSG00000140937	0.00046122	0.35191124	2.428277513
AEBP1	NM_001129.3:3170	NM_001129	165	ENSG00000106624	0.000462583	0.352950651	4.524623516
DPYSL3	NM_001387.2:4790	NM_001387	1809	ENSG00000113657	0.000482643	0.368256313	2.224484242
IGFBP7	NM_001553.1:690	NM_001553	3490	ENSG00000163453	0.000485593	0.370507125	2.895886273
TMEM100	NM_018286.2:655	NM_018286	55273	ENSG00000166292	0.000507213	0.387003257	-9.13793552
COL18A1	NM_030582.3:4490	NM_030582	80781	ENSG00000182871	0.000540074	0.412076705	0.412076705
FMOD	NM_002023.3:2050	NM_002023	2331	ENSG00000122176	0.000540289	0.41224065	2.411293098
TIMP1	NM_003254.2:329	NM_003254	7076	ENSG00000102265	0.000541966	0.413519941	4.198496211
STAB1	NM_015136.2:95	NM_015136	23166	ENSG00000010327	0.00055322	0.422106794	2.352248387
NID2	NM_007361.3:1995	NM_007361	22795	ENSG00000087303	0.000615817	0.469868443	3.123050238
VCAN	NM_004385.3:9915	NM_004385	1462	ENSG00000038427	0.000619788	0.472898248	2.811471584
ECM1	NM_004425.3:1345	NM_004425	1893	ENSG00000143369	0.000636772	0.485856872	2.348011204
GPR124	NM_032777.9:1278	NM_032777	25960	ENSG00000020181	0.000652993	0.498233411	2.428274163
PIK3R2	NM_005027.2:3100	NM_005027	5296	ENSG00000105647	0.000657551	0.501711737	1.730504529
LAMA1	NM_005559.2:5230	NM_005559	284217	ENSG00000101680	0.00068205	0.520404009	2.646026665
OLFML2B	NM_015441.1:2920	NM_015441	25903	ENSG00000162745	0.000700945	0.534820717	3.07868766
SNAI2	NM_003068.3:740	NM_003068	6591	ENSG00000019549	0.000711279	0.542705848	3.333750432
GPI	NM_000175.2:1695	NM_000175	2821	ENSG00000105220	0.000742374	0.566431178	1.715674333
MAP3K7	NM_145333.1:670	NM_145333	6885	ENSG00000135341	0.000779839	0.595017079	1.252713037
EPHB1	NM_004441.3:1855	NM_004441	2047	ENSG00000154928	0.000791883	0.604207012	1.729829765
COL4A1	NM_001845.4:780	NM_001845	1282	ENSG00000187498	0.000804034	0.613478184	2.816878526
CD44	NM_001001392.1:429	NM_001001392	960	ENSG00000026508	0.000814655	0.621581911	1.683810427
MEG3	NR_002766.2:691	NR_002766	55384	ENSG00000214548	0.000827567	0.631433643	5.521800339
COL6A2	NM_001849.2:1925	NM_001849	1292	ENSG00000142173	0.000867214	0.661683938	2.883617593
DCN	NM_001920.3:420	NM_001920	1634	ENSG00000011465	0.000877708	0.66969113	2.169376171
TGFB1	NM_000358.2:2030	NM_000358	7045	ENSG00000120708	0.00094691	0.722492314	2.513412969
IL1A	NM_000575.3:1085	NM_000575	3552	ENSG00000115008	0.000956252	0.729619971	-3.591341903
PXDN	NM_012293.1:1960	NM_012293	7837	ENSG00000130508	0.001037403	0.791538282	1.926313843



TIMP2	NM_003255.4:1555	NM_003255	7077	ENSG00000035862	0.001238392	0.944893095	2.664129859
SERINC5	NM_001174071.1:790	NM_001174071	256987	ENSG00000164300	0.001270925	0.969715543	1.446505101
PLXDC1	NM_020405.4:900	NM_020405	57125	ENSG00000161381	0.0013017	0.993197418	3.851448374
ACVRL1	NM_001105.2:1665	NM_001105	90	ENSG00000115170	0.001356621	1	1.666545602
BMPER	NM_133468.4:476	NM_133468	168667	ENSG00000164619	0.001400094	1	-2.414064362
CDH2	NM_001792.3:941	NM_001792	1000	ENSG00000170558	0.001421271	1	5.886833768
PRPF38A	NM_032864.3:335	NM_032864	84950	ENSG00000134748	0.001421605	1	-1.335898113
PRKCG	NM_002739.3:445	NM_002739	5582	ENSG00000126583	0.001472917	1	2.731039783
LGALS1	NM_002305.3:60	NM_002305	3956	ENSG00000100097	0.001479228	1	1.859355438
PLA2G2A	NM_000300.2:715	NM_000300	5320	ENSG00000188257	0.00148001	1	11.41460752
FBN1	NM_000138.3:6420	NM_000138	2200	ENSG00000166147	0.00149803	1	3.8361287
KDR	NM_002253.2:1420	NM_002253	3791	ENSG00000128052	0.001533137	1	-2.004042633
COL6A1	NM_001848.2:3665	NM_001848	1291	ENSG00000142156	0.001537035	1	2.601998786
BAI3	NM_001704.1:885	NM_001704	577	ENSG00000135298	0.001667046	1	-2.115548142
HSPG2	NM_005529.5:2715	NM_005529	3339	ENSG00000142798	0.001671426	1	2.237660129
AGT	NM_000029.3:1711	NM_000029	183	ENSG00000135744	0.00188292	1	5.339862129
LAMA3	NM_000227.3:4260	NM_000227	3909	ENSG00000053747	0.001924337	1	-2.362705114
ECM2	NM_001393.2:1700	NM_001393	1842	ENSG00000106823	0.002019211	1	2.163709084
CMA1	NM_001836.2:561	NM_001836	1215	ENSG00000092009	0.00207036	1	3.968042358
CEP170	NM_001042404.1:1800	NM_001042404	9859	ENSG00000143702	0.002128574	1	1.40231328
PRK CZ	NM_002744.4:771	NM_002744	5590	ENSG00000067606	0.002215364	1	-2.14302655
ASPN	NM_017680.3:175	NM_017680	54829	ENSG00000106819	0.002240609	1	5.32528893
ITGB1	NM_033666.2:2000	NM_033666	3688	ENSG00000150093	0.002355465	1	1.537892814
CXADR	NM_001338.3:1937	NM_001338	1525	ENSG00000154639	0.00247231	1	-2.30412106
C3	NM_000064.2:4396	NM_000064	718	ENSG00000125730	0.002487227	1	2.403163079
LOX	NM_002317.4:1575	NM_002317	4015	ENSG00000113083	0.002648147	1	2.773926318
TGFB1	NM_000660.3:1260	NM_000660	7040	ENSG00000105329	0.002649113	1	1.481166979
FGFR4	NM_002011.3:1585	NM_002011	2264	ENSG00000160867	0.002680696	1	-4.90349391
COG7	NM_153603.3:1492	NM_153603	91949	ENSG00000168434	0.002681416	1	1.133605711
FGFR1	NM_015850.2:1335	NM_015850	2260	ENSG00000077782	0.002711307	1	1.834266073
EPAS1	NM_001430.3:4246	NM_001430	2034	ENSG00000116016	0.002797635	1	-2.76407236
FAM174B	NM_207446.2:1075	NM_207446	400451	ENSG00000185442	0.002847988	1	-2.086667864
POSTN	NM_001135935.1:910	NM_001135935	10631	ENSG00000133110	0.002920049	1	4.610958152
FSTL1	NM_007085.4:1610	NM_007085	11167	ENSG00000163430	0.002944677	1	2.900535707
CAMK2D	NM_172127.1:505	NM_172127	817	ENSG00000145349	0.00307978	1	1.681654713
RELN	NM_005045.2:345	NM_005045	5649	ENSG00000189056	0.003112932	1	1.695225363
HOXA5	NM_019102.2:895	NM_019102	3202	ENSG00000106004	0.003162572	1	-1.91655267
ID1	NM_002165.2:345	NM_002165	3397	ENSG00000125968	0.003171989	1	-3.080238969
LY96	NM_015364.2:360	NM_015364	23643	ENSG00000154589	0.003208762	1	1.836087992
PDGFRB	NM_002609.3:840	NM_002609	5159	ENSG00000113721	0.003254383	1	1.639532436
VIM	NM_003380.2:694	NM_003380	7431	ENSG00000026025	0.003352749	1	1.697637824
PTPRB	NM_002837.3:2625	NM_002837	5787	ENSG00000127329	0.003378693	1	-3.167446119
CLDN1	NM_021101.3:410	NM_021101	9076	ENSG00000163347	0.003677173	1	3.289129204
TAL1	NM_003189.2:4635	NM_003189	6886	ENSG00000162367	0.003781185	1	-3.453332571
SLC37A1	NM_018964.3:810	NM_018964	54020	ENSG00000160190	0.003901134	1	-1.679982541
TP53	NM_000546.2:1330	NM_000546	7157	ENSG00000141510	0.004016796	1	1.276670251
IL1RL1	NM_016232.4:700	NM_016232	9173	ENSG00000115602	0.004035686	1	-4.289889229
PTGDS	NM_000954.5:180	NM_000954	5730	ENSG00000107317	0.004056994	1	3.097275184
ALDOA	NM_184041.2:1455	NM_184041	226	ENSG00000149925	0.004072396	1	1.390448444
HSPB1	NM_001540.3:374	NM_001540	3315	ENSG00000106211	0.004229932	1	1.929969517
ADAM28	NM_014265.4:920	NM_014265	10863	ENSG00000042980	0.004302453	1	2.288972547
ARHGDI B	NM_001175.4:833	NM_001175	397	ENSG00000111348	0.004333083	1	1.64951324
MAF	NM_005360.4:888	NM_005360	4094	ENSG00000178573	0.004656164	1	1.84156427
FREM2	NM_207361.4:9170	NM_207361	341640	ENSG00000150893	0.004709369	1	-2.84407909
NRP2	NM_003872.2:805	NM_003872	8828	ENSG00000118257	0.005083033	1	1.322800982
NR CAM	NM_005010.4:875	NM_005010	4897	ENSG00000091129	0.005384334	1	-1.694319357
TNFSF12	NM_003809.2:339	NM_003809	8742	ENSG00000239697	0.005432457	1	1.410651406
ZEB2	NM_014795.3:549	NM_014795	9839	ENSG00000169554	0.005512477	1	1.375964199
SLPI	NM_003064.2:330	NM_003064	6590	ENSG00000124107	0.005822665	1	-2.872667026
IRF6	NM_006147.2:1430	NM_006147	3664	ENSG00000117595	0.006029893	1	-1.968041104
S1PR1	NM_001400.4:802	NM_001400	1901	ENSG00000170989	0.006356886	1	-1.944728309
VEGFB	NM_003377.3:687	NM_003377	7423	ENSG00000173511	0.00635765	1	1.712442376
DLL4	NM_019074.2:893	NM_019074	54567	ENSG00000128917	0.006628434	1	-1.9111166
CCBE1	NM_133459.3:310	NM_133459	147372	ENSG00000183287	0.006917492	1	-2.625743504
OCLN	NM_002538.3:1975	NM_002538	100506658	ENSG00000197822	0.007194825	1	-1.967601964
CTN NB1	NM_001098210.1:1815	NM_001098210	1499	ENSG00000168036	0.007438512	1	1.368827677
VWA1	NM_199121.2:3664	NM_199121	64856	ENSG00000179403	0.007469846	1	1.874292616
ITGA7	NM_002206.1:1170	NM_002206	3679	ENSG00000135424	0.007626688	1	2.849023228
MTDH	NM_178812.3:828	NM_178812	92140	ENSG00000147649	0.007660735	1	1.443454944
TYMP	NM_001953.3:719	NM_001953	1890	ENSG00000025708	0.007879666	1	1.847871646
COMP	NM_000095.2:2164	NM_000095	1311	ENSG00000105664	0.007917982	1	13.0404103
SERPINE1	NM_001165413.1:1670	NM_001165413	5054	ENSG00000106366	0.007987733	1	3.928056622
ACVRL1	NM_000020.1:1710	NM_000020	94	ENSG00000139567	0.008097146	1	-2.195224587
SMAD3	NM_005902.3:4220	NM_005902	4088	ENSG00000166949	0.008473402	1	1.493703149
LEFTY1	NM_020997.2:1405	NM_020997	10637	ENSG00000243709	0.00848748	1	-3.081060639
ELK3	NM_005230.2:905	NM_005230	2004	ENSG00000111145	0.008551949	1	1.440601494
PMP22	NM_000304.2:1644	NM_000304	5376	ENSG00000109099	0.008561105	1	1.43285516
TNN	NM_022093.1:3580	NM_022093	63923	ENSG00000120332	0.008670332	1	-3.728584078

ANGPTL4	NR_104213.1:475	NR_104213	51129	ENSG00000167772	0.008900405	1	4.943357031
PLS1	NM_002670.2:3261	NM_002670	5357	ENSG00000120756	0.008928947	1	-1.71681008
TJP3	NM_014428.1:1925	NM_014428	27134	ENSG00000105289	0.009291106	1	-1.941867961
AGRN	NM_198576.2:2750	NM_198576	375790	ENSG00000188157	0.00933756	1	1.466029056
CNN1	NM_001299.4:496	NM_001299	1264	ENSG00000130176	0.009371272	1	2.405356939
CDS1	NM_001263.3:3052	NM_001263	1040	ENSG00000163624	0.009687657	1	-1.917431797
PPP2R1A	NM_014225.3:1440	NM_014225	5518	ENSG00000105568	0.00970311	1	1.355517601
LDHA	NM_001165414.1:1690	NM_001165414	3939	ENSG00000134333	0.009837242	1	1.609791281
ISL1	NM_002202.2:1375	NM_002202	3670	ENSG00000016082	0.010103826	1	-8.19373028
WIPF1	NM_001077269.1:1660	NM_001077269	7456	ENSG00000115935	0.01020863	1	1.895733621
CLU	NM_203339.2:1376	NM_203339			0.010272043	1	1.837394279
DENR	NM_003677.3:2091	NM_003677	8562	ENSG00000139726	0.010400648	1	1.284241573
TNF	NM_000594.2:1010	NM_000594	7124	ENSG00000232810	0.010646214	1	-2.294220846
GRHL2	NM_024915.3:3690	NM_024915	79977	ENSG00000083307	0.01106588	1	-2.091021148
CALCRL	NM_005795.3:1585	NM_005795	10203	ENSG00000064989	0.011141493	1	-2.507216248
VEZF1	NM_007146.2:700	NM_007146	7716	ENSG00000136451	0.011215565	1	-1.28500027
S100A7	NM_002963.2:69	NM_002963	6278	ENSG00000143556	0.011438859	1	-6.581567837
LAMA4	NM_001105209.1:287	NM_001105209	3910	ENSG00000112769	0.011502741	1	1.585535676
SACS	NM_014363.4:1475	NM_014363	26278	ENSG00000151835	0.011677033	1	1.362896214
CYP1B1	NM_000104.3:1715	NM_000104	1545	ENSG00000138061	0.011702813	1	3.493509931
TDGF1	NM_003212.2:1567	NM_003212	6997	ENSG00000241186	0.011863883	1	-3.776925545
CALD1	NM_004342.6:3862	NM_004342	800	ENSG00000122786	0.011902703	1	2.008493391
UBA52	NM_003333.3:288	NM_003333	7311	ENSG00000221983	0.01202171	1	1.412414135
PPL	NM_002705.4:2435	NM_002705	5493	ENSG00000118898	0.012068677	1	-1.967176285
DDR2	NM_006182.2:1706	NM_006182	4921	ENSG00000162733	0.012161068	1	1.507521577
TRIM39	NM_021253.3:3140	NM_021253	56658	ENSG00000204599	0.012495461	1	-1.431720377
NRXN1	NM_138735.2:1095	NM_138735	9378	ENSG00000179915	0.013226504	1	-3.792411902
PKM	NM_182471.1:2105	NM_182471	5315	ENSG00000067225	0.013384761	1	1.403862949
NODAL	NM_018055.3:320	NM_018055	4838	ENSG00000156574	0.013473237	1	-5.087372127
TOM1L1	NM_005486.2:685	NM_005486	10040	ENSG00000141198	0.013633931	1	-1.722313424
CHI3L1	NM_001276.2:475	NM_001276	1116	ENSG00000133048	0.014850429	1	3.52869178
MYO5C	NM_018728.2:2400	NM_018728	55930	ENSG00000128833	0.015332277	1	-1.481747322
SKP1	NM_170679.2:630	NM_170679	6500	ENSG00000113558	0.015622503	1	1.268398061
ADAM9	NM_001005845.1:695	NM_001005845	8754	ENSG00000168615	0.016077733	1	1.43349214
HK2	NM_000189.4:6880	NM_000189	3099	ENSG00000159399	0.016257572	1	-1.602795373
COL7A1	NM_000094.2:390	NM_000094	1294	ENSG00000114270	0.016680964	1	2.328476458
RAMP1	NM_005855.2:200	NM_005855	10267	ENSG00000132329	0.016846173	1	2.377985421
SPINK5	NM_006846.3:2595	NM_006846	11005	ENSG00000133710	0.016888826	1	-2.238756796
ITGA2	NM_002203.2:475	NM_002203	3673	ENSG00000164171	0.017032505	1	1.709140173
CDKN1A	NM_000389.2:1975	NM_000389	1026	ENSG00000124762	0.01729215	1	2.779955492
EGFL7	NM_016215.3:1252	NM_016215	51162	ENSG00000172889	0.017307879	1	-1.748583077
AQP1	NM_198098.1:1230	NM_198098	358	ENSG00000240583	0.017403463	1	-1.763738036
ADAMTS12	NM_030955.2:1955	NM_030955	81792	ENSG00000151388	0.017660619	1	1.460510739
NRP1	NM_003873.5:370	NM_003873	8829	ENSG00000099250	0.017677696	1	1.467360625
CD24	NM_013230.2:1859	NM_013230	100133941	ENSG00000272398	0.017680887	1	2.285815039
PLA2G3	NM_015715.3:2415	NM_015715	50487	ENSG00000100078	0.01797386	1	-3.703487331
ITGA9	NM_002207.2:2380	NM_002207	3680	ENSG00000144668	0.018776946	1	1.612624088
CX3CL1	NM_002996.3:140	NM_002996	6376	ENSG00000006210	0.018896514	1	-1.796134094
TWIST1	NM_000474.3:393	NM_000474	7291	ENSG00000122691	0.019029885	1	4.355739544
HIF1A	NM_001530.2:1985	NM_001530	3091	ENSG00000100644	0.019058826	1	1.94840156
LIFR	NM_002310.3:2995	NM_002310	3977	ENSG00000113594	0.01910179	1	-2.213680661
RPS27A	NM_002954.5:650	NM_002954	6233	ENSG00000143947	0.019105388	1	1.375494444
MET	NM_001127500.1:1925	NM_001127500	4233	ENSG00000105976	0.019375715	1	-1.410855047
TF	NM_001063.2:640	NM_001063	7018	ENSG00000091513	0.019546358	1	2.210201147
CAV1	NM_001753.3:434	NM_001753	857	ENSG00000105974	0.020068703	1	-1.975318418
FGFR3	NM_022965.2:3170	NM_022965	2261	ENSG00000068078	0.020136294	1	-2.094549432
RB1	NM_000321.1:2110	NM_000321	5925	ENSG00000139687	0.020146922	1	-1.191219957
MYLK	NM_053032.2:710	NM_053032	4638	ENSG00000065534	0.020240306	1	1.782078437
SCNN1A	NM_001038.4:2780	NM_001038	6337	ENSG00000111319	0.020641606	1	-1.746585389
SPP1	NM_000582.2:760	NM_000582	6696	ENSG00000118785	0.021298976	1	6.615741199
ESRP1	NM_001034915.2:1515	NM_001034915	54845	ENSG00000104413	0.021400093	1	-1.742156149
FGFR2	NM_000141.4:647	NM_000141	2263	ENSG00000066468	0.021472581	1	-1.710935773
HOXB13	NM_006361.5:1220	NM_006361	10481	ENSG00000159184	0.021709482	1	-8.236415334
PPP2CB	NM_001009552.1:1075	NM_001009552	5516	ENSG00000104695	0.021755138	1	-1.228626017
RNH1	NM_203384.1:1192	NM_203384	6050	ENSG00000023191	0.021823684	1	1.222838942
ITGA3	NM_002204.2:4550	NM_002204	3675	ENSG00000005884	0.021864636	1	-1.385718054
PDGFA	NM_002607.5:1276	NM_002607	5154	ENSG00000197461	0.022057509	1	1.713159207
TNFRSF1A	NM_001065.2:515	NM_001065	7132	ENSG00000067182	0.0220986	1	1.36848076
CHRD1L	NM_001143981.1:1120	NM_001143981	91851	ENSG00000101938	0.022115116	1	1.558777588
S100A14	NM_020672.1:460	NM_020672	57402	ENSG00000189334	0.022324448	1	-1.684257066
OGN	NM_014057.3:995	NM_014057	4969	ENSG00000106809	0.022964553	1	2.262040778
DLC1	NM_006094.3:5650	NM_006094	10395	ENSG00000164741	0.023016801	1	-1.630173363
SPOCK3	NM_001204355.1:730	NM_001204355	50859	ENSG00000196104	0.023020769	1	-4.467501503
NME1	NM_000269.2:500	NM_000269	4830	ENSG00000239672	0.023149926	1	1.545953198
INHBA	NM_002192.2:490	NM_002192	3624	ENSG00000122641	0.023650239	1	2.35056785
BMP5	NM_021073.2:1570	NM_021073	653	ENSG00000112175	0.023975539	1	-1.989623692
PDK1	NM_002610.3:401	NM_002610	5163	ENSG00000152256	0.023998743	1	1.967962912
HSP90B1	NM_003299.1:160	NM_003299	7184	ENSG00000166598	0.024297707	1	1.546620414

PDPN	NM_006474.4:431	NM_006474	10630	ENSG00000162493	0.024484008	1	1.550245915
VHL	NM_000551.2:1280	NM_000551	7428	ENSG00000134086	0.024621083	1	1.185185863
ITGB1BP1	NM_004763.3:1690	NM_004763	9270	ENSG00000119185	0.024978653	1	-2.232462206
TPM2	NM_003289.3:891	NM_003289	7169	ENSG00000198467	0.025053591	1	1.863457651
SFRP1	NM_003012.3:3320	NM_003012	6422	ENSG00000104332	0.025531411	1	3.356417396
MTA1	NM_004689.2:450	NM_004689	9112	ENSG00000182979	0.026187267	1	1.300627857
KDM1A	NM_015013.3:2395	NM_015013	23028	ENSG00000004487	0.026205332	1	1.128890532
AGK	NM_018238.3:816	NM_018238	55750	ENSG00000006530	0.02631099	1	-1.30660218
MTBP	NM_022045.4:1792	NM_022045	27085	ENSG00000172167	0.027055925	1	-2.073518489
CRISPLD2	NM_031476.3:2575	NM_031476	83716	ENSG00000103196	0.027367537	1	1.955083478
PRSS8	NM_002773.3:917	NM_002773	5652	ENSG00000052344	0.027383317	1	-1.745271465
THBS1	NM_003246.2:3465	NM_003246	7057	ENSG00000137801	0.02755036	1	2.474912085
FGF18	NM_003862.1:850	NM_003862	8817	ENSG00000156427	0.028435176	1	1.963651568
HGF	NM_000601.4:550	NM_000601	3082	ENSG00000019991	0.028494177	1	1.504054635
ROBO4	NM_019055.5:3080	NM_019055	54538	ENSG00000154133	0.028912522	1	-1.710345504
ANXA2P2	NR_003573.1:1013	NR_003573	304		0.029173965	1	1.257196128
NFATC2	NM_012340.3:1815	NM_012340	4773	ENSG00000101096	0.029769468	1	2.120166585
SOX2	NM_003106.2:151	NM_003106	6657	ENSG00000181449	0.03026698	1	-1.790426856
SEMA3E	NM_012431.1:2184	NM_012431	9723	ENSG00000170381	0.031862304	1	-2.574371949
EDC3	NM_001142443.1:925	NM_001142443	80153	ENSG00000179151	0.032255498	1	1.303073604
PPP3R1	NM_000945.3:2385	NM_000945	5534	ENSG00000221823	0.032291424	1	1.231508192
GIMAP6	NR_024115.1:2175	NR_024115			0.032650144	1	-1.514073729
MS4A4A	NM_024021.2:800	NM_024021	51338	ENSG00000110079	0.033106359	1	1.911273705
ADAM8	NM_001109.4:762	NM_001109	101	ENSG00000151651	0.03339408	1	1.586378003
TEK	NM_000459.3:1894	NM_000459	7010	ENSG00000120156	0.033567923	1	-2.470815416
THBS4	NM_003248.3:985	NM_003248	7060	ENSG00000113296	0.033637221	1	10.93312813
PLEKHO1	NM_016274.4:475	NM_016274	51177	ENSG00000023902	0.033744357	1	1.365945727
AAMP	NM_001087.3:412	NM_001087	14	ENSG00000127837	0.034279806	1	1.234672036
BMPR1B	NM_001203.1:430	NM_001203	658	ENSG00000138696	0.034393854	1	-2.202455097
OVOL2	NM_021220.2:676	NM_021220	58495	ENSG00000125850	0.034451925	1	-1.784369612
NF1	NM_000267.2:1035	NM_000267	4763	ENSG00000196712	0.034632663	1	1.369609723
NOX5	NM_024505.2:2135	NM_024505	79400	ENSG00000255346	0.034762456	1	-2.666457083
EGFR	NM_201282.1:360	NM_201282	1956	ENSG00000146648	0.034874257	1	-1.422176019
TCF4	NM_003199.1:1455	NM_003199	6925	ENSG00000196628	0.034956809	1	1.379281117
MFAP4	NM_002404.1:370	NM_002404	4239	ENSG00000166482	0.035274308	1	1.813744619
CTNND1	NM_001331.2:146	NM_001331	1500	ENSG00000198561	0.036003324	1	-1.214539768
NOTCH1	NM_017617.3:735	NM_017617	4851	ENSG00000148400	0.036216343	1	-1.288756358
SERPINA1	NM_000295.4:760	NM_000295	5265	ENSG00000197249	0.036284754	1	1.727102045
CD36	NM_000072.3:707	NM_000072	948	ENSG00000135218	0.037890423	1	-1.755033147
TJP2	NM_004817.2:2785	NM_004817	9414	ENSG00000119139	0.037961711	1	-1.33975097
TACSTD2	NM_002353.2:1840	NM_002353	4070	ENSG00000184292	0.03849362	1	-1.91620244
CHP2	NM_022097.3:1078	NM_022097	63928	ENSG00000166869	0.038548663	1	-2.3042971
FCF1	NM_015962.4:1022	NM_015962	51077	ENSG00000119616	0.038584694	1	-1.532835493
DHX16	NM_001164239.1:2490	NM_001164239	8449	ENSG00000204560	0.039264799	1	1.139701566
AKAP2	NM_001004065.4:4956	NM_001004065	11217	ENSG00000241978	0.039435889	1	-1.389189521
AKT1	NM_005163.2:1772	NM_005163	207	ENSG00000142208	0.039586848	1	1.228724797
MYO1D	NM_015194.1:616	NM_015194	4642	ENSG00000176658	0.039744252	1	1.320401961
CXCR4	NM_003467.2:1335	NM_003467	7852	ENSG00000121966	0.04026527	1	2.374379338
CAMK2B	NM_001220.3:365	NM_001220	816	ENSG00000058404	0.04044851	1	1.409402598
KISS1	NM_002256.3:125	NM_002256	3814	ENSG00000170498	0.040975274	1	-3.833902163
ZKSCAN5	NM_014569.3:3688	NM_014569	23660	ENSG00000196652	0.041162816	1	-1.473317153
CXCL13	NM_006419.2:210	NM_006419	10563	ENSG00000156234	0.04168867	1	6.697132392
AKAP12	NM_005100.3:640	NM_005100	9590	ENSG00000131016	0.042057459	1	1.625183247
ANG	NM_001145.4:949	NM_001145	283	ENSG00000214274	0.042432989	1	-1.54303342
ERBB2IP	NM_018695.2:3675	NM_018695	55914	ENSG00000112851	0.042580446	1	1.216429857
RAB25	NM_020387.2:245	NM_020387	57111	ENSG00000132698	0.042590343	1	-1.505130864
CCL5	NM_002985.2:280	NM_002985	6352	ENSG00000271503	0.04280963	1	2.653453443
PDGFC	NM_016205.2:2596	NM_016205	56034	ENSG00000145431	0.04318217	1	1.51419496
EMCN	NM_016242.3:160	NM_016242	51705	ENSG00000164035	0.044710291	1	-2.171033149
GALNT7	NM_017423.2:910	NM_017423	51809	ENSG00000109586	0.045445046	1	1.439943255
MRPS5	NM_031902.3:390	NM_031902	64969	ENSG00000144029	0.045587816	1	-1.158163378
CCR3	NM_001837.2:980	NM_001837	1232	ENSG00000183625	0.045630904	1	-3.004619368
MAP2K2	NM_030662.3:839	NM_030662	5605	ENSG00000126934	0.04674211	1	1.281788411
HOXA7	NM_006896.3:1605	NM_006896	3204	ENSG00000122592	0.047094988	1	-2.591564847
EVPL	NM_001988.2:5525	NM_001988	2125	ENSG00000167880	0.047238288	1	-1.588690463
CIB1	NM_001277764.1:530	NM_001277764	10519	ENSG00000185043	0.047305899	1	1.29364772
PFKFB1	NM_002625.2:564	NM_002625	5207	ENSG00000158571	0.04772142	1	-2.347609298
TNXB	NM_032470.3:1621	NM_032470	7148	ENSG00000168477	0.052705468	1	1.684562023
CADM1	NM_014333.3:2840	NM_014333	23705	ENSG00000182985	0.053870845	1	-1.47315118
F11R	NM_144503.1:3650	NM_144503	50848	ENSG00000158769	0.054314472	1	-1.329924695
KRT1	NM_006121.2:690	NM_006121	3848	ENSG00000167768	0.054841379	1	-2.991972766
EMP3	NM_001425.2:350	NM_001425	2014	ENSG00000142227	0.055046654	1	1.367032423
PTK6	NM_005975.2:1715	NM_005975	5753	ENSG00000101213	0.055480282	1	-1.839139199
FLI1	NM_001167681.2:1406	NM_001167681	2313	ENSG00000151702	0.056168962	1	-1.314420075
C3AR1	NM_004054.2:415	NM_004054	719	ENSG00000171860	0.056536088	1	1.582064659
AMH	NM_000479.3:1626	NM_000479	268	ENSG00000104899	0.056921697	1	-1.883510438
EGF	NM_001963.4:1022	NM_001963	1950	ENSG00000138798	0.057535292	1	-2.972203267
CAMP	NM_004345.3:220	NM_004345	820	ENSG00000164047	0.058782427	1	-2.388084596

RBL1	NM_183404.1:1110	NM_183404	5933	ENSG00000080839	0.058794236	1	1.328968329
PGK1	NM_000291.2:1030	NM_000291	5230	ENSG00000102144	0.058931827	1	1.208996321
CBLC	NM_012116.3:652	NM_012116	23624	ENSG00000142273	0.059272453	1	1.711180804
GDF5	NM_000557.2:155	NM_000557	8200	ENSG00000125965	0.05961838	1	-2.77253112
PLCG2	NM_002661.2:525	NM_002661	5336	ENSG00000197943	0.06045347	1	1.343109809
KLK3	NM_001030049.1:433	NM_001030049	354	ENSG00000142515	0.060542132	1	-2.419794738
EPCAM	NM_002354.1:415	NM_002354	4072	ENSG00000119888	0.062850706	1	-1.441584231
STAB2	NM_017564.9:3000	NM_017564	55576	ENSG00000136011	0.063663164	1	-2.313789412
CC2D1B	NM_032449.2:4182	NM_032449	200014	ENSG00000154222	0.065007424	1	-1.62015623
VPS13A	NM_033305.2:8260	NM_033305	23230	ENSG00000197969	0.065101949	1	1.275012834
SAP130	NM_024545.3:3090	NM_024545	79595	ENSG00000136715	0.065251306	1	1.269106679
KRT14	NM_000526.4:523	NM_000526	3861	ENSG00000186847	0.065594555	1	1.96072985
NFAT5	NM_173214.1:3290	NM_173214	10725	ENSG00000102908	0.066162935	1	1.113350613
PECAM1	NM_000442.3:1365	NM_000442	5175	ENSG00000261371	0.066454596	1	-1.599447218
P3H2	NM_018192.2:985	NM_018192	55214	ENSG00000090530	0.067525802	1	-1.784739779
INHBE	NM_031479.3:1450	NM_031479	83729	ENSG00000139269	0.068180644	1	-3.502220048
NF2	NM_181825.2:442	NM_181825	4771	ENSG00000186575	0.068663906	1	1.13722518
PTEN	NM_000314.4:1351	NM_000314	5728	ENSG00000171862	0.069142342	1	1.401444193
EPN3	NM_017957.2:2532	NM_017957	55040	ENSG00000049283	0.070563796	1	-2.851448689
RBM47	NM_019027.3:150	NM_019027	54502	ENSG00000163694	0.071527213	1	-1.267992956
TNFSF10	NM_003810.2:115	NM_003810	8743	ENSG00000121858	0.071656298	1	-1.762436132
CHRNA7	NR_046324.1:194	NR_046324	1139	ENSG00000175344	0.071877115	1	-1.963678523
MYH11	NM_001040113.1:920	NM_001040113	4629	ENSG00000133392	0.072370232	1	1.680055867
ERBB3	NM_001005915.1:420	NM_001005915	2065	ENSG00000065361	0.072463463	1	-1.476558404
STAT3	NM_139276.2:4535	NM_139276	6774	ENSG00000168610	0.072497067	1	1.423308115
PEBP4	NM_144962.2:190	NM_144962	157310	ENSG00000134020	0.073354418	1	-1.617980218
EPHA1	NM_005232.3:2075	NM_005232	2041	ENSG00000146904	0.074778161	1	-1.357903713
MYCL	NM_001033081.2:568	NM_001033081	4610	ENSG00000116990	0.074956336	1	-1.721538941
ITGB3	NM_000212.2:4485	NM_000212	3690	ENSG00000259207	0.075287813	1	1.622457013
TNMD	NM_022144.2:462	NM_022144	64102	ENSG00000000005	0.075739979	1	-4.553597315
ACVR1C	NM_145259.2:5168	NM_145259	130399	ENSG00000123612	0.076393555	1	-2.266364134
UTS2	NM_006786.3:354	NM_006786	10911	ENSG00000049247	0.076555913	1	-2.714216364
IFNG	NM_000619.2:970	NM_000619	3458	ENSG00000111537	0.07678464	1	-2.749776867
SLIT2	NM_004787.1:2430	NM_004787	9353	ENSG00000145147	0.078215755	1	-1.589245265
CEACAM1	NM_001712.3:2455	NM_001712	634	ENSG00000079385	0.078215875	1	-1.627843307
MRC1	NM_002438.2:2693	NM_002438	4360	ENSG00000260314	0.078732522	1	1.301085005
SRGN	NR_036430.1:65	NR_036430			0.078796246	1	1.406554997
SERPING1	NM_000062.2:305	NM_000062	710	ENSG00000149131	0.080113657	1	1.370114966
MISP	NM_173481.2:1845	NM_173481	126353	ENSG00000099812	0.080139169	1	-1.402144638
MMP12	NM_002426.3:769	NM_002426	4321	ENSG00000262406	0.080588035	1	5.354686411
TCF20	NM_005650.1:925	NM_005650	6942	ENSG00000100207	0.081097808	1	1.099504582
IL10RA	NM_001558.2:150	NM_001558	3587	ENSG00000110324	0.083420545	1	1.574943889
CYBB	NM_000397.3:2686	NM_000397	1536	ENSG00000165168	0.085198473	1	1.484049847
TBX4	NM_018488.2:1560	NM_018488	9496	ENSG00000121075	0.085324831	1	-1.86117072
TMPRSS4	NM_019894.3:1146	NM_019894	56649	ENSG00000137648	0.086401818	1	2.638164628
GSN	NM_000177.4:1075	NM_000177	2934	ENSG00000148180	0.087594471	1	1.530278084
USP39	NM_001256725.1:806	NM_001256725	10713	ENSG00000168883	0.087699283	1	-1.21669479
HKDC1	NM_025130.3:2267	NM_025130	80201	ENSG00000156510	0.088709013	1	-1.914928907
CGN	NM_020770.2:1112	NM_020770	57530	ENSG00000143375	0.08918641	1	-1.527604678
STAT1	NM_139266.1:455	NM_139266	6772	ENSG00000115415	0.089717804	1	1.748568091
CAMK2A	NM_171825.1:4080	NM_171825	815	ENSG00000070808	0.090937057	1	-2.026043127
ECSCR	NM_001077693.3:168	NM_001077693	641700	ENSG00000249751	0.092092468	1	-1.487721095
SRC	NM_005417.3:1410	NM_005417	6714	ENSG00000197122	0.092586245	1	1.151099268
NME4	NM_005009.2:820	NM_005009	4833	ENSG00000103202	0.093392195	1	1.216034204
SMAD1	NM_005900.2:1850	NM_005900	4086	ENSG00000170365	0.094731287	1	1.270334941
MED1	NM_004774.3:806	NM_004774	5469	ENSG00000125686	0.098948439	1	1.237743033
APOH	NM_000042.2:582	NM_000042	350	ENSG00000091583	0.099084921	1	-1.888159717
ITGB7	NM_000889.1:1278	NM_000889	3695	ENSG00000139626	0.100386228	1	1.983973772
RBPJ	NM_015874.3:850	NM_015874	3516	ENSG00000168214	0.100440578	1	1.159979788
SLC12A6	NM_001042494.1:3962	NM_001042494	9990	ENSG00000140199	0.102055271	1	-1.252007702
SMC3	NM_005445.3:3525	NM_005445	9126	ENSG00000108055	0.102493657	1	-1.101103631
ITGB6	NM_000888.3:1090	NM_000888	3694	ENSG00000115221	0.102826565	1	1.786716946
ZFYVE9	NM_004799.2:2135	NM_004799	9372	ENSG00000157077	0.103324418	1	-1.318722529
PTRF	NM_012232.5:86	NM_012232	284119	ENSG00000177469	0.103358501	1	1.345116608
HPSE	NM_006665.3:1625	NM_006665	10855	ENSG00000173083	0.103465286	1	-1.775499975
TPSD1	NM_012217.2:585	NM_012217	23430	ENSG00000095917	0.103791188	1	-2.716900561
LLGL2	NM_001015002.1:1065	NM_001015002	3993	ENSG00000073350	0.104126129	1	-1.308990662
JAM3	NM_032801.3:890	NM_032801	83700	ENSG00000166086	0.10451473	1	1.254823506
SMOC1	NM_001034852.1:1990	NM_001034852	64093	ENSG00000198732	0.107647548	1	-2.290167956
POPDC3	NM_022361.4:980	NM_022361	64208	ENSG00000132429	0.108985642	1	-2.602148053
ADAP1	NM_006869.2:570	NM_006869	11033	ENSG00000105963	0.10910188	1	-1.212525945
IL15	NM_172174.1:1685	NM_172174	3600	ENSG00000164136	0.109707031	1	-1.303452024
NCL	NM_005381.2:1492	NM_005381	4691	ENSG00000115053	0.111992752	1	1.169100174
HIPK2	NM_022740.4:10305	NM_022740	28996	ENSG00000064393	0.112625132	1	-1.273345936
APC	NM_000038.3:6850	NM_000038	324	ENSG00000134982	0.113567777	1	-1.28213015
SF3A3	NM_006802.2:2060	NM_006802	10946	ENSG00000183431	0.114212435	1	1.178183003
RAMP2	NM_005854.2:282	NM_005854	10266	ENSG00000131477	0.114381346	1	-1.78370825
ROCK1	NM_005406.1:2660	NM_005406	6093	ENSG00000067900	0.115533327	1	1.133206253

ITGB4	NM_001005731.1:4151	NM_001005731	3691	ENSG00000132470	0.116140778	1	1.582745648
CLDN7	NM_001307.3:175	NM_001307	1366	ENSG00000181885	0.11724293	1	-1.310083572
TFPI2	NM_006528.3:524	NM_006528	7980	ENSG00000105825	0.117987794	1	1.741767175
RGCC	NM_014059.2:765	NM_014059	28984	ENSG00000102760	0.119088503	1	-1.558586335
FLT4	NM_002020.1:955	NM_002020	2324	ENSG000000037280	0.119855096	1	-1.332658477
PTPRM	NM_002845.3:1680	NM_002845	5797	ENSG00000173482	0.120582677	1	-1.32493171
SYK	NM_003177.3:1685	NM_003177	6850	ENSG00000165025	0.123592361	1	1.27196438
HAS1	NM_001523.2:859	NM_001523	3036	ENSG00000105509	0.128620199	1	3.326298715
DLG1	NM_001098424.1:1460	NM_001098424	1739	ENSG00000075711	0.12879229	1	1.115448778
MMP10	NM_002425.1:88	NM_002425	4319	ENSG00000166670	0.129124245	1	1.840649575
TIE1	NM_005424.2:2610	NM_005424	7075	ENSG00000066056	0.129325203	1	-1.535824902
RPS6KB2	NM_003952.2:980	NM_003952	6199	ENSG00000175634	0.129797685	1	1.164538058
SLC2A1	NM_006516.2:2500	NM_006516	6513	ENSG00000117394	0.130160381	1	1.411095177
EPHB3	NM_004443.3:3485	NM_004443	2049	ENSG00000182580	0.130770574	1	1.404696117
FST	NM_006350.2:575	NM_006350	10468	ENSG00000134363	0.132868416	1	1.822631232
DAG1	NM_001165928.2:965	NM_001165928	1605	ENSG00000173402	0.133048263	1	-1.236232897
ADAMT58	NM_007037.4:2228	NM_007037	11095	ENSG00000134917	0.133278231	1	-1.886905226
FIGF	NM_004469.2:580	NM_004469	2277	ENSG00000165197	0.134725893	1	-1.813782663
PLAUR	NM_001005376.1:440	NM_001005376	5329	ENSG0000011422	0.136231565	1	1.537887225
ENPP2	NM_001040092.2:1980	NM_001040092	5168	ENSG00000136960	0.137064882	1	1.831240237
TMEM30B	NM_001017970.2:2420	NM_001017970	161291	ENSG00000182107	0.138054075	1	-1.241783076
APOE	NM_000041.2:96	NM_000041	348	ENSG00000130203	0.138332911	1	2.054074248
ITGB8	NM_002214.2:2609	NM_002214	3696	ENSG00000105855	0.138716489	1	1.44034342
KCNJ8	NM_004982.2:880	NM_004982	3764	ENSG00000121361	0.138728223	1	-1.25804362
GATA4	NM_002052.3:2140	NM_002052	2626	ENSG00000136574	0.138852094	1	-2.286063335
VIT	NM_053276.3:604	NM_053276	5212	ENSG00000205221	0.140564208	1	-1.886131094
CEP295	NM_033395.1:3775	NM_033395	85459	ENSG00000166004	0.14122833	1	-1.157312624
SAMSN1	NM_022136.3:560	NM_022136	64092	ENSG00000155307	0.141389148	1	1.5290005
SMAD9	NM_001127217.2:1152	NM_001127217	4093	ENSG00000120693	0.141635592	1	-1.504068786
NUBP1	NM_001278506.1:304	NM_001278506	4682	ENSG00000103274	0.141982276	1	1.22331726
NPR1	NM_000906.2:3490	NM_000906	4881	ENSG00000169418	0.142661381	1	-1.602658473
MMP13	NM_002427.2:951	NM_002427	4322	ENSG00000137745	0.143444483	1	-2.615986364
DPT	NM_001937.3:1510	NM_001937	1805	ENSG00000143196	0.145055498	1	2.030518963
ELF3	NM_001114309.1:460	NM_001114309	1999	ENSG00000163435	0.146627677	1	-1.629632374
GTF2I	NM_033001.2:920	NM_033001	2969	ENSG00000263001	0.147186568	1	1.234842541
PLXNC1	NM_005761.2:3705	NM_005761	10154	ENSG00000136040	0.148020741	1	1.284878083
BNC2	NM_017637.5:1800	NM_017637	54796	ENSG00000173068	0.148657873	1	1.298651738
GPX1	NM_000581.2:745	NM_000581	2876	ENSG00000233276	0.149764421	1	1.337857888
CKMT1A	NM_001015001.1:286	NM_001015001	548596	ENSG00000223572	0.150418558	1	-2.068493044
ITGA8	NM_003638.1:1215	NM_003638	8516	ENSG00000077943	0.150669032	1	-1.696385844
COL4A6	NM_001847.2:1070	NM_001847	1288	ENSG00000197565	0.154729326	1	1.537337875
CHD4	NM_001273.2:2680	NM_001273	1108	ENSG00000111642	0.155018304	1	1.169554897
FLT1	NM_002019.4:530	NM_002019	2321	ENSG00000102755	0.155622102	1	-1.604477081
DST	NM_001723.4:1870	NM_001723	667	ENSG00000151914	0.157750157	1	1.221300766
CHAD	NM_001267.2:810	NM_001267	1101	ENSG00000136457	0.158457772	1	-2.72025024
CSPG4	NM_001897.4:7642	NM_001897	1464	ENSG00000173546	0.159426372	1	-1.411569923
BMP4	NM_001202.3:395	NM_001202	652	ENSG00000125378	0.160832568	1	1.451643939
EIF2AK3	NM_004836.5:938	NM_004836	9451	ENSG00000172071	0.161980006	1	1.192068407
TCEB2	NM_007108.2:800	NM_007108	6923	ENSG00000103363	0.166234135	1	-1.319343939
ITGA6	NM_000210.1:3065	NM_000210	3655	ENSG00000091409	0.168100112	1	-1.324020556
RORA	NM_134261.2:1715	NM_134261	6095	ENSG00000069667	0.172147019	1	1.355020613
TMC6	NM_001127198.1:1266	NM_001127198	11322	ENSG00000141524	0.178419154	1	1.222260491
CDH13	NM_001220488.1:210	NM_001220488	1012	ENSG00000140945	0.181513903	1	-1.357563408
PRR15L	NM_024320.2:1005	NM_024320	79170	ENSG00000167183	0.181843756	1	-1.632782873
HDAC3	NM_003883.2:1455	NM_003883	8841	ENSG00000171720	0.182316943	1	1.076149162
FGF9	NM_002010.2:1565	NM_002010	2254	ENSG00000102678	0.185099546	1	-1.409535361
MAPKAPK3	NM_004635.3:415	NM_004635	7867	ENSG00000114738	0.185360972	1	1.14880985
PITX2	NM_000325.5:1381	NM_000325	5308	ENSG00000164093	0.187521333	1	-2.240176497
ENO2	NM_001975.2:1855	NM_001975	2026	ENSG00000111674	0.188586678	1	1.127676506
ZFYVE16	NM_001105251.2:2292	NM_001105251	9765	ENSG00000039319	0.189472652	1	1.135806478
MS4A6A	NM_152852.2:146	NM_152852	64231	ENSG00000110077	0.192698277	1	1.366005206
BMP7	NM_001719.2:1092	NM_001719	655	ENSG00000101144	0.192801224	1	1.415462351
ENO1	NM_001428.2:1689	NM_001428	2023	ENSG00000074800	0.193499913	1	1.216541149
FUT3	NM_000149.3:2342	NM_000149	2525	ENSG00000171124	0.193904897	1	-1.724367016
CCL11	NM_002986.2:378	NM_002986	6356	ENSG00000172156	0.197787893	1	1.494004777
FGL2	NM_006682.2:250	NM_006682	10875	ENSG00000127951	0.197817076	1	1.423352612
CLEC2B	NM_005127.2:980	NM_005127	9976	ENSG00000110852	0.201266965	1	1.302071496
SH2D3A	NM_005490.2:412	NM_005490	10045	ENSG00000125731	0.205216165	1	-1.267867369
JUN	NM_002228.3:140	NM_002228	3725	ENSG00000177606	0.205232479	1	-1.627348214
PPFIBP2	NM_003621.2:2350	NM_003621	8495	ENSG00000166387	0.205369585	1	1.314371864
SETD2	NM_014159.6:1386	NM_014159	29072	ENSG00000181555	0.206229143	1	1.079073854
AREG	NM_001657.2:547	NM_001657	374	ENSG00000109321	0.206904161	1	1.655573251
KIAA1462	NM_020848.2:7395	NM_020848	57608	ENSG00000165757	0.207985344	1	-1.29181652
SPINT1	NM_001032367.1:1315	NM_001032367	6692	ENSG00000166145	0.210932578	1	-1.235357314
BMPR2	NM_001204.5:1875	NM_001204	659	ENSG00000204217	0.214104549	1	-1.330606938
IL1B	NM_000576.2:840	NM_000576	3553	ENSG00000125538	0.218374799	1	-1.835937708
MMP24	NM_006690.3:1280	NM_006690	10893	ENSG00000125966	0.219601108	1	1.354499592
EVI2A	NM_014210.3:564	NM_014210	2123	ENSG00000126860	0.219728528	1	1.253033085

CTSL	NM_001912.4:1072	NM_001912	1514	ENSG00000135047	0.220546137	1	1.507403073
TNFSF13	NM_003808.3:810	NM_003808	8741	ENSG00000161955	0.224087755	1	1.252672598
NR4A3	NM_173198.1:2590	NM_173198	8013	ENSG00000119508	0.225926218	1	1.878823022
GZMK	NM_002104.2:700	NM_002104	3003	ENSG00000113088	0.227297194	1	1.718511255
CEACAM6	NM_002483.4:1217	NM_002483	4680	ENSG00000086548	0.230812565	1	-1.550584339
ZNF346	NM_012279.2:2260	NM_012279	23567	ENSG00000113761	0.231061944	1	-1.19767591
VWA2	NM_001272046.1:3148	NM_001272046	340706	ENSG00000165816	0.231675507	1	-1.237946322
IL1RN	NM_000577.3:480	NM_000577	3557	ENSG00000136689	0.232333089	1	1.499253756
DESI1	NM_015704.2:2880	NM_015704	27351	ENSG00000100418	0.233099485	1	-1.176558995
CDK14	NM_012395.2:3645	NM_012395	5218	ENSG00000058091	0.233995147	1	1.197595376
CXCL11	NM_005409.3:590	NM_005409	6373	ENSG00000169248	0.234592208	1	-2.238794599
CD34	NM_001773.2:2050	NM_001773	947	ENSG00000174059	0.235022694	1	1.50963519
PIK3CG	NM_002649.2:2125	NM_002649	5294	ENSG00000105581	0.236531913	1	1.270242078
PLXND1	NM_015103.2:3711	NM_015103	23129	ENSG00000004399	0.23722324	1	1.214215662
HOXB3	NM_002146.4:2840	NM_002146	3213	ENSG00000120093	0.237945718	1	1.298094983
ERCC3	NM_000122.1:1950	NM_000122	2071	ENSG00000163161	0.238124079	1	1.118095078
IL6	NM_000600.1:220	NM_000600	3569	ENSG00000136244	0.239253855	1	2.667180245
CXCL8	NM_000584.2:25	NM_000584	3576	ENSG00000169429	0.239313837	1	-1.800297639
GPATCH3	NM_022078.2:1685	NM_022078	63906	ENSG00000198746	0.240570604	1	-1.288225407
FGF2	NM_002006.4:620	NM_002006	2247	ENSG00000138685	0.243977699	1	1.216380106
PTTG1	NM_004219.2:542	NM_004219	9232	ENSG00000164611	0.244275069	1	-1.475385187
EMILIN3	NM_052846.1:3113	NM_052846	90187	ENSG00000183798	0.24449645	1	-1.452021657
TNS1	NM_022648.4:6080	NM_022648	7145	ENSG00000079308	0.244816751	1	-1.272597201
BAG2	NM_004282.3:785	NM_004282	9532	ENSG00000112208	0.247156778	1	1.157257484
SOX9	NM_000346.2:2135	NM_000346	6662	ENSG00000125398	0.254207488	1	-1.382192065
HAPLN1	NM_001884.3:730	NM_001884	1404	ENSG00000145681	0.255940842	1	2.31299093
MYC	NM_002467.3:1610	NM_002467	4609	ENSG00000136997	0.255976568	1	1.756663432
DICER1	NM_177438.2:5060	NM_177438	23405	ENSG00000100697	0.256355545	1	1.099735142
NAP1L3	NM_004538.4:1070	NM_004538	4675	ENSG00000186310	0.256941004	1	1.303936134
DCC	NM_005215.1:3100	NM_005215	1630	ENSG00000187323	0.257201481	1	1.404231475
AMMECR1L	NM_001199140.1:3564	NM_001199140	83607	ENSG00000144233	0.26247954	1	-1.173222106
VASH1	NM_014909.4:552	NM_014909	22846	ENSG00000071246	0.26462072	1	1.204545777
RBX1	NM_014248.2:162	NM_014248	9978	ENSG00000100387	0.266585502	1	1.052973276
CREBBP	NM_001079846.1:4818	NM_001079846	1387	ENSG00000005339	0.267541829	1	1.145262676
EGLN2	NM_053046.3:1538	NM_053046	112398	ENSG00000269858	0.271521415	1	-1.127965762
FXYD6	NM_001164831.1:875	NM_001164831	53826	ENSG00000137726	0.271581744	1	-1.129406941
HDHD3	NM_031219.2:616	NM_031219	81932	ENSG00000119431	0.276760404	1	1.114658398
BAI1	NM_001702.1:3640	NM_001702	575	ENSG00000181790	0.276787757	1	-1.424100343
MED23	NM_004830.2:640	NM_004830	9439	ENSG00000112282	0.27799751	1	1.179844182
CLEC3B	NM_003278.2:607	NM_003278	7123	ENSG00000163815	0.279697941	1	-1.583837543
PKNOX1	NM_004571.3:3655	NM_004571	5316	ENSG00000160199	0.282389011	1	-1.346022735
ANGPT2	NM_001147.2:1775	NM_001147	285	ENSG00000091879	0.282783124	1	1.616094686
PROM1	NM_006017.1:925	NM_006017	8842	ENSG00000007062	0.282983585	1	-1.481100151
SCG2	NM_003469.3:1400	NM_003469	7857	ENSG00000171951	0.28428004	1	1.606664319
CD46	NM_172350.1:365	NM_172350	4179	ENSG00000117335	0.28468388	1	-1.135614845
SIRT1	NM_012238.4:1595	NM_012238	23411	ENSG00000096717	0.289317546	1	-1.150407391
CEACAM5	NM_004363.2:1961	NM_004363	1048	ENSG00000105388	0.289989866	1	-2.331254217
CRIP2	NM_001270837.1:1042	NM_001270837	1397	ENSG00000182809	0.290490458	1	1.183800906
EPS8L1	NM_017729.3:1914	NM_017729	54869	ENSG00000131037	0.292214655	1	1.166594169
SRPX2	NM_014467.2:1420	NM_014467	27286	ENSG00000102359	0.296159507	1	1.328963654
PIK3R1	NM_181504.2:1105	NM_181504	5295	ENSG00000145675	0.29793267	1	1.350482043
FOXC2	NM_005251.2:1389	NM_005251	2303	ENSG00000176692	0.300075914	1	1.539375597
PTX3	NM_002852.3:1152	NM_002852	5806	ENSG00000163661	0.306121146	1	2.113107756
MMRN2	NM_024756.2:3040	NM_024756	79812	ENSG00000173269	0.309431041	1	-1.365881442
LAMC1	NM_002293.3:4915	NM_002293	3915	ENSG00000135862	0.327732328	1	1.231130312
KRIT1	NM_004912.3:2648	NM_004912	889	ENSG00000001631	0.330697118	1	1.151879244
TMPRSS2	NM_005656.3:1079	NM_005656	7113	ENSG00000184012	0.344589485	1	-1.296372898
CLIC4	NM_013943.2:1702	NM_013943	25932	ENSG00000169504	0.346278986	1	1.137786745
SLC44A4	NM_032794.1:1798	NM_032794			0.348287301	1	1.289520732
IBSP	NM_004967.3:876	NM_004967	3381	ENSG00000029559	0.354704489	1	-1.840186802
ERBB2	NM_001005862.1:1255	NM_001005862	2064	ENSG00000141736	0.355138724	1	1.145436724
NOL7	NM_016167.3:335	NM_016167	51406	ENSG00000225921	0.359774442	1	1.107082711
FHL1	NM_001449.4:1032	NM_001449	2273	ENSG000000022267	0.362029069	1	-1.218024023
TMPRSS6	NM_153609.2:2929	NM_153609	164656	ENSG00000187045	0.363820228	1	-1.465595723
CXCR3	NM_001504.1:80	NM_001504	2833	ENSG00000186810	0.364027474	1	1.329306708
ABI3BP	NM_015429.3:4081	NM_015429	25890	ENSG00000154175	0.369860911	1	1.214525416
HUNK	NM_014586.1:1280	NM_014586	30811	ENSG00000142149	0.371365184	1	-1.255945026
TNFRSF12A	NM_016639.1:575	NM_016639	51330	ENSG00000006327	0.375447471	1	1.295045738
CCL21	NM_002989.2:180	NM_002989	6366	ENSG00000137077	0.376874513	1	1.39283808
PLCG1	NM_002660.2:2290	NM_002660	5335	ENSG00000124181	0.37898178	1	1.10858579
ACTG2	NM_001615.3:921	NM_001615	72	ENSG00000163017	0.379749737	1	1.300052011
CD2AP	NM_012120.2:1895	NM_012120	23607	ENSG00000198087	0.38094797	1	1.044839892
SMAD4	NM_005359.3:1370	NM_005359	4089	ENSG00000141646	0.380996665	1	1.098113649
DENND5A	NM_015213.2:4604	NM_015213	23258	ENSG00000184014	0.382260653	1	1.089433362
NAA15	NM_057175.3:4145	NM_057175	80155	ENSG00000164134	0.383680254	1	1.220410356
PRSS2	NM_022119.3:499	NM_022119	64063	ENSG00000005001	0.38402018	1	1.246221081
SRPK2	NM_182692.1:340	NM_182692	6733	ENSG00000135250	0.384654894	1	1.080647432
MT3	NM_005954.2:165	NM_005954	4504	ENSG00000087250	0.385444056	1	-1.666124663



PRF1	NM_005041.3:2120	NM_005041	5551	ENSG00000180644	0.385524787	1	1.320719562
ZEB1	NM_001128128.1:1450	NM_001128128	6935	ENSG00000148516	0.386881153	1	1.209809544
CCR2	NM_001123041.2:743	NM_001123041	729230	ENSG00000121807	0.389387615	1	-1.458273847
PNPLA6	NM_006702.3:3941	NM_006702	10908	ENSG00000032444	0.393129501	1	1.095704555
FRAS1	NM_001166133.1:526	NM_001166133	80144	ENSG00000138759	0.39640084	1	-1.230896986
SYNE1	NM_015293.1:7755	NM_015293	23345	ENSG00000131018	0.400379453	1	1.135290539
HK3	NM_002115.1:495	NM_002115	3101	ENSG00000160883	0.404659445	1	-1.248711477
VEGFC	NM_005429.2:565	NM_005429	7424	ENSG00000150630	0.408140921	1	-1.173529872
MPDZ	NM_003829.4:6092	NM_003829	8777	ENSG00000107186	0.409152933	1	1.157415554
MAP2K4	NM_003010.2:2830	NM_003010	6416	ENSG00000065559	0.41014224	1	-1.089623114
MMP1	NM_002421.2:700	NM_002421	4312	ENSG00000196611	0.411968763	1	1.696708896
ZFPM2	NM_012082.3:1850	NM_012082	23414	ENSG00000169946	0.412857264	1	1.140586177
DNAJC14	NM_032364.5:1166	NM_032364	85406	ENSG00000135392	0.41389811	1	-1.113363257
CASP8	NM_001228.4:301	NM_001228	841	ENSG00000064012	0.415539138	1	1.087662418
CD163	NM_004244.4:1630	NM_004244	9332	ENSG00000177575	0.417391639	1	1.400945055
ZNF143	NM_003442.5:925	NM_003442	7702	ENSG00000166478	0.417680101	1	1.109925611
FBP1	NM_000507.3:590	NM_000507	2203	ENSG00000165140	0.41974787	1	-1.215972029
RTN4	NM_007008.2:275	NM_007008	57142	ENSG00000115310	0.419762594	1	1.061568578
ANPEP	NM_001150.1:2670	NM_001150	290	ENSG00000166825	0.421813296	1	1.234650609
GIMAP4	NM_018326.2:315	NM_018326	55303	ENSG00000133574	0.431236534	1	-1.200786534
FBN2	NM_001999.3:9850	NM_001999	2201	ENSG00000138829	0.437050023	1	-1.385783864
AP1M2	NM_005498.4:78	NM_005498	10053	ENSG00000129354	0.447124815	1	-1.161630443
SPDEF	NM_012391.1:1335	NM_012391	25803	ENSG00000124664	0.447554466	1	-1.295526494
BAD	NM_004322.3:963	NM_004322	572	ENSG00000002330	0.447932338	1	1.090240498
BRMS1	NM_015399.3:469	NM_015399	25855	ENSG00000174744	0.449753296	1	1.06515209
HRAS	NM_005343.2:396	NM_005343	3265	ENSG00000174775	0.450878757	1	-1.048907633
SNAI3	NM_178310.1:820	NM_178310	333929	ENSG00000185669	0.45208847	1	1.223807375
TBX1	NM_080646.1:540	NM_080646	6899	ENSG00000184058	0.453549765	1	-1.160100198
SMURF2	NM_022739.3:2605	NM_022739	64750	ENSG00000108854	0.453793868	1	-1.09046584
SORD	NM_003104.4:1345	NM_003104	6652	ENSG00000140263	0.457930842	1	-1.130864169
MUC1	NM_001018017.1:725	NM_001018017	4582	ENSG00000185499	0.469165018	1	-1.191047447
ILK	NM_004517.2:983	NM_004517	3611	ENSG00000166333	0.469616082	1	1.125104932
CNOT4	NM_001190848.1:795	NM_001190848	4850	ENSG00000008082	0.470623999	1	1.068553136
LAMA5	NM_005560.3:787	NM_005560	3911	ENSG00000130702	0.473961179	1	-1.129798818
EIF4E2	NM_004846.3:670	NM_004846	9470	ENSG00000135930	0.477687345	1	1.093082722
AGGF1	NM_018046.3:35	NM_018046	55109	ENSG00000164252	0.484624758	1	1.059751678
EPHA2	NM_004431.2:1525	NM_004431	1969	ENSG00000142627	0.487572675	1	1.166814415
EPHB4	NM_004444.4:1680	NM_004444	2050	ENSG00000196411	0.487601285	1	-1.167323024
KRT19	NM_002276.4:96	NM_002276	3880	ENSG00000171345	0.489781036	1	-1.129410434
QKI	NM_006775.2:838	NM_006775	9444	ENSG00000112531	0.490393751	1	-1.08650623
CHP1	XM_005254140.1:174	XM_005254140			0.49355902	1	-1.090797232
PLA2G10	NM_003561.1:779	NM_003561	8399	ENSG00000069764	0.493953067	1	-1.249155731
WNT5A	NM_003392.3:475	NM_003392	7474	ENSG00000114251	0.494984762	1	1.289368984
NDNF	NM_024574.3:395	NM_024574	79625	ENSG00000173376	0.495976172	1	1.139177712
MMP17	NM_016155.4:804	NM_016155	4326	ENSG00000198598	0.496158952	1	1.300938735
VAV3	NM_001079874.1:352	NM_001079874	10451	ENSG00000134215	0.498229427	1	-1.088370952
NFKB1	NM_0003998.2:1675	NM_0003998	4790	ENSG00000109320	0.500595092	1	1.077358597
ZC3H12A	NM_025079.2:2140	NM_025079	80149	ENSG00000163874	0.501837976	1	-1.231479448
ST14	NM_021978.3:1405	NM_021978	6768	ENSG00000149418	0.502358322	1	1.085337592
MAP2K1	NM_002755.2:970	NM_002755	5604	ENSG00000169032	0.503531089	1	1.05540896
CCL8	NM_005623.2:689	NM_005623	6355	ENSG00000108700	0.504791697	1	1.493678423
JAM2	NM_001270407.1:840	NM_001270407	58494	ENSG00000154721	0.506656095	1	-1.207158832
EDN1	NM_001955.2:770	NM_001955	1906	ENSG00000078401	0.507003813	1	-1.145414797
NRXN3	NM_001105250.1:2286	NM_001105250	9369	ENSG000000021645	0.507272053	1	-1.227662563
FERMT2	NM_001135000.1:920	NM_001135000	10979	ENSG00000073712	0.508168995	1	-1.066693817
TLK2	NM_006852.2:2335	NM_006852	11011	ENSG00000146872	0.510853879	1	-1.066294079
EP300	NM_001429.2:715	NM_001429	2033	ENSG00000100393	0.51222442	1	1.073651888
LRG1	NM_052972.2:1480	NM_052972	116844	ENSG00000171236	0.512818441	1	-1.207102476
BTG1	NM_001731.2:775	NM_001731	694	ENSG00000133639	0.514621063	1	1.162014707
FOXO4	NM_005938.2:35	NM_005938	4303	ENSG00000184481	0.514836729	1	-1.090774509
FBLN5	NM_006329.3:2242	NM_006329	10516	ENSG00000140092	0.516271724	1	-1.18790073
PTGS2	NM_000963.1:495	NM_000963	5743	ENSG00000073756	0.519004267	1	1.274400072
TIMP4	NM_003256.2:1000	NM_003256	7079	ENSG00000157150	0.522098119	1	-1.509872677
CD82	NM_002231.3:1211	NM_002231	3732	ENSG000000085117	0.525573731	1	-1.140988035
CLDN4	NM_001305.3:1242	NM_001305	1364	ENSG00000189143	0.527584501	1	-1.175686026
ANGPT1	NM_001146.3:2080	NM_001146	284	ENSG00000154188	0.528324836	1	-1.105510165
WWTR1	NM_001168278.1:1050	NM_001168278	25937	ENSG00000018408	0.528420272	1	1.129046019
CLDN3	NM_001306.3:606	NM_001306	1365	ENSG00000165215	0.531274554	1	-1.178920576
TWIST2	NM_057179.2:482	NM_057179	117581	ENSG00000233608	0.533098988	1	1.161584518
RPS6KB1	NM_003161.2:310	NM_003161	6198	ENSG00000108443	0.533449475	1	1.058966157
ALB	NM_000477.5:855	NM_000477	213	ENSG00000163631	0.535861779	1	1.560492576
LAMB3	NM_000228.2:695	NM_000228	3914	ENSG00000196878	0.53728485	1	-1.136854395
SDC4	NM_002999.2:1310	NM_002999	6385	ENSG00000124145	0.542068244	1	-1.181634804
APOD	NM_001647.3:613	NM_001647	347	ENSG00000189058	0.546970684	1	1.388513387
TXNIP	NM_006472.1:255	NM_006472	10628	ENSG00000265972	0.548683936	1	1.179189777
PIK3CA	NM_006218.2:2445	NM_006218	5290	ENSG00000121879	0.552187315	1	1.061216913
FASLG	NM_000639.1:625	NM_000639	356	ENSG00000117560	0.561725536	1	-1.306326588
TSPAN1	NM_005727.2:115	NM_005727	10103	ENSG00000117472	0.565470845	1	1.368865809

CUL1	NM_003592.2:1487	NM_003592	8454	ENSG00000055130	0.565829108	1	-1.040164693
RAC1	NM_198829.1:1250	NM_198829	5879	ENSG00000136238	0.566075721	1	1.062175636
BMPRI1A	NM_004329.2:1720	NM_004329	657	ENSG00000107779	0.56655354	1	-1.093346297
SH2B3	NM_005475.2:4285	NM_005475	10019	ENSG00000111252	0.567626963	1	1.10140474
IL18	NM_001562.2:48	NM_001562	3606	ENSG00000150782	0.568374288	1	1.136200264
ZC3H14	NM_001160103.1:2690	NM_001160103	79882	ENSG00000100722	0.570366216	1	-1.065761337
HIPK1	NM_152696.3:2105	NM_152696	204851	ENSG00000163349	0.571682571	1	1.064709669
TMUB2	NM_024107.2:1485	NM_024107	79089	ENSG00000168591	0.578976513	1	-1.03481222
EGLN3	NM_022073.3:800	NM_022073	112399	ENSG00000129521	0.583779655	1	1.151912328
SMAD2	NM_005901.5:1678	NM_005901	4087	ENSG00000175387	0.584658864	1	1.05407559
PTPRC	NM_080923.2:154	NM_080923			0.586588562	1	1.156498287
PIK3CD	NM_005026.3:2978	NM_005026	5293	ENSG00000171608	0.592739922	1	1.114651636
MCAM	NM_006500.2:2482	NM_006500	4162	ENSG00000076706	0.596068551	1	-1.106307737
RAC2	NM_002872.3:1069	NM_002872	5880	ENSG00000128340	0.601189809	1	1.091098619
DDX50	NM_024045.1:1185	NM_024045	79009	ENSG00000107625	0.602689821	1	-1.047807784
SMURF1	NM_181349.1:5162	NM_181349	57154	ENSG00000198742	0.608843754	1	1.080716943
KRT7	NM_005556.3:1425	NM_005556	3855	ENSG00000135480	0.618788686	1	1.13704906
ITGB2	NM_001127491.1:1103	NM_001127491	3689	ENSG00000160255	0.620758819	1	1.109309808
PLA2G2D	NM_001271814.1:90	NM_001271814	26279	ENSG00000117215	0.621359472	1	1.393487102
CDH1	NM_004360.2:1230	NM_004360	999	ENSG00000039068	0.622383544	1	-1.133662106
ARAP2	NM_015230.2:4875	NM_015230	116984	ENSG00000047365	0.622629179	1	-1.117260595
EREG	NM_001432.2:290	NM_001432	2069	ENSG00000124882	0.62266059	1	1.262118572
BCAS1	NM_003657.2:2305	NM_003657	8537	ENSG00000064787	0.629123252	1	-1.16566504
PPP1R16B	NM_015568.2:2860	NM_015568	26051	ENSG00000101445	0.630869035	1	-1.09847093
SSTR2	NM_001050.2:1060	NM_001050	6752	ENSG00000180616	0.637627874	1	1.218149997
RRAS	NM_006270.3:330	NM_006270	6237	ENSG00000126458	0.639851956	1	-1.084738319
SNAI1	NM_005985.2:63	NM_005985	6615	ENSG00000124216	0.640316549	1	1.183597067
LAMC2	NM_005562.2:2819	NM_005562	3918	ENSG00000058085	0.640807305	1	1.096835361
HSD17B12	NM_016142.2:1000	NM_016142	51144	ENSG00000149084	0.642347498	1	1.037815342
LOXL2	NM_002318.2:40	NM_002318	4017	ENSG00000134013	0.649525424	1	-1.129519101
PIK3R5	NM_001142633.1:3335	NM_001142633	23533	ENSG00000141506	0.652176277	1	1.095817751
LTBP4	NM_003573.2:3644	NM_003573	8425	ENSG00000090006	0.656968494	1	-1.125371104
DSC2	NM_024422.3:2200	NM_024422	1824	ENSG00000134755	0.658167798	1	1.059999531
VAMP8	NM_003761.3:260	NM_003761	8673	ENSG00000118640	0.659477343	1	-1.041636298
TCEB1	NM_001204857.1:330	NM_001204857	6921	ENSG00000154582	0.664791295	1	-1.049935259
TBXA2R	NM_001060.3:385	NM_001060	6915	ENSG00000006638	0.666330164	1	-1.099534457
VEGFA	NM_001025366.1:1325	NM_001025366	7422	ENSG00000112715	0.669214195	1	1.152263117
RBL2	NM_005611.3:1310	NM_005611	5934	ENSG00000103479	0.671465412	1	1.048498966
ETV4	NM_001079675.1:1535	NM_001079675	2118	ENSG00000175832	0.673199342	1	-1.182896579
ICAM1	NM_000201.2:2253	NM_000201	3383	ENSG00000090339	0.673261189	1	1.112008904
ERMP1	NM_024896.2:852	NM_024896	79956	ENSG00000099219	0.680875006	1	1.078699037
RAF1	NM_002880.3:1444	NM_002880	5894	ENSG00000132155	0.682001908	1	1.037561606
AKT3	NM_005465.4:287	NM_005465	10000	ENSG00000117020	0.689173496	1	1.072471184
ID2	NM_002166.4:505	NM_002166	3398	ENSG00000115738	0.693066561	1	-1.074379017
WARS	NM_004184.3:1851	NM_004184	7453	ENSG00000140105	0.699516989	1	-1.120185893
JAG1	NM_000214.2:915	NM_000214	182	ENSG00000101384	0.700129511	1	1.077370999
MAPK1	NM_138957.2:430	NM_138957	5594	ENSG00000100030	0.705518434	1	-1.04162887
ADAM15	NM_207195.1:1355	NM_207195	8751	ENSG00000143537	0.709595717	1	1.07469608
SMAD5	NM_005903.5:1044	NM_005903	4090	ENSG00000113658	0.710296456	1	1.03185389
SLC35A3	NM_012243.1:605	NM_012243	23443	ENSG00000117620	0.712930223	1	1.07187107
FREM1	NM_001177704.1:614	NM_001177704	158326	ENSG00000164946	0.716418277	1	1.104880417
LAD1	NM_005558.3:1860	NM_005558	3898	ENSG00000159166	0.71911573	1	1.129454081
CSF2RB	NM_000395.2:492	NM_000395	1439	ENSG00000100368	0.721852266	1	1.057415655
ADRA2B	NM_000682.4:2885	NM_000682	151	ENSG00000274286	0.725511261	1	1.164791297
ITM2A	NM_004867.4:988	NM_004867	9452	ENSG00000078596	0.728411698	1	-1.100303924
PYCARD	NM_013258.3:714	NM_013258	29108	ENSG00000103490	0.733099699	1	-1.051700537
RHOA	NM_001664.2:1230	NM_001664	387	ENSG00000067560	0.735513907	1	1.028949798
SOD1	NM_000454.4:35	NM_000454	6647	ENSG00000142168	0.738468428	1	1.033279639
SRF	NM_003131.2:4040	NM_003131	6722	ENSG00000112658	0.73918085	1	-1.059600171
NR3C1	NM_001018077.1:1665	NM_001018077	2908	ENSG00000113580	0.739359995	1	1.047065129
MMP3	NM_002422.3:25	NM_002422	4314	ENSG00000149968	0.741860389	1	-1.255859688
ENO3	NM_001976.4:1368	NM_001976	2027	ENSG00000108515	0.742696812	1	-1.071248349
MMP9	NM_004994.2:1530	NM_004994	4318	ENSG00000100985	0.746854653	1	1.198207319
CXCL17	NM_198477.1:440	NM_198477	284340	ENSG00000189377	0.747474984	1	1.088548212
GDF6	NM_001001557.2:1908	NM_001001557	392255	ENSG00000156466	0.752794833	1	-1.258824315
LHFP	NM_005780.2:460	NM_005780	10186	ENSG00000183722	0.756212318	1	1.065298181
PDCL3	NM_024065.4:23	NM_024065	79031	ENSG00000115539	0.764123325	1	1.059593413
TGFB2	NM_003238.2:1125	NM_003238	7042	ENSG00000092969	0.769283797	1	1.09667071
TLR4	NR_024168.1:2575	NR_024168			0.773154185	1	1.03382202
AGR2	NM_006408.3:580	NM_006408	10551	ENSG00000106541	0.786949797	1	-1.11485097
NDRG1	NM_006096.2:565	NM_006096	10397	ENSG00000104419	0.78900177	1	-1.05061158
SPARCL1	NM_004684.4:2265	NM_004684	8404	ENSG00000152583	0.789457775	1	1.056294314
TFDP1	NM_007111.4:1826	NM_007111	7027	ENSG00000198176	0.79172639	1	1.022959564
RUNX1T1	NM_004349.2:1085	NM_004349	862	ENSG00000079102	0.798206582	1	-1.046700677
PRELP	NM_002725.3:5250	NM_002725	5549	ENSG00000188783	0.799937689	1	-1.106819651
PTK2	NM_153831.2:965	NM_153831	5747	ENSG00000169398	0.807120913	1	1.044796934
ENPEP	NM_001977.3:2940	NM_001977	2028	ENSG00000138792	0.807760397	1	1.093797185
ATPIF1	NM_178190.2:334	NM_178190	93974	ENSG00000130770	0.808387375	1	1.028540246

PKN1	NM_213560.1:2153	NM_213560	5585	ENSG00000123143	0.810708133	1	1.03217835
ADAMTS1	NM_006988.3:2840	NM_006988	9510	ENSG00000154734	0.812016216	1	1.10250923
NTRK1	NM_001012331.1:1365	NM_001012331	4914	ENSG00000198400	0.816133032	1	1.086142007
F3	NM_001993.3:1030	NM_001993	2152	ENSG000000117525	0.816684239	1	-1.04552166
PTK2B	NM_004103.3:735	NM_004103	2185	ENSG00000120899	0.817287482	1	1.025406806
SV2B	NM_001167580.1:2154	NM_001167580	9899	ENSG00000185518	0.818898097	1	-1.083348752
SET	NM_001122821.1:2385	NM_001122821	6418	ENSG00000119335	0.823611379	1	-1.015940279
TPSB2	NM_024164.5:521	NM_024164	64499	ENSG00000197253	0.828143817	1	1.060354901
AHNAK	NM_001620.2:14454	NM_001620	79026	ENSG00000124942	0.830387474	1	-1.045238058
MAPK3	NM_001040056.1:580	NM_001040056	5595	ENSG00000102882	0.835545799	1	1.029686428
OAS1	NM_001032409.1:805	NM_001032409	4938	ENSG00000089127	0.839895271	1	1.029774195
HDAC5	NM_005474.4:3160	NM_005474	10014	ENSG00000108840	0.844224008	1	-1.023530216
SNRPF	NM_003095.2:225	NM_003095	6636	ENSG00000139343	0.844571264	1	1.016498816
IL13RA2	NM_000640.2:400	NM_000640	3598	ENSG00000123496	0.846805172	1	1.127941276
ITGAM	NM_000632.3:515	NM_000632	3684	ENSG00000169896	0.848451615	1	1.03821315
B3GNT3	NM_014256.3:1625	NM_014256	10331	ENSG00000179913	0.851355136	1	1.103890803
MEOX2	NM_005924.4:1184	NM_005924	4223	ENSG00000106511	0.851504866	1	1.046810964
NCAM1	NM_000615.5:1620	NM_000615	4684	ENSG00000149294	0.854705573	1	1.061869129
WNT5B	NM_032642.2:1745	NM_032642	81029	ENSG00000111186	0.868356845	1	-1.052810785
CST7	NM_003650.3:525	NM_003650	8530	ENSG00000079984	0.870203734	1	-1.051647073
ADAM17	NM_003183.4:1595	NM_003183	6868	ENSG00000151694	0.870623197	1	1.027160874
GPR56	NM_005682.4:1145	NM_005682	9289	ENSG00000205336	0.880423427	1	-1.02211926
PIK3R6	NM_001010855.3:1112	NM_001010855	146850	ENSG00000276231	0.883464142	1	1.044737434
ALOX5	NM_000698.2:735	NM_000698	240	ENSG00000012779	0.884478825	1	1.020485913
SOX17	NM_022454.3:1374	NM_022454	64321	ENSG00000164736	0.892841998	1	-1.081195611
ARHGAP32	NM_001142685.1:2100	NM_001142685	9743	ENSG00000134909	0.89354889	1	1.018530879
ACHE	NM_000665.3:1057	NM_000665	43	ENSG00000087085	0.896182991	1	-1.041315535
ITGA5	NM_002205.2:925	NM_002205	3678	ENSG00000161638	0.900620448	1	1.019690713
CTSG	NM_001911.2:160	NM_001911	1511	ENSG00000100448	0.901879669	1	1.044297227
SELE	NM_000450.2:1505	NM_000450	6401	ENSG00000007908	0.913908346	1	1.076177794
GJA5	NM_005266.5:1992	NM_005266	2702	ENSG00000265107	0.915981746	1	1.030733855
ROCK2	NM_004850.3:3140	NM_004850	9475	ENSG00000134318	0.929743226	1	1.012750512
GLYR1	NM_032569.3:1470	NM_032569	84656	ENSG00000140632	0.930083402	1	-1.011323887
CDKN2A	NM_000077.3:975	NM_000077	1029	ENSG00000147889	0.941338532	1	1.033533206
RORB	NM_006914.3:1840	NM_006914	6096	ENSG00000198963	0.94221905	1	-1.027236633
KRAS	NM_004985.3:327	NM_004985	3845	ENSG00000133703	0.94612787	1	-1.007931486
CTSH	NM_148979.2:800	NM_148979	1512	ENSG00000103811	0.95156531	1	1.017675216
ADD1	NM_001119.4:622	NM_001119	118	ENSG00000087274	0.957728806	1	1.010260974
PRKCB	NM_212535.1:1750	NM_212535	5579	ENSG00000166501	0.960982317	1	1.006807947
CNOT10	NM_001256741.1:1962	NM_001256741	25904	ENSG00000182973	0.962233219	1	-1.003099484
CYB561	NM_001915.3:1065	NM_001915	1534	ENSG00000008283	0.96277949	1	1.00459177
VSIG4	NM_001100431.1:160	NM_001100431	11326	ENSG00000155659	0.96665642	1	1.011162736
IL11	NM_000641.2:1145	NM_000641	3589	ENSG00000095752	0.967259001	1	1.021369795
NOS2	NM_153292.1:546	NM_153292	4843	ENSG00000007171	0.974526929	1	1.007901353
ITGA1	NM_181501.1:1875	NM_181501	3672	ENSG00000213949	0.977029516	1	-1.004962337
TGFBR2	NM_001024847.1:1760	NM_001024847	7048	ENSG00000163513	0.977176746	1	-1.00293601
NR4A1	NM_173157.1:1575	NM_173157	3164	ENSG00000123358	0.978101034	1	1.014508082
NOS3	NM_000603.4:1456	NM_000603	4846	ENSG00000164867	0.979080705	1	1.008871167
PFKFB4	NM_004567.2:400	NM_004567	5210	ENSG00000114268	0.980511853	1	-1.004078842
HEG1	NM_020733.1:1890	NM_020733	57493	ENSG00000173706	0.980694041	1	-1.00496891
ADM2	NM_001253845.1:610	NM_001253845	79924	ENSG00000128165	0.981458859	1	-1.012131436
SHB	NM_003028.2:3200	NM_003028	6461	ENSG00000107338	0.982336183	1	-1.007613817
CXCL10	NM_001565.1:40	NM_001565	3627	ENSG00000169245	0.982674666	1	1.013313916
CDC42	NM_001039802.1:390	NM_001039802	998	ENSG00000070831	0.982968644	1	-1.001435091
ID4	NM_001546.2:588	NM_001546	3400	ENSG00000172201	0.987249972	1	1.004355051
NDP	NM_000266.2:505	NM_000266	4693	ENSG00000124479	0.988001612	1	1.004747377
HMOX1	NM_002133.2:781	NM_002133	3162	ENSG00000100292	0.988627765	1	1.008070316
SPHK2	NM_020126.3:2443	NM_020126	56848	ENSG00000063176	0.991306455	1	1.001490774
SH3YL1	NM_001159597.1:216	NM_001159597	26751	ENSG00000035115	0.992869843	1	-1.001407687
EIF4EBP1	NM_004095.3:363	NM_004095	1978	ENSG00000187840	0.99319557	1	-1.001514153
VAV2	NM_003371.3:2699	NM_003371	7410	ENSG00000160293	0.994877892	1	1.000749517

Gene	Probe	RefSeq	Entrez	Ensembl	p-value	p-value bonferroni	Ingenuity fold-change
THY1	NM_006288.2:135	NM_006288	7070	ENSG00000154096	1.73831E-05	0.01326329	9.549802921
COL1A2	NM_000089.3:2635	NM_000089	1278	ENSG00000164692	1.83526E-05	0.014003004	5.457991125
COL1A1	NM_000088.3:4272	NM_000088	1277	ENSG00000108821	2.72294E-05	0.020776025	8.604048821
MEG3	NR_002766.2:691	NR_002766	55384	ENSG00000214548	5.84524E-05	0.044599191	4.057256311
PCOLCE	NM_002593.3:1258	NM_002593	5118	ENSG00000106333	8.41792E-05	0.06422876	2.395208564
IGF1	NM_000618.3:491	NM_000618	3479	ENSG00000017427	0.000151338	0.115470824	5.598254544
PTGDS	NM_000954.5:180	NM_000954	5730	ENSG00000107317	0.000296362	0.226124436	7.840878788
COL4A1	NM_001845.4:780	NM_001845	1282	ENSG00000187498	0.000329628	0.251506095	3.527188964
TOM1L1	NM_005486.2:685	NM_005486	10040	ENSG00000141198	0.00033268	0.253835197	-1.828028494
COL5A2	NM_000393.3:4075	NM_000393	1290	ENSG00000204262	0.000439678	0.335474555	2.669222696
ECM2	NM_001393.2:1700	NM_001393	1842	ENSG00000106823	0.000485804	0.370668225	2.729154246
COL4A2	NM_001846.2:1150	NM_001846	1284	ENSG00000134871	0.000497905	0.379901547	3.698064914
STAB1	NM_015136.2:95	NM_015136	23166	ENSG00000010327	0.000594376	0.453508693	2.138591382
ISLR	NM_005545.3:2072	NM_005545	3671	ENSG00000129009	0.000630687	0.481214319	2.919299188
COL18A1	NM_030582.3:4490	NM_030582	80781	ENSG00000182871	0.000789017	0.602019794	3.070129004
DPT	NM_001937.3:1510	NM_001937	1805	ENSG00000143196	0.000876303	0.66861934	3.185852753
PTPRB	NM_002837.3:2625	NM_002837	5787	ENSG00000127329	0.000908604	0.693265109	-3.264510435
FLT1	NM_002019.4:530	NM_002019	2321	ENSG00000102755	0.000916037	0.698936411	-2.09684153
ITGA11	NM_012211.3:650	NM_012211	22801	ENSG00000137809	0.000940493	0.717596367	4.211506418
VCAM1	NM_001078.3:2535	NM_001078	7412	ENSG00000162692	0.001020958	0.778991121	2.836201597
AGT	NM_000029.3:1711	NM_000029	183	ENSG00000135744	0.001391848	1	2.590135918
TGFB1	NM_000660.3:1260	NM_000660	7040	ENSG00000105329	0.00186894	1	1.917846576
CXCL8	NM_000584.2:25	NM_000584	3576	ENSG00000169429	0.002026686	1	-6.124787339
RBM47	NM_019027.3:150	NM_019027	54502	ENSG00000163694	0.002403625	1	-1.857782726
EMILIN1	XM_006711928.1:724	XM_006711928			0.002609125	1	2.798666276
COL3A1	NM_000090.3:180	NM_000090	1281	ENSG00000168542	0.002757841	1	5.291042292
CXCL12	NM_199168.3:69	NM_199168	6387	ENSG00000107562	0.002916806	1	8.742819414
TNC	NM_002160.3:1215	NM_002160	3371	ENSG00000041982	0.00304703	1	2.819925748
PRKCG	NM_002739.3:445	NM_002739	5582	ENSG00000126583	0.003216449	1	2.681516785
PPL	NM_002705.4:2435	NM_002705	5493	ENSG00000118898	0.003271564	1	-2.906040358
TFPI2	NM_006528.3:524	NM_006528	7980	ENSG00000105825	0.003318733	1	4.326581316
ECM1	NM_004425.3:1345	NM_004425	1893	ENSG00000143369	0.003408099	1	2.718348884
CDH2	NM_001792.3:941	NM_001792	1000	ENSG00000170558	0.003416099	1	3.356958362
CD36	NM_000072.3:707	NM_000072	948	ENSG00000135218	0.003459015	1	-1.740935573
PROK2	NM_021935.3:827	NM_021935	60675	ENSG00000163421	0.003597526	1	-7.256100913
BGN	NM_001711.3:1935	NM_001711	633	ENSG00000182492	0.003958834	1	3.064251308
SULF1	NM_001128204.1:3004	NM_001128204	23213	ENSG00000137573	0.004077298	1	2.588228061
ANGPTL2	NM_012098.2:540	NM_012098	23452	ENSG00000136859	0.004218949	1	4.079326781
CNN1	NM_001299.4:496	NM_001299	1264	ENSG00000130176	0.004546136	1	2.97531461
FGF18	NM_003862.1:850	NM_003862	8817	ENSG00000156427	0.004782758	1	2.193450616
OGN	NM_014057.3:995	NM_014057	4969	ENSG00000106809	0.0049709	1	2.494435059
TXNIP	NM_006472.1:255	NM_006472	10628	ENSG00000265972	0.00556552	1	3.179083635
SERINC5	NM_001174071.1:790	NM_001174071	256987	ENSG00000164300	0.005644352	1	1.336438334
BMP7	NM_001719.2:1092	NM_001719	655	ENSG00000101144	0.006172212	1	2.398292345
COL5A1	NM_000093.3:6345	NM_000093	1289	ENSG00000130635	0.006644877	1	2.476390461
COMP	NM_000095.2:2164	NM_000095	1311	ENSG00000105664	0.00689953	1	12.34907001
CAMK2B	NM_001220.3:365	NM_001220	816	ENSG00000058404	0.006986816	1	2.813145376
IL6	NM_000600.1:220	NM_000600	3569	ENSG00000136244	0.007605525	1	-3.454308557
AAMP	NM_001087.3:412	NM_001087	14	ENSG00000127837	0.007668151	1	1.353722711
PRKCZ	NM_002744.4:771	NM_002744	5590	ENSG00000067606	0.007818208	1	-1.985780837
ICAM1	NM_000201.2:2253	NM_000201	3383	ENSG00000090339	0.008224426	1	-2.199958106
LAMA1	NM_005559.2:5230	NM_005559	284217	ENSG00000101680	0.008365746	1	1.896077932
SERPINH1	NM_001235.2:880	NM_001235	871	ENSG00000149257	0.008417095	1	1.852738969
SCNN1A	NM_001038.4:2780	NM_001038	6337	ENSG00000111319	0.008928742	1	-2.072862014
NRP1	NM_003873.5:370	NM_003873	8829	ENSG00000099250	0.009005991	1	1.485284574
IL13RA2	NM_000640.2:400	NM_000640	3598	ENSG00000123496	0.00954549	1	5.719532288
HSPG2	NM_005529.5:2715	NM_005529	3339	ENSG00000142798	0.010382594	1	1.74370515
AEBP1	NM_001129.3:3170	NM_001129	165	ENSG00000106624	0.010507299	1	2.285144318
PEBP4	NM_144962.2:190	NM_144962	157310	ENSG00000134020	0.010627597	1	-2.576544553
DLC1	NM_006094.3:5650	NM_006094	10395	ENSG00000164741	0.010700455	1	-1.7830421
P3H2	NM_018192.2:985	NM_018192	55214	ENSG00000090530	0.010854079	1	-2.613881301
PLXDC1	NM_020405.4:900	NM_020405	57125	ENSG00000161381	0.01138457	1	3.238672238
NR4A1	NM_173157.1:1575	NM_173157	3164	ENSG00000123358	0.013128197	1	-2.585143971
CCDC80	NM_199511.1:3235	NM_199511	151887	ENSG00000091986	0.013604267	1	3.0729362
JUN	NM_002228.3:140	NM_002228	3725	ENSG00000177606	0.013791446	1	-2.692389899
CRIP2	NM_001270837.1:1042	NM_001270837	1397	ENSG00000182809	0.014192595	1	1.850766648
OCLN	NM_002538.3:1975	NM_002538	100506658	ENSG00000197822	0.014536751	1	-2.063367188
THBS2	NM_003247.2:4460	NM_003247	7058	ENSG00000186340	0.014579565	1	3.043436442
COL6A3	NM_004369.3:2782	NM_004369	1293	ENSG00000163359	0.014664443	1	3.224403646
VEGFA	NM_001025366.1:1325	NM_001025366	7422	ENSG00000112715	0.015031938	1	-1.803355757
CXADR	NM_001338.3:1937	NM_001338	1525	ENSG00000154639	0.01598665	1	-2.324749312
FAM174B	NM_207446.2:1075	NM_207446	400451	ENSG00000185442	0.015991675	1	-1.774084187
CMA1	NM_001836.2:561	NM_001836	1215	ENSG00000092009	0.016532003	1	5.0543122
AKAP2	NM_001004065.4:4956	NM_001004065	11217	ENSG00000241978	0.017876338	1	-1.7874863
SFRP2	NM_003013.2:840	NM_003013	6423	ENSG00000145423	0.018204107	1	3.955491046
PDGFC	NM_016205.2:2596	NM_016205	56034	ENSG00000145431	0.018540211	1	-1.758353249
HSPB1	NM_001540.3:374	NM_001540	3315	ENSG00000106211	0.0192059	1	3.20411122

TCF4	NM_003199.1:1455	NM_003199	6925	ENSG00000196628	0.019388569	1	1.653164462
ADAM28	NM_014265.4:920	NM_014265	10863	ENSG00000042980	0.019696249	1	1.753586518
TMPRSS2	NM_005656.3:1079	NM_005656	7113	ENSG00000184012	0.019963126	1	-1.874871656
MMP10	NM_002425.1:88	NM_002425	4319	ENSG00000166670	0.021983192	1	4.136911304
AKT2	NM_001626.2:1450	NM_001626	208	ENSG00000105221	0.022650716	1	1.653705059
MAF	NM_005360.4:888	NM_005360	4094	ENSG00000178573	0.022653336	1	1.773580599
SEMA3E	NM_012431.1:2184	NM_012431	9723	ENSG00000170381	0.02297645	1	-2.372662723
SMAD4	NM_005359.3:1370	NM_005359	4089	ENSG00000141646	0.023435059	1	1.226288882
LAMA4	NM_001105209.1:287	NM_001105209	3910	ENSG00000112769	0.023616017	1	1.940734805
PLA2G10	NM_003561.1:779	NM_003561	8399	ENSG00000069764	0.024731844	1	-2.348363296
TPM2	NM_003289.3:891	NM_003289	7169	ENSG00000198467	0.024830622	1	3.093020279
RORA	NM_134261.2:1715	NM_134261	6095	ENSG00000069667	0.025098513	1	1.505387332
ARAP2	NM_015230.2:4875	NM_015230	116984	ENSG00000047365	0.02611814	1	-1.655754941
IL1RL1	NM_016232.4:700	NM_016232	9173	ENSG00000115602	0.026202112	1	-2.848308385
COL4A6	NM_001847.2:1070	NM_001847	1288	ENSG00000197565	0.026412087	1	2.069401674
APOE	NM_000041.2:96	NM_000041	348	ENSG00000130203	0.026419085	1	2.507198037
FBN1	NM_000138.3:6420	NM_000138	2200	ENSG00000166147	0.026442197	1	2.347847495
PDPN	NM_006474.4:431	NM_006474	10630	ENSG00000162493	0.026896348	1	-1.520663767
CTSK	NM_000396.2:415	NM_000396	1513	ENSG00000143387	0.02732932	1	1.915824328
GDF15	NM_004864.2:180	NM_004864	9518	ENSG00000130513	0.027722567	1	2.602817645
ANXA2P2	NR_003573.1:1013	NR_003573	304		0.027949959	1	1.619796997
AGRN	NM_198576.2:2750	NM_198576	375790	ENSG00000188157	0.028654542	1	2.446008381
SF3A3	NM_006802.2:2060	NM_006802	10946	ENSG00000183431	0.029459996	1	1.259698918
PTPRM	NM_002845.3:1680	NM_002845	5797	ENSG00000173482	0.030382111	1	-1.71180787
CCL21	NM_002989.2:180	NM_002989	6366	ENSG00000137077	0.030872316	1	2.936850836
ZFYVE9	NM_004799.2:2135	NM_004799	9372	ENSG00000157077	0.032432424	1	-1.48307437
JAM3	NM_032801.3:890	NM_032801	83700	ENSG00000166086	0.035230494	1	1.361464802
RELN	NM_005045.2:345	NM_005045	5649	ENSG00000189056	0.035909058	1	2.122623526
HK2	NM_000189.4:6880	NM_000189	3099	ENSG00000159399	0.036718341	1	-1.83188415
TPSB2	NM_024164.5:521	NM_024164	64499	ENSG00000197253	0.036743302	1	1.773577722
HIPK2	NM_022740.4:10305	NM_022740	28996	ENSG00000064393	0.036823324	1	-1.339852699
ITGA7	NM_002206.1:1170	NM_002206	3679	ENSG00000135424	0.037221858	1	3.754756304
TNXB	NM_032470.3:1621	NM_032470	7148	ENSG00000168477	0.037310561	1	3.008007151
CAMK2D	NM_172127.1:505	NM_172127	817	ENSG00000145349	0.038303696	1	1.526951118
CXCR2	NM_001168298.1:840	NM_001168298	3579	ENSG00000180871	0.038332029	1	-4.370687389
WNT5A	NM_003392.3:475	NM_003392	7474	ENSG00000114251	0.038493513	1	1.515822209
LAMA3	NM_000227.3:4260	NM_000227	3909	ENSG00000053747	0.038723764	1	-1.654974694
COL6A2	NM_001849.2:1925	NM_001849	1292	ENSG00000142173	0.039203978	1	1.436558842
TBX1	NM_080646.1:540	NM_080646	6899	ENSG00000184058	0.039381913	1	2.86186254
TEK	NM_000459.3:1894	NM_000459	7010	ENSG00000120156	0.040994683	1	-2.27686725
KRT14	NM_000526.4:523	NM_000526	3861	ENSG00000186847	0.041579717	1	4.244952339
FAP	NM_004460.2:1490	NM_004460	2191	ENSG00000078098	0.042034656	1	2.045191049
MFAP4	NM_002404.1:370	NM_002404	4239	ENSG00000166482	0.042191794	1	1.803614623
OLFML2B	NM_015441.1:2920	NM_015441	25903	ENSG00000162745	0.042699976	1	2.453747962
NOS2	NM_153292.1:546	NM_153292	4843	ENSG00000007171	0.042908407	1	2.183590383
MTA1	NM_004689.2:450	NM_004689	9112	ENSG00000182979	0.043238759	1	1.707792612
NDNF	NM_024574.3:395	NM_024574	79625	ENSG00000173376	0.043312262	1	1.568526085
FST	NM_006350.2:575	NM_006350	10468	ENSG00000134363	0.043438017	1	1.909284256
FBP1	NM_000507.3:590	NM_000507	2203	ENSG00000165140	0.045218833	1	-1.737876844
ID1	NM_002165.2:345	NM_002165	3397	ENSG00000125968	0.045642384	1	-1.34399872
TF	NM_001063.2:640	NM_001063	7018	ENSG00000091513	0.045977073	1	2.809903167
CEACAM6	NM_002483.4:1217	NM_002483	4680	ENSG00000086548	0.045994758	1	-2.447138912
EGLN2	NM_053046.3:1538	NM_053046	112398	ENSG00000269858	0.046980107	1	-1.42606816
TACSTD2	NM_002353.2:1840	NM_002353	4070	ENSG00000184292	0.047037476	1	-2.168065121
FREM2	NM_207361.4:9170	NM_207361	341640	ENSG00000150893	0.047754657	1	-2.823428664
PRKCB	NM_212535.1:1750	NM_212535	5579	ENSG00000166501	0.048690446	1	1.605657443
PTRF	NM_012232.5:86	NM_012232	284119	ENSG00000177469	0.048869014	1	2.424309235
FRAS1	NM_001166133.1:526	NM_001166133	80144	ENSG00000138759	0.050937362	1	1.868521021
ANGPT1	NM_001146.3:2080	NM_001146	284	ENSG00000154188	0.051030701	1	2.047458208
ARHGDI8	NM_001175.4:833	NM_001175	397	ENSG00000111348	0.051602802	1	1.376239878
CDH11	NM_001797.2:1835	NM_001797	1009	ENSG00000140937	0.052251892	1	1.673978959
RAMP1	NM_005855.2:200	NM_005855	10267	ENSG00000132329	0.052441481	1	3.539652692
CXCL11	NM_005409.3:590	NM_005409	6373	ENSG00000169248	0.052704549	1	-2.866508726
EPHB1	NM_004441.3:1855	NM_004441	2047	ENSG00000154928	0.053278662	1	2.757467055
CXCL13	NM_006419.2:210	NM_006419	10563	ENSG00000156234	0.054594208	1	4.310228735
SPARC	NM_003118.2:910	NM_003118	6678	ENSG00000113140	0.054621177	1	2.292394144
CD44	NM_001001392.1:429	NM_001001392	960	ENSG00000026508	0.054795392	1	2.084048234
IGFBP7	NM_001553.1:690	NM_001553	3490	ENSG00000163453	0.055399466	1	2.327397288
PIK3R2	NM_005027.2:3100	NM_005027	5296	ENSG00000105647	0.056374855	1	2.332400016
LIFR	NM_002310.3:2995	NM_002310	3977	ENSG00000113594	0.056698137	1	-1.689464045
RNH1	NM_203384.1:1192	NM_203384	6050	ENSG00000023191	0.057731348	1	1.298841818
EGLN3	NM_022073.3:800	NM_022073	112399	ENSG00000129521	0.058265631	1	-1.844903049
PLS1	NM_002670.2:3261	NM_002670	5357	ENSG00000120756	0.059627069	1	-1.920483766
P3H1	NM_001146289.1:860	NM_001146289	64175	ENSG00000117385	0.059733943	1	1.391303063
BICC1	NM_001080512.1:2155	NM_001080512	80114	ENSG00000122870	0.059994427	1	1.753538619
LAMB3	NM_000228.2:695	NM_000228	3914	ENSG00000196878	0.060805952	1	-2.021250341
KRAS	NM_004985.3:327	NM_004985	3845	ENSG00000133703	0.060945296	1	-1.267418554
CDH1	NM_004360.2:1230	NM_004360	999	ENSG00000039068	0.061940446	1	-1.90789702

ADAMTS8	NM_007037.4:2228	NM_007037	11095	ENSG00000134917	0.063510764	1	-1.439322083
THBS4	NM_003248.3:985	NM_003248	7060	ENSG00000113296	0.063676137	1	2.783011364
ITGB3	NM_000212.2:4485	NM_000212	3690	ENSG00000259207	0.064936688	1	1.687890742
TMPRSS4	NM_019894.3:1146	NM_019894	56649	ENSG00000137648	0.064944594	1	3.050271859
ELF3	NM_001114309.1:460	NM_001114309	1999	ENSG00000163435	0.066865334	1	-2.101363515
COL7A1	NM_000094.2:390	NM_000094	1294	ENSG00000114270	0.067252303	1	3.863504189
TCF3	NM_003200.3:858	NM_003200	6929	ENSG00000071564	0.069197774	1	2.571961761
TWIST1	NM_000474.3:393	NM_000474	7291	ENSG00000122691	0.069369402	1	6.471768049
EPAS1	NM_001430.3:4246	NM_001430	2034	ENSG00000116016	0.071391664	1	-3.33460222
PDGFA	NM_002607.5:1276	NM_002607	5154	ENSG00000197461	0.07192993	1	1.733353679
TRIM39	NM_021253.3:3140	NM_021253	56658	ENSG00000204599	0.073726158	1	-1.428982263
FREM1	NM_001177704.1:614	NM_001177704	158326	ENSG00000164946	0.074387251	1	2.034545257
IL1B	NM_000576.2:840	NM_000576	3553	ENSG00000125538	0.074510356	1	-2.840680625
CLDN1	NM_021101.3:410	NM_021101	9076	ENSG00000163347	0.075150985	1	2.049957796
EREG	NM_001432.2:290	NM_001432	2069	ENSG00000124882	0.077464375	1	-2.189960965
GPI	NM_000175.2:1695	NM_000175	2821	ENSG00000105220	0.078694294	1	1.287234201
HAPLN1	NM_001884.3:730	NM_001884	1404	ENSG00000145681	0.07931618	1	2.91160504
ANGPTL4	NR_104213.1:475	NR_104213	51129	ENSG00000167772	0.079399662	1	2.228093579
CADM1	NM_014333.3:2840	NM_014333	23705	ENSG00000182985	0.080764743	1	-1.603824316
ZCCHC24	XM_005269604.1:379	XM_005269604			0.083075507	1	1.661504489
IL18	NM_001562.2:48	NM_001562	3606	ENSG00000150782	0.084472592	1	1.286076798
USP39	NM_001256725.1:806	NM_001256725	10713	ENSG00000168883	0.088026922	1	-1.389748563
AQP1	NM_198098.1:1230	NM_198098	358	ENSG00000240583	0.089300919	1	-1.536418438
TNFSF10	NM_003810.2:115	NM_003810	8743	ENSG00000121858	0.089711311	1	-1.759645881
CCL5	NM_002985.2:280	NM_002985	6352	ENSG00000271503	0.090320229	1	1.541844424
CAV1	NM_001753.3:434	NM_001753	857	ENSG00000105974	0.09138636	1	-1.721815508
MAPK1	NM_138957.2:430	NM_138957	5594	ENSG00000100030	0.092176967	1	-1.382573762
ZC3H14	NM_001160103.1:2690	NM_001160103	79882	ENSG00000100722	0.092802479	1	-1.344348526
GREM1	NM_013372.5:575	NM_013372	26585	ENSG00000166923	0.094554603	1	4.220662379
TNF	NM_000594.2:1010	NM_000594	7124	ENSG00000232810	0.096182986	1	-2.143411651
MET	NM_001127500.1:1925	NM_001127500	4233	ENSG00000105976	0.096570682	1	-1.479858805
EPHB3	NM_004443.3:3485	NM_004443	2049	ENSG00000182580	0.097329951	1	2.703255033
MEOX2	NM_005924.4:1184	NM_005924	4223	ENSG00000106511	0.09755951	1	1.999147706
IFNG	NM_000619.2:970	NM_000619	3458	ENSG00000111537	0.097567429	1	-3.213975175
SMAD2	NM_005901.5:1678	NM_005901	4087	ENSG00000175387	0.099269744	1	-1.279223492
MUC1	NM_001018017.1:725	NM_001018017	4582	ENSG00000185499	0.099270209	1	-3.429991505
HSP90B1	NM_003299.1:160	NM_003299	7184	ENSG00000166598	0.100250835	1	1.263584693
POSTN	NM_001135935.1:910	NM_001135935	10631	ENSG00000133110	0.101483644	1	2.877721224
CD34	NM_001773.2:2050	NM_001773	947	ENSG00000174059	0.10326976	1	1.543557226
SLC12A6	NM_001042494.1:3962	NM_001042494	9990	ENSG00000140199	0.103313421	1	-1.555925012
PLCG1	NM_002660.2:2290	NM_002660	5335	ENSG00000124181	0.10389109	1	1.406649399
NID2	NM_007361.3:1995	NM_007361	22795	ENSG00000087303	0.105590243	1	1.936463867
HOXB3	NM_002146.4:2840	NM_002146	3213	ENSG00000120093	0.106895395	1	1.531274333
LTBP4	NM_003573.2:3644	NM_003573	8425	ENSG00000090006	0.107511682	1	1.39988892
CTSH	NM_148979.2:800	NM_148979	1512	ENSG00000103811	0.109232129	1	-2.659282546
CD46	NM_172350.1:365	NM_172350	4179	ENSG00000117335	0.109658376	1	-1.643518891
ID2	NM_002166.4:505	NM_002166	3398	ENSG00000115738	0.109944561	1	-1.489558825
DESI1	NM_015704.2:2880	NM_015704	27351	ENSG00000100418	0.110720984	1	-1.330959261
ADAM15	NM_207195.1:1355	NM_207195	8751	ENSG00000143537	0.111285775	1	1.540155774
S100A14	NM_020672.1:460	NM_020672	57402	ENSG00000189334	0.112494459	1	-1.690852307
DHX16	NM_001164239.1:2490	NM_001164239	8449	ENSG00000204560	0.11338822	1	1.193773952
ASPN	NM_017680.3:175	NM_017680	54829	ENSG00000106819	0.115526441	1	3.22205444
SDC4	NM_002999.2:1310	NM_002999	6385	ENSG00000124145	0.115526887	1	-1.736393497
EPCAM	NM_002354.1:415	NM_002354	4072	ENSG00000119888	0.115978108	1	-1.317102196
SMAD3	NM_005902.3:4220	NM_005902	4088	ENSG00000166949	0.116649243	1	1.250306701
HDAC5	NM_005474.4:3160	NM_005474	10014	ENSG00000108840	0.119318572	1	1.595646057
CD2AP	NM_012120.2:1895	NM_012120	23607	ENSG00000198087	0.122028646	1	-1.135484139
RP56KB2	NM_003952.2:980	NM_003952	6199	ENSG00000175634	0.122194321	1	1.754703261
MAP2K2	NM_030662.3:839	NM_030662	5605	ENSG00000126934	0.123126504	1	1.947431892
NME1	NM_000269.2:500	NM_000269	4830	ENSG00000239672	0.123397162	1	1.333810265
SLC44A4	NM_032794.1:1798	NM_032794			0.124864063	1	2.630277701
COG7	NM_153603.3:1492	NM_153603	91949	ENSG00000168434	0.127558983	1	1.233175774
APOH	NM_000042.2:582	NM_000042	350	ENSG00000091583	0.127806412	1	-1.909960439
TMEM100	NM_018286.2:655	NM_018286	55273	ENSG00000166292	0.130536165	1	-2.346082219
ITGA9	NM_002207.2:2380	NM_002207	3680	ENSG00000144668	0.131973392	1	1.826419416
CYB561	NM_001915.3:1065	NM_001915	1534	ENSG00000008283	0.133173024	1	1.518854557
ERBB2	NM_001005862.1:1255	NM_001005862	2064	ENSG00000141736	0.134802073	1	1.459306498
NR4A3	NM_173198.1:2590	NM_173198	8013	ENSG00000119508	0.135373595	1	-2.003845102
ELK3	NM_005230.2:905	NM_005230	2004	ENSG00000111145	0.135832134	1	1.474366338
NF2	NM_181825.2:442	NM_181825	4771	ENSG00000186575	0.138231382	1	1.368051269
AGGF1	NM_018046.3:35	NM_018046	55109	ENSG00000164252	0.138917634	1	1.331809746
SNRPF	NM_003095.2:225	NM_003095	6636	ENSG00000139343	0.140394328	1	-1.240550683
PPP1R16B	NM_015568.2:2860	NM_015568	26051	ENSG00000101445	0.140653803	1	-1.543896195
MMP12	NM_002426.3:769	NM_002426	4321	ENSG00000262406	0.142398622	1	2.406480973
BMP5	NM_021073.2:1570	NM_021073	653	ENSG00000112175	0.142979678	1	1.424685386
CCL8	NM_005623.2:689	NM_005623	6355	ENSG00000108700	0.143312543	1	-2.423110719
STAB2	NM_017564.9:3000	NM_017564	55576	ENSG00000136011	0.143588213	1	2.169022938
SIRT1	NM_012238.4:1595	NM_012238	23411	ENSG00000096717	0.143639312	1	-1.312729797

SACS	NM_014363.4:1475	NM_014363	26278	ENSG00000151835	0.144612368	1	1.386205677
TMEM30B	NM_001017970.2:2420	NM_001017970	161291	ENSG00000182107	0.148108857	1	-1.246263109
SH3YL1	NM_001159597.1:216	NM_001159597	26751	ENSG00000035115	0.148380708	1	2.029741269
CGN	NM_020770.2:1112	NM_020770	57530	ENSG00000143375	0.149414845	1	-1.591973122
MYLK	NM_053032.2:710	NM_053032	4638	ENSG00000065534	0.149710971	1	1.536135386
RBL1	NM_183404.1:1110	NM_183404	5933	ENSG00000080839	0.150362902	1	1.199143229
EP300	NM_001429.2:715	NM_001429	2033	ENSG00000100393	0.154657763	1	-1.468043612
PLA2G2A	NM_000300.2:715	NM_000300	5320	ENSG00000188257	0.154827624	1	2.84328509
HGF	NM_000601.4:550	NM_000601	3082	ENSG00000019991	0.156560298	1	1.436734584
BAD	NM_004322.3:963	NM_004322	572	ENSG0000002330	0.157742158	1	1.697751126
PTGS2	NM_000963.1:495	NM_000963	5743	ENSG00000073756	0.159875792	1	-1.763877724
SOD1	NM_000454.4:35	NM_000454	6647	ENSG00000142168	0.160617921	1	1.86704047
TNS1	NM_022648.4:6080	NM_022648	7145	ENSG00000079308	0.160876192	1	-1.632253476
PLAUR	NM_001005376.1:440	NM_001005376	5329	ENSG00000011422	0.161332014	1	-1.293549569
EPS8L1	NM_017729.3:1914	NM_017729	54869	ENSG00000131037	0.162049494	1	1.936459042
HPSE	NM_006665.3:1625	NM_006665	10855	ENSG00000173083	0.162096535	1	-1.940975021
HOXA5	NM_019102.2:895	NM_019102	3202	ENSG00000106004	0.163478712	1	-1.420757514
CTSG	NM_001911.2:160	NM_001911	1511	ENSG00000100448	0.164712552	1	2.289051734
SMURF2	NM_022739.3:2605	NM_022739	64750	ENSG00000108854	0.165374379	1	-1.295396528
F11R	NM_144503.1:3650	NM_144503	50848	ENSG00000158769	0.166636277	1	-1.445916183
DPYSL3	NM_001387.2:4790	NM_001387	1809	ENSG00000113657	0.166914885	1	1.40452204
ZC3H12A	NM_025079.2:2140	NM_025079	80149	ENSG00000163874	0.168585082	1	-1.870316684
LDHA	NM_001165414.1:1690	NM_001165414	3939	ENSG00000134333	0.169579999	1	-1.179365259
SMURF1	NM_181349.1:5162	NM_181349	57154	ENSG00000198742	0.169990661	1	-1.162796272
IGFBP4	NM_001552.2:1520	NM_001552	3487	ENSG00000141753	0.171702889	1	1.781266398
PPP2CB	NM_001009552.1:1075	NM_001009552	5516	ENSG00000104695	0.171965651	1	-1.297109301
ERCC3	NM_000122.1:1950	NM_000122	2071	ENSG00000163161	0.172788339	1	1.416060661
TIMP2	NM_003255.4:1555	NM_003255	7077	ENSG00000035862	0.173948121	1	1.557164058
PLAU	NM_002658.2:793	NM_002658	5328	ENSG00000122861	0.177214422	1	1.533548605
AP1M2	NM_005498.4:78	NM_005498	10053	ENSG00000129354	0.177937097	1	-1.326744938
ITGB7	NM_000889.1:1278	NM_000889	3695	ENSG00000139626	0.178131507	1	1.41732516
CLU	NM_203339.2:1376	NM_203339			0.180266157	1	1.781718594
CBLC	NM_012116.3:652	NM_012116	23624	ENSG00000142273	0.181642889	1	1.478334245
FSTL1	NM_007085.4:1610	NM_007085	11167	ENSG00000163430	0.183145486	1	1.863076107
HDHD3	NM_031219.2:616	NM_031219	81932	ENSG00000119431	0.18338072	1	1.351450383
TP53	NM_000546.2:1330	NM_000546	7157	ENSG00000141510	0.184187698	1	1.305005196
RBL2	NM_005611.3:1310	NM_005611	5934	ENSG00000103479	0.18591743	1	-1.349244328
ISL1	NM_002202.2:1375	NM_002202	3670	ENSG00000016082	0.186866133	1	-4.749335576
PTX3	NM_002852.3:1152	NM_002852	5806	ENSG00000163661	0.187062216	1	2.220800067
SLIT2	NM_004787.1:2430	NM_004787	9353	ENSG00000145147	0.187277833	1	-1.778153866
TYMP	NM_001953.3:719	NM_001953	1890	ENSG00000025708	0.188059309	1	1.445077137
PIK3R1	NM_181504.2:1105	NM_181504	5295	ENSG00000145675	0.188552484	1	1.357421685
MAPKAPK3	NM_004635.3:415	NM_004635	7867	ENSG00000114738	0.188946565	1	1.196195053
FGFR1	NM_015850.2:1335	NM_015850	2260	ENSG00000077782	0.190957006	1	1.353770468
SPP1	NM_000582.2:760	NM_000582	6696	ENSG00000118785	0.191760535	1	2.40577372
QKI	NM_006775.2:838	NM_006775	9444	ENSG00000112531	0.191914324	1	-1.572209603
CDS1	NM_001263.3:3052	NM_001263	1040	ENSG00000163624	0.192604534	1	-1.543804797
ESRP1	NM_001034915.2:1515	NM_001034915	54845	ENSG00000104413	0.193343132	1	-1.376457098
CALCR1	NM_005795.3:1585	NM_005795	10203	ENSG00000064989	0.195851875	1	-2.093992479
RPS6KB1	NM_003161.2:310	NM_003161	6198	ENSG00000108443	0.196668581	1	-1.077343093
HUNK	NM_014586.1:1280	NM_014586	30811	ENSG00000142149	0.198600223	1	-1.505504985
KDM1A	NM_015013.3:2395	NM_015013	23028	ENSG00000004487	0.199407036	1	1.248578497
EIF4EBP1	NM_004095.3:363	NM_004095	1978	ENSG00000187840	0.203948957	1	-1.220980282
CYP1B1	NM_000104.3:1715	NM_000104	1545	ENSG00000138061	0.205259542	1	1.809180871
MMP24	NM_006690.3:1280	NM_006690	10893	ENSG00000125966	0.206379594	1	1.512861491
EGFR	NM_201282.1:360	NM_201282	1956	ENSG00000146648	0.206687261	1	-1.221789676
NFATC2	NM_012340.3:1815	NM_012340	4773	ENSG00000101096	0.206848507	1	1.33538773
VAMP8	NM_003761.3:260	NM_003761	8673	ENSG00000118640	0.207028291	1	-1.181598807
RTN4	NM_007008.2:275	NM_007008	57142	ENSG00000115310	0.207117993	1	-1.293334698
PGK1	NM_000291.2:1030	NM_000291	5230	ENSG00000102144	0.207773897	1	1.291203226
SERPINF1	NM_002615.4:888	NM_002615	5176	ENSG00000132386	0.208897362	1	2.013190033
GIMAP6	NR_024115.1:2175	NR_024115			0.209631037	1	-1.345292072
FXYD6	NM_001164831.1:875	NM_001164831	53826	ENSG00000137726	0.210222146	1	1.21591369
SLPI	NM_003064.2:330	NM_003064	6590	ENSG00000124107	0.212661462	1	-1.647250575
PTGIS	NM_000961.3:1409	NM_000961	5740	ENSG00000124212	0.214358175	1	1.321677853
TNMD	NM_022144.2:462	NM_022144	64102	ENSG00000000005	0.215241071	1	-2.959193024
TNFSF13	NM_003808.3:810	NM_003808	8741	ENSG00000161955	0.215353515	1	2.564285135
GRHL2	NM_024915.3:3690	NM_024915	79977	ENSG00000083307	0.215635171	1	-1.399911543
CDC42	NM_001039802.1:390	NM_001039802	998	ENSG00000070831	0.21617843	1	-1.273497418
SMAD1	NM_005900.2:1850	NM_005900	4086	ENSG00000170365	0.216893404	1	1.398171658
SPINK5	NM_006846.3:2595	NM_006846	11005	ENSG00000133710	0.217185635	1	-1.676958346
TPSD1	NM_012217.2:585	NM_012217	23430	ENSG00000095917	0.217985587	1	2.740799471
ITGB4	NM_001005731.1:4151	NM_001005731	3691	ENSG00000132470	0.218236328	1	2.124259705
MYO1D	NM_015194.1:616	NM_015194	4642	ENSG00000176658	0.22597285	1	-1.214263127
TLR4	NR_024168.1:2575	NR_024168			0.226832518	1	-1.280244326
ADAM17	NM_003183.4:1595	NM_003183	6868	ENSG00000151694	0.22833044	1	1.211788248
ATPIF1	NM_178190.2:334	NM_178190	93974	ENSG00000130770	0.230147644	1	-1.221735583
MAP2K4	NM_003010.2:2830	NM_003010	6416	ENSG00000065559	0.230687358	1	-1.182149204



AKT3	NM_005465.4:287	NM_005465	10000	ENSG00000117020	0.231378092	1	-1.44270609
CXCL17	NM_198477.1:440	NM_198477	284340	ENSG00000189377	0.231718431	1	-1.499763345
MAP2K1	NM_002755.2:970	NM_002755	5604	ENSG00000169032	0.233270115	1	-1.144845781
INHBA	NM_002192.2:490	NM_002192	3624	ENSG00000122641	0.236071219	1	1.719749739
MRC1	NM_002438.2:2693	NM_002438	4360	ENSG00000260314	0.237989767	1	-1.41585749
RBPJ	NM_015874.3:850	NM_015874	3516	ENSG00000168214	0.238100087	1	-1.216975267
TIE1	NM_005424.2:2610	NM_005424	7075	ENSG00000066056	0.238226381	1	1.393244365
KDR	NM_002253.2:1420	NM_002253	3791	ENSG00000128052	0.240672159	1	-1.370834772
ITGB8	NM_002214.2:2609	NM_002214	3696	ENSG00000105855	0.240817426	1	1.403297227
SRPK2	NM_182692.1:340	NM_182692	6733	ENSG00000135250	0.240821571	1	1.171912553
SMAD9	NM_001127217.2:1152	NM_001127217	4093	ENSG00000120693	0.241082521	1	1.260278604
PLEKHO1	NM_016274.4:475	NM_016274	51177	ENSG00000023902	0.242752632	1	1.114936108
EDN1	NM_001955.2:770	NM_001955	1906	ENSG00000078401	0.243622803	1	1.303414274
LRG1	NM_052972.2:1480	NM_052972	116844	ENSG00000171236	0.243687313	1	-1.60591318
PLA2G3	NM_015715.3:2415	NM_015715	50487	ENSG00000100078	0.24386281	1	-2.406293369
PECAM1	NM_000442.3:1365	NM_000442	5175	ENSG00000261371	0.245324705	1	-2.227111355
PLXND1	NM_015103.2:3711	NM_015103	23129	ENSG00000004399	0.245505627	1	1.304764661
ERBB3	NM_001005915.1:420	NM_001005915	2065	ENSG00000065361	0.24561211	1	-1.341051676
ITGA5	NM_002205.2:925	NM_002205	3678	ENSG00000161638	0.245890919	1	-1.717413367
VASH1	NM_014909.4:552	NM_014909	22846	ENSG00000071246	0.24633308	1	1.507536709
EMP3	NM_001425.2:350	NM_001425	2014	ENSG00000142227	0.247367969	1	1.228497006
MYO5C	NM_018728.2:2400	NM_018728	55930	ENSG00000128833	0.247469997	1	-1.290086177
S100A7	NM_002963.2:69	NM_002963	6278	ENSG00000143556	0.24834383	1	-3.68210443
CCR3	NM_001837.2:980	NM_001837	1232	ENSG00000183625	0.25017667	1	-2.533390963
LHFP	NM_005780.2:460	NM_005780	10186	ENSG00000183722	0.251464346	1	1.268235531
CHRD1	NM_001143981.1:1120	NM_001143981	91851	ENSG00000101938	0.253629084	1	1.470530241
MAP3K7	NM_145333.1:670	NM_145333	6885	ENSG00000135341	0.253667317	1	1.13045332
PTEN	NM_000314.4:1351	NM_000314	5728	ENSG00000171862	0.253933989	1	1.268153386
CD24	NM_013230.2:1859	NM_013230	100133941	ENSG00000272398	0.255747516	1	1.364077873
EPHB4	NM_004444.4:1680	NM_004444	2050	ENSG00000196411	0.25656407	1	1.565819292
LAMA5	NM_005560.3:787	NM_005560	3911	ENSG00000130702	0.259586269	1	1.366401173
SLC37A1	NM_018964.3:810	NM_018964	54020	ENSG00000160190	0.261687831	1	-1.509653942
HOXB13	NM_006361.5:1220	NM_006361	10481	ENSG00000159184	0.262906381	1	-3.56018618
ADD1	NM_001119.4:622	NM_001119	118	ENSG00000087274	0.263665375	1	-1.863575756
HRAS	NM_005343.2:396	NM_005343	3265	ENSG00000174775	0.2650335	1	1.548229715
NTRK1	NM_001012331.1:1365	NM_001012331	4914	ENSG00000198400	0.269142414	1	2.46396195
PRR15L	NM_024320.2:1005	NM_024320	79170	ENSG00000167183	0.270614132	1	-1.472042985
SMOC1	NM_001034852.1:1990	NM_001034852	64093	ENSG00000198732	0.272371826	1	-1.943251691
ACHE	NM_000665.3:1057	NM_000665	43	ENSG00000087085	0.27324285	1	2.048698
TFDP1	NM_007111.4:1826	NM_007111	7027	ENSG00000198176	0.273279175	1	1.232269063
PDCL3	NM_024065.4:23	NM_024065	79031	ENSG00000115539	0.27469131	1	2.287710031
SPHK2	NM_020126.3:2443	NM_020126	56848	ENSG00000063176	0.279450071	1	1.87239677
TBXA2R	NM_001060.3:385	NM_001060	6915	ENSG00000006638	0.281164989	1	2.267923896
CXCR3	NM_001504.1:80	NM_001504	2833	ENSG00000186810	0.283918259	1	1.611152713
RUNX1	NM_001754.4:635	NM_001754	861	ENSG00000159216	0.286073662	1	1.364074227
ACVRL1	NM_000020.1:1710	NM_000020	94	ENSG00000139567	0.286990012	1	-1.32901214
SMC3	NM_005445.3:3525	NM_005445	9126	ENSG00000108055	0.288054731	1	-1.142067667
PIK3R6	NM_001010855.3:1112	NM_001010855	146850	ENSG00000276231	0.288782994	1	2.175741073
DST	NM_001723.4:1870	NM_001723	667	ENSG00000151914	0.289287432	1	1.282941697
GZMK	NM_002104.2:700	NM_002104	3003	ENSG00000113088	0.289745522	1	1.392976135
FGL2	NM_006682.2:250	NM_006682	10875	ENSG00000127951	0.290098818	1	1.192463179
PYCARD	NM_013258.3:714	NM_013258	29108	ENSG00000103490	0.291153491	1	1.279636905
PKM	NM_182471.1:2105	NM_182471	5315	ENSG00000067225	0.291922939	1	1.137796364
PTPRC	NM_080923.2:154	NM_080923			0.293249275	1	-1.226897677
GDF5	NM_000557.2:155	NM_000557	8200	ENSG00000125965	0.295674841	1	-2.406754847
MPDZ	NM_003829.4:6092	NM_003829	8777	ENSG00000107186	0.297001062	1	1.231804386
GPR124	NM_032777.9:1278	NM_032777	25960	ENSG00000020181	0.297086767	1	1.61631645
FMOD	NM_002023.3:2050	NM_002023	2331	ENSG00000122176	0.299015232	1	1.322773381
EGFL7	NM_016215.3:1252	NM_016215	51162	ENSG00000172889	0.302556835	1	1.564727788
ITGA3	NM_002204.2:4550	NM_002204	3675	ENSG00000005884	0.303856888	1	-1.215062364
CSPG4	NM_001897.4:7642	NM_001897	1464	ENSG00000173546	0.304213343	1	1.424311781
RAC2	NM_002872.3:1069	NM_002872	5880	ENSG00000128340	0.305990374	1	1.22167735
CHP1	XM_005254140.1:174	XM_005254140			0.307016906	1	2.284168085
ANG	NM_001145.4:949	NM_001145	283	ENSG00000214274	0.307324881	1	-1.272426218
SET	NM_001122821.1:2385	NM_001122821	6418	ENSG00000119335	0.307867481	1	-1.2319817
SH2B3	NM_005475.2:4285	NM_005475	10019	ENSG00000111252	0.308648225	1	-1.212927899
VEZF1	NM_007146.2:700	NM_007146	7716	ENSG00000136451	0.309892623	1	-1.218502446
BCAS1	NM_003657.2:2305	NM_003657	8537	ENSG00000064787	0.311510885	1	1.866158018
F3	NM_001993.3:1030	NM_001993	2152	ENSG00000117525	0.31882446	1	-1.228944762
DLL4	NM_019074.2:893	NM_019074	54567	ENSG00000128917	0.321387564	1	-1.33611558
NOL7	NM_016167.3:335	NM_016167	51406	ENSG00000225921	0.322422486	1	-1.44343175
IRF6	NM_006147.2:1430	NM_006147	3664	ENSG00000117595	0.323705894	1	-1.35748439
FOXC2	NM_005251.2:1389	NM_005251	2303	ENSG00000176692	0.324500056	1	2.00428594
NCAM1	NM_000615.5:1620	NM_000615	4684	ENSG00000149294	0.327555886	1	1.579924678
VCAN	NM_004385.3:9915	NM_004385	1462	ENSG00000038427	0.327829006	1	1.420694356
ROCK1	NM_005406.1:2660	NM_005406	6093	ENSG00000067900	0.328323475	1	1.141860128
SERPINE1	NM_001165413.1:1670	NM_001165413	5054	ENSG00000106366	0.329700093	1	1.532956974
VPS13A	NM_033305.2:8260	NM_033305	23230	ENSG00000197969	0.329943019	1	-1.356276808

VWA1	NM_199121.2:3664	NM_199121	64856	ENSG00000179403	0.330778058	1	2.106587199
CHD4	NM_001273.2:2680	NM_001273	1108	ENSG00000111642	0.331705366	1	-1.231512338
EGF	NM_001963.4:1022	NM_001963	1950	ENSG00000138798	0.333128378	1	-1.926503942
NDP	NM_000266.2:505	NM_000266	4693	ENSG00000124479	0.334132895	1	1.734883425
AGK	NM_018238.3:816	NM_018238	55750	ENSG00000006530	0.335551108	1	-1.291560341
PPP3R1	NM_000945.3:2385	NM_000945	5534	ENSG00000221823	0.335607161	1	1.136804299
KIAA1462	NM_020848.2:7395	NM_020848	57608	ENSG00000165757	0.336692689	1	-1.219404763
MTBP	NM_022045.4:1792	NM_022045	27085	ENSG00000172167	0.33891142	1	-1.464502669
HMOX1	NM_002133.2:781	NM_002133	3162	ENSG00000100292	0.339124	1	1.756203573
RGCC	NM_014059.2:765	NM_014059	28984	ENSG00000102760	0.342799508	1	-1.482427926
LAMC2	NM_005562.2:2819	NM_005562	3918	ENSG00000058085	0.344456556	1	-1.146778256
IL1A	NM_000575.3:1085	NM_000575	3552	ENSG00000115008	0.345871513	1	-1.66787284
MMP17	NM_016155.4:804	NM_016155	4326	ENSG00000198598	0.345916964	1	2.147935581
CCL11	NM_002986.2:378	NM_002986	6356	ENSG00000172156	0.347852762	1	-1.701833186
CEACAM1	NM_001712.3:2455	NM_001712	634	ENSG00000079385	0.347860507	1	-1.738629611
PIK3R5	NM_001142633.1:3335	NM_001142633	23533	ENSG00000141506	0.347888937	1	-1.19694564
HEG1	NM_020733.1:1890	NM_020733	57493	ENSG00000173706	0.348605722	1	-1.282730271
PDGFRB	NM_002609.3:840	NM_002609	5159	ENSG00000113721	0.351559461	1	1.290921106
NME4	NM_005009.2:820	NM_005009	4833	ENSG00000103202	0.352115711	1	1.387504895
SLC2A1	NM_006516.2:2500	NM_006516	6513	ENSG00000117394	0.355139712	1	1.513528292
FASLG	NM_000639.1:625	NM_000639	356	ENSG00000117560	0.35532726	1	-1.485017198
VIT	NM_053276.3:604	NM_053276	5212	ENSG00000205221	0.35537571	1	-1.754245643
ITGB1BP1	NM_004763.3:1690	NM_004763	9270	ENSG00000119185	0.356154329	1	-1.572815599
FIGF	NM_004469.2:580	NM_004469	2277	ENSG000001165197	0.35682876	1	-1.523638685
DNAJC14	NM_032364.5:1166	NM_032364	85406	ENSG00000135392	0.357843137	1	1.240226911
ENPP2	NM_001040092.2:1980	NM_001040092	5168	ENSG00000136960	0.3590976	1	1.415437226
ITGB6	NM_000888.3:1090	NM_000888	3694	ENSG00000115221	0.360530345	1	1.248218572
SNAI2	NM_003068.3:740	NM_003068	6591	ENSG0000019549	0.362081806	1	1.802533196
ANGPT2	NM_001147.2:1775	NM_001147	285	ENSG00000091879	0.362142863	1	1.410765675
SPOCK3	NM_001204355.1:730	NM_001204355	50859	ENSG00000196104	0.365883746	1	-2.050732095
NRXN1	NM_138735.2:1095	NM_138735	9378	ENSG00000179915	0.367109794	1	-2.145048641
ENO1	NM_001428.2:1689	NM_001428	2023	ENSG00000074800	0.367807722	1	-1.207671068
PIK3CG	NM_002649.2:2125	NM_002649	5294	ENSG00000105851	0.3696027	1	1.171254119
ADAMTS1	NM_006988.3:2840	NM_006988	9510	ENSG00000154734	0.371435941	1	-1.379064356
CEP295	NM_033395.1:3775	NM_033395	85459	ENSG00000166004	0.373587628	1	-1.233403035
PRELP	NM_002725.3:5250	NM_002725	5549	ENSG00000188783	0.374373143	1	-1.322852637
MMP2	NM_004530.2:2360	NM_004530	4313	ENSG00000087245	0.376467145	1	1.473758404
SOX2	NM_003106.2:151	NM_003106	6657	ENSG00000181449	0.377516446	1	1.913048707
FLI1	NM_001167681.2:1406	NM_001167681	2313	ENSG00000151702	0.377683977	1	-1.227912753
SNAI3	NM_178310.1:820	NM_178310	333929	ENSG00000185669	0.378186585	1	2.073867212
DDR2	NM_006182.2:1706	NM_006182	4921	ENSG00000162733	0.37990054	1	1.19473295
BMP4	NM_001202.3:395	NM_001202	652	ENSG00000125378	0.383984832	1	1.390046843
LEFTY1	NM_020997.2:1405	NM_020997	10637	ENSG00000243709	0.384386258	1	-1.755623911
STAT3	NM_139276.2:4535	NM_139276	6774	ENSG00000168610	0.384829868	1	1.179078393
PXDN	NM_012293.1:1960	NM_012293	7837	ENSG00000130508	0.385099917	1	1.377098374
C1S	NM_001734.2:775	NM_001734	716	ENSG00000182326	0.386402049	1	1.390833426
PRSS22	NM_022119.3:499	NM_022119	64063	ENSG00000005001	0.386853753	1	1.575192272
RAC1	NM_198829.1:1250	NM_198829	5879	ENSG00000136238	0.38716041	1	-1.408475222
ZEB1	NM_001128128.1:1450	NM_001128128	6935	ENSG00000148516	0.387594852	1	1.121969745
IL11	NM_000641.2:1145	NM_000641	3589	ENSG00000095752	0.391741611	1	2.325818478
OAS1	NM_001032409.1:805	NM_001032409	4938	ENSG00000089127	0.39318832	1	1.301335034
KISS1	NM_002256.3:125	NM_002256	3814	ENSG00000170498	0.397640647	1	-2.113338142
CASP8	NM_001228.4:301	NM_001228	841	ENSG00000064012	0.397768273	1	1.090905079
LY96	NM_015364.2:360	NM_015364	23643	ENSG00000154589	0.400651096	1	1.266404295
ITGA6	NM_000210.1:3065	NM_000210	3655	ENSG00000091409	0.401499816	1	-1.179630218
KRIT1	NM_004912.3:2648	NM_004912	889	ENSG00000001631	0.402164049	1	-1.278729143
BMPR1A	NM_004329.2:1720	NM_004329	657	ENSG00000107779	0.403429868	1	1.198904443
EIF2AK3	NM_004836.5:938	NM_004836	9451	ENSG00000172071	0.409974744	1	1.121700841
AGR2	NM_006408.3:580	NM_006408	10551	ENSG00000106541	0.414439204	1	-1.386627398
SMAD5	NM_005903.5:1044	NM_005903	4090	ENSG00000113658	0.415714448	1	-1.154260448
CX3CL1	NM_002996.3:140	NM_002996	6376	ENSG00000006210	0.416349229	1	-1.322919941
CXCR4	NM_003467.2:1335	NM_003467	7852	ENSG00000121966	0.418291219	1	1.283754198
TJP2	NM_004817.2:2785	NM_004817	9414	ENSG00000119139	0.419371719	1	-1.110003814
KRT1	NM_006121.2:690	NM_006121	3848	ENSG00000167768	0.420930565	1	-1.646776069
NODAL	NM_018055.3:320	NM_018055	4838	ENSG00000156574	0.424120205	1	-2.224206341
CSF2RB	NM_000395.2:492	NM_000395	1439	ENSG00000100368	0.42581071	1	1.424968694
IL15	NM_172174.1:1685	NM_172174	3600	ENSG00000164136	0.430170921	1	-1.28509389
SPDEF	NM_012391.1:1335	NM_012391	25803	ENSG00000124664	0.430534255	1	2.012019579
CC2D1B	NM_032449.2:4182	NM_032449	200014	ENSG00000154222	0.432070645	1	-1.418039428
FBLN1	NM_006487.2:965	NM_006487	2192	ENSG00000077942	0.432425358	1	1.440769611
ADAMTS12	NM_030955.2:1955	NM_030955	81792	ENSG00000151388	0.432632351	1	1.234989874
C3AR1	NM_004054.2:415	NM_004054	719	ENSG00000171860	0.436383051	1	1.206565391
ECSCR	NM_001077693.3:168	NM_001077693	641700	ENSG00000249751	0.439724751	1	-1.339730756
CNOT10	NM_001256741.1:1962	NM_001256741	25904	ENSG00000182973	0.441429173	1	1.081831653
IL1RN	NM_000577.3:480	NM_000577	3557	ENSG00000136689	0.441906197	1	1.395079416
VAV2	NM_003371.3:2699	NM_003371	7410	ENSG00000160293	0.442687622	1	1.316640929
IBSP	NM_004967.3:876	NM_004967	3381	ENSG00000029559	0.443454927	1	-2.317620051
POPDC3	NM_022361.4:980	NM_022361	64208	ENSG00000132429	0.446304741	1	-1.860741382

MMP1	NM_002421.2:700	NM_002421	4312	ENSG00000196611	0.448327212	1	1.730304415
CUL1	NM_003592.2:1487	NM_003592	8454	ENSG00000055130	0.448440865	1	-1.099218061
ENO3	NM_001976.4:1368	NM_001976	2027	ENSG00000108515	0.448459015	1	1.332347212
BAI1	NM_001702.1:3640	NM_001702	575	ENSG00000181790	0.451869903	1	2.001447712
HDAC3	NM_003883.2:1455	NM_003883	8841	ENSG00000171720	0.452238084	1	-1.136619291
VEGFB	NM_003377.3:687	NM_003377	7423	ENSG00000173511	0.453042661	1	1.144542716
VWA2	NM_001272046.1:3148	NM_001272046	340706	ENSG00000165816	0.454042344	1	-1.246862835
NAP1L3	NM_004538.4:1070	NM_004538	4675	ENSG00000186310	0.454058187	1	1.327863693
CHI3L1	NM_001276.2:475	NM_001276	1116	ENSG00000133048	0.455601804	1	1.484913599
IL10RA	NM_001558.2:150	NM_001558	3587	ENSG00000110324	0.455756063	1	1.133277633
SYK	NM_003177.3:1685	NM_003177	6850	ENSG00000165025	0.456435166	1	-1.22845342
NCL	NM_005381.2:1492	NM_005381	4691	ENSG00000115053	0.457487785	1	-1.17695837
FGF9	NM_002010.2:1565	NM_002010	2254	ENSG00000102678	0.461554276	1	-1.542666305
FBLN5	NM_006329.3:2242	NM_006329	10516	ENSG00000140092	0.463912715	1	-1.291945713
ACVR1C	NM_145259.2:5168	NM_145259	130399	ENSG00000123612	0.465279521	1	-1.518922648
FGF2	NM_002006.4:620	NM_002006	2247	ENSG00000138685	0.465633572	1	-1.135039635
TDGF1	NM_003212.2:1567	NM_003212	6997	ENSG00000241186	0.467071789	1	-1.710238254
VSIG4	NM_001100431.1:160	NM_001100431	11326	ENSG00000155659	0.471123854	1	-1.218866615
FLT4	NM_002020.1:955	NM_002020	2324	ENSG00000037280	0.473234429	1	1.153709809
ADRA2B	NM_000682.4:2885	NM_000682	151	ENSG00000274286	0.475331471	1	1.799413316
ERBB2IP	NM_018695.2:3675	NM_018695	55914	ENSG00000112851	0.475833756	1	-1.100188795
NFKB1	NM_003998.2:1675	NM_003998	4790	ENSG00000109320	0.4787003	1	-1.102518261
PTK2	NM_153831.2:965	NM_153831	5747	ENSG00000169398	0.483865841	1	-1.301869089
NR3C1	NM_001018077.1:1665	NM_001018077	2908	ENSG00000113580	0.485089727	1	-1.194651677
BNC2	NM_017637.5:1800	NM_017637	54796	ENSG00000173068	0.486677159	1	1.27696401
ANPEP	NM_001150.1:2670	NM_001150	290	ENSG00000166825	0.487080056	1	-1.303695841
ALB	NM_000477.5:855	NM_000477	213	ENSG00000163631	0.487775741	1	1.460666018
SSTR2	NM_001050.2:1060	NM_001050	6752	ENSG00000180616	0.490437126	1	1.464975543
WWTR1	NM_001168278.1:1050	NM_001168278	25937	ENSG00000018408	0.491135128	1	-1.106221274
SPARCL1	NM_004684.4:2265	NM_004684	8404	ENSG00000152583	0.492511071	1	-1.442705339
TNFRSF12A	NM_016639.1:575	NM_016639	51330	ENSG00000006327	0.493757559	1	1.355067185
GSN	NM_000177.4:1075	NM_000177	2934	ENSG00000148180	0.494055849	1	1.161942162
ITGA2	NM_002203.2:475	NM_002203	3673	ENSG00000164171	0.494574463	1	1.241766459
LOXL2	NM_002318.2:40	NM_002318	4017	ENSG00000134013	0.494947852	1	1.682552515
CTSL	NM_001912.4:1072	NM_001912	1514	ENSG00000135047	0.49920163	1	-1.256733986
SRC	NM_005417.3:1410	NM_005417	6714	ENSG00000197122	0.500262906	1	1.314863057
CST7	NM_003650.3:525	NM_003650	8530	ENSG00000077984	0.50266075	1	-1.270186713
TMC6	NM_001127198.1:1266	NM_001127198	11322	ENSG00000141524	0.505667944	1	-1.429025806
GPATCH3	NM_022078.2:1685	NM_022078	63906	ENSG00000198746	0.506575156	1	1.334376158
TNFRSF1A	NM_001065.2:515	NM_001065	7132	ENSG00000067182	0.509437275	1	1.093895821
ITGAM	NM_000632.3:515	NM_000632	3684	ENSG00000169896	0.509551486	1	-1.199754964
TNN	NM_022093.1:3580	NM_022093	63923	ENSG00000120332	0.510622008	1	-1.606149851
MMRN2	NM_024756.2:3040	NM_024756	79812	ENSG00000173269	0.516911385	1	-1.152574766
ZKSCAN5	NM_014569.3:3688	NM_014569	23660	ENSG00000196652	0.518715312	1	-1.296062838
CDH13	NM_001220488.1:210	NM_001220488	1012	ENSG00000140945	0.522260246	1	-1.416359307
MMP13	NM_002427.2:951	NM_002427	4322	ENSG00000137745	0.523490169	1	-1.666502204
PIK3CA	NM_006218.2:2445	NM_006218	5290	ENSG00000121879	0.526487293	1	1.067940015
MED23	NM_004830.2:640	NM_004830	9439	ENSG00000112282	0.527491483	1	-1.185564206
EMILIN3	NM_052846.1:3113	NM_052846	90187	ENSG00000183798	0.531551966	1	1.384493617
ZNF143	NM_003442.5:925	NM_003442	7702	ENSG00000166478	0.532151623	1	-1.127353412
LUM	NM_002345.3:1285	NM_002345	4060	ENSG00000139329	0.53312396	1	1.508315126
MGAT5	NM_002410.4:1233	NM_002410	4249	ENSG00000152127	0.534793735	1	1.07158614
GLYR1	NM_032569.3:1470	NM_032569	84656	ENSG00000140632	0.535917628	1	-1.124862022
HOXA7	NM_006896.3:1605	NM_006896	3204	ENSG00000122592	0.538920829	1	-1.517685267
FBN2	NM_001999.3:9850	NM_001999	2201	ENSG00000138829	0.539585868	1	-1.579705248
SRPX2	NM_014467.2:1420	NM_014467	27286	ENSG00000102359	0.541839185	1	1.17222642
SPINT1	NM_001032367.1:1315	NM_001032367	6692	ENSG00000166145	0.544869397	1	-1.099816555
DCC	NM_005215.1:3100	NM_005215	1630	ENSG00000187323	0.549411433	1	1.198592931
AKAP12	NM_005100.3:640	NM_005100	9590	ENSG00000131016	0.551704073	1	1.078983961
CLEC2B	NM_005127.2:980	NM_005127	9976	ENSG00000110852	0.553438011	1	1.075306897
BAG2	NM_004282.3:785	NM_004282	9532	ENSG00000112208	0.555314593	1	1.125391528
HIPK1	NM_152696.3:2105	NM_152696	204851	ENSG00000163349	0.555890896	1	-1.126972275
RB1	NM_000321.1:2110	NM_000321	5925	ENSG00000139687	0.557666238	1	-1.076617873
NRCAM	NM_005010.4:875	NM_005010	4897	ENSG00000091129	0.560501225	1	1.191661383
SLC35A3	NM_012243.1:605	NM_012243	23443	ENSG00000117620	0.560672158	1	-1.346185465
MMP3	NM_002422.3:25	NM_002422	4314	ENSG00000149968	0.560860123	1	-1.589932131
MCAM	NM_006500.2:2482	NM_006500	4162	ENSG00000076706	0.563484198	1	1.116020709
GDF6	NM_001001557.2:1908	NM_001001557	392255	ENSG00000156466	0.564050893	1	-1.827891345
PFKFB1	NM_002625.2:564	NM_002625	5207	ENSG00000158571	0.565394766	1	-1.474035396
SOX9	NM_000346.2:2135	NM_000346	6662	ENSG00000125398	0.569067049	1	-1.241503598
ERMP1	NM_024896.2:852	NM_024896	79956	ENSG00000099219	0.569325581	1	-1.147182348
CLDN3	NM_001306.3:606	NM_001306	1365	ENSG00000165215	0.569607936	1	1.520935107
PPFIBP2	NM_003621.2:2350	NM_003621	8495	ENSG00000166387	0.570746328	1	1.143042357
COL6A1	NM_001848.2:3665	NM_001848	1291	ENSG00000142156	0.572294096	1	1.13926309
ADAM9	NM_001005845.1:695	NM_001005845	8754	ENSG00000168615	0.574422431	1	1.16161387
ZFPM2	NM_012082.3:1850	NM_012082	23414	ENSG00000169946	0.576177596	1	-1.1486702
NAA15	NM_057175.3:4145	NM_057175	80155	ENSG00000164134	0.578154655	1	1.088271802
FOXO4	NM_005938.2:35	NM_005938	4303	ENSG00000184481	0.578321809	1	1.229803417

VHL	NM_000551.2:1280	NM_000551	7428	ENSG00000134086	0.580842111	1	1.096133374
SYNE1	NM_015293.1:7755	NM_015293	23345	ENSG00000131018	0.584895056	1	-1.164830966
MS4A6A	NM_152852.2:146	NM_152852	64231	ENSG00000110077	0.587501724	1	1.182265289
RAB25	NM_020387.2:245	NM_020387	57111	ENSG00000132698	0.588145094	1	-1.231468375
SHB	NM_003028.2:3200	NM_003028	6461	ENSG00000107338	0.59096831	1	-1.309917181
GIMAP4	NM_018326.2:315	NM_018326	55303	ENSG00000133574	0.597906654	1	-1.092127482
RUNX1T1	NM_004349.2:1085	NM_004349	862	ENSG00000079102	0.598840361	1	1.269450591
SNAI1	NM_005985.2:63	NM_005985	6615	ENSG00000124216	0.600693608	1	1.349122341
CTNNB1	NM_001098210.1:1815	NM_001098210	1499	ENSG00000168036	0.602709395	1	-1.165639525
DENR	NM_003677.3:2091	NM_003677	8562	ENSG00000139726	0.603082475	1	1.089841577
BTG1	NM_001731.2:775	NM_001731	694	ENSG00000133639	0.604015354	1	-1.170312748
SERPING1	NM_000062.2:305	NM_000062	710	ENSG00000149131	0.604313862	1	-1.220213789
MT3	NM_005954.2:165	NM_005954	4504	ENSG00000087250	0.606407594	1	1.75006263
DICER1	NM_177438.2:5060	NM_177438	23405	ENSG00000100697	0.607141912	1	1.100146543
AREG	NM_001657.2:547	NM_001657	374	ENSG00000109321	0.610571228	1	-1.26326751
PLXNC1	NM_005761.2:3705	NM_005761	10154	ENSG00000136040	0.611542472	1	-1.09968381
ROCK2	NM_004850.3:3140	NM_004850	9475	ENSG00000134318	0.611932925	1	1.099264991
AHNAK	NM_001620.2:14454	NM_001620	79026	ENSG00000124942	0.614798094	1	-1.146432875
INHBE	NM_031479.3:1450	NM_031479	83729	ENSG00000139269	0.61499431	1	-1.594601078
S1PR1	NM_001400.4:802	NM_001400	1901	ENSG00000170989	0.615149	1	-1.073741076
NOS3	NM_000603.4:1456	NM_000603	4846	ENSG00000164867	0.615442805	1	1.293045778
NF1	NM_000267.2:1035	NM_000267	4763	ENSG00000196712	0.61657756	1	1.182215229
SORD	NM_003104.4:1345	NM_003104	6652	ENSG00000140263	0.621572613	1	1.167015152
RHOA	NM_001664.2:1230	NM_001664	387	ENSG00000067560	0.622186492	1	-1.171918413
UBA52	NM_003333.3:288	NM_003333	7311	ENSG00000221983	0.625467658	1	1.102650803
C3	NM_000064.2:4396	NM_000064	718	ENSG00000125730	0.62590863	1	-1.256028599
ADAM8	NM_001109.4:762	NM_001109	101	ENSG00000151651	0.627937608	1	-1.097450832
THBS1	NM_003246.2:3465	NM_003246	7057	ENSG00000137801	0.630765171	1	-1.269322973
PROM1	NM_006017.1:925	NM_006017	8842	ENSG00000007062	0.633788733	1	1.253050583
VAV3	NM_001079874.1:352	NM_001079874	10451	ENSG00000134215	0.635548982	1	-1.084135114
RPS27A	NM_002954.5:650	NM_002954	6233	ENSG00000143947	0.636334251	1	1.144174196
ST14	NM_021978.3:1405	NM_021978	6768	ENSG00000149418	0.636909315	1	1.178878235
TAL1	NM_003189.2:4635	NM_003189	6886	ENSG00000162367	0.639331535	1	-1.142435665
FHL1	NM_001449.4:1032	NM_001449	2273	ENSG00000022267	0.641911372	1	1.146227394
EPHA2	NM_004431.2:1525	NM_004431	1969	ENSG00000142627	0.643313158	1	-1.15645278
TCEB2	NM_007108.2:800	NM_007108	6923	ENSG00000103363	0.64450542	1	1.218437498
CXCL10	NM_001565.1:40	NM_001565	3627	ENSG00000169245	0.645475617	1	-1.229921228
NOX5	NM_024505.2:2135	NM_024505	79400	ENSG00000255346	0.646259217	1	-1.386816056
EMCN	NM_016242.3:160	NM_016242	51705	ENSG00000164035	0.64767779	1	-1.210444505
FUT3	NM_000149.3:2342	NM_000149	2525	ENSG00000171124	0.650703488	1	-1.420214637
HSD17B12	NM_016142.2:1000	NM_016142	51144	ENSG00000149084	0.651413412	1	-1.115778453
HIF1A	NM_001530.2:1985	NM_001530	3091	ENSG00000100644	0.653693563	1	1.058032989
FCF1	NM_015962.4:1022	NM_015962	51077	ENSG00000119616	0.653947778	1	-1.204965509
VIM	NM_003380.2:694	NM_003380	7431	ENSG00000026025	0.657987234	1	1.137666559
SRGN	NR_036430.1:65	NR_036430			0.661015416	1	-1.225390387
CCBE1	NM_133459.3:310	NM_133459	147372	ENSG00000183287	0.664312665	1	-1.1476106
PKN1	NM_213560.1:2153	NM_213560	5585	ENSG00000123143	0.665133986	1	-1.161527373
TWIST2	NM_057179.2:482	NM_057179	117581	ENSG00000233608	0.669152029	1	1.205525212
AKT1	NM_005163.2:1772	NM_005163	207	ENSG00000142208	0.67160427	1	-1.189913788
KRT19	NM_002276.4:96	NM_002276	3880	ENSG00000171345	0.674117062	1	1.181813082
APOD	NM_001647.3:613	NM_001647	347	ENSG00000189058	0.674472155	1	1.198363708
ALOX5	NM_000698.2:735	NM_000698	240	ENSG00000012779	0.675583182	1	-1.077098663
EDC3	NM_001142443.1:925	NM_001142443	80153	ENSG00000179151	0.6761627	1	-1.087816358
CD82	NM_002231.3:1211	NM_002231	3732	ENSG00000085117	0.681405607	1	1.101114547
KRT7	NM_005556.3:1425	NM_005556	3855	ENSG00000135480	0.681563973	1	-1.093690491
MS4A4A	NM_024021.2:800	NM_024021	51338	ENSG00000110079	0.682240259	1	-1.093699695
CIB1	NM_001277764.1:530	NM_001277764	10519	ENSG00000185043	0.683037593	1	1.057920508
ENO2	NM_001975.2:1855	NM_001975	2026	ENSG00000111674	0.685823834	1	-1.035252083
ITGA8	NM_003638.1:1215	NM_003638	8516	ENSG00000077943	0.687066175	1	-1.075633663
SCG2	NM_003469.3:1400	NM_003469	7857	ENSG00000171951	0.687934918	1	1.256765977
CLIC4	NM_013943.2:1702	NM_013943	25932	ENSG00000169504	0.689901365	1	-1.16316249
FGFR2	NM_000141.4:647	NM_000141	2263	ENSG00000066468	0.692001748	1	1.15928977
CHRNA7	NR_046324.1:194	NR_046324	1139	ENSG00000175344	0.692289225	1	1.376382539
NUBP1	NM_001278506.1:304	NM_001278506	4682	ENSG00000103274	0.694543822	1	-1.093747568
SFRP1	NM_003012.3:3320	NM_003012	6422	ENSG00000104332	0.697869621	1	1.238287451
CYBB	NM_000397.3:2686	NM_000397	1536	ENSG00000165168	0.698883461	1	-1.134087185
MMP14	NM_004995.2:1470	NM_004995	4323	ENSG00000157227	0.70063689	1	1.175943271
TSPAN1	NM_005727.2:115	NM_005727	10103	ENSG00000117472	0.700666318	1	1.295052261
ARHGAP32	NM_001142685.1:2100	NM_001142685	9743	ENSG00000134909	0.701289006	1	-1.045800933
LOX	NM_002317.4:1575	NM_002317	4015	ENSG00000113083	0.701755761	1	1.20701815
VEGFC	NM_005429.2:565	NM_005429	7424	ENSG00000150630	0.702125138	1	-1.103587313
NRP2	NM_003872.2:805	NM_003872	8828	ENSG00000118257	0.702971359	1	-1.122134122
PRSS8	NM_002773.3:917	NM_002773	5652	ENSG00000052344	0.705894579	1	-1.229339638
MAPK3	NM_001040056.1:580	NM_001040056	5595	ENSG00000102882	0.709426903	1	-1.131994963
BMPER	NM_133468.4:476	NM_133468	168667	ENSG00000164619	0.710309534	1	-1.092098736
TGFBR2	NM_001024847.1:1760	NM_001024847	7048	ENSG00000163513	0.71051714	1	-1.115083446
CAMP	NM_004345.3:220	NM_004345	820	ENSG00000164047	0.711927081	1	-1.305147268
ADM2	NM_001253845.1:610	NM_001253845	79924	ENSG00000128165	0.712661716	1	1.440754208

WIPF1	NM_001077269.1:1660	NM_001077269	7456	ENSG00000115935	0.714688725	1	1.08177572
EIF4E2	NM_004846.3:670	NM_004846	9470	ENSG00000135930	0.717310271	1	1.057523896
KLK3	NM_001030049.1:433	NM_001030049	354	ENSG00000142515	0.718087434	1	-1.387097431
ADAP1	NM_006869.2:570	NM_006869	11033	ENSG00000105963	0.719627419	1	1.214176853
AMH	NM_000479.3:1626	NM_000479	268	ENSG00000104899	0.722329382	1	1.416250621
JAG1	NM_000214.2:915	NM_000214	182	ENSG00000101384	0.723082038	1	-1.088337781
CLDN4	NM_001305.3:1242	NM_001305	1364	ENSG00000189143	0.726057147	1	-1.131879396
TMUB2	NM_024107.2:1485	NM_024107	79089	ENSG00000168591	0.726294104	1	1.043775966
LAMC1	NM_002293.3:4915	NM_002293	3915	ENSG00000135862	0.726454708	1	-1.071771079
UTS2	NM_006786.3:354	NM_006786	10911	ENSG0000049247	0.729412759	1	-1.317371084
NOTCH1	NM_017617.3:735	NM_017617	4851	ENSG00000148400	0.73324271	1	1.13934282
ACVR1	NM_001105.2:1665	NM_001105	90	ENSG00000115170	0.736068505	1	-1.134277452
GATA4	NM_002052.3:2140	NM_002052	2626	ENSG00000136574	0.737297424	1	-1.371307098
NFAT5	NM_173214.1:3290	NM_173214	10725	ENSG00000102908	0.738756286	1	1.10260107
ENPEP	NM_001977.3:2940	NM_001977	2028	ENSG00000138792	0.73897919	1	1.170285356
PFKFB4	NM_004567.2:400	NM_004567	5210	ENSG00000114268	0.740147293	1	1.084688789
GALNT7	NM_017423.2:910	NM_017423	51809	ENSG00000109586	0.741870838	1	1.04994489
PDK1	NM_002610.3:401	NM_002610	5163	ENSG00000152256	0.742808027	1	1.12775413
PIK3CD	NM_005026.3:2978	NM_005026	5293	ENSG00000171608	0.743607461	1	-1.134917321
MTDH	NM_178812.3:828	NM_178812	92140	ENSG00000147649	0.744762043	1	-1.136526543
AMMECR1L	NM_001199140.1:3564	NM_001199140	83607	ENSG00000144233	0.746434494	1	-1.087763349
CEACAM5	NM_004363.2:1961	NM_004363	1048	ENSG00000105388	0.749325667	1	-1.347364686
DENND5A	NM_015213.2:4604	NM_015213	23258	ENSG00000184014	0.751195755	1	1.027943385
CREBBP	NM_001079846.1:4818	NM_001079846	1387	ENSG0000005339	0.754424241	1	1.079149627
MRP55	NM_031902.3:390	NM_031902	64969	ENSG00000144029	0.756261462	1	-1.037941524
TGFB1	NM_000358.2:2030	NM_000358	7045	ENSG00000120708	0.761827633	1	1.118657273
PNPLA6	NM_006702.3:3941	NM_006702	10908	ENSG00000032444	0.763583189	1	-1.104195632
SAMSN1	NM_022136.3:560	NM_022136	64092	ENSG00000155307	0.765251719	1	-1.058615188
MED1	NM_004774.3:806	NM_004774	5469	ENSG00000125686	0.767555795	1	-1.102775256
ETV4	NM_001079675.1:1535	NM_001079675	2118	ENSG00000175832	0.769091626	1	1.230687853
CKMT1A	NM_001015001.1:286	NM_001015001	548596	ENSG00000223572	0.769162395	1	1.329769666
CLEC3B	NM_003278.2:607	NM_003278	7123	ENSG00000163815	0.769576051	1	1.11336759
SERPINA1	NM_000295.4:760	NM_000295	5265	ENSG00000197249	0.772279905	1	-1.067027547
CCR2	NM_001123041.2:743	NM_001123041	729230	ENSG00000121807	0.777806373	1	1.09406244
TNFSF12	NM_003809.2:339	NM_003809	8742	ENSG00000239697	0.777979945	1	-1.168595109
GTF2I	NM_033001.2:920	NM_033001	2969	ENSG00000263001	0.779270597	1	-1.065846681
CFP	NM_002621.2:380	NM_002621	5199	ENSG00000126759	0.77933157	1	-1.134554843
SKP1	NM_170679.2:630	NM_170679	6500	ENSG00000113558	0.779901978	1	1.078676182
PTK2B	NM_004103.3:735	NM_004103	2185	ENSG00000120899	0.781049948	1	-1.039759192
FN1	NM_212482.1:1776	NM_212482	2335	ENSG00000115414	0.781730492	1	-1.286328626
ROBO4	NM_019055.5:3080	NM_019055	54538	ENSG00000154133	0.782034544	1	-1.118918688
TGFB2	NM_003238.2:1125	NM_003238	7042	ENSG00000092969	0.786622786	1	1.119041089
CAMK2A	NM_171825.1:4080	NM_171825	815	ENSG00000070808	0.786895057	1	-1.199052313
ITGA1	NM_181501.1:1875	NM_181501	3672	ENSG00000213949	0.787291797	1	-1.166025185
GJA5	NM_005266.5:1992	NM_005266	2702	ENSG00000265107	0.787440525	1	1.102760906
PRPF38A	NM_032864.3:335	NM_032864	84950	ENSG00000134748	0.790085172	1	-1.056256685
CLDN7	NM_001307.3:175	NM_001307	1366	ENSG00000181885	0.795024139	1	1.084291663
CDKN2A	NM_000077.3:975	NM_000077	1029	ENSG00000147889	0.798367768	1	1.117925589
BAI3	NM_001704.1:885	NM_001704	577	ENSG00000135298	0.799557534	1	-1.042536222
MYCL	NM_001033081.2:568	NM_001033081	4610	ENSG00000116990	0.802395847	1	1.236408073
CEP170	NM_001042404.1:1800	NM_001042404	9859	ENSG00000143702	0.804702906	1	-1.05877813
BMPR2	NM_001204.5:1875	NM_001204	659	ENSG00000204217	0.805089641	1	-1.072122823
FERMT2	NM_001135000.1:920	NM_001135000	10979	ENSG00000073712	0.807172994	1	1.047446391
TIMP1	NM_003254.2:329	NM_003254	7076	ENSG00000102265	0.80860491	1	1.171551527
TIMP4	NM_003256.2:1000	NM_003256	7079	ENSG00000157150	0.809328256	1	-1.161994016
TMPRSS6	NM_153609.2:2929	NM_153609	164656	ENSG00000187045	0.809915571	1	1.25396564
MGP	NM_000900.2:305	NM_000900	4256	ENSG00000111341	0.813771269	1	1.160271298
DLG1	NM_001098424.1:1460	NM_001098424	1739	ENSG00000075711	0.815254549	1	-1.024558853
RBX1	NM_014248.2:162	NM_014248	9978	ENSG00000100387	0.818317651	1	1.02425905
STAT1	NM_139266.1:455	NM_139266	6772	ENSG00000115415	0.821323594	1	1.079064632
TCEB1	NM_001204857.1:330	NM_001204857	6921	ENSG00000154582	0.821607764	1	-1.038799413
PTTG1	NM_004219.2:542	NM_004219	9232	ENSG00000164611	0.82486047	1	-1.09863726
FGFR4	NM_002011.3:1585	NM_002011	2264	ENSG00000160867	0.825970949	1	1.090093648
PLCG2	NM_002661.2:525	NM_002661	5336	ENSG00000197943	0.828011025	1	1.044986957
SELE	NM_000450.2:1505	NM_000450	6401	ENSG0000007908	0.828303785	1	-1.125142074
RRAS	NM_006270.3:330	NM_006270	6237	ENSG00000126458	0.830758684	1	-1.032305143
SH2D3A	NM_005490.2:412	NM_005490	10045	ENSG00000125731	0.833239273	1	-1.097331947
PKNOX1	NM_004571.3:3655	NM_004571	5316	ENSG00000160199	0.840296891	1	1.078779155
OVOL2	NM_021220.2:676	NM_021220	58495	ENSG00000125850	0.840951542	1	1.072182657
CHAD	NM_001267.2:810	NM_001267	1101	ENSG00000136457	0.84128179	1	1.214307593
CTNND1	NM_001331.2:146	NM_001331	1500	ENSG00000198561	0.842538694	1	-1.022249192
BMPR1B	NM_001203.1:430	NM_001203	658	ENSG00000138696	0.843455158	1	-1.11051923
FGFR3	NM_022965.2:3170	NM_022965	2261	ENSG00000068078	0.844690195	1	1.056729557
RORB	NM_006914.3:1840	NM_006914	6096	ENSG00000198963	0.845788205	1	-1.117848112
TBX4	NM_018488.2:1560	NM_018488	9496	ENSG00000121075	0.84606851	1	-1.06326532
APC	NM_000038.3:6850	NM_000038	324	ENSG00000134982	0.847957066	1	-1.064251473
EVI2A	NM_014210.3:564	NM_014210	2123	ENSG00000126860	0.849372657	1	-1.026145707
WARS	NM_004184.3:1851	NM_004184	7453	ENSG00000140105	0.855177241	1	-1.068167222

SOX17	NM_022454.3:1374	NM_022454	64321	ENSG00000164736	0.862593288	1	-1.095018284
NRXN3	NM_001105250.1:2286	NM_001105250	9369	ENSG00000021645	0.864471619	1	-1.075249974
EPHA1	NM_005232.3:2075	NM_005232	2041	ENSG00000146904	0.865723538	1	1.107050317
ILK	NM_004517.2:983	NM_004517	3611	ENSG00000166333	0.865862219	1	-1.059426011
TCF20	NM_005650.1:925	NM_005650	6942	ENSG00000100207	0.866257267	1	-1.023786932
DSC2	NM_024422.3:2200	NM_024422	1824	ENSG00000134755	0.866796486	1	1.040657144
BRMS1	NM_015399.3:469	NM_015399	25855	ENSG00000174744	0.874611706	1	1.013396506
PPP2R1A	NM_014225.3:1440	NM_014225	5518	ENSG00000105568	0.876490942	1	1.051901609
HKDC1	NM_025130.3:2267	NM_025130	80201	ENSG00000156510	0.884521575	1	-1.101167691
MYH11	NM_001040113.1:920	NM_001040113	4629	ENSG00000133392	0.888912341	1	1.044295886
ITGB2	NM_001127491.1:1103	NM_001127491	3689	ENSG00000160255	0.891646768	1	1.023619322
PITX2	NM_000325.5:1381	NM_000325	5308	ENSG00000164093	0.892540195	1	-1.166189023
RAF1	NM_002880.3:1444	NM_002880	5894	ENSG00000132155	0.893735913	1	1.008709864
CALD1	NM_004342.6:3862	NM_004342	800	ENSG00000122786	0.894657989	1	1.051622996
LAD1	NM_005558.3:1860	NM_005558	3898	ENSG00000159166	0.899206998	1	1.07340334
SETD2	NM_014159.6:1386	NM_014159	29072	ENSG00000181555	0.900302134	1	-1.010424476
CD163	NM_004244.4:1630	NM_004244	9332	ENSG00000177575	0.905792709	1	-1.047235497
KCNJ8	NM_004982.2:880	NM_004982	3764	ENSG00000121361	0.906162736	1	1.009152402
MMP9	NM_004994.2:1530	NM_004994	4318	ENSG00000100985	0.906965422	1	-1.090997455
JAM2	NM_001270407.1:840	NM_001270407	58494	ENSG00000154721	0.906989157	1	-1.022442283
PRF1	NM_005041.3:2120	NM_005041	5551	ENSG00000180644	0.909618993	1	1.03876315
TLK2	NM_006852.2:2335	NM_006852	11011	ENSG00000146872	0.9111795486	1	1.017630895
ACTG2	NM_001615.3:921	NM_001615	72	ENSG00000163017	0.91212285	1	1.040220212
B3GNT3	NM_014256.3:1625	NM_014256	10331	ENSG00000179913	0.914479073	1	1.073863363
CDKN1A	NM_000389.2:1975	NM_000389	1026	ENSG00000124762	0.915231142	1	1.023009969
PLA2G2D	NM_001271814.1:90	NM_001271814	26279	ENSG00000117215	0.916473624	1	1.072943862
CRISPLD2	NM_031476.3:2575	NM_031476	83716	ENSG00000103196	0.918217069	1	1.041837653
ZFYVE16	NM_001105251.2:2292	NM_001105251	9765	ENSG00000039319	0.919782713	1	-1.022187111
RAMP2	NM_005854.2:282	NM_005854	10266	ENSG00000131477	0.920555293	1	1.038039743
CHP2	NM_022097.3:1078	NM_022097	63928	ENSG00000166869	0.922266437	1	1.059497464
ZEB2	NM_014795.3:549	NM_014795	9839	ENSG00000169554	0.924618846	1	-1.031681988
CDK14	NM_012395.2:3645	NM_012395	5218	ENSG00000058091	0.927117118	1	1.011279574
HAS1	NM_001523.2:859	NM_001523	3036	ENSG00000105509	0.929830611	1	-1.07232674
ID4	NM_001546.2:588	NM_001546	3400	ENSG00000172201	0.932118881	1	1.028600145
ALDOA	NM_184041.2:1455	NM_184041	226	ENSG00000149925	0.932461634	1	1.013966689
ZNF346	NM_012279.2:2260	NM_012279	23567	ENSG00000113761	0.932732113	1	1.02489189
DDX50	NM_024045.1:1185	NM_024045	79009	ENSG00000107625	0.934580979	1	-1.015332825
ITGB1	NM_033666.2:2000	NM_033666	3688	ENSG00000150093	0.934848522	1	-1.032861706
TJP3	NM_014428.1:1925	NM_014428	27134	ENSG00000105289	0.942517014	1	-1.032466691
HK3	NM_002115.1:495	NM_002115	3101	ENSG00000160883	0.942705428	1	1.026464317
NPR1	NM_000906.2:3490	NM_000906	4881	ENSG00000169414	0.943658681	1	1.011980796
SRF	NM_003131.2:4040	NM_003131	6722	ENSG00000112658	0.946877318	1	1.015832351
SAP130	NM_024545.3:3090	NM_024545	79595	ENSG00000136715	0.950586929	1	1.008345385
PMP22	NM_000304.2:1644	NM_000304	5376	ENSG00000109099	0.953585197	1	1.008966953
MYC	NM_002467.3:1610	NM_002467	4609	ENSG00000136997	0.955416092	1	-1.016145074
ITM2A	NM_004867.4:988	NM_004867	9452	ENSG00000078596	0.959157666	1	-1.018802962
EPN3	NM_017957.2:2532	NM_017957	55040	ENSG00000049283	0.960220569	1	1.054194022
GPR56	NM_005682.4:1145	NM_005682	9289	ENSG00000205336	0.960836998	1	1.009223097
ABI3BP	NM_015429.3:4081	NM_015429	25890	ENSG00000154175	0.961648612	1	1.014962601
LLGL2	NM_001015002.1:1065	NM_001015002	3993	ENSG00000073350	0.962808519	1	-1.016798748
CNOT4	NM_001190848.1:795	NM_001190848	4850	ENSG00000080802	0.966048857	1	-1.004861192
LGALS1	NM_002305.3:60	NM_002305	3956	ENSG00000100097	0.966515593	1	1.018650013
PTK6	NM_005975.2:1715	NM_005975	5753	ENSG00000101213	0.969170275	1	-1.026665005
MISP	NM_173481.2:1845	NM_173481	126353	ENSG00000099812	0.97207387	1	1.013939233
NDRG1	NM_006096.2:565	NM_006096	10397	ENSG00000104419	0.978087703	1	-1.004774585
WNT5B	NM_032642.2:1745	NM_032642	81029	ENSG00000111186	0.979254598	1	-1.010389444
DAG1	NM_001165928.2:965	NM_001165928	1605	ENSG00000173402	0.97933107	1	1.002660897
GPX1	NM_000581.2:745	NM_000581	2876	ENSG00000233276	0.981823962	1	-1.005928257
EVPL	NM_001988.2:5525	NM_001988	2125	ENSG00000167880	0.983329862	1	1.007980078
SV2B	NM_001167580.1:2154	NM_001167580	9899	ENSG00000185518	0.990135682	1	-1.006760196
DCN	NM_001920.3:420	NM_001920	1634	ENSG00000011465	0.997810451	1	-1.001762997

Gene	Probe	RefSeq	Entrez	Ensembl	p-value	p-value bonferroni	Ingenuity fold-change
DLC1	NM_006094.3:5650	NM_006094	10395	ENSG00000164741	2.05472E-05	0.015677505	-2.988958059
MEG3	NR_002766.2:691	NR_002766	55384	ENSG00000214548	2.83759E-05	0.021650787	4.446631306
IGF1	NM_000618.3:491	NM_000618	3479	ENSG00000017427	4.31523E-05	0.03292518	5.530010983
SFRP2	NM_003013.2:840	NM_003013	6423	ENSG00000145423	5.44731E-05	0.041562969	10.22756063
PRKCZ	NM_002744.4:771	NM_002744	5590	ENSG00000067606	5.49138E-05	0.041899212	-2.505401388
EPAS1	NM_001430.3:4246	NM_001430	2034	ENSG00000116016	6.0066E-05	0.045830332	-3.983082821
COL7A1	NM_000094.2:390	NM_000094	1294	ENSG00000114270	7.0513E-05	0.05380143	5.631066941
RGCC	NM_014059.2:765	NM_014059	28984	ENSG00000102760	0.00012578	0.095970195	-3.495872829
TMPRSS2	NM_005656.3:1079	NM_005656	7113	ENSG00000184012	0.000136583	0.104212749	-2.936356771
THY1	NM_006288.2:135	NM_006288	7070	ENSG00000154096	0.00014078	0.107414866	5.231287726
LAMA3	NM_000227.3:4260	NM_000227	3909	ENSG00000053747	0.000143785	0.109708251	-2.626174275
COL1A1	NM_000088.3:4272	NM_000088	1277	ENSG00000108821	0.000151019	0.115227271	11.94048822
MAP2K1	NM_002755.2:970	NM_002755	5604	ENSG00000169032	0.000201312	0.153601045	-1.443047805
CX3CL1	NM_002996.3:140	NM_002996	6376	ENSG00000006210	0.00024619	0.187843216	-2.817531642
ICAM1	NM_000201.2:2253	NM_000201	3383	ENSG00000090339	0.000252728	0.192831533	-3.000774436
FIGF	NM_004469.2:580	NM_004469	2277	ENSG00000165197	0.000269632	0.205729469	-3.695419816
ID1	NM_002165.2:345	NM_002165	3397	ENSG00000125968	0.000402776	0.307318424	-3.065991511
PPP2CB	NM_001009552.1:1075	NM_001009552	5516	ENSG00000104695	0.000435863	0.33256369	-1.407599618
ERCC3	NM_000122.1:1950	NM_000122	2071	ENSG00000163161	0.000533814	0.407299999	1.424980143
ITGA7	NM_002206.1:1170	NM_002206	3679	ENSG00000135424	0.000559674	0.427031203	3.036138006
SPP1	NM_000582.2:760	NM_000582	6696	ENSG00000118785	0.000562832	0.42944076	15.47890327
P3H2	NM_018192.2:985	NM_018192	55214	ENSG00000090530	0.000624853	0.476762647	-4.331037843
PLXDC1	NM_020405.4:900	NM_020405	57125	ENSG00000161381	0.000637988	0.486784753	2.489559374
TJP2	NM_004817.2:2785	NM_004817	9414	ENSG00000119139	0.00067303	0.513521609	-1.480473387
COG7	NM_153603.3:1492	NM_153603	91949	ENSG00000168434	0.000699027	0.533357799	1.267480579
ACVRL1	NM_000020.1:1710	NM_000020	94	ENSG00000139567	0.000699151	0.533451859	-3.276188798
OCLN	NM_002538.3:1975	NM_002538	100506658	ENSG00000197822	0.000710457	0.542078375	-2.439483632
TWIST1	NM_000474.3:393	NM_000474	7291	ENSG00000122691	0.000745348	0.568700548	5.835140311
FLT1	NM_002019.4:530	NM_002019	2321	ENSG00000102755	0.00078072	0.595689102	-2.146956797
FBLN5	NM_006329.3:2242	NM_006329	10516	ENSG00000140092	0.000901982	0.688212491	-2.91285163
CMA1	NM_001836.2:561	NM_001836	1215	ENSG00000092009	0.000917022	0.699687781	8.799431421
SULF1	NM_001128204.1:3004	NM_001128204	23213	ENSG00000137573	0.000918088	0.700500815	2.568568346
COMP	NM_000095.2:2164	NM_000095	1311	ENSG00000105664	0.000975707	0.744464165	10.78424141
CXCL12	NM_199168.3:69	NM_199168	6387	ENSG00000107562	0.000977096	0.74552457	6.641940058
KDR	NM_002253.2:1420	NM_002253	3791	ENSG00000128052	0.001013321	0.773163935	-2.000838683
PTPRM	NM_002845.3:1680	NM_002845	5797	ENSG00000173482	0.001036997	0.791229011	-2.046388202
SLIT2	NM_004787.1:2430	NM_004787	9353	ENSG00000145147	0.001063836	0.811706549	-3.811706549
SOX2	NM_003106.2:151	NM_003106	6657	ENSG00000181449	0.001081854	0.825454953	4.293665796
CXCL8	NM_000584.2:25	NM_000584	3576	ENSG00000169429	0.001212923	0.925460509	-2.964007933
CTSG	NM_001911.2:160	NM_001911	1511	ENSG00000100448	0.001224708	0.934452253	4.07921256
ANGPTL2	NM_012098.2:540	NM_012098	23452	ENSG00000136859	0.001268015	0.967495613	4.03752876
ITGB4	NM_001005731.1:4151	NM_001005731	3691	ENSG00000132470	0.001331492	1	3.48873405
CDC42	NM_001039802.1:390	NM_001039802	998	ENSG00000070831	0.001384443	1	-1.54809535
BMP4	NM_001202.3:395	NM_001202	652	ENSG00000125378	0.001472348	1	1.655481109
TCF3	NM_003200.3:858	NM_003200	6929	ENSG00000071564	0.001544007	1	2.389059748
F3	NM_001993.3:1030	NM_001993	2152	ENSG00000117525	0.001555156	1	-2.144469363
VEGFA	NM_001025366.1:1325	NM_001025366	7422	ENSG00000112715	0.001564212	1	-2.307531717
CLDN1	NM_021101.3:410	NM_021101	9076	ENSG00000163347	0.001572202	1	3.446613865
CTSK	NM_000396.2:415	NM_000396	1513	ENSG00000143387	0.001650977	1	3.160667914
AKAP2	NM_001004065.4:4956	NM_001004065	11217	ENSG00000241978	0.001862819	1	-2.825689873
ISLR	NM_005545.3:2072	NM_005545	3671	ENSG00000129009	0.001872035	1	2.619150311
TMPRSS4	NM_019894.3:1146	NM_019894	56649	ENSG00000137648	0.002022786	1	10.40492322
IGFBP4	NM_001552.2:1520	NM_001552	3487	ENSG00000141753	0.002034869	1	2.823376276
COL3A1	NM_000090.3:180	NM_000090	1281	ENSG00000168542	0.002041405	1	5.02080846
OGN	NM_014057.3:995	NM_014057	4969	ENSG00000106809	0.0021565	1	3.450903887
FLI1	NM_001167681.2:1406	NM_001167681	2313	ENSG00000151702	0.002170756	1	-1.891041261
ID2	NM_002166.4:505	NM_002166	3398	ENSG00000115738	0.00222206	1	-1.794580923
ITGA3	NM_002204.2:4550	NM_002204	3675	ENSG00000005884	0.002313593	1	-1.848129435
EPS8L1	NM_017729.3:1914	NM_017729	54869	ENSG00000131037	0.002437339	1	2.477839006
CD46	NM_172350.1:365	NM_172350	4179	ENSG00000117335	0.002531435	1	-1.834027571
EIF2AK3	NM_004836.5:938	NM_004836	9451	ENSG00000172071	0.002537405	1	1.414679553
ROBO4	NM_019055.5:3080	NM_019055	54538	ENSG00000154133	0.002616917	1	-2.232611827
RBM47	NM_019027.3:150	NM_019027	54502	ENSG00000163694	0.002746751	1	-1.59432327
OLFML2B	NM_015441.1:2920	NM_015441	25903	ENSG00000162745	0.002774242	1	1.733452615
MAPK1	NM_138957.2:430	NM_138957	5594	ENSG00000100030	0.002958605	1	-1.599938402
SNRPF	NM_003095.2:225	NM_003095	6636	ENSG00000139343	0.003078424	1	-1.665202258
THBS4	NM_003248.3:985	NM_003248	7060	ENSG00000113296	0.00309496	1	4.150448595
ITGA11	NM_012211.3:650	NM_012211	22801	ENSG00000137809	0.003109559	1	3.360355671
ECM1	NM_004425.3:1345	NM_004425	1893	ENSG00000143369	0.003532543	1	2.522132927
GREM1	NM_013372.5:575	NM_013372	26585	ENSG00000166923	0.003599329	1	5.95280024
PTPRB	NM_002837.3:2625	NM_002837	5787	ENSG00000127329	0.003607291	1	-2.502314488
VWA2	NM_001272046.1:3148	NM_001272046	340706	ENSG00000165816	0.003635539	1	1.544944451
PLA2G2A	NM_000300.2:715	NM_000300	5320	ENSG00000188257	0.003790039	1	6.304807233
QKI	NM_006775.2:838	NM_006775	9444	ENSG00000112531	0.003942816	1	-2.010147671
BMP7	NM_001719.2:1092	NM_001719	655	ENSG00000101144	0.003971451	1	5.634860683
ZC3H12A	NM_025079.2:2140	NM_025079	80149	ENSG00000163874	0.004098967	1	-2.294828054
TNC	NM_002160.3:1215	NM_002160	3371	ENSG00000041982	0.004188117	1	2.70310291



EPHB3	NM_004443.3:3485	NM_004443	2049	ENSG00000182580	0.004335627	1	2.067618936
RTN4	NM_007008.2:275	NM_007008	57142	ENSG00000115310	0.004352962	1	-1.872348483
ECM2	NM_001393.2:1700	NM_001393	1842	ENSG00000106823	0.004362516	1	2.052591285
BCAS1	NM_003657.2:2305	NM_003657	8537	ENSG00000064787	0.004431357	1	2.892236944
TMEM100	NM_018286.2:655	NM_018286	55273	ENSG00000166292	0.004618373	1	-4.891760659
IL1RL1	NM_016232.4:700	NM_016232	9173	ENSG00000115602	0.004637986	1	-4.161304736
PPL	NM_002705.4:2435	NM_002705	5493	ENSG00000118898	0.004865585	1	-2.348754888
ITGA9	NM_002207.2:2380	NM_002207	3680	ENSG00000144668	0.004895992	1	1.491593195
PTGDS	NM_000954.5:180	NM_000954	5730	ENSG00000107317	0.005148742	1	4.880674072
COL6A3	NM_004369.3:2782	NM_004369	1293	ENSG00000163359	0.005177241	1	4.160861453
CBLC	NM_012116.3:652	NM_012116	23624	ENSG00000142273	0.005789943	1	2.558900362
ASPN	NM_017680.3:175	NM_017680	54829	ENSG00000106819	0.005823393	1	3.350656838
RAMP1	NM_005855.2:200	NM_005855	10267	ENSG00000132329	0.005984108	1	2.326053166
PRKCG	NM_002739.3:445	NM_002739	5582	ENSG00000126583	0.00615931	1	2.454526259
CCDC80	NM_199511.1:3235	NM_199511	151887	ENSG00000091986	0.006166714	1	3.661218443
PECAM1	NM_000442.3:1365	NM_000442	5175	ENSG00000261371	0.006292673	1	-2.404965182
IL6	NM_000600.1:220	NM_000600	3569	ENSG00000136244	0.006535744	1	-7.388366472
COL1A2	NM_000089.3:2635	NM_000089	1278	ENSG00000164692	0.00692546	1	4.116388391
COL18A1	NM_030582.3:4490	NM_030582	80781	ENSG00000182871	0.007062928	1	2.258732564
TMUB2	NM_024107.2:1485	NM_024107	79089	ENSG00000168591	0.007082787	1	1.231623114
GPR124	NM_032777.9:1278	NM_032777	25960	ENSG00000202181	0.007288196	1	1.940470288
SACS	NM_014363.4:1475	NM_014363	26278	ENSG00000151835	0.007398034	1	1.438733469
POSTN	NM_001135935.1:910	NM_001135935	10631	ENSG00000133110	0.007557097	1	3.861188564
CALCR1	NM_005795.3:1585	NM_005795	10203	ENSG00000064989	0.008039011	1	-2.543116709
CXCR3	NM_001504.1:80	NM_001504	2833	ENSG00000186810	0.008145222	1	1.685434671
TNXB	NM_032470.3:1621	NM_032470	7148	ENSG00000168477	0.008408357	1	3.267283444
TF	NM_001063.2:640	NM_001063	7018	ENSG00000091513	0.009394707	1	4.012935764
SMURF2	NM_022739.3:2605	NM_022739	64750	ENSG00000108854	0.009493141	1	-1.592131262
AGRN	NM_198576.2:2750	NM_198576	375790	ENSG00000188157	0.009617654	1	2.449688594
ITGB8	NM_002214.2:2609	NM_002214	3696	ENSG00000105855	0.010135814	1	1.929843219
CDH2	NM_001792.3:941	NM_001792	1000	ENSG00000170558	0.01025034	1	2.909430093
THBS2	NM_003247.2:4460	NM_003247	7058	ENSG00000186340	0.010507938	1	2.354241349
EGLN2	NM_053046.3:1538	NM_053046	112398	ENSG00000269858	0.010518877	1	-1.623291612
SMAD2	NM_005901.5:1678	NM_005901	4087	ENSG00000175387	0.010533061	1	-1.518351247
PEBP4	NM_144962.2:190	NM_144962	157310	ENSG00000134020	0.011174529	1	-3.913123655
PIK3R2	NM_005027.2:3100	NM_005027	5296	ENSG00000105647	0.011248284	1	2.042953352
PROM1	NM_006017.1:925	NM_006017	8842	ENSG0000007062	0.011846176	1	3.220689556
DENND5A	NM_015213.2:4604	NM_015213	23258	ENSG00000184014	0.011890842	1	-1.300696176
PLA2G2D	NM_001271814.1:90	NM_001271814	26279	ENSG00000117215	0.011928373	1	2.673799893
PIK3R6	NM_001010855.3:1112	NM_001010855	146850	ENSG00000276231	0.012173874	1	2.607316742
ARAP2	NM_015230.2:4875	NM_015230	116984	ENSG00000047365	0.012351793	1	-2.163888533
CADM1	NM_014333.3:2840	NM_014333	23705	ENSG00000182985	0.013253785	1	-2.111999823
HOXB3	NM_002146.4:2840	NM_002146	3213	ENSG00000120093	0.013261241	1	1.626820804
MMP1	NM_002421.2:700	NM_002421	4312	ENSG00000196611	0.013273031	1	6.593179813
CCL5	NM_002985.2:280	NM_002985	6352	ENSG00000271503	0.013428237	1	2.024337312
WWTR1	NM_001168278.1:1050	NM_001168278	25937	ENSG00000018408	0.013570448	1	-1.366933773
SH2B3	NM_005475.2:4285	NM_005475	10019	ENSG00000111252	0.0138181	1	-1.715819424
GZMK	NM_002104.2:700	NM_002104	3003	ENSG00000113088	0.013818545	1	1.953072497
ITGA1	NM_181501.1:1875	NM_181501	3672	ENSG00000213949	0.01409138	1	-2.214375496
COL5A2	NM_000393.3:4075	NM_000393	1290	ENSG00000204262	0.014099436	1	1.952352923
COL4A6	NM_001847.2:1070	NM_001847	1288	ENSG00000197565	0.014389563	1	3.060934624
KRT14	NM_000526.4:523	NM_000526	3861	ENSG00000186847	0.015094553	1	10.82133567
ZCCHC24	XM_005269604.1:379	XM_005269604			0.015157594	1	1.633272241
BMP1R1B	NM_001203.1:430	NM_001203	658	ENSG00000138696	0.015437958	1	2.303589497
TEK	NM_000459.3:1894	NM_000459	7010	ENSG00000120156	0.015802441	1	-2.567866241
CREBBP	NM_001079846.1:4818	NM_001079846	1387	ENSG00000005339	0.016215612	1	-1.410160636
CNN1	NM_001299.4:496	NM_001299	1264	ENSG00000130176	0.016431727	1	2.888632826
GDF15	NM_004864.2:180	NM_004864	9518	ENSG00000130513	0.017129379	1	2.351979344
JUN	NM_002228.3:140	NM_002228	3725	ENSG00000177606	0.017269805	1	-3.169203294
TBX1	NM_080646.1:540	NM_080646	6899	ENSG00000184058	0.017679283	1	1.675810882
CSPG4	NM_001897.4:7642	NM_001897	1464	ENSG00000173546	0.019399931	1	-1.541709335
PIK3CG	NM_002649.2:2125	NM_002649	5294	ENSG00000105851	0.019417839	1	1.38953014
VWA1	NM_199121.2:3664	NM_199121	64856	ENSG00000179403	0.019894186	1	1.67293828
RB1	NM_000321.1:2110	NM_000321	5925	ENSG00000139687	0.020135448	1	-1.279423511
NTRK1	NM_001012331.1:1365	NM_001012331	4914	ENSG00000198400	0.020393449	1	2.666632772
ADD1	NM_001119.4:622	NM_001119	118	ENSG00000087274	0.020610891	1	-2.038571836
EREG	NM_001432.2:290	NM_001432	2069	ENSG00000124882	0.020619191	1	-2.300916906
SNAI3	NM_178310.1:820	NM_178310	333929	ENSG00000185669	0.021629952	1	2.078203046
VEZF1	NM_007146.2:700	NM_007146	7716	ENSG00000136451	0.021699029	1	-1.259129027
CLIC4	NM_013943.2:1702	NM_013943	25932	ENSG00000169504	0.022006833	1	-1.591587473
HIPK2	NM_022740.4:10305	NM_022740	28996	ENSG00000064393	0.022153477	1	-1.335728775
CD24	NM_013230.2:1859	NM_013230	100133941	ENSG00000272398	0.022311416	1	1.849811108
SERPINF1	NM_002615.4:888	NM_002615	5176	ENSG00000132386	0.023079352	1	2.490823206
SLC44A4	NM_032794.1:1798	NM_032794			0.023510587	1	4.93693853
CXCL13	NM_006419.2:210	NM_006419	10563	ENSG00000156234	0.023750813	1	11.98900994
NOL7	NM_016167.3:335	NM_016167	51406	ENSG00000225921	0.024030631	1	-1.535418893
PRSS22	NM_022119.3:499	NM_022119	64063	ENSG00000005001	0.024144067	1	2.180593434
AGT	NM_000029.3:1711	NM_000029	183	ENSG00000135744	0.024182054	1	2.632346454

PROK2	NM_021935.3:827	NM_021935	60675	ENSG00000163421	0.024265251	1	-3.127678577
CASP8	NM_001228.4:301	NM_001228	841	ENSG00000064012	0.024400459	1	1.258348306
OVOL2	NM_021220.2:676	NM_021220	58495	ENSG00000125850	0.024482595	1	1.642043268
WIPF1	NM_001077269.1:1660	NM_001077269	7456	ENSG00000115935	0.024488397	1	1.292056158
SEMA3E	NM_012431.1:2184	NM_012431	9723	ENSG00000170381	0.024910943	1	-2.851036196
BAD	NM_004322.3:963	NM_004322	572	ENSG00000002330	0.025185497	1	1.579887159
BMP5	NM_021073.2:1570	NM_021073	653	ENSG00000112175	0.027679711	1	1.473602592
VHL	NM_000551.2:1280	NM_000551	7428	ENSG00000134086	0.027893677	1	1.193343795
PCOLCE	NM_002593.3:1258	NM_002593	5118	ENSG00000106333	0.028200919	1	2.329866807
AKT3	NM_005465.4:287	NM_005465	10000	ENSG00000117020	0.028356517	1	-1.658857527
NFKB1	NM_003998.2:1675	NM_003998	4790	ENSG00000109320	0.028390871	1	-1.307473747
ERBB2	NM_001005862.1:1255	NM_001005862	2064	ENSG00000141736	0.028659163	1	1.54155517
TJP3	NM_014428.1:1925	NM_014428	27134	ENSG00000105289	0.028956698	1	1.735407517
CD36	NM_000072.3:707	NM_000072	948	ENSG00000135218	0.030394735	1	-1.714643508
SPDEF	NM_012391.1:1335	NM_012391	25803	ENSG00000124664	0.030566321	1	2.634661332
VEGFC	NM_005429.2:565	NM_005429	7424	ENSG00000150630	0.031019382	1	-1.746440763
TSPAN1	NM_005727.2:115	NM_005727	10103	ENSG00000117472	0.031163614	1	3.928167657
SFRP1	NM_003012.3:3320	NM_003012	6422	ENSG00000104332	0.031508306	1	2.034198058
HEG1	NM_020733.1:1890	NM_020733	57493	ENSG00000173706	0.031762461	1	-1.68222174
THBS1	NM_003246.2:3465	NM_003246	7057	ENSG00000137801	0.031915357	1	-2.366447911
DLL4	NM_019074.2:893	NM_019074	54567	ENSG00000128917	0.032982192	1	-1.562148302
EMCN	NM_016242.3:160	NM_016242	51705	ENSG00000164035	0.033001402	1	-2.420532127
RAC1	NM_198829.1:1250	NM_198829	5879	ENSG00000136238	0.033607081	1	-1.539279856
HSPB1	NM_001540.3:374	NM_001540	3315	ENSG00000106211	0.033929219	1	2.564797031
FBLN1	NM_006487.2:965	NM_006487	2192	ENSG00000077942	0.033934268	1	1.896532284
COL5A1	NM_000093.3:6345	NM_000093	1289	ENSG00000130635	0.03438734	1	1.556344251
DESI1	NM_015704.2:2880	NM_015704	27351	ENSG00000100418	0.0350528	1	-1.728451214
F11R	NM_144503.1:3650	NM_144503	50848	ENSG00000158769	0.035484947	1	-1.45695851
FGF2	NM_002006.4:620	NM_002006	2247	ENSG00000138685	0.035616352	1	-1.698103574
SNAI1	NM_005985.2:63	NM_005985	6615	ENSG00000124216	0.03592342	1	-1.663995241
WNT5A	NM_003392.3:475	NM_003392	7474	ENSG00000114251	0.036214247	1	1.309829845
SIRT1	NM_012238.4:1595	NM_012238	23411	ENSG00000096717	0.036804579	1	-1.528293117
ITGA5	NM_002205.2:925	NM_002205	3678	ENSG00000161638	0.036985192	1	-1.787242577
BMPR1A	NM_004329.2:1720	NM_004329	657	ENSG00000107779	0.037005103	1	1.36610145
EPHB1	NM_004441.3:1855	NM_004441	2047	ENSG00000154928	0.037277307	1	1.79207816
IL18	NM_001562.2:48	NM_001562	3606	ENSG00000150782	0.0376378	1	1.565254005
MMP10	NM_002425.1:88	NM_002425	4319	ENSG00000166670	0.037758453	1	4.150057598
SCNN1A	NM_001038.4:2780	NM_001038	6337	ENSG00000111319	0.038069335	1	-1.688168319
HDHD3	NM_031219.2:616	NM_031219	81932	ENSG00000119431	0.039031716	1	1.327506197
CTSH	NM_148979.2:800	NM_148979	1512	ENSG00000103811	0.039421998	1	-1.981355175
CLU	NM_203339.2:1376	NM_203339			0.040706037	1	2.622532215
CAV1	NM_001753.3:434	NM_001753	857	ENSG00000105974	0.041843024	1	-2.093710572
MAP2K2	NM_030662.3:839	NM_030662	5605	ENSG00000126934	0.042596301	1	1.776909792
FREM1	NM_001177704.1:614	NM_001177704	158326	ENSG00000164946	0.043292228	1	1.773760659
CLDN3	NM_001306.3:606	NM_001306	1365	ENSG00000165215	0.043736022	1	1.410223727
SH3YL1	NM_001159597.1:216	NM_001159597	26751	ENSG00000035115	0.043775008	1	1.970882685
LAMA4	NM_001105209.1:287	NM_001105209	3910	ENSG00000112769	0.044872773	1	1.775997687
FGF18	NM_003862.1:850	NM_003862	8817	ENSG00000156427	0.044898889	1	1.881524938
PDPN	NM_006474.4:431	NM_006474	10630	ENSG00000162493	0.045976607	1	-2.048157814
NFATC2	NM_012340.3:1815	NM_012340	4773	ENSG00000101096	0.046119217	1	1.404202794
VASH1	NM_014909.4:552	NM_014909	22846	ENSG00000071246	0.048656555	1	1.512077041
TGFB1	NM_000358.2:2030	NM_000358	7045	ENSG00000120708	0.049928037	1	1.766719441
ZC3H14	NM_001160103.1:2690	NM_001160103	79882	ENSG00000100722	0.050156955	1	-1.642883055
SNAI2	NM_003068.3:740	NM_003068	6591	ENSG00000019549	0.050343735	1	1.780116796
CFP	NM_002621.2:380	NM_002621	5199	ENSG00000126759	0.050515896	1	-1.458544489
ADAMTS8	NM_007037.4:2228	NM_007037	11095	ENSG00000134917	0.050710937	1	-1.726621491
CRIP2	NM_001270837.1:1042	NM_001270837	1397	ENSG00000182809	0.050871665	1	1.821180665
FBN1	NM_000138.3:6420	NM_000138	2200	ENSG00000166147	0.050959159	1	2.099050547
CD44	NM_001001392.1:429	NM_001001392	960	ENSG00000026508	0.051009397	1	2.280962702
PLAU	NM_002658.2:793	NM_002658	5328	ENSG00000122861	0.051028277	1	1.324139324
CDH13	NM_001220488.1:210	NM_001220488	1012	ENSG00000140945	0.053659946	1	-1.608404806
APOH	NM_000042.2:582	NM_000042	350	ENSG00000091583	0.05446578	1	-2.858299332
PTGIS	NM_000961.3:1409	NM_000961	5740	ENSG00000124212	0.054989165	1	1.73336857
CHD4	NM_001273.2:2680	NM_001273	1108	ENSG00000111642	0.055165771	1	-1.311088566
TMEM30B	NM_001017970.2:2420	NM_001017970	161291	ENSG00000182107	0.05519756	1	-1.218927296
ITGB7	NM_000889.1:1278	NM_000889	3695	ENSG00000139626	0.055316243	1	2.087160548
SMAD3	NM_005902.3:4220	NM_005902	4088	ENSG00000166949	0.055953775	1	1.250310125
EIF4EBP1	NM_004095.3:363	NM_004095	1978	ENSG00000187840	0.056127515	1	-1.451305991
BMPR2	NM_001204.5:1875	NM_001204	659	ENSG00000204217	0.056200989	1	-1.742121171
ENO2	NM_001975.2:1855	NM_001975	2026	ENSG00000111674	0.056719331	1	1.235228659
ID4	NM_001546.2:588	NM_001546	3400	ENSG00000172201	0.057319619	1	-1.610581706
NR4A1	NM_173157.1:1575	NM_173157	3164	ENSG00000123358	0.057405693	1	-2.826877046
DPYSL3	NM_001387.2:4790	NM_001387	1809	ENSG00000113657	0.057730964	1	1.619842766
KDM1A	NM_015013.3:2395	NM_015013	23028	ENSG00000004487	0.057787216	1	1.082501903
VCAM1	NM_001078.3:2535	NM_001078	7412	ENSG00000162692	0.060265082	1	1.549433315
TPM2	NM_003289.3:891	NM_003289	7169	ENSG00000198467	0.062195157	1	2.299593745
DPT	NM_001937.3:1510	NM_001937	1805	ENSG00000143196	0.063039024	1	2.274966105
TIMP2	NM_003255.4:1555	NM_003255	7077	ENSG00000035862	0.06381429	1	1.716565241

STAB1	NM_015136.2:95	NM_015136	23166	ENSG00000010327	0.063952367	1	1.687308743
TPSB2	NM_024164.5:521	NM_024164	64499	ENSG00000197253	0.064017818	1	1.678103751
HK2	NM_000189.4:6880	NM_000189	3099	ENSG00000159399	0.064282766	1	-1.733761256
TNFSF13	NM_003808.3:810	NM_003808	8741	ENSG00000161955	0.064903732	1	2.087659292
AGGF1	NM_018046.3:35	NM_018046	55109	ENSG00000164252	0.065847871	1	1.292126101
SMAD1	NM_005900.2:1850	NM_005900	4086	ENSG00000170365	0.066371715	1	1.261474421
TYMP	NM_001953.3:719	NM_001953	1890	ENSG00000025708	0.066487864	1	1.44121417
CAMK2B	NM_001220.3:365	NM_001220	816	ENSG00000058404	0.0668737385	1	1.989926285
MMP2	NM_004530.2:2360	NM_004530	4313	ENSG00000087245	0.070439698	1	1.582574625
TGFB1	NM_000660.3:1260	NM_000660	7040	ENSG00000105329	0.071190262	1	1.933616683
MMP13	NM_002427.2:951	NM_002427	4322	ENSG00000137745	0.071965837	1	3.323292197
NCAM1	NM_000615.5:1620	NM_000615	4684	ENSG00000149294	0.072208802	1	2.010078363
CALD1	NM_004342.6:3862	NM_004342	800	ENSG00000122786	0.072412896	1	-1.619655149
FREM2	NM_207361.4:9170	NM_207361	341640	ENSG00000150893	0.073426543	1	-2.251466386
SPARC	NM_003118.2:910	NM_003118	6678	ENSG00000113140	0.073719793	1	1.824647279
HRAS	NM_005343.2:396	NM_005343	3265	ENSG00000174775	0.073925314	1	-1.228466439
JAM2	NM_001270407.1:840	NM_001270407	58494	ENSG00000154721	0.075550295	1	1.401916448
PRSS8	NM_002773.3:917	NM_002773	5652	ENSG00000052344	0.076629915	1	-1.608436967
FAM174B	NM_207446.2:1075	NM_207446	400451	ENSG00000185442	0.076845415	1	-1.413619986
LLGL2	NM_001015002.1:1065	NM_001015002	3993	ENSG00000073350	0.077220845	1	-1.249666071
SLC2A1	NM_006516.2:2500	NM_006516	6513	ENSG00000117394	0.077982759	1	1.58947007
TBX4	NM_018488.2:1560	NM_018488	9496	ENSG00000121075	0.078231522	1	-1.429380381
RAC2	NM_002872.3:1069	NM_002872	5880	ENSG00000128340	0.078994426	1	1.312006113
SDC4	NM_002999.2:1310	NM_002999	6385	ENSG00000124145	0.080423074	1	-1.521426976
SLC12A6	NM_001042494.1:3962	NM_001042494	9990	ENSG00000140199	0.082456141	1	-1.67639366
RAF1	NM_002880.3:1444	NM_002880	5894	ENSG00000132155	0.082506135	1	-1.205108236
LDHA	NM_001165414.1:1690	NM_001165414	3939	ENSG00000134333	0.084059212	1	-1.510166313
SRC	NM_005417.3:1410	NM_005417	6714	ENSG00000197122	0.085362053	1	-1.346223603
BMPER	NM_133468.4:476	NM_133468	168667	ENSG00000164619	0.085512293	1	-1.701424299
RBL2	NM_005611.3:1310	NM_005611	5934	ENSG00000103479	0.086864287	1	-1.335440237
HSD17B12	NM_016142.2:1000	NM_016142	51144	ENSG00000149084	0.086888041	1	-1.158019659
SORD	NM_003104.4:1345	NM_003104	6652	ENSG00000140263	0.087242399	1	1.506669718
TBXA2R	NM_001060.3:385	NM_001060	6915	ENSG00000006638	0.08789968	1	1.841629656
DHX16	NM_001164239.1:2490	NM_001164239	8449	ENSG00000204560	0.088021652	1	1.253146148
IL13RA2	NM_000640.2:400	NM_000640	3598	ENSG00000123496	0.088999876	1	2.7060222
FSTL1	NM_007085.4:1610	NM_007085	11167	ENSG00000163430	0.08900276	1	1.63342084
FGFR1	NM_015850.2:1335	NM_015850	2260	ENSG00000077782	0.089734987	1	1.354952759
NOTCH1	NM_017617.3:735	NM_017617	4851	ENSG00000148400	0.090850768	1	-1.333373291
SERPINA1	NM_000295.4:760	NM_000295	5265	ENSG00000197249	0.090858627	1	-1.737552657
CKMT1A	NM_001015001.1:286	NM_001015001	548596	ENSG00000223572	0.091937268	1	2.775598723
CYB561	NM_001915.3:1065	NM_001915	1534	ENSG00000008283	0.092942777	1	1.438555533
GLYR1	NM_032569.3:1470	NM_032569	84656	ENSG00000140632	0.093704185	1	-1.229680302
PLS1	NM_002670.2:3261	NM_002670	5357	ENSG00000120756	0.094960731	1	-1.74969747
ECSCR	NM_001077693.3:168	NM_001077693	641700	ENSG00000249751	0.096282349	1	-1.464199314
CCL21	NM_002989.2:180	NM_002989	6366	ENSG00000137077	0.098455993	1	1.778287359
RUNX1	NM_001754.4:635	NM_001754	861	ENSG00000159216	0.098904907	1	1.62550543
BGN	NM_001711.3:1935	NM_001711	633	ENSG00000182492	0.099358436	1	2.324620489
LAMB3	NM_000228.2:695	NM_000228	3914	ENSG00000196878	0.099409321	1	-1.482478035
ZFYVE9	NM_004799.2:2135	NM_004799	9372	ENSG00000157077	0.099603286	1	-1.497800294
ENO3	NM_001976.4:1368	NM_001976	2027	ENSG00000108515	0.100940702	1	1.566782298
ADAM28	NM_014265.4:920	NM_014265	10863	ENSG00000042980	0.101321807	1	1.886597582
KRAS	NM_004985.3:327	NM_004985	3845	ENSG00000133703	0.101861473	1	-1.264544688
ZNF143	NM_003442.5:925	NM_003442	7702	ENSG00000166478	0.10246237	1	-1.511442159
NCL	NM_005381.2:1492	NM_005381	4691	ENSG00000115053	0.104208795	1	-1.351589268
B3GNT3	NM_014256.3:1625	NM_014256	10331	ENSG00000179913	0.105204099	1	2.465186508
SMAD9	NM_001127217.2:1152	NM_001127217	4093	ENSG00000120693	0.105778076	1	1.252198587
TXNIP	NM_006472.1:255	NM_006472	10628	ENSG00000265972	0.106508582	1	1.904216885
ADAM15	NM_207195.1:1355	NM_207195	8751	ENSG00000143537	0.108679863	1	1.678629061
PYCARD	NM_013258.3:714	NM_013258	29108	ENSG00000103490	0.109890786	1	1.583878752
CXCR2	NM_001168298.1:840	NM_001168298	3579	ENSG00000180871	0.111069112	1	-1.728314059
SMAD5	NM_005903.5:1044	NM_005903	4090	ENSG00000113658	0.111857966	1	-1.574912152
MTA1	NM_004689.2:450	NM_004689	9112	ENSG00000182979	0.111935273	1	1.365133869
SERINC5	NM_001174071.1:790	NM_001174071	256987	ENSG00000164300	0.113181531	1	1.196525039
GIMAP6	NR_024115.1:2175	NR_024115			0.114257694	1	-1.337602458
NUPB1	NM_001278506.1:304	NM_001278506	4682	ENSG00000103274	0.114381869	1	-1.566962633
FGFR3	NM_022965.2:3170	NM_022965	2261	ENSG00000068078	0.11563573	1	1.405862479
EP300	NM_001429.2:715	NM_001429	2033	ENSG00000100393	0.116200712	1	-1.308597586
MEOX2	NM_005924.4:1184	NM_005924	4223	ENSG00000106511	0.116639536	1	1.323802327
DAG1	NM_001165928.2:965	NM_001165928	1605	ENSG00000173402	0.119904209	1	-1.099398721
SF3A3	NM_006802.2:2060	NM_006802	10946	ENSG00000183431	0.120808054	1	1.158155931
IL10RA	NM_001558.2:150	NM_001558	3587	ENSG00000110324	0.121495854	1	1.206791624
RBX1	NM_014248.2:162	NM_014248	9978	ENSG00000100387	0.122086612	1	-1.183336136
NR4A3	NM_173198.1:2590	NM_173198	8013	ENSG00000119508	0.122177476	1	-1.555524366
ERBB2IP	NM_018695.2:3675	NM_018695	55914	ENSG00000112851	0.123501679	1	-1.273529368
NOS2	NM_153292.1:546	NM_153292	4843	ENSG00000007171	0.123706237	1	-1.628392305
PIK3CD	NM_005026.3:2978	NM_005026	5293	ENSG00000171608	0.123870033	1	-1.277873183
NPR1	NM_000906.2:3490	NM_000906	4881	ENSG00000169418	0.125297461	1	-1.442446527
BRMS1	NM_015399.3:469	NM_015399	25855	ENSG00000174744	0.12550693	1	-1.334016657

MYO1D	NM_015194.1:616	NM_015194	4642	ENSG00000176658	0.12574323	1	-1.283562759
BAI1	NM_001702.1:3640	NM_001702	575	ENSG00000181790	0.125938712	1	1.87430051
MFAP4	NM_002404.1:370	NM_002404	4239	ENSG00000166482	0.126060079	1	1.886753148
IRF6	NM_006147.2:1430	NM_006147	3664	ENSG00000117595	0.126133737	1	1.312631147
PDGFRB	NM_002609.3:840	NM_002609	5159	ENSG00000113721	0.127194425	1	-1.30888794
ACHE	NM_000665.3:1057	NM_000665	43	ENSG00000087085	0.128316117	1	1.57345821
MAF	NM_005360.4:888	NM_005360	4094	ENSG00000178573	0.128344018	1	1.425744761
USP39	NM_001256725.1:806	NM_001256725	10713	ENSG00000168883	0.128467626	1	-1.284320483
RRAS	NM_006270.3:330	NM_006270	6237	ENSG00000126458	0.130698322	1	-1.529096919
HSPG2	NM_005529.5:2715	NM_005529	3339	ENSG00000142798	0.132685626	1	1.727045038
ITGB3	NM_000212.2:4485	NM_000212	3690	ENSG00000259207	0.132898052	1	1.371591026
TOM1L1	NM_005486.2:685	NM_005486	10040	ENSG00000141198	0.133481444	1	-1.274488184
SAP130	NM_024545.3:3090	NM_024545	79595	ENSG00000136715	0.134629295	1	-1.309752619
FLT4	NM_002020.1:955	NM_002020	2324	ENSG00000037280	0.134651027	1	-1.331707756
LAMA5	NM_005560.3:787	NM_005560	3911	ENSG00000130702	0.134963862	1	1.344336998
WARS	NM_004184.3:1851	NM_004184	7453	ENSG00000140105	0.135192631	1	-1.539829746
PKM	NM_182471.1:2105	NM_182471	5315	ENSG00000067225	0.135744198	1	1.365604943
KRT19	NM_002276.4:96	NM_002276	3880	ENSG00000171345	0.135925303	1	1.740637143
ELF3	NM_001114309.1:460	NM_001114309	1999	ENSG00000163435	0.13706127	1	-1.656595103
TNS1	NM_022648.4:6080	NM_022648	7145	ENSG00000079308	0.139115027	1	-1.404225578
MUC1	NM_001018017.1:725	NM_001018017	4582	ENSG00000185499	0.140001378	1	-1.548236368
IFNG	NM_000619.2:970	NM_000619	3458	ENSG00000111537	0.140172873	1	-2.927753652
IL1RN	NM_000577.3:480	NM_000577	3557	ENSG00000136689	0.140386442	1	1.703373702
FAP	NM_004460.2:1490	NM_004460	2191	ENSG00000078098	0.140465826	1	1.577091412
CTSL	NM_001912.4:1072	NM_001912	1514	ENSG00000135047	0.141552766	1	-1.750875614
ELK3	NM_005230.2:905	NM_005230	2004	ENSG00000111145	0.142213985	1	1.373884161
S1PR1	NM_001400.4:802	NM_001400	1901	ENSG00000170989	0.143298121	1	-1.373666595
CDH1	NM_004360.2:1230	NM_004360	999	ENSG00000039068	0.143577483	1	-1.375126793
MYH11	NM_001040113.1:920	NM_001040113	4629	ENSG00000133392	0.144000348	1	1.568448498
PLA2G10	NM_003561.1:779	NM_003561	8399	ENSG00000069764	0.144151259	1	-1.477874414
ADRA2B	NM_000682.4:2885	NM_000682	151	ENSG00000274286	0.145099642	1	1.57564824
DICER1	NM_177438.2:5060	NM_177438	23405	ENSG00000100697	0.146108707	1	1.201001753
EPN3	NM_017957.2:2532	NM_017957	55040	ENSG00000049283	0.146253346	1	2.313411156
TFDP1	NM_007111.4:1826	NM_007111	7027	ENSG00000198176	0.147190077	1	1.164521179
IL1B	NM_000576.2:840	NM_000576	3553	ENSG00000125538	0.147859774	1	-1.899639023
SERPINE1	NM_001165413.1:1670	NM_001165413	5054	ENSG00000106366	0.148421486	1	-2.224351073
AKAP12	NM_005100.3:640	NM_005100	9590	ENSG00000131016	0.148530834	1	-1.341441472
TPSD1	NM_012217.2:585	NM_012217	23430	ENSG00000095917	0.148542781	1	2.365599492
FGFR2	NM_000141.4:647	NM_000141	2263	ENSG00000066468	0.148569587	1	1.283406645
PLEKHO1	NM_016274.4:475	NM_016274	51177	ENSG00000023902	0.149281126	1	1.122103424
TCF4	NM_003199.1:1455	NM_003199	6925	ENSG00000196628	0.149494352	1	1.279939715
LTBP4	NM_003573.2:3644	NM_003573	8425	ENSG00000090006	0.150424764	1	1.407720048
PDCL3	NM_024065.4:23	NM_024065	79031	ENSG00000115539	0.151396611	1	1.430204022
JAG1	NM_000214.2:915	NM_000214	182	ENSG00000101384	0.153227137	1	-1.440176874
EVI2A	NM_014210.3:564	NM_014210	2123	ENSG00000126860	0.154044606	1	-1.153242509
AQP1	NM_198098.1:1230	NM_198098	358	ENSG00000240583	0.154833799	1	-1.404440218
GIMAP4	NM_018326.2:315	NM_018326	55303	ENSG00000133574	0.15828364	1	-1.250500705
FST	NM_006350.2:575	NM_006350	10468	ENSG00000134363	0.158713494	1	1.665143267
FOXC2	NM_005251.2:1389	NM_005251	2303	ENSG00000176692	0.164332996	1	1.428298179
NID2	NM_007361.3:1995	NM_007361	22795	ENSG00000087303	0.164764478	1	1.576335584
PRELP	NM_002725.3:5250	NM_002725	5549	ENSG00000188783	0.165219629	1	-1.465111063
WNT5B	NM_032642.2:1745	NM_032642	81029	ENSG00000111186	0.166031018	1	1.500183857
PTGS2	NM_000963.1:495	NM_000963	5743	ENSG00000073756	0.166513384	1	-1.527230088
CD34	NM_001773.2:2050	NM_001773	947	ENSG00000174059	0.166871213	1	1.28959488
MMP9	NM_004994.2:1530	NM_004994	4318	ENSG00000100985	0.168084955	1	2.229102682
DNAJC14	NM_032364.5:1166	NM_032364	85406	ENSG00000135392	0.168799088	1	1.181102436
MMP17	NM_016155.4:804	NM_016155	4326	ENSG00000198598	0.169567606	1	1.769598175
PTRF	NM_012232.5:86	NM_012232	284119	ENSG00000177469	0.170132013	1	1.792673612
GSN	NM_000177.4:1075	NM_000177	2934	ENSG00000148180	0.171567454	1	1.461555464
LIFR	NM_002310.3:2995	NM_002310	3977	ENSG00000113594	0.173384093	1	-1.443653076
ANXA2P2	NR_003573.1:1013	NR_003573	304		0.175580892	1	1.679958794
ATPIF1	NM_178190.2:334	NM_178190	93974	ENSG00000130770	0.175623962	1	-1.206407828
TAL1	NM_003189.2:4635	NM_003189	6886	ENSG00000162367	0.176634485	1	-1.326232673
AEBP1	NM_001129.3:3170	NM_001129	165	ENSG00000106624	0.177458312	1	1.308743514
CTNNB1	NM_001098210.1:1815	NM_001098210	1499	ENSG00000168036	0.181940475	1	-1.298251628
CNOT4	NM_001190848.1:795	NM_001190848	4850	ENSG00000080802	0.186570428	1	-1.194667232
MMP12	NM_002426.3:769	NM_002426	4321	ENSG00000262406	0.186650026	1	2.870714502
SAMSN1	NM_022136.3:560	NM_022136	64092	ENSG00000155307	0.189034043	1	-1.21689657
PPP3R1	NM_000945.3:2385	NM_000945	5534	ENSG00000221823	0.189297035	1	1.191911575
TGFB2	NM_003238.2:1125	NM_003238	7042	ENSG00000092969	0.191617412	1	-1.617423456
IGFBP7	NM_001553.1:690	NM_001553	3490	ENSG00000163453	0.193799001	1	1.626090543
ZFYVE16	NM_001105251.2:2292	NM_001105251	9765	ENSG00000039319	0.194177537	1	-1.312829482
CHI3L1	NM_001276.2:475	NM_001276	1116	ENSG00000133048	0.19706736	1	1.686997384
ARHGDI8	NM_001175.4:833	NM_001175	397	ENSG00000111348	0.199159276	1	1.287343598
SPHK2	NM_020126.3:2443	NM_020126	56848	ENSG00000063176	0.199648229	1	1.232715898
ROCK1	NM_005406.1:2660	NM_005406	6093	ENSG00000067900	0.201360247	1	1.258756431
EMILIN1	XM_006711928.1:724	XM_006711928			0.201860377	1	1.346902019
LAD1	NM_005558.3:1860	NM_005558	3898	ENSG00000159166	0.203096625	1	1.642487388

LAMC2	NM_005562.2:2819	NM_005562	3918	ENSG00000058085	0.204763199	1	-1.193262881
PMP22	NM_000304.2:1644	NM_000304	5376	ENSG00000109099	0.206337881	1	-1.158204585
PXDN	NM_012293.1:1960	NM_012293	7837	ENSG00000130508	0.208258568	1	-1.451237005
FBP1	NM_000507.3:590	NM_000507	2203	ENSG00000165140	0.209343486	1	-1.574015227
SSTR2	NM_001050.2:1060	NM_001050	6752	ENSG00000180616	0.211254362	1	1.803330023
DST	NM_001723.4:1870	NM_001723	667	ENSG00000151914	0.212006145	1	1.148504546
LRG1	NM_052972.2:1480	NM_052972	116844	ENSG00000171236	0.21582006	1	-1.392332224
TLK2	NM_006852.2:2335	NM_006852	11011	ENSG00000146872	0.218793166	1	1.171095099
DLG1	NM_001098424.1:1460	NM_001098424	1739	ENSG00000075711	0.220535303	1	1.102247445
HDAC5	NM_005474.4:3160	NM_005474	10014	ENSG00000108840	0.223347767	1	1.377645543
CXADR	NM_001338.3:1937	NM_001338	1525	ENSG00000154639	0.224202073	1	-1.742185085
SET	NM_001122821.1:2385	NM_001122821	6418	ENSG00000119335	0.22430565	1	-1.098693109
FRAS1	NM_001166133.1:526	NM_001166133	80144	ENSG00000138759	0.225562892	1	-1.251487898
KRIT1	NM_004912.3:2648	NM_004912	889	ENSG00000001631	0.225934445	1	-1.384586603
CHAD	NM_001267.2:810	NM_001267	1101	ENSG00000136457	0.227269529	1	2.096320592
SMAD4	NM_005359.3:1370	NM_005359	4089	ENSG00000141646	0.232351978	1	1.116805887
CYP1B1	NM_000104.3:1715	NM_000104	1545	ENSG00000138061	0.233174105	1	1.589219911
LUM	NM_002345.3:1285	NM_002345	4060	ENSG00000139329	0.233644018	1	1.400189339
AREG	NM_001657.2:547	NM_001657	374	ENSG00000109321	0.234372305	1	-1.669118375
MET	NM_001127500.1:1925	NM_001127500	4233	ENSG00000105976	0.237286479	1	1.198634658
NME1	NM_000269.2:500	NM_000269	4830	ENSG00000239672	0.238300985	1	1.234789031
COL6A2	NM_001849.2:1925	NM_001849	1292	ENSG00000142173	0.238771947	1	1.317752827
TWIST2	NM_057179.2:482	NM_057179	117581	ENSG00000233608	0.239195571	1	-1.278305077
SOD1	NM_000454.4:35	NM_000454	6647	ENSG00000142168	0.239946607	1	1.312458212
HIPK1	NM_152696.3:2105	NM_152696	204851	ENSG00000163349	0.241356734	1	-1.284851049
PIK3R1	NM_181504.2:1105	NM_181504	5295	ENSG00000145675	0.24303764	1	1.472130175
LAMC1	NM_002293.3:4915	NM_002293	3915	ENSG00000135862	0.245881328	1	-1.251455435
GPI	NM_000175.2:1695	NM_000175	2821	ENSG00000105220	0.249251863	1	1.20388754
MAP3K7	NM_145333.1:670	NM_145333	6885	ENSG00000135341	0.24997175	1	-1.096220769
IL1A	NM_000575.3:1085	NM_000575	3552	ENSG00000115008	0.25013945	1	-1.976487652
SRPX2	NM_014467.2:1420	NM_014467	27286	ENSG00000102359	0.250570671	1	-1.350160128
NDP	NM_000266.2:505	NM_000266	4693	ENSG00000124479	0.250574452	1	1.554527344
NF2	NM_181825.2:442	NM_181825	4771	ENSG00000186575	0.251900599	1	1.117751975
AKT1	NM_005163.2:1772	NM_005163	207	ENSG00000142208	0.252030467	1	-1.194694319
PLCG2	NM_002661.2:525	NM_002661	5336	ENSG00000197943	0.253209427	1	1.399045099
BNC2	NM_017637.5:1800	NM_017637	54796	ENSG00000173068	0.25399537	1	1.32838321
MYC	NM_002467.3:1610	NM_002467	4609	ENSG00000136997	0.257508972	1	-1.375929596
PIK3CA	NM_006218.2:2445	NM_006218	5290	ENSG00000121879	0.259910468	1	1.129621544
SERPING1	NM_000062.2:305	NM_000062	710	ENSG00000149131	0.260254942	1	-1.435202842
MRC1	NM_002438.2:2693	NM_002438	4360	ENSG00000260314	0.261076031	1	-1.499084634
MRPS5	NM_031902.3:390	NM_031902	64969	ENSG00000144029	0.263833828	1	-1.149282548
PNPLA6	NM_006702.3:3941	NM_006702	10908	ENSG00000032444	0.265541473	1	1.283651445
CHP1	XM_005254140.1:174	XM_005254140			0.270203735	1	1.521574905
SRPK2	NM_182692.1:340	NM_182692	6733	ENSG00000135250	0.27047422	1	1.167728287
RHOA	NM_001664.2:1230	NM_001664	387	ENSG00000067560	0.272041621	1	-1.234607142
ETV4	NM_001079675.1:1535	NM_001079675	2118	ENSG00000175832	0.274314383	1	1.725681601
ACVR1	NM_001105.2:1665	NM_001105	90	ENSG00000115170	0.274565164	1	-1.264538657
VPS13A	NM_033305.2:8260	NM_033305	23230	ENSG00000197969	0.276265249	1	-1.273754575
CD163	NM_004244.4:1630	NM_004244	9332	ENSG00000177575	0.276734361	1	-1.569801925
HIF1A	NM_001530.2:1985	NM_001530	3091	ENSG00000100644	0.27795678	1	-1.223692837
TNFSF10	NM_003810.2:115	NM_003810	8743	ENSG00000121858	0.278972604	1	-1.353612208
FGL2	NM_006682.2:250	NM_006682	10875	ENSG00000127951	0.282478876	1	1.190330195
ADAMTS1	NM_006988.3:2840	NM_006988	9510	ENSG00000154734	0.282709381	1	-1.543214341
AKT2	NM_001626.2:1450	NM_001626	208	ENSG00000105221	0.283168765	1	1.205096451
ACTG2	NM_001615.3:921	NM_001615	72	ENSG00000163017	0.28908328	1	1.436405975
MGAT5	NM_002410.4:1233	NM_002410	4249	ENSG00000152127	0.289279064	1	-1.074243595
SLC35A3	NM_012243.1:605	NM_012243	23443	ENSG00000117620	0.290792781	1	-1.318739826
ENPEP	NM_001977.3:2940	NM_001977	2028	ENSG00000138792	0.291409583	1	-1.477459802
CHRD1	NM_001143981.1:1120	NM_001143981	91851	ENSG00000101938	0.291808758	1	1.371953865
CHRNA7	NR_046324.1:194	NR_046324	1139	ENSG00000175344	0.295452458	1	1.596861128
ITM2A	NM_004867.4:988	NM_004867	9452	ENSG00000078596	0.295494633	1	-1.346435866
RELN	NM_005045.2:345	NM_005045	5649	ENSG00000189056	0.297589412	1	1.417884177
TNFSF12	NM_003809.2:339	NM_003809	8742	ENSG00000239697	0.300763504	1	1.299613586
PLA2G3	NM_015715.3:2415	NM_015715	50487	ENSG00000100078	0.303405538	1	-2.141813341
NRP1	NM_003873.5:370	NM_003873	8829	ENSG00000099250	0.303862604	1	1.231552671
HDAC3	NM_003883.2:1455	NM_003883	8841	ENSG00000171720	0.304271921	1	1.122269722
PKNOX1	NM_004571.3:3655	NM_004571	5316	ENSG00000160199	0.305325084	1	1.488697097
AP1M2	NM_005498.4:78	NM_005498	10053	ENSG00000129354	0.306661094	1	-1.246077433
CDKN2A	NM_000077.3:975	NM_000077	1029	ENSG00000147889	0.308794124	1	1.612305177
ITGB1BP1	NM_004763.3:1690	NM_004763	9270	ENSG00000119185	0.310309775	1	-1.821515967
FERMT2	NM_001135000.1:920	NM_001135000	10979	ENSG00000073712	0.313274293	1	-1.2869494
TFPI2	NM_006528.3:524	NM_006528	7980	ENSG00000105825	0.314430422	1	1.564643273
TNF	NM_000594.2:1010	NM_000594	7124	ENSG00000232810	0.316994858	1	-1.473446009
NDNF	NM_024574.3:395	NM_024574	79625	ENSG00000173376	0.31774297	1	1.230391888
RPS6KB2	NM_003952.2:980	NM_003952	6199	ENSG00000175634	0.320477764	1	1.307898001
PRKCB	NM_212535.1:1750	NM_212535	5579	ENSG00000166501	0.320538431	1	1.376422502
CXCL11	NM_005409.3:590	NM_005409	6373	ENSG00000169248	0.321348666	1	-1.88042403
GTF2I	NM_033001.2:920	NM_033001	2969	ENSG00000263001	0.323806065	1	-1.24591881

GPATCH3	NM_022078.2:1685	NM_022078	63906	ENSG00000198746	0.326296484	1	1.268298058
CEP170	NM_001042404.1:1800	NM_001042404	9859	ENSG00000143702	0.326633682	1	-1.215109534
FGFR4	NM_002011.3:1585	NM_002011	2264	ENSG00000160867	0.329010386	1	-1.292824788
CCL11	NM_002986.2:378	NM_002986	6356	ENSG00000172156	0.330760224	1	1.692839416
PKN1	NM_213560.1:2153	NM_213560	5585	ENSG00000123143	0.331588957	1	-1.345250908
MED23	NM_004830.2:640	NM_004830	9439	ENSG00000112282	0.333266758	1	-1.28226146
PLXND1	NM_015103.2:3711	NM_015103	23129	ENSG00000004399	0.336811534	1	-1.196540675
MT3	NM_005954.2:165	NM_005954	4504	ENSG000000087250	0.338516768	1	1.999830736
CEACAM6	NM_002483.4:1217	NM_002483	4680	ENSG000000086548	0.339782917	1	-1.455818873
PTPRC	NM_080923.2:154	NM_080923			0.340440612	1	-1.097620543
ITGB1	NM_033666.2:2000	NM_033666	3688	ENSG00000150093	0.341592225	1	-1.189172658
TACSTD2	NM_002353.2:1840	NM_002353	4070	ENSG00000184292	0.341730801	1	-1.30833697
TLR4	NR_024168.1:2575	NR_024168			0.342045684	1	-1.12072612
TCF20	NM_005650.1:925	NM_005650	6942	ENSG00000100207	0.342888378	1	-1.219493601
DCN	NM_001920.3:420	NM_001920	1634	ENSG00000011465	0.344376608	1	1.344218952
CCR2	NM_001123041.2:743	NM_001123041	729230	ENSG00000121807	0.344762504	1	1.281222681
APOE	NM_000041.2:96	NM_000041	348	ENSG00000130203	0.347492295	1	1.590225577
GJA5	NM_005266.5:1992	NM_005266	2702	ENSG00000265107	0.351248316	1	-1.356681334
MS4A4A	NM_024021.2:800	NM_024021	51338	ENSG00000110079	0.354073195	1	-1.261376895
PDGFA	NM_002607.5:1276	NM_002607	5154	ENSG00000197461	0.355689999	1	-1.163748769
TP53	NM_000546.2:1330	NM_000546	7157	ENSG00000141510	0.362756002	1	1.125784646
EGF	NM_001963.4:1022	NM_001963	1950	ENSG00000138798	0.363644508	1	-1.91079866
PDGFC	NM_016205.2:2596	NM_016205	56034	ENSG00000145431	0.371661541	1	-1.180187328
LOX	NM_002317.4:1575	NM_002317	4015	ENSG00000113083	0.372092269	1	-1.248021226
PTK2	NM_153831.2:965	NM_153831	5747	ENSG00000169398	0.373209544	1	-1.251908112
MYLK	NM_053032.2:710	NM_053032	4638	ENSG00000065534	0.380198883	1	1.242214916
CGN	NM_020770.2:1112	NM_020770	57530	ENSG00000143375	0.381014124	1	-1.273873596
PTEN	NM_000314.4:1351	NM_000314	5728	ENSG00000171862	0.383328315	1	1.121670217
ERBB3	NM_001005915.1:420	NM_001005915	2065	ENSG00000065361	0.384826285	1	-1.123668609
PPP1R16B	NM_015568.2:2860	NM_015568	26051	ENSG00000101445	0.385797411	1	-1.253898963
VIM	NM_003380.2:694	NM_003380	7431	ENSG00000026025	0.388398759	1	1.211943411
TIMP1	NM_003254.2:329	NM_003254	7076	ENSG00000102265	0.390623842	1	-1.368354442
RPS6KB1	NM_003161.2:310	NM_003161	6198	ENSG00000108443	0.390715016	1	-1.050134669
RAMP2	NM_005854.2:282	NM_005854	10266	ENSG00000131477	0.39112868	1	-1.373648101
CLEC3B	NM_003278.2:607	NM_003278	7123	ENSG00000163815	0.3913696	1	-1.290184234
SKP1	NM_170679.2:630	NM_170679	6500	ENSG00000113558	0.392848127	1	1.181442804
PTX3	NM_002852.3:1152	NM_002852	5806	ENSG00000163661	0.39300388	1	-1.532684711
HGF	NM_000601.4:550	NM_000601	3082	ENSG00000019991	0.393562592	1	1.187681071
ADAM9	NM_001005845.1:695	NM_001005845	8754	ENSG00000168615	0.393984076	1	-1.221327097
TNFRSF1A	NM_001065.2:515	NM_001065	7132	ENSG00000067182	0.39767929	1	-1.151245776
CUL1	NM_003592.2:1487	NM_003592	8454	ENSG00000055130	0.402245967	1	-1.067874888
PTK6	NM_005975.2:1715	NM_005975	5753	ENSG00000101213	0.40495089	1	1.353046799
PDK1	NM_002610.3:401	NM_002610	5163	ENSG00000152256	0.406229204	1	1.415387287
APOD	NM_001647.3:613	NM_001647	347	ENSG00000189058	0.407572778	1	1.428942421
NF1	NM_000267.2:1035	NM_000267	4763	ENSG00000196712	0.413243379	1	1.263149359
SELE	NM_000450.2:1505	NM_000450	6401	ENSG00000007908	0.41556012	1	-1.334615996
HMBOX1	NM_002133.2:781	NM_002133	3162	ENSG00000100292	0.416741558	1	-1.551029764
LEFTY1	NM_020997.2:1405	NM_020997	10637	ENSG00000243709	0.41692901	1	-1.609302599
EGFR	NM_201282.1:360	NM_201282	1956	ENSG00000146648	0.419743711	1	-1.110349568
CEP295	NM_033395.1:3775	NM_033395	85459	ENSG00000166004	0.422691677	1	-1.221304283
HOXA5	NM_019102.2:895	NM_019102	3202	ENSG00000106004	0.425150217	1	-1.145811598
DENR	NM_003677.3:2091	NM_003677	8562	ENSG00000139726	0.425175461	1	-1.1447631
CAMK2D	NM_172127.1:505	NM_172127	817	ENSG00000145349	0.425294288	1	1.232044915
ALOX5	NM_000698.2:735	NM_000698	240	ENSG00000012779	0.426918913	1	-1.192890901
MPDZ	NM_003829.4:6092	NM_003829	8777	ENSG00000107186	0.427905363	1	-1.141458004
FASLG	NM_000639.1:625	NM_000639	356	ENSG00000117560	0.429889539	1	1.3383672
KIAA1462	NM_020848.2:7395	NM_020848	57608	ENSG00000165757	0.430167927	1	-1.212491108
MED1	NM_004774.3:806	NM_004774	5469	ENSG00000125686	0.430246013	1	-1.192653323
PRR15L	NM_024320.2:1005	NM_024320	79170	ENSG00000167183	0.431220399	1	-1.253507014
MAP2K4	NM_003010.2:2830	NM_003010	6416	ENSG00000065559	0.432206411	1	-1.172609529
ITGA8	NM_003638.1:1215	NM_003638	8516	ENSG00000077943	0.432620306	1	-1.139994653
COL4A2	NM_001846.2:1150	NM_001846	1284	ENSG00000134871	0.432730614	1	1.428964414
CYBB	NM_000397.3:2686	NM_000397	1536	ENSG00000165168	0.434741006	1	1.255578191
STAT3	NM_139276.2:4535	NM_139276	6774	ENSG00000168610	0.434753804	1	-1.122341166
SCG2	NM_003469.3:1400	NM_003469	7857	ENSG00000117195	0.435111791	1	1.437463851
CLEC2B	NM_005127.2:980	NM_005127	9976	ENSG00000110852	0.43694585	1	-1.117288341
TDGF1	NM_003212.2:1567	NM_003212	6997	ENSG00000241186	0.437399035	1	-1.586274629
PLAUR	NM_001005376.1:440	NM_001005376	5329	ENSG00000011422	0.439950544	1	-1.179490158
NRP2	NM_003872.2:805	NM_003872	8828	ENSG00000118257	0.44391271	1	1.180756694
CIB1	NM_001277764.1:530	NM_001277764	10519	ENSG00000185043	0.449250145	1	1.135858264
ZEB1	NM_001128128.1:1450	NM_001128128	6935	ENSG00000148516	0.451518709	1	-1.055603772
HAS1	NM_001523.2:859	NM_001523	3036	ENSG00000105509	0.453992465	1	1.402789161
CDK14	NM_012395.2:3645	NM_012395	5218	ENSG00000058091	0.457796149	1	-1.13140145
TCEB1	NM_001204857.1:330	NM_001204857	6921	ENSG00000154582	0.460766756	1	1.111682918
RPS27A	NM_002954.5:650	NM_002954	6233	ENSG00000143947	0.461522291	1	1.216419046
CD82	NM_002231.3:1211	NM_002231	3732	ENSG00000085117	0.464349137	1	1.148225739
CXCL10	NM_001565.1:40	NM_001565	3627	ENSG00000169245	0.465091363	1	-1.34589117
PRPF38A	NM_032864.3:335	NM_032864	84950	ENSG00000134748	0.466771435	1	-1.130776227

SETD2	NM_014159.6:1386	NM_014159	29072	ENSG00000181555	0.471250255	1	-1.057429165
FXYD6	NM_001164831.1:875	NM_001164831	53826	ENSG00000137726	0.473216739	1	1.121024629
CC2D1B	NM_032449.2:4182	NM_032449	200014	ENSG00000154222	0.475259323	1	-1.331442108
CEACAM5	NM_004363.2:1961	NM_004363	1048	ENSG00000105388	0.475659713	1	1.925201759
SYNE1	NM_015293.1:7755	NM_015293	23345	ENSG00000131018	0.48034948	1	-1.134592042
CST7	NM_003650.3:525	NM_003650	8530	ENSG00000077984	0.494430783	1	-1.156319865
NR3C1	NM_001018077.1:1665	NM_001018077	2908	ENSG00000113580	0.495158498	1	1.086849565
TGFBR2	NM_001024847.1:1760	NM_001024847	7048	ENSG00000163513	0.500941199	1	-1.155444864
SMC3	NM_005445.3:3525	NM_005445	9126	ENSG00000108055	0.505732085	1	-1.06743461
OAS1	NM_001032409.1:805	NM_001032409	4938	ENSG00000089127	0.506303445	1	-1.1251192
GPR56	NM_005682.4:1145	NM_005682	9289	ENSG00000205336	0.506315561	1	1.097753969
CNOT10	NM_001256741.1:1962	NM_001256741	25904	ENSG00000182973	0.50823543	1	1.067811552
ENO1	NM_001428.2:1689	NM_001428	2023	ENSG00000074800	0.50884864	1	-1.119812472
JAM3	NM_032801.3:890	NM_032801	83700	ENSG00000166086	0.509616039	1	-1.082606719
CCBE1	NM_133459.3:310	NM_133459	147372	ENSG00000183287	0.509987396	1	-1.160010789
ALB	NM_000477.5:855	NM_000477	213	ENSG00000163631	0.509993064	1	1.335409791
HUNK	NM_014586.1:1280	NM_014586	30811	ENSG00000142149	0.512323947	1	-1.233822639
FUT3	NM_000149.3:2342	NM_000149	2525	ENSG00000171124	0.512563819	1	1.347657765
MAPKAPK3	NM_004635.3:415	NM_004635	7867	ENSG00000114738	0.51536528	1	-1.11994699
PITX2	NM_000325.5:1381	NM_000325	5308	ENSG00000164093	0.515895761	1	1.751562325
ZFPM2	NM_012082.3:1850	NM_012082	23414	ENSG00000169946	0.516491019	1	-1.20433417
MS4A6A	NM_152852.2:146	NM_152852	64231	ENSG00000110077	0.518139572	1	1.174915826
PPP2R1A	NM_014225.3:1440	NM_014225	5518	ENSG00000105568	0.518760455	1	-1.154827669
BTG1	NM_001731.2:775	NM_001731	694	ENSG00000133639	0.519916732	1	-1.173093693
DSC2	NM_024422.3:2200	NM_024422	1824	ENSG00000134755	0.523383423	1	1.151787981
ADM2	NM_001253845.1:610	NM_001253845	79924	ENSG00000128165	0.529646463	1	1.462501551
SH2D3A	NM_005490.2:412	NM_005490	10045	ENSG00000125731	0.530635492	1	-1.13114973
SRF	NM_003131.2:4040	NM_003131	6722	ENSG00000112658	0.535998349	1	-1.111314977
AMH	NM_000479.3:1626	NM_000479	268	ENSG00000104899	0.536494335	1	-1.236262626
POPDC3	NM_022361.4:980	NM_022361	64208	ENSG00000132429	0.538596065	1	-1.573075138
SYK	NM_003177.3:1685	NM_003177	6850	ENSG00000165025	0.539658163	1	-1.166032601
ESRP1	NM_001034915.2:1515	NM_001034915	54845	ENSG00000104413	0.540825758	1	-1.105390121
MAPK3	NM_001040056.1:580	NM_001040056	5595	ENSG00000102882	0.542251573	1	-1.18448063
C3AR1	NM_004054.2:415	NM_004054	719	ENSG00000171860	0.544006504	1	1.131914696
RORB	NM_006914.3:1840	NM_006914	6096	ENSG00000198963	0.545791526	1	-1.243818288
MMP14	NM_004995.2:1470	NM_004995	4323	ENSG00000157227	0.546328435	1	1.241824027
SV2B	NM_001167580.1:2154	NM_001167580	9899	ENSG00000185518	0.550287911	1	1.326520686
TRIM39	NM_021253.3:3140	NM_021253	56658	ENSG00000204599	0.552952332	1	-1.161203066
AGK	NM_018238.3:816	NM_018238	55750	ENSG00000006530	0.553548043	1	-1.161600835
MYO5C	NM_018728.2:2400	NM_018728	55930	ENSG00000128833	0.555171933	1	1.105136711
FN1	NM_212482.1:1776	NM_212482	2335	ENSG00000115414	0.556811369	1	-1.168157096
PLCG1	NM_002660.2:2290	NM_002660	5335	ENSG00000124181	0.557302	1	-1.080243464
EPCAM	NM_002354.1:415	NM_002354	4072	ENSG00000119888	0.558895195	1	-1.125095343
AAMP	NM_001087.3:412	NM_001087	14	ENSG00000127837	0.559430667	1	1.165500796
EDC3	NM_001142443.1:925	NM_001142443	80153	ENSG00000179151	0.560701178	1	-1.087237251
DCC	NM_005215.1:3100	NM_005215	1630	ENSG00000187323	0.5788714	1	1.195723417
MISP	NM_173481.2:1845	NM_173481	126353	ENSG00000099812	0.58005477	1	1.093715209
BAI3	NM_001704.1:885	NM_001704	577	ENSG00000135298	0.580639403	1	-1.172501742
CDH11	NM_001797.2:1835	NM_001797	1009	ENSG00000140937	0.581200915	1	1.096948246
PLXNC1	NM_005761.2:3705	NM_005761	10154	ENSG00000136040	0.581547424	1	1.098957035
C3	NM_000064.2:4396	NM_000064	718	ENSG00000125730	0.581934355	1	-1.193664513
ITGB2	NM_001127491.1:1103	NM_001127491	3689	ENSG00000160255	0.582068738	1	-1.178860658
EVPL	NM_001988.2:5525	NM_001988	2125	ENSG00000167880	0.584342046	1	-1.086687877
ARHGAP32	NM_001142685.1:2100	NM_001142685	9743	ENSG00000134909	0.584410094	1	1.147258903
NRCAM	NM_005010.4:875	NM_005010	4897	ENSG00000091129	0.584673237	1	-1.205944467
RBL1	NM_183404.1:1110	NM_183404	5933	ENSG00000080839	0.585079455	1	1.105655946
ANGPT1	NM_001146.3:2080	NM_001146	284	ENSG00000154188	0.586291655	1	1.113384993
EPHB4	NM_004444.4:1680	NM_004444	2050	ENSG00000196411	0.591166728	1	1.086245961
RAB25	NM_020387.2:245	NM_020387	57111	ENSG00000132698	0.591976634	1	-1.110834742
VSIG4	NM_001100431.1:160	NM_001100431	11326	ENSG00000155659	0.593082427	1	-1.243760024
STAB2	NM_017564.9:3000	NM_017564	55576	ENSG00000136011	0.596205203	1	1.284293698
EGLN3	NM_022073.3:800	NM_022073	112399	ENSG00000129521	0.59720162	1	-1.174624927
CCL8	NM_005623.2:689	NM_005623	6355	ENSG00000108700	0.597405169	1	-1.301315575
PFKFB1	NM_002625.2:564	NM_002625	5207	ENSG00000158571	0.598204224	1	1.310064984
CRISPLD2	NM_031476.3:2575	NM_031476	83716	ENSG00000103196	0.599696275	1	1.115796203
ZKSCAN5	NM_014569.3:3688	NM_014569	23660	ENSG00000196652	0.603755466	1	-1.229081922
CHP2	NM_022097.3:1078	NM_022097	63928	ENSG00000166869	0.603809174	1	1.327648349
PIK3R5	NM_001142633.1:3335	NM_001142633	23533	ENSG00000141506	0.603890935	1	1.09108681
DDX50	NM_024045.1:1185	NM_024045	79009	ENSG00000107625	0.605939461	1	-1.131073531
S100A14	NM_020672.1:460	NM_020672	57402	ENSG00000189334	0.607609704	1	-1.143895816
S100A7	NM_002963.2:69	NM_002963	6278	ENSG00000143556	0.611556896	1	-1.613726349
AMMECR1L	NM_001199140.1:3564	NM_001199140	83607	ENSG00000144233	0.611800876	1	-1.117958241
CAMP	NM_004345.3:220	NM_004345	820	ENSG00000164047	0.613896686	1	-1.314011483
ILK	NM_004517.2:983	NM_004517	3611	ENSG00000166333	0.61854882	1	-1.121984674
CEACAM1	NM_001712.3:2455	NM_001712	634	ENSG00000079385	0.619548381	1	-1.226462505
LHFP	NM_005780.2:460	NM_005780	10186	ENSG00000183722	0.619572123	1	1.101523204
SERPINH1	NM_001235.2:880	NM_001235	871	ENSG00000149257	0.620599584	1	1.108823262
SRGN	NR_036430.1:65	NR_036430			0.624528104	1	-1.165479197

PTK2B	NM_004103.3:735	NM_004103	2185	ENSG00000120899	0.630168048	1	1.084103191
HAPLN1	NM_001884.3:730	NM_001884	1404	ENSG00000145681	0.630460137	1	1.424381752
ITGAM	NM_000632.3:515	NM_000632	3684	ENSG00000169896	0.631843681	1	-1.100407369
VIT	NM_053276.3:604	NM_053276	5212	ENSG00000205221	0.633059447	1	1.239941055
MMP3	NM_002422.3:25	NM_002422	4314	ENSG00000149968	0.634465423	1	1.321181015
RORA	NM_134261.2:1715	NM_134261	6095	ENSG00000069667	0.634684723	1	1.091237332
CSF2RB	NM_000395.2:492	NM_000395	1439	ENSG00000100368	0.634880135	1	1.091726691
CDS1	NM_001263.3:3052	NM_001263	1040	ENSG00000163624	0.63536083	1	-1.099635939
BAG2	NM_004282.3:785	NM_004282	9532	ENSG00000112208	0.635879441	1	-1.103377592
FHL1	NM_001449.4:1032	NM_001449	2273	ENSG00000022267	0.637151512	1	1.12916337
CAMK2A	NM_171825.1:4080	NM_171825	815	ENSG00000070808	0.637778188	1	1.298817638
ADAMTS12	NM_030955.2:1955	NM_030955	81792	ENSG00000151388	0.639843561	1	-1.129363611
PTTG1	NM_004219.2:542	NM_004219	9232	ENSG00000164611	0.644863383	1	1.184920891
TCEB2	NM_007108.2:800	NM_007108	6923	ENSG00000103363	0.648680787	1	-1.103673513
PGK1	NM_000291.2:1030	NM_000291	5230	ENSG00000102144	0.648787973	1	1.105124807
ACVR1C	NM_145259.2:5168	NM_145259	130399	ENSG00000123612	0.650671084	1	-1.304160018
KCNJ8	NM_004982.2:880	NM_004982	3764	ENSG00000121361	0.654807526	1	-1.06480509
DDR2	NM_006182.2:1706	NM_006182	4921	ENSG00000162733	0.657583011	1	-1.071979465
NRXN3	NM_001105250.1:2286	NM_001105250	9369	ENSG00000021645	0.659596789	1	1.103115749
CDKN1A	NM_000389.2:1975	NM_000389	1026	ENSG00000124762	0.660228823	1	-1.106226759
HSP90B1	NM_003299.1:160	NM_003299	7184	ENSG00000166598	0.661276215	1	-1.10061837
VEGFB	NM_003377.3:687	NM_003377	7423	ENSG00000173511	0.663320793	1	1.05337556
ZEB2	NM_014795.3:549	NM_014795	9839	ENSG00000169554	0.664207323	1	-1.084658147
NAA15	NM_057175.3:4145	NM_057175	80155	ENSG00000164134	0.667200484	1	-1.088035421
COL4A1	NM_001845.4:780	NM_001845	1282	ENSG00000187498	0.668559893	1	1.133093888
MMP24	NM_006690.3:1280	NM_006690	10893	ENSG00000125966	0.679750102	1	-1.087690052
TNMD	NM_022144.2:462	NM_022144	64102	ENSG00000000005	0.679888157	1	-1.352905441
AGR2	NM_006408.3:580	NM_006408	10551	ENSG00000106541	0.680059382	1	1.147589691
APC	NM_000038.3:6850	NM_000038	324	ENSG00000134982	0.686383842	1	-1.069643271
KRT7	NM_005556.3:1425	NM_005556	3855	ENSG00000135480	0.686863242	1	-1.082184306
CTNND1	NM_001331.2:146	NM_001331	1500	ENSG00000198561	0.687704485	1	1.103102711
MGP	NM_000900.2:305	NM_000900	4256	ENSG00000111341	0.689197937	1	1.114679471
COL6A1	NM_001848.2:3665	NM_001848	1291	ENSG00000142156	0.689937793	1	1.099588555
ANG	NM_001145.4:949	NM_001145	283	ENSG00000214274	0.692970865	1	-1.063498166
EMP3	NM_001425.2:350	NM_001425	2014	ENSG00000142227	0.695633999	1	1.081322891
GPX1	NM_000581.2:745	NM_000581	2876	ENSG00000233276	0.69872819	1	1.081216046
RUNX1T1	NM_004349.2:1085	NM_004349	862	ENSG00000079102	0.699722444	1	1.105735396
SLC37A1	NM_018964.3:810	NM_018964	54020	ENSG00000160190	0.704017795	1	-1.108396101
NDRG1	NM_006096.2:565	NM_006096	10397	ENSG00000104419	0.710593605	1	-1.125595948
ITGA6	NM_000210.1:3065	NM_000210	3655	ENSG00000091409	0.712782008	1	-1.066391578
PRF1	NM_005041.3:2120	NM_005041	5551	ENSG00000180644	0.71351347	1	1.066498524
RBPJ	NM_015874.3:850	NM_015874	3516	ENSG00000168214	0.713869864	1	-1.068107636
IL15	NM_172174.1:1685	NM_172174	3600	ENSG00000164136	0.717167377	1	-1.107343119
NRXN1	NM_138735.2:1095	NM_138735	9378	ENSG00000179915	0.718372674	1	-1.262532828
PFKFB4	NM_004567.2:400	NM_004567	5210	ENSG00000114268	0.721456263	1	-1.124935335
ANGPTL4	NR_104213.1:475	NR_104213	51129	ENSG00000167772	0.724589828	1	-1.182447912
NFAT5	NM_173214.1:3290	NM_173214	10725	ENSG00000102908	0.726392169	1	-1.050206081
HKDC1	NM_025130.3:2267	NM_025130	80201	ENSG00000156510	0.733110652	1	1.170296402
CLDN4	NM_001305.3:1242	NM_001305	1364	ENSG00000189143	0.735321688	1	-1.101444141
EIF4E2	NM_004846.3:670	NM_004846	9470	ENSG00000135930	0.737933733	1	1.036067539
SMOC1	NM_001034852.1:1990	NM_001034852	64093	ENSG00000198732	0.738843121	1	1.192927098
SMURF1	NM_181349.1:5162	NM_181349	57154	ENSG00000198742	0.739303935	1	-1.038237455
ERMP1	NM_024896.2:852	NM_024896	79956	ENSG00000099219	0.740185875	1	-1.08253975
INHBE	NM_031479.3:1450	NM_031479	83729	ENSG00000139269	0.741739278	1	-1.320097345
BICC1	NM_001080512.1:2155	NM_001080512	80114	ENSG00000122870	0.743405708	1	1.084138656
LY96	NM_015364.2:360	NM_015364	23643	ENSG00000154589	0.7461671	1	1.141742094
ADAM8	NM_001109.4:762	NM_001109	101	ENSG00000151651	0.752098121	1	1.070824367
ADAM17	NM_003183.4:1595	NM_003183	6868	ENSG00000151694	0.756422506	1	1.068447622
NOX5	NM_024505.2:2135	NM_024505	79400	ENSG00000255346	0.759485614	1	1.185113816
FOXO4	NM_005938.2:35	NM_005938	4303	ENSG00000184481	0.759499678	1	1.042705973
EGFL7	NM_016215.3:1252	NM_016215	51162	ENSG00000172889	0.759505559	1	1.07891197
VCAN	NM_004385.3:9915	NM_004385	1462	ENSG00000038427	0.762639992	1	1.08687028
MYCL	NM_001033081.2:568	NM_001033081	4610	ENSG00000116990	0.763853359	1	1.090395978
TMC6	NM_001127198.1:1266	NM_001127198	11322	ENSG00000141524	0.767158861	1	1.070092366
ST14	NM_021978.3:1405	NM_021978	6768	ENSG00000149418	0.767442353	1	1.048789847
MCAM	NM_006500.2:2482	NM_006500	4162	ENSG00000076706	0.767468617	1	-1.062769708
RNH1	NM_203384.1:1192	NM_203384	6050	ENSG00000023191	0.773525079	1	1.049028155
SPARCL1	NM_004684.4:2265	NM_004684	8404	ENSG00000152583	0.776438308	1	1.11938938
SOX17	NM_022454.3:1374	NM_022454	64321	ENSG00000164736	0.77852091	1	-1.071567252
ZNF346	NM_012279.2:2260	NM_012279	23567	ENSG00000113761	0.783415922	1	-1.086257811
SPOCK3	NM_001204355.1:730	NM_001204355	50859	ENSG00000196104	0.786408789	1	1.185238335
FGF9	NM_002010.2:1565	NM_002010	2254	ENSG00000102678	0.788248905	1	-1.108501068
ISL1	NM_002202.2:1375	NM_002202	3670	ENSG00000016082	0.788811192	1	-1.277543057
MTDH	NM_178812.3:828	NM_178812	92140	ENSG00000147649	0.792547311	1	1.068284071
EDN1	NM_001955.2:770	NM_001955	1906	ENSG00000078401	0.797349081	1	-1.066264793
TIMP4	NM_003256.2:1000	NM_003256	7079	ENSG00000157150	0.805490451	1	1.147674955
EPHA2	NM_004431.2:1525	NM_004431	1969	ENSG00000142627	0.805713813	1	1.061086427
EPHA1	NM_005232.3:2075	NM_005232	2041	ENSG00000146904	0.806265437	1	1.06004795



VAV2	NM_003371.3:2699	NM_003371	7410	ENSG00000160293	0.807178785	1	-1.034863514
HPSE	NM_006665.3:1625	NM_006665	10855	ENSG00000173083	0.813468607	1	-1.099591791
KLK3	NM_001030049.1:433	NM_001030049	354	ENSG00000142515	0.813762772	1	1.154968015
C1S	NM_001734.2:775	NM_001734	716	ENSG00000182326	0.81654591	1	1.069267658
TNN	NM_022093.1:3580	NM_022093	63923	ENSG00000120332	0.8170437	1	1.120752481
NOS3	NM_000603.4:1456	NM_000603	4846	ENSG00000164867	0.818827216	1	1.060728835
LGALS1	NM_002305.3:60	NM_002305	3956	ENSG00000100097	0.820876087	1	1.062911128
NODAL	NM_018055.3:320	NM_018055	4838	ENSG00000156574	0.824167596	1	-1.176932925
ENPP2	NM_001040092.2:1980	NM_001040092	5168	ENSG00000136960	0.824617692	1	1.094386113
IL11	NM_000641.2:1145	NM_000641	3589	ENSG00000095752	0.826026892	1	1.128156204
FBN2	NM_001999.3:9850	NM_001999	2201	ENSG00000138829	0.826337528	1	1.126701285
ANGPT2	NM_001147.2:1775	NM_001147	285	ENSG00000091879	0.830406077	1	1.074988272
VAMP8	NM_003761.3:260	NM_003761	8673	ENSG00000118640	0.830538477	1	-1.047676857
UTS2	NM_006786.3:354	NM_006786	10911	ENSG00000049247	0.837622297	1	-1.145191382
EMILIN3	NM_052846.1:3113	NM_052846	90187	ENSG00000183798	0.838065637	1	-1.113323334
TIE1	NM_005424.2:2610	NM_005424	7075	ENSG00000066056	0.84714594	1	-1.033233797
SOX9	NM_000346.2:2135	NM_000346	6662	ENSG00000125398	0.847536843	1	-1.039331068
CXCR4	NM_003467.2:1335	NM_003467	7852	ENSG00000121966	0.847650935	1	1.088611805
FCF1	NM_015962.4:1022	NM_015962	51077	ENSG00000119616	0.849601686	1	-1.058959143
AHNAK	NM_001620.2:14454	NM_001620	79026	ENSG00000124942	0.861540094	1	1.061327122
SPINK5	NM_006846.3:2595	NM_006846	11005	ENSG00000133710	0.868893876	1	1.071096651
SLPI	NM_003064.2:330	NM_003064	6590	ENSG00000124107	0.869682841	1	1.070359083
FMOD	NM_002023.3:2050	NM_002023	2331	ENSG00000122176	0.872785814	1	-1.019860587
ADAP1	NM_006869.2:570	NM_006869	11033	ENSG00000105963	0.873580312	1	-1.022224233
PPFIBP2	NM_003621.2:2350	NM_003621	8495	ENSG00000166387	0.875794892	1	-1.044126356
ALDOA	NM_184041.2:1455	NM_184041	226	ENSG00000149925	0.878571242	1	1.030278151
ABI3BP	NM_015429.3:4081	NM_015429	25890	ENSG00000154175	0.879166507	1	1.032855339
NAP1L3	NM_004538.4:1070	NM_004538	4675	ENSG00000186310	0.896169286	1	1.038640307
UBA52	NM_003333.3:288	NM_003333	7311	ENSG00000221983	0.897514443	1	-1.024794054
IBSP	NM_004967.3:876	NM_004967	3381	ENSG0000029559	0.898307916	1	-1.095273059
CD2AP	NM_012120.2:1895	NM_012120	23607	ENSG00000198087	0.899544862	1	1.012536713
CCR3	NM_001837.2:980	NM_001837	1232	ENSG00000183625	0.911411751	1	1.078044924
GALNT7	NM_017423.2:910	NM_017423	51809	ENSG00000109586	0.91297904	1	-1.026452366
CXCL17	NM_198477.1:440	NM_198477	284340	ENSG00000189377	0.919869093	1	1.027064502
VAV3	NM_001079874.1:352	NM_001079874	10451	ENSG00000134215	0.92063718	1	-1.023296858
HOXA7	NM_006896.3:1605	NM_006896	3204	ENSG00000122592	0.921025896	1	1.06054095
LAMA1	NM_005559.2:5230	NM_005559	284217	ENSG00000101680	0.921649038	1	-1.024613213
GRHL2	NM_024915.3:3690	NM_024915	79977	ENSG00000083307	0.930265961	1	1.025493297
CLDN7	NM_001307.3:175	NM_001307	1366	ENSG00000181885	0.933008244	1	-1.020607872
ITGA2	NM_002203.2:475	NM_002203	3673	ENSG00000164171	0.934478895	1	1.016420127
INHBA	NM_002192.2:490	NM_002192	3624	ENSG00000122641	0.934719134	1	1.029705596
NME4	NM_005009.2:820	NM_005009	4833	ENSG00000103202	0.936861438	1	-1.012863107
STAT1	NM_139266.1:455	NM_139266	6772	ENSG00000115415	0.940534071	1	1.013897163
GATA4	NM_002052.3:2140	NM_002052	2626	ENSG00000136574	0.941898243	1	1.060599009
SHB	NM_003028.2:3200	NM_003028	6461	ENSG00000107338	0.943198748	1	-1.019894719
GDF6	NM_001001557.2:1908	NM_001001557	392255	ENSG00000156466	0.94374091	1	1.05765611
KRT1	NM_006121.2:690	NM_006121	3848	ENSG00000167768	0.943969558	1	1.045515892
MMRN2	NM_024756.2:3040	NM_024756	79812	ENSG00000173269	0.944471915	1	-1.012671354
MTBP	NM_022045.4:1792	NM_022045	27085	ENSG00000172167	0.949050869	1	1.02641402
HOXB13	NM_006361.5:1220	NM_006361	10481	ENSG00000159184	0.956479493	1	-1.051292043
HK3	NM_002115.1:495	NM_002115	3101	ENSG00000160883	0.96101387	1	-1.014800482
TNFRSF12A	NM_016639.1:575	NM_016639	51330	ENSG00000006327	0.964002622	1	1.01108777
LOXL2	NM_002318.2:40	NM_002318	4017	ENSG00000134013	0.96491379	1	-1.010108534
SPINT1	NM_001032367.1:1315	NM_001032367	6692	ENSG00000166145	0.967605285	1	-1.007227683
TMPRSS6	NM_153609.2:2929	NM_153609	164656	ENSG00000187045	0.96922046	1	1.028234451
ROCK2	NM_004850.3:3140	NM_004850	9475	ENSG00000134318	0.9701545	1	1.008216218
ANPEP	NM_001150.1:2670	NM_001150	290	ENSG00000166825	0.978510814	1	1.006307075
KISS1	NM_002256.3:125	NM_002256	3814	ENSG00000170498	0.979952452	1	1.019397511
GDF5	NM_000557.2:155	NM_000557	8200	ENSG00000125965	0.989878329	1	-1.008636571
ITGB6	NM_000888.3:1090	NM_000888	3694	ENSG00000115221	0.994565814	1	1.00174183
P3H1	NM_001146289.1:860	NM_001146289	64175	ENSG00000117385	0.996639703	1	-1.00070556

Group	Gene	Shapiro-Wilks	
		p-value	overall normality
AFE	AAMP	0.562328084	88.5%
AFE	ABI3BP	0.628343558	
AFE	ACHE	0.947927145	
AFE	ACTG2	0.046908396	
AFE	ACVR1	0.102796814	
AFE	ACVR1C	0.879065023	
AFE	ACVRL1	0.858837811	
AFE	ADAM15	0.826919812	
AFE	ADAM17	0.425427018	
AFE	ADAM28	0.070557131	
AFE	ADAM8	0.835632465	
AFE	ADAM9	0.278174754	
AFE	ADAMTS1	0.957331506	
AFE	ADAMTS12	0.293114606	
AFE	ADAMTS8	0.860154533	
AFE	ADAP1	0.491280651	
AFE	ADD1	0.386540718	
AFE	ADM2	0.524378997	
AFE	ADRA2B	0.542937431	
AFE	AEBP1	0.868098426	
AFE	AGGF1	0.430640357	
AFE	AGK	0.346548379	
AFE	AGR2	0.183206301	
AFE	AGRN	0.762169537	
AFE	AGT	0.337826873	
AFE	AHNAK	0.625391115	
AFE	AKAP12	0.743389829	
AFE	AKAP2	0.478519854	
AFE	AKT1	0.320788283	
AFE	AKT2	0.887924315	
AFE	AKT3	0.770690898	
AFE	ALB	0.00377358	
AFE	ALDOA	0.96018967	
AFE	ALOX5	0.017556306	
AFE	AMH	0.93165111	
AFE	AMMECR1L	0.704414335	
AFE	ANG	0.764773672	
AFE	ANGPT1	0.486764319	
AFE	ANGPT2	0.122337151	
AFE	ANGPTL2	0.200635219	
AFE	ANGPTL4	0.501861552	
AFE	ANPEP	0.723492243	
AFE	ANXA2P2	0.198211426	
AFE	AP1M2	0.962774631	

AFE	APC	0.843597927
AFE	APOD	0.895372992
AFE	APOE	0.855995937
AFE	APOH	0.375086521
AFE	AQP1	0.888069196
AFE	ARAP2	0.914288124
AFE	AREG	0.532225093
AFE	ARHGAP32	0.583329396
AFE	ARHGDIB	0.880591661
AFE	ASPN	0.011476647
AFE	ATPIF1	0.612239592
AFE	B3GNT3	0.156875674
AFE	BAD	0.678575292
AFE	BAG2	0.1189156
AFE	BAI1	0.33859783
AFE	BAI3	0.841399022
AFE	BCAS1	0.634659048
AFE	BGN	0.623882484
AFE	BICC1	0.175927898
AFE	BMP4	0.760522303
AFE	BMP5	0.233687376
AFE	BMP7	0.653300487
AFE	BMPER	0.314588465
AFE	BMPR1A	0.961464616
AFE	BMPR1B	0.120789756
AFE	BMPR2	0.272102806
AFE	BNC2	0.388113412
AFE	BRMS1	0.956648393
AFE	BTG1	0.235371234
AFE	C1S	0.146611232
AFE	C3	0.070832268
AFE	C3AR1	0.414863483
AFE	CADM1	0.837331745
AFE	CALCRL	0.945840743
AFE	CALD1	0.338255885
AFE	CAMK2A	0.147785075
AFE	CAMK2B	0.384835662
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AFE	CAMP	0.697240386
AFE	CASP8	0.816212931
AFE	CAV1	0.417560612
AFE	CBLC	0.215610506
AFE	CC2D1B	0.104141647
AFE	CCBE1	0.84744046
AFE	CCDC80	0.854319877
AFE	CCL11	0.217073698
AFE	CCL21	0.648960722

AFE	CCL5	0.367529819
AFE	CCL8	0.74461361
AFE	CCR2	0.885738067
AFE	CCR3	0.757126205
AFE	CD163	0.723756987
AFE	CD24	0.41575635
AFE	CD2AP	0.022234821
AFE	CD34	0.676398369
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AFE	CD82	0.535158449
AFE	CDC42	0.431848232
AFE	CDH1	0.152183918
AFE	CDH11	0.963278152
AFE	CDH13	0.174060015
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AFE	CDK14	0.163095706
AFE	CDKN1A	0.987114597
AFE	CDKN2A	0.98271572
AFE	CDS1	0.9308455
AFE	CEACAM1	0.072164008
AFE	CEACAM5	0.307753361
AFE	CEACAM6	0.319441844
AFE	CEP170	0.597997891
AFE	CEP295	0.165427229
AFE	CFP	0.593237589
AFE	CGN	0.008182301
AFE	CHAD	0.009897597
AFE	CHD4	0.847350974
AFE	CHI3L1	0.735952337
AFE	CHP1	0.442901452
AFE	CHP2	0.849107248
AFE	CHRDL1	0.081261677
AFE	CHRNA7	0.507153406
AFE	CIB1	0.065677146
AFE	CKMT1A	0.081320723
AFE	CLDN1	0.952696541
AFE	CLDN3	0.56411546
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AFE	CLEC2B	0.500317639
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AFE	CLU	0.53779002
AFE	CMA1	0.499071274
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AFE	CNOT10	0.065580033
AFE	CNOT4	0.206033351
AFE	COG7	0.262950696
AFE	COL18A1	0.573196783
AFE	COL1A1	0.214895993
AFE	COL1A2	0.375365544
AFE	COL3A1	0.890391604
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AFE	COL4A2	0.010769396
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AFE	COL7A1	0.82186739
AFE	COMP	0.580905557
AFE	CREBBP	0.179650223
AFE	CRIP2	0.179925253
AFE	CRISPLD2	0.803939466
AFE	CSF2RB	0.906551794
AFE	CSPG4	0.708653291
AFE	CST7	0.064408547
AFE	CTNNB1	0.265387546
AFE	CTNND1	0.983065982
AFE	CTSG	0.90805923
AFE	CTSH	0.049254293
AFE	CTSK	0.196301589
AFE	CTSL	0.650166346
AFE	CUL1	0.591535982
AFE	CX3CL1	0.328854907
AFE	CXADR	0.961499627
AFE	CXCL10	0.301773426
AFE	CXCL11	0.898378389
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AFE	DAG1	0.443899313
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AFE	DDR2	0.467806116
AFE	DDX50	0.120515775
AFE	DENND5A	0.717077637
AFE	DENR	0.097688767
AFE	DESI1	0.032452357
AFE	DHX16	0.590378313
AFE	DICER1	0.23398002
AFE	DLC1	0.516657032
AFE	DLG1	0.131242759
AFE	DLL4	0.590877611
AFE	DNAJC14	0.542192962
AFE	DPT	0.936256033
AFE	DPYSL3	0.619142025
AFE	DSC2	0.221198855
AFE	DST	0.987268939
AFE	ECM1	0.55325435
AFE	ECM2	0.84404645
AFE	ECSCR	0.722965824
AFE	EDC3	0.724719315
AFE	EDN1	0.178526639
AFE	EGF	0.394261478
AFE	EGFL7	0.34223535
AFE	EGFR	0.573491645
AFE	EGLN2	0.608116883
AFE	EGLN3	0.296857263
AFE	EIF2AK3	0.006762042
AFE	EIF4E2	0.859129704
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AFE	ELF3	0.553721954
AFE	ELK3	0.390876505
AFE	EMCN	0.108215804
AFE	EMILIN1	0.297345426
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AFE	ENPEP	0.312450499
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AFE	EP300	0.421295374
AFE	EPAS1	0.632275261
AFE	EPCAM	0.642617212
AFE	EPHA1	0.588012088
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AFE	EPS8L1	0.398079384
AFE	ERBB2	0.369756028
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AFE	ERMP1	0.062429323
AFE	ESRP1	0.543919452
AFE	ETV4	0.635257315
AFE	EVI2A	0.637308355
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AFE	F11R	0.51896
AFE	F3	0.52786975
AFE	FAM174B	0.732797172
AFE	FAP	0.367452775
AFE	FASLG	0.588085777
AFE	FBLN1	0.132235258
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AFE	FBN1	0.467465122
AFE	FBN2	0.975865969
AFE	FBP1	0.838527705
AFE	FCF1	0.498898775
AFE	FERMT2	0.857234067
AFE	FGF18	0.415049407
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AFE	FGFR1	0.586663173
AFE	FGFR2	0.497014776
AFE	FGFR3	0.905238682
AFE	FGFR4	0.812590563
AFE	FGL2	0.426581646
AFE	FHL1	0.58692733
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Kontrolle	ADAM15	0.542835798
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Kontrolle	ALB	0.068457816
Kontrolle	ALDOA	0.071138583

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Kontrolle	AMH	0.555516357
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Kontrolle	ANGPT1	0.011233037
Kontrolle	ANGPT2	0.451631044
Kontrolle	ANGPTL2	0.241753106
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Kontrolle	ANPEP	0.249456888
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Kontrolle	ASPN	0.400665348
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Kontrolle	BAI1	0.007460168
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Kontrolle	BCAS1	0.356709042
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Kontrolle	BMP4	0.515354878
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Kontrolle	BMPR2	0.753593408
Kontrolle	BNC2	0.177345965
Kontrolle	BRMS1	0.986729098
Kontrolle	BTG1	0.344780324
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Kontrolle	C3	0.978214245
Kontrolle	C3AR1	0.273809568
Kontrolle	CADM1	0.731137659
Kontrolle	CALCRL	0.378708558
Kontrolle	CALD1	0.038998174
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Kontrolle	CAMK2B	0.402742635
Kontrolle	CAMK2D	0.25840508
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Kontrolle	CDH13	0.045807316
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Kontrolle	PTGS2	0.629210714

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Gene	p-value	p-value bonferroni
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SULF1	2.35284E-07	0.000179522
THBS2	4.34647E-07	0.000331635
IGF1	6.20619E-07	0.000473532
COL5A1	7.94961E-07	0.000606556
MEG3	1.97504E-06	0.001506955
VCAM1	2.63015E-06	0.002006806
CTSK	3.121E-06	0.00238132
PLAU	4.23158E-06	0.003228695
ITGA11	4.45649E-06	0.003400305
COL1A2	1.01413E-05	0.007737849
COL5A2	1.97765E-05	0.015089456
COL3A1	2.21932E-05	0.016933419
ISLR	2.29724E-05	0.017527927
TNC	2.38329E-05	0.018184469
AEBP1	3.25113E-05	0.024806116
ID1	4.89885E-05	0.037378244
FAP	5.33319E-05	0.040692212
SFRP2	5.4825E-05	0.041831449
DLC1	8.87693E-05	0.067730952
COL18A1	0.000104292	0.079574728
ICAM1	0.000121286	0.092541
CXCL12	0.000123488	0.094220965
COL4A1	0.000131467	0.100309128
PTPRB	0.000143923	0.109813339
P3H2	0.000169187	0.129089847
ECM2	0.000195773	0.149374645
GREM1	0.000229262	0.174926619
CCDC80	0.000249553	0.190409105
BICC1	0.00026393	0.201378527
SERPINH1	0.000283393	0.216228997
EMILIN1	0.000283395	0.216230304
PTGDS	0.00029799	0.227366431
IL1RL1	0.000341332	0.260436461
P3H1	0.000363678	0.277486604
LAMA1	0.000366787	0.279858519
PROK2	0.000382202	0.291620132
LAMA3	0.000400382	0.305491124
BMP7	0.000403437	0.307822545
ANGPTL2	0.00040775	0.311113404
PRKCZ	0.000415944	0.317365393
AKAP2	0.000449757	0.343164782
LDHA	0.000471446	0.359713627
BMP5	0.000477172	0.364082233
COL6A2	0.000578177	0.441149133

PDPN	0.000616943	0.47072768
PTGIS	0.000720198	0.549511078
FGFR4	0.000760696	0.580411168
ACVRL1	0.000854687	0.652126051
PDGFC	0.000855088	0.652432161
CDH2	0.000875704	0.668162435
MMP2	0.000951317	0.725855148
RBM47	0.000954447	0.728243066
FMOD	0.000972518	0.742031505
COL6A3	0.000986533	0.752724823
IL6	0.001072868	0.818598417
PCOLCE	0.001087637	0.829867193
MAP2K1	0.001119819	0.854422121
ECM1	0.001127176	0.860035588
CDH11	0.001152508	0.879363413
AGT	0.001156743	0.882595002
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CMA1	0.001319207	1
TAL1	0.001379261	1
TMEM100	0.001449881	1
PLXDC1	0.001550549	1
SERPINA1	0.001560162	1
RTN4	0.001706743	1
CDKN1A	0.001708391	1
HIF1A	0.00187791	1
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IGFBP4	0.001957267	1
OGN	0.00217657	1
PRKCG	0.002215584	1
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F3	0.002500215	1
SPP1	0.00256894	1
STAB1	0.002613475	1
SERPINE1	0.00269018	1
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TBX1	0.002980572	1
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COL6A1	0.003163771	1
VEGFA	0.00322141	1
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MGAT5	0.005452091	1
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IL13RA2	0.005717626	1
NOS2	0.005787862	1
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COL4A2	0.005847507	1
SLIT2	0.006070556	1
AKAP12	0.006161233	1
BGN	0.006189412	1
FGFR3	0.006213793	1
PTPRM	0.006298613	1
THBS1	0.006470002	1
ANGPTL4	0.006712376	1
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RUNX1	0.007029836	1
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MAP3K7	0.008977358	1
VCAN	0.009032222	1
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SOD1	0.193256627	1
NCAM1	0.195596256	1

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RNH1	0.221932558	1
VIM	0.222333572	1
DAG1	0.22256149	1
CHAD	0.223657095	1
ITGA8	0.2246209	1
HGF	0.225304968	1
EPHB4	0.225592954	1
RBPJ	0.22658998	1
MYH11	0.226853567	1
ADAMTS12	0.22763257	1
NOX5	0.228986875	1
ITGB1	0.23114624	1
F11R	0.233015055	1
GTF2I	0.233590681	1
NRXN1	0.236255465	1
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RAC1	0.237026668	1
PRSS22	0.238630727	1
HDHD3	0.242845723	1
TRIM39	0.245947632	1
CHRNA7	0.247332685	1
KRIT1	0.24778415	1
STAT1	0.251714109	1

RPS6KB2	0.254763646	1
VIT	0.256195487	1
MMP12	0.257432393	1
ELK3	0.257816518	1
SRC	0.257855803	1
RBL1	0.257956513	1
RPS6KB1	0.259094311	1
SDC4	0.261652743	1
GZMK	0.262482719	1
SLC37A1	0.262484823	1
CFP	0.262730301	1
TBXA2R	0.262860476	1
FBP1	0.266186623	1
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ENO3	0.268691715	1
HPSE	0.269382019	1
PECAM1	0.270618736	1
SMAD4	0.272215131	1
LEFTY1	0.272350873	1
LAMC1	0.273041319	1
CNOT4	0.275573177	1
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IL1B	0.279481425	1
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B3GNT3	0.282093415	1
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KCNJ8	0.284960756	1
ERBB3	0.285530497	1
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GDF5	0.290616359	1
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FST	0.292371346	1
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TGFB2	0.29331561	1
IFNG	0.295987169	1
PLA2G3	0.296972457	1
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TP53	0.299103528	1
CXCL17	0.299209639	1
DNAJC14	0.299906185	1
TLR4	0.306348685	1
ACHE	0.307857634	1
VASH1	0.308535645	1
SYK	0.311109877	1

HDAC3	0.312453328	1
GPATCH3	0.313274789	1
BAI1	0.316033534	1
CEACAM5	0.316396271	1
PTEN	0.319642212	1
FN1	0.323674731	1
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GSN	0.334941448	1
JAG1	0.336258532	1
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TNS1	0.339822942	1
PKNOX1	0.340617566	1
TMEM30B	0.340773744	1
SMAD1	0.34264867	1
SPHK2	0.344064008	1
PTK6	0.344294423	1
DCN	0.345086867	1
PDK1	0.349981573	1
CDK14	0.354702843	1
EMP3	0.358631848	1
EGF	0.36003106	1
EDN1	0.362730747	1
LAMC2	0.366523433	1
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PDCL3	0.36808691	1
EVPL	0.369477115	1
CAMK2A	0.369906829	1
CYBB	0.373390992	1
CHP1	0.37393639	1
TLK2	0.381257133	1
CGN	0.39250431	1
TFDP1	0.392842438	1
PLCG2	0.395104011	1
BMP4	0.395872875	1
DLG1	0.397496032	1
NOTCH1	0.401211083	1
PPP2R1A	0.403686909	1
PRPF38A	0.405142379	1
HIPK1	0.405520028	1
HAPLN1	0.406373428	1
PPP3R1	0.406986017	1
CCR2	0.40705918	1
SMURF1	0.407113368	1
CD34	0.409026623	1

NRP2	0.410243877	1
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SETD2	0.416837675	1
ZEB2	0.417193814	1
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CXCL11	0.432395536	1
PPP1R16B	0.432428337	1
ITGA6	0.433499818	1
CTNND1	0.437437703	1
FASLG	0.438045212	1
FGL2	0.438519746	1
AAMP	0.438856205	1
VHL	0.44177341	1
HKDC1	0.442543812	1
UTS2	0.443845367	1
INHBE	0.448057534	1
ACVR1C	0.449208991	1
PIK3R5	0.455332448	1
CXCR3	0.455796735	1
SNAI3	0.45602789	1
CLEC3B	0.457002608	1
SET	0.458469874	1
CHRD1	0.462149498	1
FUT3	0.46231197	1
GLYR1	0.46243716	1
PTPRC	0.466666903	1
MTDH	0.469200809	1
LRG1	0.473829055	1
NDP	0.474230836	1
VWA1	0.478864487	1
OAS1	0.481642313	1
ZEB1	0.482306169	1
MT3	0.482901338	1
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MISP	0.484309696	1
RAC2	0.486112395	1
GPX1	0.486423733	1
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ROCK1	0.495164124	1
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ENPEP	0.499753526	1
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MMRN2	0.506930856	1
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WARS	0.510286457	1
FERMT2	0.51468838	1
ANPEP	0.517001465	1
AKT1	0.520626259	1
TMC6	0.533121554	1
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AP1M2	0.539358246	1
MMP17	0.54049656	1
PITX2	0.542982035	1
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NR3C1	0.545837006	1
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SYNE1	0.555486706	1
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ECSCR	0.556978149	1
AMH	0.557861065	1
HUNK	0.563899878	1
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ADAMTS1	0.571039641	1
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BAG2	0.574446595	1
POPDC3	0.57447044	1
TWIST2	0.584859038	1
VAV2	0.591755994	1
TNFSF12	0.591845773	1
FCF1	0.592939699	1
ZFPM2	0.59320689	1
CEACAM1	0.600517245	1
KIAA1462	0.602152891	1
ANGPT2	0.602454538	1
ETV4	0.603761306	1
CDKN2A	0.604498632	1
PGK1	0.607890504	1
SRPK2	0.609242717	1
MYCL	0.609913962	1
PNPLA6	0.611168085	1
SSTR2	0.611857948	1
GIMAP4	0.613222997	1
CLDN7	0.616992536	1



IL11	0.619338586	1
ACTG2	0.625411781	1
LOXL2	0.631167994	1
FHL1	0.63186883	1
FOXC2	0.632339656	1
AGR2	0.632984615	1
CLDN3	0.639678174	1
SMC3	0.641745625	1
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LLGL2	0.647365326	1
SPINT1	0.649890021	1
LAD1	0.653953545	1
AGK	0.655344398	1
RPS27A	0.656425757	1
CC2D1B	0.661650433	1
BTG1	0.668224818	1
CD82	0.669161845	1
DICER1	0.674263281	1
PIK3CD	0.676355858	1
PKN1	0.676501023	1
HSD17B12	0.678924727	1
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SLC35A3	0.680814235	1
CSF2RB	0.685318993	1
CDH13	0.687139399	1
NAP1L3	0.693430956	1
SPARCL1	0.69969062	1
LHFP	0.706021734	1
PRELP	0.70854919	1
ALOX5	0.711599981	1
MS4A6A	0.712692192	1
MAP2K4	0.713044833	1
RHOA	0.721355828	1
SKP1	0.721877467	1
NF1	0.728028621	1
EPHA2	0.730153375	1
TCEB1	0.731199832	1
FBN2	0.732312638	1
ERMP1	0.733327434	1
MCAM	0.737107667	1
BNC2	0.73945591	1
IL15	0.743925505	1
ITGB2	0.747835869	1
MMP3	0.749446662	1
FOXO4	0.751796493	1
TNFRSF12A	0.752399539	1

TIMP4	0.754612934	1
FGF9	0.756137602	1
IBSP	0.757585418	1
ADRA2B	0.761240469	1
SCG2	0.762222719	1
DCC	0.762543443	1
ZKSCAN5	0.764158993	1
ITM2A	0.764762537	1
PIK3CA	0.770862357	1
ITGAM	0.776085442	1
ADAM17	0.779842406	1
CEP295	0.779962316	1
VAMP8	0.78178921	1
ADAP1	0.782068133	1
CNOT10	0.782816231	1
EPHA1	0.784230272	1
CUL1	0.787551073	1
ARHGAP32	0.788523592	1
APC	0.793349394	1
VSIG4	0.799741231	1
PRF1	0.799898896	1
KRT7	0.80100666	1
APOD	0.823170848	1
ILK	0.842719659	1
HK3	0.848056847	1
PTK2B	0.851637288	1
GDF6	0.853569181	1
SV2B	0.859429619	1
CST7	0.861102871	1
ABI3BP	0.861680064	1
NRXN3	0.862543088	1
NFAT5	0.866635524	1
RUNX1T1	0.866863257	1
MAPK3	0.87795982	1
ALB	0.883879162	1
ZNF346	0.887513302	1
TMPRSS6	0.891634028	1
PFKFB4	0.902832025	1
SHB	0.905302333	1
ADM2	0.905486713	1
SH2D3A	0.907134135	1
TGFBR2	0.907564189	1
NOS3	0.911765867	1
AHNAK	0.913063123	1
GPR56	0.915216744	1
AMMECR1L	0.918460539	1
CXCL10	0.919652951	1

DDX50	0.924642535	1
EIF4E2	0.927767173	1
ST14	0.929222941	1
SRF	0.929565921	1
DSC2	0.931071931	1
SELE	0.937007503	1
RORB	0.959480344	1
VAV3	0.960046791	1
NDRG1	0.960241888	1
ROCK2	0.963402887	1
CLDN4	0.964986606	1
SOX17	0.998211158	1

Probe	RefSeq	Entrez	Ensembl	Gene	group 1	group 2	p-value	p-value bonferroni
NM_004530.2:2360	NM_004530	4313	ENSG00000087245	MMP2	Kontrolle	AFE	2.91738E-07	0.000222596
NM_001754.4:635	NM_001754	861	ENSG00000159216	RUNX1	Kontrolle	AFE	5.70574E-07	0.000435348
NM_000088.3:4272	NM_000088	1277	ENSG00000108821	COL1A1	Kontrolle	AFE	1.48924E-06	0.001136291
NM_000396.2:415	NM_000396	1513	ENSG00000143387	CTSK	Kontrolle	AFE	2.32697E-06	0.001775477
NM_000093.3:6345	NM_000093	1289	ENSG00000130635	COL5A1	Kontrolle	AFE	2.43954E-06	0.001861371
NM_000090.3:180	NM_000090	1281	ENSG00000168542	COL3A1	Kontrolle	AFE	3.19983E-06	0.002441471
NM_003247.2:4460	NM_003247	7058	ENSG00000186340	THBS2	Kontrolle	AFE	3.65192E-06	0.002786417
NM_002615.4:888	NM_002615	5176	ENSG00000132386	SERPINF1	Kontrolle	AFE	3.98881E-06	0.003043461
NM_002658.2:793	NM_002658	5328	ENSG00000122861	PLAU	Kontrolle	AFE	8.38629E-06	0.006398738
NM_001734.2:775	NM_001734	716	ENSG00000182326	C1S	Kontrolle	AFE	1.16026E-05	0.008852758
NM_000618.3:491	NM_000618	3479	ENSG00000017427	IGF1	Kontrolle	AFE	1.33109E-05	0.010156206
NM_004369.3:2782	NM_004369	1293	ENSG00000163359	COL6A3	Kontrolle	AFE	1.39255E-05	0.010625153
NM_004995.2:1470	NM_004995	4323	ENSG00000157227	MMP14	Kontrolle	AFE	1.71288E-05	0.013069296
NM_006288.2:135	NM_006288	7070	ENSG00000154096	THY1	Kontrolle	AFE	1.72934E-05	0.01319484
NM_006288.2:135	NM_006288	7070	ENSG00000154096	THY1	NSIP	Kontrolle	1.73831E-05	0.01326329
NM_000089.3:2635	NM_000089	1278	ENSG00000164692	COL1A2	NSIP	Kontrolle	1.83526E-05	0.014003004
NM_001080512.1:2155	NM_001080512	80114	ENSG00000122870	BICC1	Kontrolle	AFE	1.91194E-05	0.014588103
NM_006094.3:5650	NM_006094	10395	ENSG00000164741	DLC1	UIP	Kontrolle	2.05472E-05	0.015677505
NM_001552.2:1520	NM_001552	3487	ENSG00000141753	IGFBP4	Kontrolle	AFE	2.4191E-05	0.018457706
NM_002345.3:1285	NM_002345	4060	ENSG00000139329	LUM	Kontrolle	AFE	2.65667E-05	0.020270412
NM_000088.3:4272	NM_000088	1277	ENSG00000108821	COL1A1	NSIP	Kontrolle	2.72294E-05	0.020776025
NM_002658.2:793	NM_002658	5328	ENSG00000122861	PLAU	UIP	AFE	2.80274E-05	0.021384929
NR_002766.2:691	NR_002766	55384	ENSG00000214548	MEG3	UIP	Kontrolle	2.83759E-05	0.021650787
NM_002160.3:1215	NM_002160	3371	ENSG00000041982	TNC	Kontrolle	AFE	2.92128E-05	0.022289388
NM_003247.2:4460	NM_003247	7058	ENSG00000186340	THBS2	UIP	AFE	3.15001E-05	0.024034595
NM_013372.5:575	NM_013372	26585	ENSG00000166923	GREM1	Kontrolle	AFE	3.97374E-05	0.030319616
NM_000618.3:491	NM_000618	3479	ENSG00000017427	IGF1	UIP	Kontrolle	4.31523E-05	0.03292518
NM_006017.1:925	NM_006017	8842	ENSG00000007062	PROM1	UIP	AFE	4.75639E-05	0.036291218
NM_003013.2:840	NM_003013	6423	ENSG00000145423	SFRP2	UIP	Kontrolle	5.44731E-05	0.041562969
NM_002744.4:771	NM_002744	5590	ENSG00000067606	PRKCZ	UIP	Kontrolle	5.49138E-05	0.041899212
NR_002766.2:691	NR_002766	55384	ENSG00000214548	MEG3	NSIP	Kontrolle	5.84524E-05	0.044599191
NM_001430.3:4246	NM_001430	2034	ENSG00000116016	EPAS1	UIP	Kontrolle	6.0066E-05	0.045830332
NM_000093.3:6345	NM_000093	1289	ENSG00000130635	COL5A1	AFE	AFE	6.25112E-05	0.047696067
NM_000094.2:390	NM_000094	1294	ENSG00000114270	COL7A1	UIP	Kontrolle	7.0513E-05	0.05380143
NM_001146289.1:860	NM_001146289	64175	ENSG00000117385	P3H1	Kontrolle	AFE	7.52675E-05	0.057429078
NM_199511.1:3235	NM_199511	151887	ENSG00000091986	CCDC80	Kontrolle	AFE	7.56103E-05	0.057690636
NM_002593.3:1258	NM_002593	5118	ENSG00000106333	PCOLCE	NSIP	Kontrolle	8.41792E-05	0.06422876
NM_004864.2:180	NM_004864	9518	ENSG00000130513	GDF15	Kontrolle	AFE	9.93808E-05	0.075827539
NM_006487.2:965	NM_006487	2192	ENSG00000077942	FBLN1	Kontrolle	AFE	0.000101838	0.077702758
NM_001078.3:2535	NM_001078	7412	ENSG00000162692	VCAM1	Kontrolle	AFE	0.000103416	0.078906181
XM_005269604.1:379	XM_005269604			ZCCHC24	Kontrolle	AFE	0.000109827	0.083798131
NM_000089.3:2635	NM_000089	1278	ENSG00000164692	COL1A2	Kontrolle	AFE	0.000111817	0.085316192
NM_003106.2:151	NM_003106	6657	ENSG00000181449	SOX2	UIP	AFE	0.000113025	0.086237831
NM_001235.2:880	NM_001235	871	ENSG00000149257	SERPINH1	Kontrolle	AFE	0.000118381	0.090324793
NM_003118.2:910	NM_003118	6678	ENSG00000113140	SPARC	Kontrolle	AFE	0.000123139	0.093954685
NM_014059.2:765	NM_014059	28984	ENSG00000102760	RGCC	UIP	Kontrolle	0.00012578	0.095970195
NM_000393.3:4075	NM_000393	1290	ENSG00000204262	COL5A2	Kontrolle	AFE	0.000126456	0.096486092
NM_001128204.1:3004	NM_001128204	23213	ENSG00000137573	SULF1	Kontrolle	AFE	0.000131144	0.100062735
XM_006711928.1:724	XM_006711928			EMILIN1	Kontrolle	AFE	0.000136254	0.103961895
NM_005656.3:1079	NM_005656	7113	ENSG00000184012	TMPPRSS2	UIP	Kontrolle	0.000136583	0.104212749
NM_006288.2:135	NM_006288	7070	ENSG00000154096	THY1	UIP	Kontrolle	0.00014078	0.107414866
NM_000227.3:4260	NM_000227	3909	ENSG00000053747	LAMA3	UIP	Kontrolle	0.000143785	0.109708251
NM_002427.2:951	NM_002427	4322	ENSG00000137745	MMP13	UIP	AFE	0.000147735	0.112721465
NM_000088.3:4272	NM_000088	1277	ENSG00000108821	COL1A1	UIP	Kontrolle	0.000151019	0.115227271
NM_000618.3:491	NM_000618	3479	ENSG00000017427	IGF1	NSIP	Kontrolle	0.000151338	0.115470824
NM_021935.3:827	NM_021935	60675	ENSG00000163421	PROK2	Kontrolle	AFE	0.000160054	0.122121394
NM_199168.3:69	NM_199168	6387	ENSG00000107562	CXCL12	Kontrolle	AFE	0.000182143	0.138975401
NM_001168298.1:840	NM_001168298	3579	ENSG00000180871	CXCR2	Kontrolle	AFE	0.000186799	0.142527952
NM_000900.2:305	NM_000900	4256	ENSG00000111341	MGP	Kontrolle	AFE	0.00020118	0.15350067
NM_004460.2:1490	NM_004460	2191	ENSG00000078098	FAP	Kontrolle	AFE	0.000201308	0.153598055
NM_002755.2:970	NM_002755	5604	ENSG00000169032	MAP2K1	UIP	Kontrolle	0.000201312	0.153601045
NM_012098.2:540	NM_012098	23452	ENSG00000136859	ANGPTL2	Kontrolle	AFE	0.00021547	0.164403793
NM_000961.3:1409	NM_000961	5740	ENSG00000124212	PTGIS	Kontrolle	AFE	0.000216014	0.164818852
NM_017957.2:2532	NM_017957	55040	ENSG00000049283	EPN3	UIP	AFE	0.000231984	0.177003533
NM_001010855.3:1112	NM_001010855	146850	ENSG00000276231	PIK3R6	UIP	AFE	0.000240789	0.183722228
NM_002996.3:140	NM_002996	6376	ENSG00000006210	CX3CL1	UIP	Kontrolle	0.00024619	0.187843216
NM_000201.2:2253	NM_000201	3383	ENSG00000090339	ICAM1	UIP	Kontrolle	0.000252728	0.192831533
NM_003200.3:858	NM_003200	6929	ENSG00000071564	TCF3	Kontrolle	AFE	0.000255685	0.195087603
NM_001846.2:1150	NM_001846	1284	ENSG00000134871	COL4A2	Kontrolle	AFE	0.000265529	0.202598691
NM_001711.3:1935	NM_001711	633	ENSG00000182492	BGN	Kontrolle	AFE	0.000266092	0.203027994
NM_004469.2:580	NM_004469	2277	ENSG00000165197	FIGF	UIP	Kontrolle	0.000269632	0.205729469

NM_012211.3:650	NM_012211	22801	ENSG00000137809	ITGA11	Kontrolle	AFE	0.000278333	0.212367845
NM_003013.2:840	NM_003013	6423	ENSG00000145423	SFRP2	Kontrolle	AFE	0.000281764	0.21498585
NM_001626.2:1450	NM_001626	208	ENSG00000105221	AKT2	Kontrolle	AFE	0.000292976	0.223540307
NM_000954.5:180	NM_000954	5730	ENSG00000107317	PTGDS	NSIP	Kontrolle	0.000296362	0.226124436
NM_002023.3:2050	NM_002023	2331	ENSG00000122176	FMOD	UIP	AFE	0.000306359	0.233752229
NM_212482.1:1776	NM_212482	2335	ENSG00000115414	FN1	Kontrolle	AFE	0.000306368	0.233759139
NM_001845.4:780	NM_001845	1282	ENSG00000187498	COL4A1	NSIP	Kontrolle	0.000329628	0.251506095
NM_005486.2:685	NM_005486	10040	ENSG00000141198	TOM1L1	NSIP	Kontrolle	0.00033268	0.253835197
NM_001203.1:430	NM_001203	658	ENSG00000138696	BMPR1B	UIP	AFE	0.000376005	0.286891944
NM_002621.2:380	NM_002621	5199	ENSG00000126759	CFP	Kontrolle	AFE	0.000384194	0.293139672
NM_005545.3:2072	NM_005545	3671	ENSG00000129009	ISLR	Kontrolle	AFE	0.000385551	0.29417535
NM_002593.3:1258	NM_002593	5118	ENSG00000106333	PCOLCE	Kontrolle	AFE	0.000392027	0.299116852
NM_002410.4:1233	NM_002410	4249	ENSG00000152127	MGAT5	Kontrolle	AFE	0.000397415	0.303227387
NM_002165.2:345	NM_002165	3397	ENSG00000125968	ID1	UIP	Kontrolle	0.000402776	0.307318424
NM_001009552.1:1075	NM_001009552	5516	ENSG00000104695	PPP2CB	UIP	Kontrolle	0.000435863	0.33256369
NM_000393.3:4075	NM_000393	1290	ENSG00000204262	COL5A2	NSIP	Kontrolle	0.000439678	0.335474555
NM_001797.2:1835	NM_001797	1009	ENSG00000140937	CDH11	Kontrolle	AFE	0.00046122	0.35191124
NM_001129.3:3170	NM_001129	165	ENSG00000106624	AEBP1	Kontrolle	AFE	0.000462583	0.352950651
NM_004460.2:1490	NM_004460	2191	ENSG00000078098	FAP	UIP	AFE	0.000479343	0.365738878
NM_003254.2:329	NM_003254	7076	ENSG00000102265	TIMP1	UIP	AFE	0.000480744	0.366807661
NM_001387.2:4790	NM_001387	1809	ENSG00000113657	DPYSL3	Kontrolle	AFE	0.000482643	0.368256313
NM_001553.1:690	NM_001553	3490	ENSG00000163453	IGFBP7	Kontrolle	AFE	0.000485593	0.370507125
NM_001393.2:1700	NM_001393	1842	ENSG00000106823	ECM2	NSIP	Kontrolle	0.000485804	0.370668225
NM_001846.2:1150	NM_001846	1284	ENSG00000134871	COL4A2	NSIP	Kontrolle	0.000497905	0.379901547
NM_006474.4:431	NM_006474	10630	ENSG00000162493	PDPN	NSIP	AFE	0.000500508	0.381887312
NM_018286.2:655	NM_018286	55273	ENSG00000166292	TMEM100	Kontrolle	AFE	0.000507213	0.387003257
NM_002410.4:1233	NM_002410	4249	ENSG00000152127	MGAT5	UIP	AFE	0.000515215	0.393108986
NM_014428.1:1925	NM_014428	27134	ENSG00000105289	TJP3	UIP	AFE	0.000517992	0.395227724
NM_000122.1:1950	NM_000122	2071	ENSG00000163161	ERCC3	UIP	Kontrolle	0.000533814	0.407299999
NM_030582.3:4490	NM_030582	80781	ENSG00000182871	COL18A1	Kontrolle	AFE	0.000540074	0.412076705
NM_002023.3:2050	NM_002023	2331	ENSG00000122176	FMOD	Kontrolle	AFE	0.000540289	0.41224065
NM_003254.2:329	NM_003254	7076	ENSG00000102265	TIMP1	Kontrolle	AFE	0.000541966	0.413519941
NM_015136.2:95	NM_015136	23166	ENSG00000010327	STAB1	Kontrolle	AFE	0.00055322	0.422106794
NM_002206.1:1170	NM_002206	3679	ENSG00000135424	ITGA7	UIP	Kontrolle	0.000559674	0.427031203
NM_000582.2:760	NM_000582	6696	ENSG00000118785	SPP1	UIP	Kontrolle	0.000562832	0.42944076
NM_015136.2:95	NM_015136	23166	ENSG00000010327	STAB1	NSIP	Kontrolle	0.000594376	0.453508693
NM_007361.3:1995	NM_007361	22795	ENSG00000087303	NID2	Kontrolle	AFE	0.000615817	0.469868443
NM_004385.3:9915	NM_004385	1462	ENSG00000038427	VCAN	Kontrolle	AFE	0.000619788	0.472898248
NM_018192.2:985	NM_018192	55214	ENSG00000090530	P3H2	UIP	Kontrolle	0.000624853	0.476762647
NM_024107.2:1485	NM_024107	79089	ENSG00000168591	TMUB2	UIP	AFE	0.000627792	0.479005257
NM_005545.3:2072	NM_005545	3671	ENSG00000129009	ISLR	NSIP	Kontrolle	0.000630687	0.481214319
NM_004425.3:1345	NM_004425	1893	ENSG00000143369	ECM1	Kontrolle	AFE	0.000636772	0.485856872
NM_020405.4:900	NM_020405	57125	ENSG00000161381	PLXDC1	UIP	Kontrolle	0.000637988	0.486784753
NM_032777.9:1278	NM_032777	25960	ENSG00000020181	GPR124	Kontrolle	AFE	0.000652993	0.498233411
NM_005027.2:3100	NM_005027	5296	ENSG00000105647	PIK3R2	Kontrolle	AFE	0.000657551	0.501711737
NM_004817.2:2785	NM_004817	9414	ENSG00000119139	TJP2	UIP	Kontrolle	0.00067303	0.513521609
NM_005559.2:5230	NM_005559	284217	ENSG00000101680	LAMA1	Kontrolle	AFE	0.00068205	0.520404009
NM_153603.3:1492	NM_153603	91949	ENSG00000168434	COG7	UIP	Kontrolle	0.000699027	0.533357799
NM_000020.1:1710	NM_000020	94	ENSG00000139567	ACVRL1	UIP	Kontrolle	0.000699151	0.533451859
NM_015441.1:2920	NM_015441	25903	ENSG00000162745	OLFML2B	Kontrolle	AFE	0.000700945	0.534820717
NM_002538.3:1975	NM_002538	100506658	ENSG00000197822	OCLN	UIP	Kontrolle	0.000710457	0.542078375
NM_003068.3:740	NM_003068	6591	ENSG00000019549	SNAI2	Kontrolle	AFE	0.000711279	0.542705848
NM_000175.2:1695	NM_000175	2821	ENSG00000105220	GPI	Kontrolle	AFE	0.000742374	0.566431178
NM_000474.3:393	NM_000474	7291	ENSG00000122691	TWIST1	UIP	Kontrolle	0.000745348	0.568700548
NM_001078.3:2535	NM_001078	7412	ENSG00000162692	VCAM1	UIP	AFE	0.000776682	0.592608265
NM_145333.1:670	NM_145333	6885	ENSG00000135341	MAP3K7	Kontrolle	AFE	0.000779839	0.595017079
NM_002019.4:530	NM_002019	2321	ENSG00000102755	FLT1	UIP	Kontrolle	0.00078072	0.595689102
NM_030582.3:4490	NM_030582	80781	ENSG00000182871	COL18A1	NSIP	Kontrolle	0.000789017	0.602019794
NM_004441.3:1855	NM_004441	2047	ENSG00000154928	EPHB1	Kontrolle	AFE	0.000791883	0.604207012
NM_002755.2:970	NM_002755	5604	ENSG00000169032	MAP2K1	UIP	AFE	0.000798207	0.609031901
NM_001845.4:780	NM_001845	1282	ENSG00000187498	COL4A1	Kontrolle	AFE	0.000804034	0.613478184
NM_001001392.1:429	NM_001001392	960	ENSG00000026508	CD44	Kontrolle	AFE	0.000814655	0.621581911
NR_002766.2:691	NR_002766	55384	ENSG00000214548	MEG3	Kontrolle	AFE	0.000827567	0.631433643
NM_001849.2:1925	NM_001849	1292	ENSG00000142173	COL6A2	Kontrolle	AFE	0.000867214	0.661683938
NM_001937.3:1510	NM_001937	1805	ENSG00000143196	DPT	NSIP	Kontrolle	0.000876303	0.66861934
NM_001920.3:420	NM_001920	1634	ENSG00000011465	DCN	Kontrolle	AFE	0.000877708	0.66969113
NM_006329.3:2242	NM_006329	10516	ENSG00000140092	FBLN5	UIP	Kontrolle	0.000901982	0.688212491
NM_002837.3:2625	NM_002837	5787	ENSG00000127329	PTPRB	NSIP	Kontrolle	0.000908604	0.693265109
NM_002019.4:530	NM_002019	2321	ENSG00000102755	FLT1	NSIP	Kontrolle	0.000916037	0.698936411
NM_001836.2:561	NM_001836	1215	ENSG00000092009	CMA1	UIP	Kontrolle	0.000917022	0.699687781
NM_001128204.1:3004	NM_001128204	23213	ENSG00000137573	SULF1	UIP	Kontrolle	0.000918088	0.700500815
NM_012211.3:650	NM_012211	22801	ENSG00000137809	ITGA11	NSIP	Kontrolle	0.000940493	0.717596367

NM_000358.2:2030	NM_000358	7045	ENSG00000120708	TGFBI	Kontrolle	AFE	0.00094691	0.722492314
NM_000575.3:1085	NM_000575	3552	ENSG00000115008	IL1A	Kontrolle	AFE	0.000956252	0.729619971
NM_000095.2:2164	NM_000095	1311	ENSG00000105664	COMP	UIP	Kontrolle	0.000975707	0.744464165
NM_199168.3:69	NM_199168	6387	ENSG00000107562	CXCL12	UIP	Kontrolle	0.000977096	0.74552457
NM_002253.2:1420	NM_002253	3791	ENSG00000128052	KDR	UIP	Kontrolle	0.001013321	0.773163935
NM_001078.3:2535	NM_001078	7412	ENSG00000162692	VCAM1	NSIP	Kontrolle	0.001020958	0.778991121
NM_002845.3:1680	NM_002845	5797	ENSG00000173482	PTPRM	UIP	Kontrolle	0.001036997	0.791229011
NM_012293.1:1960	NM_012293	7837	ENSG00000130508	PXDN	Kontrolle	AFE	0.001037403	0.791538282
NM_004787.1:2430	NM_004787	9353	ENSG00000145147	SLIT2	UIP	Kontrolle	0.001063836	0.811706549
NM_003106.2:151	NM_003106	6657	ENSG00000181449	SOX2	UIP	Kontrolle	0.001081854	0.825454953
NM_001129.3:3170	NM_001129	165	ENSG00000106624	AEBP1	UIP	AFE	0.001132491	0.864090842
NM_000584.2:25	NM_000584	3576	ENSG00000169429	CXCL8	UIP	Kontrolle	0.001212923	0.925460509
NM_001911.2:160	NM_001911	1511	ENSG00000100448	CTSG	UIP	Kontrolle	0.001224708	0.934452253
NM_016205.2:2596	NM_016205	56034	ENSG00000145431	PDGFC	NSIP	AFE	0.001233384	0.941071726
NM_006147.2:1430	NM_006147	3664	ENSG00000117595	IRF6	UIP	AFE	0.001237055	0.943873202
NM_003255.4:1555	NM_003255	7077	ENSG00000035862	TIMP2	Kontrolle	AFE	0.001238392	0.944893095
NM_012098.2:540	NM_012098	23452	ENSG00000136859	ANGPTL2	UIP	Kontrolle	0.001268015	0.967495613
NM_001174071.1:790	NM_001174071	256987	ENSG00000164300	SERINC5	Kontrolle	AFE	0.001270925	0.969715543
NM_001128204.1:3004	NM_001128204	23213	ENSG00000137573	SULF1	UIP	AFE	0.001289815	0.984128561
NM_020405.4:900	NM_020405	57125	ENSG00000161381	PLXDC1	Kontrolle	AFE	0.0013017	0.993197418
NM_001005731.1:4151	NM_001005731	3691	ENSG00000132470	ITGB4	UIP	Kontrolle	0.001331492	1
NM_003657.2:2305	NM_003657	8537	ENSG00000064787	BCAS1	UIP	AFE	0.001338878	1
NM_001128204.1:3004	NM_001128204	23213	ENSG00000137573	SULF1	NSIP	AFE	0.001351333	1
NM_001105.2:1665	NM_001105	90	ENSG00000115170	ACVR1	Kontrolle	AFE	0.001356621	1
NM_012217.2:585	NM_012217	23430	ENSG00000095917	TPSD1	UIP	AFE	0.001366602	1
NM_001039802.1:390	NM_001039802	998	ENSG00000070831	CDC42	UIP	Kontrolle	0.001384443	1
NM_000029.3:1711	NM_000029	183	ENSG00000135744	AGT	NSIP	Kontrolle	0.001391848	1
NM_133468.4:476	NM_133468	168667	ENSG00000164619	BMPER	Kontrolle	AFE	0.001400094	1
NM_001792.3:941	NM_001792	1000	ENSG00000170558	CDH2	Kontrolle	AFE	0.001421271	1
NM_032864.3:335	NM_032864	84950	ENSG00000134748	PRPF38A	Kontrolle	AFE	0.001421605	1
NM_001202.3:395	NM_001202	652	ENSG00000125378	BMP4	UIP	Kontrolle	0.001472348	1
NM_002739.3:445	NM_002739	5582	ENSG00000126583	PRKCG	Kontrolle	AFE	0.001472917	1
NM_002305.3:60	NM_002305	3956	ENSG00000100097	LGALS1	Kontrolle	AFE	0.001479228	1
NM_000300.2:715	NM_000300	5320	ENSG00000188257	PLA2G2A	Kontrolle	AFE	0.00148001	1
NM_001039802.1:390	NM_001039802	998	ENSG00000070831	CDC42	UIP	AFE	0.001483079	1
NM_001165414.1:1690	NM_001165414	3939	ENSG00000134333	LDHA	NSIP	AFE	0.00149354	1
NM_000138.3:6420	NM_000138	2200	ENSG00000166147	FBN1	Kontrolle	AFE	0.00149803	1
NM_080646.1:540	NM_080646	6899	ENSG00000184058	TBX1	UIP	AFE	0.001500704	1
NM_002253.2:1420	NM_002253	3791	ENSG00000128052	KDR	Kontrolle	AFE	0.001533137	1
NM_001848.2:3665	NM_001848	1291	ENSG00000142156	COL6A1	Kontrolle	AFE	0.001537035	1
NM_003246.2:3465	NM_003246	7057	ENSG00000137801	THBS1	UIP	AFE	0.001541092	1
NM_003200.3:858	NM_003200	6929	ENSG00000071564	TCF3	UIP	Kontrolle	0.001544007	1
NM_001993.3:1030	NM_001993	2152	ENSG00000117525	F3	UIP	Kontrolle	0.001555156	1
NM_001025366.1:1325	NM_001025366	7422	ENSG00000112715	VEGFA	UIP	Kontrolle	0.001564212	1
NM_021101.3:410	NM_021101	9076	ENSG00000163347	CLDN1	UIP	Kontrolle	0.001572202	1
NM_000396.2:415	NM_000396	1513	ENSG00000143387	CTSK	UIP	Kontrolle	0.001650977	1
NM_001704.1:885	NM_001704	577	ENSG00000135298	BAI3	Kontrolle	AFE	0.001667046	1
NM_005529.5:2715	NM_005529	3339	ENSG00000142798	HSPG2	Kontrolle	AFE	0.001671426	1
NM_012391.1:1335	NM_012391	25803	ENSG00000124664	SPDEF	UIP	AFE	0.001689181	1
NM_003247.2:4460	NM_003247	7058	ENSG00000186340	THBS2	NSIP	AFE	0.001711318	1
NM_004530.2:2360	NM_004530	4313	ENSG00000087245	MMP2	UIP	AFE	0.001725363	1
NM_000201.2:2253	NM_000201	3383	ENSG00000090339	ICAM1	UIP	AFE	0.001731373	1
NM_001080512.1:2155	NM_001080512	80114	ENSG00000122870	BICC1	UIP	AFE	0.001763188	1
NM_001704.1:885	NM_001704	577	ENSG00000135298	BAI3	NSIP	AFE	0.001767187	1
NM_020733.1:1890	NM_020733	57493	ENSG00000173706	HEG1	UIP	AFE	0.001771824	1
NM_002609.3:840	NM_002609	5159	ENSG00000113721	PDGFRB	UIP	AFE	0.001780028	1
NM_001004065.4:4956	NM_001004065	11217	ENSG00000241978	AKAP2	UIP	Kontrolle	0.001862819	1
NM_002317.4:1575	NM_002317	4015	ENSG00000113083	LOX	UIP	AFE	0.001864445	1
NM_000660.3:1260	NM_000660	7040	ENSG00000105329	TGFBI	NSIP	Kontrolle	0.00186894	1
NM_005545.3:2072	NM_005545	3671	ENSG00000129009	ISLR	UIP	Kontrolle	0.001872035	1
NM_000029.3:1711	NM_000029	183	ENSG00000135744	AGT	Kontrolle	AFE	0.00188292	1
NM_004342.6:3862	NM_004342	800	ENSG00000122786	CALD1	UIP	AFE	0.001888603	1
NM_018192.2:985	NM_018192	55214	ENSG00000090530	P3H2	UIP	AFE	0.001890069	1
NM_000227.3:4260	NM_000227	3909	ENSG00000053747	LAMA3	Kontrolle	AFE	0.001924337	1
NM_001393.2:1700	NM_001393	1842	ENSG00000106823	ECM2	Kontrolle	AFE	0.002019211	1
NM_019894.3:1146	NM_019894	56649	ENSG00000137648	TMPPRSS4	UIP	Kontrolle	0.002022786	1
NM_000584.2:25	NM_000584	3576	ENSG00000169429	CXCL8	NSIP	Kontrolle	0.002026686	1
NM_001552.2:1520	NM_001552	3487	ENSG00000141753	IGFBP4	UIP	Kontrolle	0.002034869	1
NM_000090.3:180	NM_000090	1281	ENSG00000168542	COL3A1	UIP	Kontrolle	0.002041405	1
NM_001836.2:561	NM_001836	1215	ENSG00000092009	CMA1	Kontrolle	AFE	0.00207036	1
NM_148979.2:800	NM_148979	1512	ENSG00000103811	CTSH	UIP	AFE	0.002120337	1
NM_001042404.1:1800	NM_001042404	9859	ENSG00000143702	CEP170	Kontrolle	AFE	0.002128574	1

NM_021220.2:676	NM_021220	58495	ENSG00000125850	OVOL2	UIP	AFE	0.002131217	1
NM_000295.4:760	NM_000295	5265	ENSG00000197249	SERPINA1	NSIP	AFE	0.002139768	1
NM_014057.3:995	NM_014057	4969	ENSG00000106809	OGN	UIP	Kontrolle	0.0021565	1
NM_001167681.2:1406	NM_001167681	2313	ENSG00000151702	FLI1	UIP	Kontrolle	0.002170756	1
NM_007008.2:275	NM_007008	57142	ENSG00000115310	RTN4	UIP	AFE	0.002174141	1
NM_000304.2:1644	NM_000304	5376	ENSG00000109099	PMP22	UIP	AFE	0.002203878	1
NM_002744.4:771	NM_002744	5590	ENSG00000067606	PRKCZ	Kontrolle	AFE	0.002215364	1
NM_002166.4:505	NM_002166	3398	ENSG00000115738	ID2	UIP	Kontrolle	0.00222206	1
NM_017680.3:175	NM_017680	54829	ENSG00000106819	ASPN	Kontrolle	AFE	0.002240609	1
NM_001146289.1:860	NM_001146289	64175	ENSG00000117385	P3H1	UIP	AFE	0.002274294	1
NM_002204.2:4550	NM_002204	3675	ENSG0000005884	ITGA3	UIP	Kontrolle	0.002313593	1
NM_001797.2:1835	NM_001797	1009	ENSG00000140937	CDH11	UIP	AFE	0.002316938	1
NM_001911.2:160	NM_001911	1511	ENSG00000100448	CTSG	UIP	AFE	0.002341439	1
NM_033666.2:2000	NM_033666	3688	ENSG00000150093	ITGB1	Kontrolle	AFE	0.002355465	1
NM_019027.3:150	NM_019027	54502	ENSG00000163694	RBM47	NSIP	Kontrolle	0.002403625	1
NM_0017729.3:1914	NM_0017729	54869	ENSG00000131037	EPS8L1	UIP	Kontrolle	0.002437339	1
NM_001338.3:1937	NM_001338	1525	ENSG00000154639	CXADR	Kontrolle	AFE	0.00247231	1
NM_000064.2:4396	NM_000064	718	ENSG00000125730	C3	Kontrolle	AFE	0.002487227	1
NM_000396.2:415	NM_000396	1513	ENSG00000143387	CTSK	NSIP	AFE	0.002517599	1
NM_172350.1:365	NM_172350	4179	ENSG00000117335	CD46	UIP	Kontrolle	0.002531435	1
NM_004836.5:938	NM_004836	9451	ENSG00000172071	EIF2AK3	NSIP	Kontrolle	0.002537405	1
XM_006711928.1:724	XM_006711928			EMILIN1	NSIP	Kontrolle	0.002609125	1
NM_019055.5:3080	NM_019055	54538	ENSG00000154133	ROBO4	UIP	Kontrolle	0.002616917	1
NM_003095.2:225	NM_003095	6636	ENSG00000139343	SNRPF	UIP	AFE	0.002625197	1
NM_002317.4:1575	NM_002317	4015	ENSG00000113083	LOX	Kontrolle	AFE	0.002648147	1
NM_000660.3:1260	NM_000660	7040	ENSG00000105329	TGFB1	Kontrolle	AFE	0.002649113	1
NM_002011.3:1585	NM_002011	2264	ENSG00000160867	FGFR4	Kontrolle	AFE	0.002680696	1
NM_153603.3:1492	NM_153603	91949	ENSG00000168434	COG7	Kontrolle	AFE	0.002681416	1
NM_015850.2:1335	NM_015850	2260	ENSG00000077782	FGFR1	Kontrolle	AFE	0.002711307	1
NM_019027.3:150	NM_019027	54502	ENSG00000163694	RBM47	UIP	Kontrolle	0.002746751	1
NM_021073.2:1570	NM_021073	653	ENSG00000112175	BMP5	UIP	AFE	0.002747031	1
NM_000090.3:180	NM_000090	1281	ENSG00000168542	COL3A1	NSIP	Kontrolle	0.002757841	1
NM_015441.1:2920	NM_015441	25903	ENSG00000162745	OLFML2B	UIP	Kontrolle	0.002774242	1
NM_001430.3:4246	NM_001430	2034	ENSG00000116016	EPAS1	Kontrolle	AFE	0.002797635	1
NM_002345.3:1285	NM_002345	4060	ENSG00000139329	LUM	UIP	AFE	0.002843367	1
NM_138957.2:430	NM_138957	5594	ENSG00000100030	MAPK1	UIP	AFE	0.002843936	1
NM_207446.2:1075	NM_207446	400451	ENSG00000185442	FAM174B	Kontrolle	AFE	0.002847988	1
NM_005559.2:5230	NM_005559	284217	ENSG00000101680	LAMA1	UIP	AFE	0.002854675	1
NM_199168.3:69	NM_199168	6387	ENSG00000107562	CXCL12	NSIP	Kontrolle	0.002916806	1
NM_001135935.1:910	NM_001135935	10631	ENSG00000133110	POSTN	Kontrolle	AFE	0.002920049	1
NM_007085.4:1610	NM_007085	11167	ENSG00000163430	FSTL1	Kontrolle	AFE	0.002944677	1
NM_138957.2:430	NM_138957	5594	ENSG00000100030	MAPK1	UIP	Kontrolle	0.002958605	1
NM_001273.2:2680	NM_001273	1108	ENSG00000111642	CHD4	UIP	AFE	0.002995486	1
NM_000295.4:760	NM_000295	5265	ENSG00000197249	SERPINA1	UIP	AFE	0.003005724	1
NM_002160.3:1215	NM_002160	3371	ENSG00000041982	TNC	NSIP	Kontrolle	0.00304703	1
NM_002165.2:345	NM_002165	3397	ENSG00000125968	ID1	NSIP	AFE	0.003063461	1
NM_003095.2:225	NM_003095	6636	ENSG00000139343	SNRPF	UIP	Kontrolle	0.003078424	1
NM_172127.1:505	NM_172127	817	ENSG00000145349	CAMK2D	Kontrolle	AFE	0.00307978	1
NM_003248.3:985	NM_003248	7060	ENSG00000113296	THBS4	UIP	Kontrolle	0.00309496	1
NM_012211.3:650	NM_012211	22801	ENSG00000137809	ITGA11	UIP	Kontrolle	0.003109559	1
NM_005045.2:345	NM_005045	5649	ENSG00000189056	RELN	Kontrolle	AFE	0.003112932	1
NM_019102.2:895	NM_019102	3202	ENSG00000106004	HOXA5	Kontrolle	AFE	0.003162572	1
NM_001993.3:1030	NM_001993	2152	ENSG00000117525	F3	UIP	AFE	0.003167648	1
NM_002165.2:345	NM_002165	3397	ENSG00000125968	ID1	Kontrolle	AFE	0.003171989	1
NM_015364.2:360	NM_015364	23643	ENSG00000154589	LY96	Kontrolle	AFE	0.003208762	1
NM_002739.3:445	NM_002739	5582	ENSG00000126583	PRKCG	NSIP	Kontrolle	0.003216449	1
NM_002609.3:840	NM_002609	5159	ENSG00000113721	PDGFRB	Kontrolle	AFE	0.003254383	1
NM_002705.4:2435	NM_002705	5493	ENSG00000118898	PPL	NSIP	Kontrolle	0.003271564	1
NM_001165414.1:1690	NM_001165414	3939	ENSG00000134333	LDHA	UIP	AFE	0.003300491	1
NM_006528.3:524	NM_006528	7980	ENSG00000105825	TFPI2	NSIP	Kontrolle	0.003318733	1
NM_003380.2:694	NM_003380	7431	ENSG00000026025	VIM	Kontrolle	AFE	0.003352749	1
NM_145333.1:670	NM_145333	6885	ENSG00000135341	MAP3K7	UIP	AFE	0.003376869	1
NM_002837.3:2625	NM_002837	5787	ENSG00000127329	PTPRB	Kontrolle	AFE	0.003378693	1
NM_000961.3:1409	NM_000961	5740	ENSG00000124212	PTGIS	NSIP	AFE	0.003378697	1
NM_001015001.1:286	NM_001015001	548596	ENSG00000223572	CKMT1A	UIP	AFE	0.003379988	1
NM_004425.3:1345	NM_004425	1893	ENSG00000143369	ECM1	NSIP	Kontrolle	0.003408099	1
NM_001792.3:941	NM_001792	1000	ENSG00000170558	CDH2	NSIP	Kontrolle	0.003416099	1
NM_000072.3:707	NM_000072	948	ENSG00000135218	CD36	NSIP	Kontrolle	0.003459015	1
NM_004425.3:1345	NM_004425	1893	ENSG00000143369	ECM1	UIP	Kontrolle	0.003532543	1
NM_021935.3:827	NM_021935	60675	ENSG00000163421	PROK2	NSIP	Kontrolle	0.003597526	1
NM_013372.5:575	NM_013372	26585	ENSG00000166923	GREM1	UIP	Kontrolle	0.003599329	1
NM_002837.3:2625	NM_002837	5787	ENSG00000127329	PTPRB	UIP	Kontrolle	0.003607291	1

NM_001272046.1:3148	NM_001272046	340706	ENSG00000165816	VWA2	UIP	Kontrolle	0.003635539	1
NM_013372.5:575	NM_013372	26585	ENSG00000166923	GREM1	UIP	AFE	0.003635888	1
NM_021101.3:410	NM_021101	9076	ENSG00000163347	CLDN1	Kontrolle	AFE	0.003677173	1
NM_000141.4:647	NM_000141	2263	ENSG00000066468	FGFR2	UIP	AFE	0.003684602	1
NM_003189.2:4635	NM_003189	6886	ENSG00000162367	TAL1	Kontrolle	AFE	0.003781185	1
NM_000300.2:715	NM_000300	5320	ENSG00000188257	PLA2G2A	UIP	Kontrolle	0.003790039	1
NM_000104.3:1715	NM_000104	1545	ENSG00000138061	CYP1B1	UIP	AFE	0.003864779	1
NM_022965.2:3170	NM_022965	2261	ENSG00000068078	FGFR3	UIP	AFE	0.003873643	1
NM_018964.3:810	NM_018964	54020	ENSG00000160190	SLC37A1	Kontrolle	AFE	0.003901134	1
NM_002607.5:1276	NM_002607	5154	ENSG00000197461	PDGFA	UIP	AFE	0.003925127	1
NM_006775.2:838	NM_006775	9444	ENSG00000112531	QKI	UIP	Kontrolle	0.003942816	1
NM_001711.3:1935	NM_001711	633	ENSG00000182492	BGN	NSIP	Kontrolle	0.003958834	1
NM_001719.2:1092	NM_001719	655	ENSG00000101144	BMP7	UIP	Kontrolle	0.003971451	1
NM_000546.2:1330	NM_000546	7157	ENSG00000141510	TP53	Kontrolle	AFE	0.004016796	1
NM_016232.4:700	NM_016232	9173	ENSG00000115602	IL1RL1	Kontrolle	AFE	0.004035686	1
NM_000954.5:180	NM_000954	5730	ENSG00000107317	PTGDS	Kontrolle	AFE	0.004056994	1
NM_184041.2:1455	NM_184041	226	ENSG00000149925	ALDOA	Kontrolle	AFE	0.004072396	1
NM_001128204.1:3004	NM_001128204	23213	ENSG00000137573	SULF1	NSIP	Kontrolle	0.004077298	1
NM_025079.2:2140	NM_025079	80149	ENSG00000163874	ZC3H12A	UIP	Kontrolle	0.004098967	1
NM_001165413.1:1670	NM_001165413	5054	ENSG00000106366	SERPINE1	UIP	AFE	0.00414584	1
NM_002160.3:1215	NM_002160	3371	ENSG00000041982	TNC	UIP	Kontrolle	0.004188117	1
NM_012098.2:540	NM_012098	23452	ENSG00000136859	ANGPTL2	NSIP	Kontrolle	0.004218949	1
NM_001540.3:374	NM_001540	3315	ENSG00000106211	HSPB1	Kontrolle	AFE	0.004229932	1
NM_014265.4:920	NM_014265	10863	ENSG00000042980	ADAM28	Kontrolle	AFE	0.004302453	1
NM_001175.4:833	NM_001175	397	ENSG00000111348	ARHGDIB	Kontrolle	AFE	0.004333083	1
NM_004443.3:3485	NM_004443	2049	ENSG00000182580	EPHB3	UIP	Kontrolle	0.004335627	1
NM_007008.2:275	NM_007008	57142	ENSG00000115310	RTN4	UIP	Kontrolle	0.004352962	1
NM_001393.2:1700	NM_001393	1842	ENSG00000106823	ECM2	UIP	Kontrolle	0.004362516	1
NM_003657.2:2305	NM_003657	8537	ENSG00000064787	BCAS1	UIP	Kontrolle	0.004431357	1
NM_001299.4:496	NM_001299	1264	ENSG00000130176	CNN1	NSIP	Kontrolle	0.004546136	1
NM_018286.2:655	NM_018286	55273	ENSG00000166292	TMEM100	UIP	Kontrolle	0.004618373	1
NM_001845.4:780	NM_001845	1282	ENSG00000187498	COL4A1	UIP	NSIP	0.004619263	1
NM_002658.2:793	NM_002658	5328	ENSG00000122861	PLAU	NSIP	AFE	0.004622909	1
NM_016232.4:700	NM_016232	9173	ENSG00000115602	IL1RL1	UIP	Kontrolle	0.004637986	1
NM_005360.4:888	NM_005360	4094	ENSG00000178573	MAF	Kontrolle	AFE	0.004656164	1
NM_207361.4:9170	NM_207361	341640	ENSG00000150893	FREM2	Kontrolle	AFE	0.004709369	1
NM_004385.3:9915	NM_004385	1462	ENSG00000038427	VCAN	UIP	AFE	0.004742542	1
NM_003862.1:850	NM_003862	8817	ENSG00000156427	FGF18	NSIP	Kontrolle	0.004782758	1
NM_002705.4:2435	NM_002705	5493	ENSG00000118898	PPL	UIP	Kontrolle	0.004865585	1
NM_002207.2:2380	NM_002207	3680	ENSG00000144668	ITGA9	UIP	Kontrolle	0.004895992	1
NM_005901.5:1678	NM_005901	4087	ENSG00000175387	SMAD2	UIP	AFE	0.004949637	1
NM_014057.3:995	NM_014057	4969	ENSG00000106809	OGN	NSIP	Kontrolle	0.0049709	1
NM_001168298.1:840	NM_001168298	3579	ENSG00000180871	CXCR2	UIP	AFE	0.004991273	1
NM_003872.2:805	NM_003872	8828	ENSG00000118257	NRP2	Kontrolle	AFE	0.005083033	1
NM_001235.2:880	NM_001235	871	ENSG00000149257	SERPINH1	UIP	AFE	0.005129422	1
NM_001272046.1:3148	NM_001272046	340706	ENSG00000165816	VWA2	UIP	AFE	0.00512949	1
NM_000954.5:180	NM_000954	5730	ENSG00000107317	PTGDS	UIP	Kontrolle	0.005148742	1
NM_004369.3:2782	NM_004369	1293	ENSG00000163359	COL6A3	UIP	Kontrolle	0.005177241	1
NM_021073.2:1570	NM_021073	653	ENSG00000112175	BMP5	NSIP	AFE	0.005218731	1
NM_005010.4:875	NM_005010	4897	ENSG00000091129	NRCAM	Kontrolle	AFE	0.005384334	1
NM_012211.3:650	NM_012211	22801	ENSG00000137809	ITGA11	UIP	AFE	0.005390958	1
NM_003809.2:339	NM_003809	8742	ENSG00000239697	TNFSF12	Kontrolle	AFE	0.005432457	1
NM_0014795.3:549	NM_014795	9839	ENSG00000169554	ZEB2	Kontrolle	AFE	0.005512477	1
NM_006472.1:255	NM_006472	10628	ENSG00000265972	TXNIP	NSIP	Kontrolle	0.00556552	1
NM_001174071.1:790	NM_001174071	256987	ENSG00000164300	SERINC5	NSIP	Kontrolle	0.005644352	1
NM_002011.3:1585	NM_002011	2264	ENSG00000160867	FGFR4	NSIP	AFE	0.005702939	1
NM_024021.2:800	NM_024021	51338	ENSG00000110079	MS4A4A	UIP	AFE	0.005758653	1
NM_001204355.1:730	NM_001204355	50859	ENSG00000196104	SPOCK3	UIP	AFE	0.005780283	1
NM_012116.3:652	NM_012116	23624	ENSG00000142273	CBLC	UIP	Kontrolle	0.005789943	1
NM_003064.2:330	NM_003064	6590	ENSG00000124107	SLPI	Kontrolle	AFE	0.005822665	1
NM_017680.3:175	NM_017680	54829	ENSG00000106819	ASPN	UIP	Kontrolle	0.00582393	1
NM_001012331.1:1365	NM_001012331	4914	ENSG00000198400	NTRK1	UIP	AFE	0.005946333	1
NM_005855.2:200	NM_005855	10267	ENSG00000132329	RAMP1	UIP	Kontrolle	0.005984108	1
NM_006147.2:1430	NM_006147	3664	ENSG00000117595	IRF6	Kontrolle	AFE	0.006029893	1
NM_006474.4:431	NM_006474	10630	ENSG00000162493	PDPN	UIP	AFE	0.006051926	1
NM_002739.3:445	NM_002739	5582	ENSG00000126583	PRKCG	UIP	Kontrolle	0.00615931	1
NM_199511.1:3235	NM_199511	151887	ENSG00000091986	CCDC80	UIP	Kontrolle	0.006166714	1
NM_001719.2:1092	NM_001719	655	ENSG00000101144	BMP7	NSIP	Kontrolle	0.006172212	1
NM_004460.2:1490	NM_004460	2191	ENSG00000078098	FAP	NSIP	AFE	0.006214061	1
NM_000442.3:1365	NM_000442	5175	ENSG00000261371	PECAM1	UIP	Kontrolle	0.006292673	1
NM_212482.1:1776	NM_212482	2335	ENSG00000115414	FN1	UIP	AFE	0.00631349	1
NM_017729.3:1914	NM_017729	54869	ENSG00000131037	EPS8L1	UIP	AFE	0.006344825	1



NM_006329.3:2242	NM_006329	10516	ENSG00000140092	FBLN5	UIP	AFE	0.006356392	1
NM_001400.4:802	NM_001400	1901	ENSG00000170989	S1PR1	Kontrolle	AFE	0.006356886	1
NM_003377.3:687	NM_003377	7423	ENSG00000173511	VEGFB	Kontrolle	AFE	0.00635765	1
NM_000600.1:220	NM_000600	3569	ENSG00000136244	IL6	UIP	Kontrolle	0.006535744	1
NM_002011.3:1585	NM_002011	2264	ENSG00000160867	FGFR4	UIP	AFE	0.006601105	1
NM_019074.2:893	NM_019074	54567	ENSG00000128917	DLL4	Kontrolle	AFE	0.006628434	1
NM_000093.3:6345	NM_000093	1289	ENSG00000130635	COL5A1	NSIP	Kontrolle	0.006644877	1
NM_001105.2:1665	NM_001105	90	ENSG00000115170	ACVR1	UIP	AFE	0.006719347	1
NM_153292.1:546	NM_153292	4843	ENSG00000007171	NOS2	UIP	NSIP	0.006831084	1
NM_001530.2:1985	NM_001530	3091	ENSG00000100644	HIF1A	UIP	AFE	0.006892577	1
NM_000095.2:2164	NM_000095	1311	ENSG00000105664	COMP	NSIP	Kontrolle	0.00689953	1
NM_133459.3:310	NM_133459	147372	ENSG00000183287	CCBE1	Kontrolle	AFE	0.006917492	1
NM_000089.3:2635	NM_000089	1278	ENSG00000164692	COL1A2	UIP	Kontrolle	0.00692546	1
NM_013943.2:1702	NM_013943	25932	ENSG00000169504	CLIC4	UIP	AFE	0.006943703	1
NM_001220.3:365	NM_001220	816	ENSG00000058404	CAMK2B	NSIP	Kontrolle	0.006986816	1
NM_030582.3:4490	NM_030582	80781	ENSG00000182871	COL18A1	UIP	Kontrolle	0.007062928	1
NM_024107.2:1485	NM_024107	79089	ENSG00000168591	TMUB2	UIP	Kontrolle	0.007082787	1
NM_000088.3:4272	NM_000088	1277	ENSG00000108821	COL1A1	NSIP	AFE	0.007148193	1
NM_002538.3:1975	NM_002538	100506658	ENSG00000197822	OCLN	Kontrolle	AFE	0.007194825	1
NM_000600.1:220	NM_000600	3569	ENSG00000136244	IL6	UIP	AFE	0.007268959	1
NM_032777.9:1278	NM_032777	25960	ENSG00000020181	GPR124	UIP	Kontrolle	0.007288196	1
NM_014363.4:1475	NM_014363	26278	ENSG00000151835	SACS	UIP	Kontrolle	0.007398034	1
NM_016167.3:335	NM_016167	51406	ENSG00000225921	NOL7	UIP	AFE	0.007407815	1
NM_001098210.1:1815	NM_001098210	1499	ENSG00000168036	CTNNB1	Kontrolle	AFE	0.007438512	1
NM_199121.2:3664	NM_199121	64856	ENSG00000179403	VWA1	Kontrolle	AFE	0.007469846	1
NM_000094.2:390	NM_000094	1294	ENSG00000114270	COL7A1	UIP	AFE	0.007470535	1
NM_006775.2:838	NM_006775	9444	ENSG00000112531	QKI	UIP	AFE	0.007554695	1
NM_001135935.1:910	NM_001135935	10631	ENSG00000133110	POSTN	UIP	Kontrolle	0.007557097	1
NM_000600.1:220	NM_000600	3569	ENSG00000136244	IL6	NSIP	Kontrolle	0.007605525	1
NM_000900.2:305	NM_000900	4256	ENSG00000111341	MGP	UIP	AFE	0.007616944	1
NM_002206.1:1170	NM_002206	3679	ENSG00000135424	ITGA7	Kontrolle	AFE	0.007626688	1
NM_012293.1:1960	NM_012293	7837	ENSG00000130508	PXDN	UIP	AFE	0.007636932	1
NM_001127500.1:1925	NM_001127500	4233	ENSG00000105976	MET	UIP	AFE	0.007638805	1
NM_178812.3:828	NM_178812	92140	ENSG00000147649	MTDH	Kontrolle	AFE	0.007660735	1
NM_001087.3:412	NM_001087	14	ENSG00000127837	AAMP	NSIP	Kontrolle	0.007668151	1
NM_015194.1:616	NM_015194	4642	ENSG00000176658	MYO1D	UIP	AFE	0.007765023	1
NM_001079846.1:4818	NM_001079846	1387	ENSG00000005339	CREBBP	UIP	AFE	0.007770818	1
NM_002744.4:771	NM_002744	5590	ENSG00000067606	PRKCZ	NSIP	Kontrolle	0.007818208	1
NM_017564.9:3000	NM_017564	55576	ENSG00000136011	STAB2	NSIP	AFE	0.007827828	1
NM_001953.3:719	NM_001953	1890	ENSG00000025708	TYMP	Kontrolle	AFE	0.007879668	1
NM_000095.2:2164	NM_000095	1311	ENSG00000105664	COMP	Kontrolle	AFE	0.007917982	1
NM_000064.2:4396	NM_000064	718	ENSG00000125730	C3	UIP	AFE	0.007952285	1
NM_172350.1:365	NM_172350	4179	ENSG00000117335	CD46	UIP	AFE	0.0079728	1
NM_001165413.1:1670	NM_001165413	5054	ENSG00000106366	SERPINE1	Kontrolle	AFE	0.007987733	1
NM_005795.3:1585	NM_005795	10203	ENSG00000064989	CALCL	UIP	Kontrolle	0.008039011	1
NM_006288.2:135	NM_006288	7070	ENSG00000154096	THY1	UIP	AFE	0.008040532	1
NM_000020.1:1710	NM_000020	94	ENSG00000139567	ACVRL1	Kontrolle	AFE	0.008097146	1
NM_001504.1:80	NM_001504	2833	ENSG00000186810	CXCR3	UIP	Kontrolle	0.008145222	1
NM_000201.2:2253	NM_000201	3383	ENSG00000090339	ICAM1	NSIP	Kontrolle	0.008224426	1
NM_005559.2:5230	NM_005559	284217	ENSG00000101680	LAMA1	NSIP	Kontrolle	0.008365746	1
NM_004787.1:2430	NM_004787	9353	ENSG00000145147	SLIT2	UIP	AFE	0.008393255	1
NM_032470.3:1621	NM_032470	7148	ENSG00000168477	TNXB	UIP	Kontrolle	0.008408357	1
NM_002421.2:700	NM_002421	4312	ENSG00000196611	MMP1	UIP	AFE	0.008409398	1
NM_001235.2:880	NM_001235	871	ENSG00000149257	SERPINH1	NSIP	Kontrolle	0.008417095	1
NM_005902.3:4220	NM_005902	4088	ENSG00000166949	SMAD3	Kontrolle	AFE	0.008473402	1
NM_020997.2:1405	NM_020997	10637	ENSG00000243709	LEFTY1	Kontrolle	AFE	0.00848748	1
NM_005230.2:905	NM_005230	2004	ENSG00000111145	ELK3	Kontrolle	AFE	0.008551949	1
NM_000304.2:1644	NM_000304	5376	ENSG00000109099	PMP22	Kontrolle	AFE	0.008561105	1
NM_000640.2:400	NM_000640	3598	ENSG00000123496	IL13RA2	NSIP	AFE	0.008596989	1
NM_000093.3:6345	NM_000093	1289	ENSG00000130635	COL5A1	NSIP	AFE	0.008614048	1
NM_022093.1:3580	NM_022093	63923	ENSG00000120332	TNN	Kontrolle	AFE	0.008670332	1
NM_000393.3:4075	NM_000393	1290	ENSG00000204262	COL5A2	UIP	AFE	0.008707187	1
NM_178310.1:820	NM_178310	333929	ENSG00000185669	SNAI3	UIP	AFE	0.008868158	1
NR_104213.1:475	NR_104213	51129	ENSG00000167772	ANGPTL4	Kontrolle	AFE	0.008900405	1
NM_001702.1:3640	NM_001702	575	ENSG00000181790	BAI1	UIP	AFE	0.008917356	1
NM_001038.4:2780	NM_001038	6337	ENSG00000111319	SCNN1A	NSIP	Kontrolle	0.008928742	1
NM_002670.2:3261	NM_002670	5357	ENSG00000120756	PLS1	Kontrolle	AFE	0.008928947	1
NM_003873.5:370	NM_003873	8829	ENSG00000099250	NRP1	NSIP	Kontrolle	0.009005991	1
NM_014428.1:1925	NM_014428	27134	ENSG00000105289	TJP3	Kontrolle	AFE	0.009291106	1
NM_198576.2:2750	NM_198576	375790	ENSG00000188157	AGRN	Kontrolle	AFE	0.00933756	1
NM_001299.4:496	NM_001299	1264	ENSG00000130176	CNN1	Kontrolle	AFE	0.009371272	1
NM_001063.2:640	NM_001063	7018	ENSG00000091513	TF	UIP	Kontrolle	0.009394707	1

NM_022739.3:2605	NM_022739	64750	ENSG00000108854	SMURF2	UIP	Kontrolle	0.009493141	1
NM_001849.2:1925	NM_001849	1292	ENSG00000142173	COL6A2	NSIP	AFE	0.009500915	1
NM_000640.2:400	NM_000640	3598	ENSG00000123496	IL13RA2	NSIP	Kontrolle	0.00954549	1
NM_005100.3:640	NM_005100	9590	ENSG00000131016	AKAP12	UIP	AFE	0.009590508	1
NM_198576.2:2750	NM_198576	375790	ENSG00000188157	AGRN	UIP	Kontrolle	0.009617654	1
NM_006094.3:5650	NM_006094	10395	ENSG00000164741	DLC1	UIP	AFE	0.009685404	1
NM_001263.3:3052	NM_001263	1040	ENSG00000163624	CDS1	Kontrolle	AFE	0.009687657	1
NM_014225.3:1440	NM_014225	5518	ENSG00000105568	PPP2R1A	Kontrolle	AFE	0.00970311	1
NM_001165414.1:1690	NM_001165414	3939	ENSG00000134333	LDHA	Kontrolle	AFE	0.009837242	1
NM_015213.2:4604	NM_015213	23258	ENSG00000184014	DENND5A	UIP	AFE	0.009862673	1
NM_002006.4:620	NM_002006	2247	ENSG00000138685	FGF2	UIP	AFE	0.009868325	1
NM_001734.2:775	NM_001734	716	ENSG00000182326	C1S	UIP	AFE	0.010101172	1
NM_002202.2:1375	NM_002202	3670	ENSG00000016082	ISL1	Kontrolle	AFE	0.010103826	1
NM_002214.2:2609	NM_002214	3696	ENSG00000105855	ITGB8	UIP	Kontrolle	0.010135814	1
NM_001077269.1:1660	NM_001077269	7456	ENSG00000115935	WIPF1	Kontrolle	AFE	0.01020863	1
NM_001792.3:941	NM_001792	1000	ENSG00000170558	CDH2	UIP	Kontrolle	0.01025034	1
NM_203339.2:1376	NM_203339			CLU	Kontrolle	AFE	0.010272043	1
NM_005529.5:2715	NM_005529	3339	ENSG00000142798	HSPG2	NSIP	Kontrolle	0.010382594	1
NM_003677.3:2091	NM_003677	8562	ENSG00000139726	DENR	Kontrolle	AFE	0.010400648	1
NM_001848.2:3665	NM_001848	1291	ENSG00000142156	COL6A1	UIP	AFE	0.010421288	1
NM_001129.3:3170	NM_001129	165	ENSG00000106624	AEBP1	NSIP	Kontrolle	0.010507299	1
NM_003247.2:4460	NM_003247	7058	ENSG00000186340	THBS2	UIP	Kontrolle	0.010507938	1
NM_053046.3:1538	NM_053046	112398	ENSG00000269858	EGLN2	UIP	Kontrolle	0.010518877	1
NM_005901.5:1678	NM_005901	4087	ENSG00000175387	SMAD2	UIP	Kontrolle	0.010533061	1
NM_024021.2:800	NM_024021	51338	ENSG00000110079	MS4A4A	NSIP	AFE	0.010595219	1
NM_144962.2:190	NM_144962	157310	ENSG00000134020	PEBP4	NSIP	Kontrolle	0.010627597	1
NM_000594.2:1010	NM_000594	7124	ENSG00000232810	TNF	Kontrolle	AFE	0.010646214	1
NM_006094.3:5650	NM_006094	10395	ENSG00000164741	DLC1	NSIP	Kontrolle	0.010700455	1
NM_033666.2:2000	NM_033666	3688	ENSG00000150093	ITGB1	UIP	AFE	0.01072647	1
NM_000389.2:1975	NM_000389	1026	ENSG00000124762	CDKN1A	UIP	AFE	0.01075024	1
NM_018192.2:985	NM_018192	55214	ENSG00000090530	P3H2	NSIP	Kontrolle	0.010854079	1
NM_012211.3:650	NM_012211	22801	ENSG00000137809	ITGA11	NSIP	AFE	0.010877844	1
NM_022093.1:3580	NM_022093	63923	ENSG00000120332	TNN	UIP	AFE	0.011005761	1
NR_104213.1:475	NR_104213	51129	ENSG00000167772	ANGPTL4	UIP	AFE	0.011028878	1
NM_024915.3:3690	NM_024915	79977	ENSG00000083307	GRHL2	Kontrolle	AFE	0.01106588	1
NM_005795.3:1585	NM_005795	10203	ENSG00000064989	CALCRL	Kontrolle	AFE	0.011141493	1
NM_002121.4:931	NM_002121	3115	ENSG00000223865	HLA-DPB1	UIP	AFE	0.011148088	1
NM_144962.2:190	NM_144962	157310	ENSG00000134020	PEBP4	UIP	Kontrolle	0.011174529	1
NM_007146.2:700	NM_007146	7716	ENSG00000136451	VEZF1	Kontrolle	AFE	0.011215565	1
NM_005027.2:3100	NM_005027	5296	ENSG00000105647	PIK3R2	UIP	Kontrolle	0.011248284	1
NM_001848.2:3665	NM_001848	1291	ENSG00000142156	COL6A1	NSIP	AFE	0.011270179	1
NM_020405.4:900	NM_020405	57125	ENSG00000161381	PLXDC1	NSIP	Kontrolle	0.01138457	1
NM_002963.2:69	NM_002963	6278	ENSG00000143556	S100A7	Kontrolle	AFE	0.011438859	1
NM_133468.4:476	NM_133468	168667	ENSG00000164619	BMPER	NSIP	AFE	0.011478232	1
NM_001105209.1:287	NM_001105209	3910	ENSG00000112769	LAMA4	Kontrolle	AFE	0.011502741	1
NM_001719.2:1092	NM_001719	655	ENSG00000101144	BMP7	UIP	AFE	0.011531027	1
NM_014467.2:1420	NM_014467	27286	ENSG00000102359	SRPX2	UIP	AFE	0.011629936	1
NM_001004065.4:4956	NM_001004065	11217	ENSG00000241978	AKAP2	UIP	AFE	0.011640287	1
NM_014363.4:1475	NM_014363	26278	ENSG00000151835	SACS	Kontrolle	AFE	0.011677033	1
NM_000104.3:1715	NM_000104	1545	ENSG00000138061	CYP1B1	Kontrolle	AFE	0.011702813	1
NM_006017.1:925	NM_006017	8842	ENSG00000007062	PROM1	UIP	Kontrolle	0.011846176	1
NM_003212.2:1567	NM_003212	6997	ENSG00000241186	TDGF1	Kontrolle	AFE	0.011863883	1
NM_015213.2:4604	NM_015213	23258	ENSG00000184014	DENND5A	UIP	Kontrolle	0.011890842	1
NM_004342.6:3862	NM_004342	800	ENSG00000122786	CALD1	Kontrolle	AFE	0.011902703	1
NM_001271814.1:90	NM_001271814	26279	ENSG00000117215	PLA2G2D	UIP	Kontrolle	0.011928373	1
NM_024545.3:3090	NM_024545	79595	ENSG00000136715	SAP130	UIP	AFE	0.011972549	1
NM_003333.3:288	NM_003333	7311	ENSG00000221983	UBA52	Kontrolle	AFE	0.01202171	1
NM_002705.4:2435	NM_002705	5493	ENSG00000118898	PPL	Kontrolle	AFE	0.012068677	1
NM_002166.4:505	NM_002166	3398	ENSG00000115738	ID2	UIP	AFE	0.012083387	1
NM_006182.2:1706	NM_006182	4921	ENSG00000162733	DDR2	Kontrolle	AFE	0.012161068	1
NM_001010855.3:1112	NM_001010855	146850	ENSG00000276231	PIK3R6	UIP	Kontrolle	0.012173874	1
NM_001119.4:622	NM_001119	118	ENSG00000087274	ADD1	UIP	AFE	0.012299147	1
NM_015230.2:4875	NM_015230	116984	ENSG00000047365	ARAP2	UIP	Kontrolle	0.012351793	1
NM_003189.2:4635	NM_003189	6886	ENSG00000162367	TAL1	UIP	AFE	0.012388105	1
NM_003189.2:4635	NM_003189	6886	ENSG00000162367	TAL1	NSIP	AFE	0.012452032	1
NR_046324.1:194	NR_046324	1139	ENSG00000175344	CHRNA7	UIP	AFE	0.012474269	1
NM_021253.3:3140	NM_021253	56658	ENSG00000204599	TRIM39	Kontrolle	AFE	0.012495461	1
NM_005656.3:1079	NM_005656	7113	ENSG00000184012	TMPPRSS2	UIP	AFE	0.012554171	1
NM_181501.1:1875	NM_181501	3672	ENSG00000213949	ITGA1	UIP	AFE	0.012657737	1
NM_005975.2:1715	NM_005975	5753	ENSG00000101213	PTK6	UIP	AFE	0.01280595	1
NM_000020.1:1710	NM_000020	94	ENSG00000139567	ACVRL1	UIP	NSIP	0.012917909	1
NM_173157.1:1575	NM_173157	3164	ENSG00000123358	NR4A1	NSIP	Kontrolle	0.013128197	1

NM_138735.2:1095	NM_138735	9378	ENSG00000179915	NRXN1	Kontrolle	AFE	0.013226504	1
NM_014333.3:2840	NM_014333	23705	ENSG00000182985	CADM1	UIP	Kontrolle	0.013253785	1
NM_002146.4:2840	NM_002146	3213	ENSG00000120093	HOXB3	UIP	Kontrolle	0.013261241	1
NM_002421.2:700	NM_002421	4312	ENSG00000196611	MMP1	UIP	Kontrolle	0.013273031	1
NM_182471.1:2105	NM_182471	5315	ENSG00000067225	PKM	Kontrolle	AFE	0.013384761	1
NM_002985.2:280	NM_002985	6352	ENSG00000271503	CCL5	UIP	Kontrolle	0.013428237	1
NM_018055.3:320	NM_018055	4838	ENSG00000156574	NODAL	Kontrolle	AFE	0.013473237	1
NM_001400.4:802	NM_001400	1901	ENSG00000170989	S1PR1	NSIP	AFE	0.013504306	1
NM_001168278.1:1050	NM_001168278	25937	ENSG00000018408	WWTR1	UIP	Kontrolle	0.013570448	1
NM_199511.1:3235	NM_199511	151887	ENSG00000091986	CCDC80	NSIP	Kontrolle	0.013604267	1
NM_005486.2:685	NM_005486	10040	ENSG00000141198	TOM1L1	Kontrolle	AFE	0.013633931	1
NM_003377.3:687	NM_003377	7423	ENSG00000173511	VEGFB	UIP	AFE	0.013634525	1
NM_000201.2:2253	NM_000201	3383	ENSG00000090339	ICAM1	NSIP	AFE	0.013712236	1
NM_001845.4:780	NM_001845	1282	ENSG00000187498	COL4A1	UIP	AFE	0.013747763	1
NM_002228.3:140	NM_002228	3725	ENSG00000177606	JUN	NSIP	Kontrolle	0.013791446	1
NM_005475.2:4285	NM_005475	10019	ENSG00000111252	SH2B3	UIP	Kontrolle	0.0138181	1
NM_002104.2:700	NM_002104	3003	ENSG00000113088	GZMK	UIP	Kontrolle	0.013818545	1
NM_001098210.1:1815	NM_001098210	1499	ENSG00000168036	CTNNB1	UIP	AFE	0.013923065	1
NM_018695.2:3675	NM_018695	55914	ENSG00000112851	ERBB2IP	UIP	AFE	0.013971434	1
NM_000582.2:760	NM_000582	6696	ENSG00000118785	SPP1	UIP	NSIP	0.014041451	1
NM_181501.1:1875	NM_181501	3672	ENSG00000213949	ITGA1	UIP	Kontrolle	0.01409138	1
NM_000393.3:4075	NM_000393	1290	ENSG00000204262	COL5A2	UIP	Kontrolle	0.014099436	1
NM_001270837.1:1042	NM_001270837	1397	ENSG00000182809	CRIP2	NSIP	Kontrolle	0.014192595	1
NM_005475.2:4285	NM_005475	10019	ENSG00000111252	SH2B3	UIP	AFE	0.014217288	1
NM_001849.2:1925	NM_001849	1292	ENSG00000142173	COL6A2	UIP	AFE	0.014231435	1
NM_005465.4:287	NM_005465	10000	ENSG00000117020	AKT3	UIP	AFE	0.014319192	1
NM_001847.2:1070	NM_001847	1288	ENSG00000197565	COL4A6	UIP	Kontrolle	0.014389563	1
NM_017423.2:910	NM_017423	51809	ENSG00000109586	GALNT7	NSIP	AFE	0.014458287	1
NM_001078.3:2535	NM_001078	7412	ENSG00000162692	VCAM1	UIP	NSIP	0.014483326	1
NM_002538.3:1975	NM_002538	100506658	ENSG00000197822	OCLN	NSIP	Kontrolle	0.014536751	1
NM_003247.2:4460	NM_003247	7058	ENSG00000186340	THBS2	NSIP	Kontrolle	0.014579565	1
NM_004369.3:2782	NM_004369	1293	ENSG00000163359	COL6A3	NSIP	Kontrolle	0.014664443	1
NM_015194.1:616	NM_015194	4642	ENSG00000176658	MYO1D	NSIP	AFE	0.014701705	1
NM_002165.2:345	NM_002165	3397	ENSG00000125968	ID1	NSIP	AFE	0.014716477	1
NM_001276.2:475	NM_001276	1116	ENSG00000133048	CHI3L1	Kontrolle	AFE	0.014850429	1
NM_001025366.1:1325	NM_001025366	7422	ENSG00000112715	VEGFA	NSIP	Kontrolle	0.015031938	1
NM_000526.4:523	NM_000526	3861	ENSG00000186847	KRT14	UIP	Kontrolle	0.015094553	1
XM_005269604.1:379	XM_005269604			ZCCHC24	UIP	Kontrolle	0.015157594	1
NM_022078.2:1685	NM_022078	63906	ENSG00000198746	GPATCH3	UIP	AFE	0.015233148	1
NM_018728.2:2400	NM_018728	55930	ENSG00000128833	MYO5C	Kontrolle	AFE	0.015332277	1
NM_001203.1:430	NM_001203	658	ENSG00000138696	BMPR1B	UIP	Kontrolle	0.015437958	1
NM_170679.2:630	NM_170679	6500	ENSG00000113558	SKP1	Kontrolle	AFE	0.015622503	1
NM_000459.3:1894	NM_000459	7010	ENSG00000120156	TEK	UIP	Kontrolle	0.015802441	1
NM_001338.3:1937	NM_001338	1525	ENSG00000154639	CXADR	NSIP	Kontrolle	0.01598665	1
NM_207446.2:1075	NM_207446	400451	ENSG00000185442	FAM174B	NSIP	Kontrolle	0.015991675	1
NM_001005845.1:695	NM_001005845	8754	ENSG00000168615	ADAM9	Kontrolle	AFE	0.016077733	1
NM_001079846.1:4818	NM_001079846	1387	ENSG00000005339	CREBBP	UIP	Kontrolle	0.016215612	1
NM_000189.4:6880	NM_000189	3099	ENSG00000159399	HK2	Kontrolle	AFE	0.016257572	1
NM_001025366.1:1325	NM_001025366	7422	ENSG00000112715	VEGFA	UIP	AFE	0.016305269	1
NM_001166133.1:526	NM_001166133	80144	ENSG00000138759	FRAS1	UIP	NSIP	0.016349694	1
NM_001299.4:496	NM_001299	1264	ENSG00000130176	CNN1	UIP	Kontrolle	0.016431727	1
NM_001836.2:561	NM_001836	1215	ENSG00000092009	CMA1	NSIP	Kontrolle	0.016532003	1
NM_000122.1:1950	NM_000122	2071	ENSG00000163161	ERCC3	UIP	AFE	0.016612231	1
NM_000094.2:390	NM_000094	1294	ENSG00000114270	COL7A1	Kontrolle	AFE	0.016680964	1
NM_005855.2:200	NM_005855	10267	ENSG00000132329	RAMP1	Kontrolle	AFE	0.016846173	1
NM_006846.3:2595	NM_006846	11005	ENSG00000133710	SPINK5	Kontrolle	AFE	0.016888826	1
NM_002203.2:475	NM_002203	3673	ENSG00000164171	ITGA2	Kontrolle	AFE	0.017032505	1
NM_004864.2:180	NM_004864	9518	ENSG00000130513	GDF15	UIP	Kontrolle	0.017129379	1
NM_016205.2:2596	NM_016205	56034	ENSG00000145431	PDGFC	UIP	AFE	0.017171325	1
NM_002228.3:140	NM_002228	3725	ENSG00000177606	JUN	UIP	Kontrolle	0.017269805	1
NM_000389.2:1975	NM_000389	1026	ENSG00000124762	CDKN1A	Kontrolle	AFE	0.01729215	1
NM_016215.3:1252	NM_016215	51162	ENSG00000172889	EGFL7	Kontrolle	AFE	0.017307879	1
NM_198098.1:1230	NM_198098	358	ENSG00000240583	AQP1	Kontrolle	AFE	0.017403463	1
NM_198829.1:1250	NM_198829	5879	ENSG00000136238	RAC1	UIP	AFE	0.01752876	1
NM_015213.2:4604	NM_015213	23258	ENSG00000184014	DENND5A	UIP	NSIP	0.017557377	1
NM_001993.3:1030	NM_001993	2152	ENSG00000117525	F3	UIP	NSIP	0.017609748	1
NM_030955.2:1955	NM_030955	81792	ENSG00000151388	ADAMTS12	Kontrolle	AFE	0.017660619	1
NM_003873.5:370	NM_003873	8829	ENSG00000099250	NRP1	Kontrolle	AFE	0.017677696	1
NM_080646.1:540	NM_080646	6899	ENSG00000184058	TBX1	UIP	Kontrolle	0.017679283	1
NM_013230.2:1859	NM_013230	100133941	ENSG00000272398	CD24	Kontrolle	AFE	0.017680887	1
NM_006472.1:255	NM_006472	10628	ENSG00000265972	TXNIP	NSIP	AFE	0.017864066	1
NM_001004065.4:4956	NM_001004065	11217	ENSG00000241978	AKAP2	NSIP	Kontrolle	0.017876338	1

NM_015715.3:2415	NM_015715	50487	ENSG00000100078	PLA2G3	Kontrolle	AFE	0.01797386	1
NM_000389.2:1975	NM_000389	1026	ENSG00000124762	CDKN1A	NSIP	AFE	0.018028837	1
NM_003013.2:840	NM_003013	6423	ENSG00000145423	SFRP2	NSIP	Kontrolle	0.018204107	1
NM_014059.2:765	NM_014059	28984	ENSG00000102760	RGCC	UIP	AFE	0.018224979	1
NM_019894.3:1146	NM_019894	56649	ENSG00000137648	TMPRSS4	UIP	AFE	0.018499033	1
NM_016205.2:2596	NM_016205	56034	ENSG00000145431	PDGFC	NSIP	Kontrolle	0.018540211	1
NM_000149.3:2342	NM_000149	2525	ENSG00000171124	FUT3	UIP	AFE	0.018653832	1
NM_002192.2:490	NM_002192	3624	ENSG00000122641	INHBA	UIP	AFE	0.018752244	1
NM_022739.3:2605	NM_022739	64750	ENSG00000108854	SMURF2	UIP	AFE	0.018760997	1
NM_002207.2:2380	NM_002207	3680	ENSG00000144668	ITGA9	Kontrolle	AFE	0.018776946	1
NM_002996.3:140	NM_002996	6376	ENSG00000006210	CX3CL1	Kontrolle	AFE	0.018896514	1
NM_000474.3:393	NM_000474	7291	ENSG00000122691	TWIST1	Kontrolle	AFE	0.019029885	1
NM_001530.2:1985	NM_001530	3091	ENSG00000100644	HIF1A	Kontrolle	AFE	0.019058826	1
NM_002310.3:2995	NM_002310	3977	ENSG00000113594	LIFR	Kontrolle	AFE	0.019101079	1
NM_002954.5:650	NM_002954	6233	ENSG00000143947	RPS27A	Kontrolle	AFE	0.019105388	1
NM_001540.3:374	NM_001540	3315	ENSG00000106211	HSPB1	NSIP	Kontrolle	0.0192059	1
NM_002133.2:781	NM_002133	3162	ENSG00000100292	HMOX1	UIP	NSIP	0.019353699	1
NM_001127500.1:1925	NM_001127500	4233	ENSG00000105976	MET	Kontrolle	AFE	0.019375715	1
NM_003199.1:1455	NM_003199	6925	ENSG00000196628	TCF4	NSIP	Kontrolle	0.019388569	1
NM_001897.4:7642	NM_001897	1464	ENSG00000173546	CSPG4	UIP	Kontrolle	0.019399931	1
NM_002649.2:2125	NM_002649	5294	ENSG00000105851	PIK3CG	UIP	Kontrolle	0.019417839	1
NM_001063.2:640	NM_001063	7018	ENSG00000091513	TF	Kontrolle	AFE	0.019546358	1
NM_014265.4:920	NM_014265	10863	ENSG00000042980	ADAM28	NSIP	Kontrolle	0.019696249	1
NM_199121.2:3664	NM_199121	64856	ENSG00000179403	VWA1	UIP	Kontrolle	0.019894186	1
NM_005656.3:1079	NM_005656	7113	ENSG00000184012	TMPRSS2	NSIP	Kontrolle	0.019963126	1
NM_032801.3:890	NM_032801	83700	ENSG00000166086	JAM3	UIP	NSIP	0.019983431	1
NM_001753.3:434	NM_001753	857	ENSG00000105974	CAV1	Kontrolle	AFE	0.020068703	1
NM_000321.1:2110	NM_000321	5925	ENSG00000139687	RB1	UIP	Kontrolle	0.020135448	1
NM_022965.2:3170	NM_022965	2261	ENSG00000068078	FGFR3	Kontrolle	AFE	0.020136294	1
NM_000321.1:2110	NM_000321	5925	ENSG00000139687	RB1	Kontrolle	AFE	0.020146922	1
NM_053032.2:710	NM_053032	4638	ENSG00000065534	MYLK	Kontrolle	AFE	0.020240306	1
NM_001012331.1:1365	NM_001012331	4914	ENSG00000198400	NTRK1	UIP	Kontrolle	0.020393449	1
NM_012217.2:585	NM_012217	23430	ENSG00000095917	TPSD1	NSIP	AFE	0.020600057	1
NM_001119.4:622	NM_001119	118	ENSG00000087274	ADD1	NSIP	Kontrolle	0.020610891	1
NM_018728.2:2400	NM_018728	55930	ENSG00000128833	MYO5C	UIP	AFE	0.020612813	1
NM_001432.2:290	NM_001432	2069	ENSG00000124882	EREG	UIP	Kontrolle	0.020619191	1
NM_001005731.1:4151	NM_001005731	3691	ENSG00000132470	ITGB4	UIP	AFE	0.020638693	1
NM_001038.4:2780	NM_001038	6337	ENSG00000111319	SCNN1A	Kontrolle	AFE	0.020641606	1
NM_006182.2:1706	NM_006182	4921	ENSG00000162733	DDR2	UIP	AFE	0.021180455	1
NM_000582.2:760	NM_000582	6696	ENSG00000118785	SPP1	Kontrolle	AFE	0.021298976	1
NM_001034915.2:1515	NM_001034915	54845	ENSG00000104413	ESRP1	Kontrolle	AFE	0.021400093	1
NM_002160.3:1215	NM_002160	3371	ENSG00000041982	TNC	UIP	AFE	0.021416822	1
NM_000141.4:647	NM_000141	2263	ENSG00000066468	FGFR2	Kontrolle	AFE	0.021472581	1
NM_006094.3:5650	NM_006094	10395	ENSG00000164741	DLC1	UIP	NSIP	0.021604911	1
NM_178310.1:820	NM_178310	333929	ENSG00000185669	SNAI3	UIP	Kontrolle	0.021629952	1
NM_007146.2:700	NM_007146	7716	ENSG00000136451	VEZF1	UIP	Kontrolle	0.021699029	1
NM_006361.5:1220	NM_006361	10481	ENSG00000159184	HOXB13	Kontrolle	AFE	0.021709482	1
NM_001009552.1:1075	NM_001009552	5516	ENSG00000104695	PPP2CB	Kontrolle	AFE	0.021755138	1
NM_203384.1:1192	NM_203384	6050	ENSG00000023191	RNH1	Kontrolle	AFE	0.021823684	1
NM_002204.2:4550	NM_002204	3675	ENSG00000005884	ITGA3	Kontrolle	AFE	0.021864636	1
NM_002425.1:88	NM_002425	4319	ENSG00000166670	MMP10	NSIP	Kontrolle	0.021983192	1
NM_013943.2:1702	NM_013943	25932	ENSG00000169504	CLIC4	UIP	Kontrolle	0.022006833	1
NM_002607.5:1276	NM_002607	5154	ENSG00000197461	PDGFA	Kontrolle	AFE	0.022057509	1
NM_001065.2:515	NM_001065	7132	ENSG00000067182	TNFRSF1A	Kontrolle	AFE	0.0220986	1
NM_001143981.1:1120	NM_001143981	91851	ENSG00000101938	CHRDL1	Kontrolle	AFE	0.022115116	1
NM_022740.4:10305	NM_022740	28996	ENSG00000064393	HIPK2	UIP	Kontrolle	0.022153477	1
NM_013230.2:1859	NM_013230	100133941	ENSG000000272398	CD24	UIP	Kontrolle	0.022311416	1
NM_020672.1:460	NM_020672	57402	ENSG00000189334	S100A14	Kontrolle	AFE	0.022324448	1
NM_133459.3:310	NM_133459	147372	ENSG00000183287	CCBE1	UIP	AFE	0.022354327	1
NM_001626.2:1450	NM_001626	208	ENSG00000105221	AKT2	NSIP	Kontrolle	0.022650716	1
NM_005360.4:888	NM_005360	4094	ENSG00000178573	MAF	NSIP	Kontrolle	0.022653336	1
NM_006711928.1:724	NM_006711928			EMILIN1	UIP	AFE	0.022660562	1
NM_003104.4:1345	NM_003104	6652	ENSG00000140263	SORD	UIP	AFE	0.022773858	1
NM_005417.3:1410	NM_005417	6714	ENSG00000197122	SRC	UIP	AFE	0.022870927	1
NM_001912.4:1072	NM_001912	1514	ENSG00000135047	CTSL	UIP	AFE	0.022953876	1
NM_014057.3:995	NM_014057	4969	ENSG00000106809	OGN	Kontrolle	AFE	0.022964553	1
NM_012431.1:2184	NM_012431	9723	ENSG00000170381	SEMA3E	NSIP	Kontrolle	0.02297645	1
NM_006094.3:5650	NM_006094	10395	ENSG00000164741	DLC1	Kontrolle	AFE	0.023016801	1
NM_001204355.1:730	NM_001204355	50859	ENSG00000196104	SPOCK3	Kontrolle	AFE	0.023020769	1
NM_002615.4:888	NM_002615	5176	ENSG00000132386	SERPINF1	UIP	Kontrolle	0.023079352	1
NM_000269.2:500	NM_000269	4830	ENSG00000239672	NME1	Kontrolle	AFE	0.023149926	1
NM_005359.3:1370	NM_005359	4089	ENSG00000141646	SMAD4	NSIP	Kontrolle	0.023435059	1

NM_005559.2:5230	NM_005559	284217	ENSG00000101680	LAMA1	UIP	NSIP	0.023483838	1
NM_032794.1:1798	NM_032794			SLC44A4	UIP	Kontrolle	0.023510587	1
NM_001105209.1:287	NM_001105209	3910	ENSG00000112769	LAMA4	NSIP	Kontrolle	0.023616017	1
NM_002192.2:490	NM_002192	3624	ENSG00000122641	INHBA	Kontrolle	AFE	0.023650239	1
NM_006419.2:210	NM_006419	10563	ENSG00000156234	CXCL13	UIP	Kontrolle	0.023750813	1
NM_003998.2:1675	NM_003998	4790	ENSG00000109320	NFKB1	UIP	AFE	0.023776664	1
NM_080646.1:540	NM_080646	6899	ENSG00000184058	TBX1	NSIP	AFE	0.023926741	1
NM_021073.2:1570	NM_021073	653	ENSG00000112175	BMP5	Kontrolle	AFE	0.023975539	1
NM_002610.3:401	NM_002610	5163	ENSG00000152256	PKD1	Kontrolle	AFE	0.023998743	1
NM_016167.3:335	NM_016167	51406	ENSG00000225921	NOL7	UIP	Kontrolle	0.024030631	1
NM_022119.3:499	NM_022119	64063	ENSG00000005001	PRSS22	UIP	Kontrolle	0.024144067	1
NM_000029.3:1711	NM_000029	183	ENSG00000135744	AGT	UIP	Kontrolle	0.024182054	1
NM_021935.3:827	NM_021935	60675	ENSG00000163421	PROK2	UIP	Kontrolle	0.024265251	1
NM_003299.1:160	NM_003299	7184	ENSG00000166598	HSP90B1	Kontrolle	AFE	0.024297707	1
NM_001228.4:301	NM_001228	841	ENSG00000064012	CASP8	UIP	Kontrolle	0.024400459	1
NM_001078.3:2535	NM_001078	7412	ENSG00000162692	VCAM1	NSIP	AFE	0.024436642	1
NM_021220.2:676	NM_021220	58495	ENSG00000125850	OVOL2	UIP	Kontrolle	0.024482595	1
NM_006474.4:431	NM_006474	10630	ENSG00000162493	PDPN	Kontrolle	AFE	0.024484008	1
NM_001077269.1:1660	NM_001077269	7456	ENSG00000115935	WIPF1	UIP	Kontrolle	0.024488397	1
NM_005381.2:1492	NM_005381	4691	ENSG00000115053	NCL	UIP	AFE	0.024570117	1
NM_000551.2:1280	NM_000551	7428	ENSG00000134086	VHL	Kontrolle	AFE	0.024621083	1
NM_003561.1:779	NM_003561	8399	ENSG00000069764	PLA2G10	NSIP	Kontrolle	0.024731844	1
NM_015441.1:2920	NM_015441	25903	ENSG00000162745	OLFML2B	UIP	AFE	0.024789366	1
NM_000600.1:220	NM_000600	3569	ENSG00000136244	IL6	NSIP	AFE	0.024799109	1
NM_003289.3:891	NM_003289	7169	ENSG00000198467	TPM2	NSIP	Kontrolle	0.024830622	1
NM_012431.1:2184	NM_012431	9723	ENSG00000170381	SEMA3E	UIP	Kontrolle	0.024910943	1
NM_004763.3:1690	NM_004763	9270	ENSG00000119185	ITGB1BP1	Kontrolle	AFE	0.024978653	1
NM_003289.3:891	NM_003289	7169	ENSG00000198467	TPM2	Kontrolle	AFE	0.025053591	1
NM_134261.2:1715	NM_134261	6095	ENSG00000069667	RORA	NSIP	Kontrolle	0.025098513	1
NM_004322.3:963	NM_004322	572	ENSG00000002330	BAD	UIP	Kontrolle	0.025185497	1
NM_003012.3:3320	NM_003012	6422	ENSG00000104332	SFRP1	Kontrolle	AFE	0.025531411	1
NM_019102.2:895	NM_019102	3202	ENSG00000106004	HOXA5	UIP	AFE	0.025546007	1
NM_006361.5:1220	NM_006361	10481	ENSG00000159184	HOXB13	UIP	AFE	0.026054364	1
NM_015230.2:4875	NM_015230	116984	ENSG00000047365	ARAP2	NSIP	Kontrolle	0.02611814	1
NM_002845.3:1680	NM_002845	5797	ENSG00000173482	PTPRM	UIP	AFE	0.026155502	1
NM_004689.2:450	NM_004689	9112	ENSG00000182979	MTA1	Kontrolle	AFE	0.026187267	1
NM_016232.4:700	NM_016232	9173	ENSG00000115602	IL1RL1	NSIP	Kontrolle	0.026202112	1
NM_015013.3:2395	NM_015013	23028	ENSG00000004487	KDM1A	Kontrolle	AFE	0.026205332	1
NM_001042404.1:1800	NM_001042404	9859	ENSG00000143702	CEP170	UIP	AFE	0.026251621	1
NM_018238.3:816	NM_018238	55750	ENSG00000006530	AGK	Kontrolle	AFE	0.02631099	1
XM_006711928.1:724	XM_006711928			EMILIN1	UIP	NSIP	0.026325721	1
NM_001847.2:1070	NM_001847	1288	ENSG00000197565	COL4A6	NSIP	Kontrolle	0.026412087	1
NM_000041.2:96	NM_000041	348	ENSG00000130203	APOE	NSIP	Kontrolle	0.026419085	1
NM_000138.3:6420	NM_000138	2200	ENSG00000166147	FBN1	NSIP	Kontrolle	0.026442197	1
NM_001166133.1:526	NM_001166133	80144	ENSG00000138759	FRAS1	NSIP	AFE	0.026603971	1
NM_001065.2:515	NM_001065	7132	ENSG00000067182	TNFRSF1A	UIP	AFE	0.026660782	1
NM_002160.3:1215	NM_002160	3371	ENSG000000041982	TNC	NSIP	AFE	0.02678228	1
NM_006474.4:431	NM_006474	10630	ENSG00000162493	PDPN	NSIP	Kontrolle	0.026896348	1
NM_022045.4:1792	NM_022045	27085	ENSG00000172167	MTBP	Kontrolle	AFE	0.027055925	1
NM_001033081.2:568	NM_001033081	4610	ENSG00000116990	MYCL	UIP	AFE	0.027087747	1
NM_015230.2:4875	NM_015230	116984	ENSG00000047365	ARAP2	UIP	AFE	0.02728075	1
NM_002607.5:1276	NM_002607	5154	ENSG00000197461	PDGFA	UIP	NSIP	0.027283858	1
NM_000396.2:415	NM_000396	1513	ENSG00000143387	CTSK	NSIP	Kontrolle	0.02732932	1
NM_031476.3:2575	NM_031476	83716	ENSG00000103196	CRISPLD2	Kontrolle	AFE	0.027367537	1
NM_002773.3:917	NM_002773	5652	ENSG00000052344	PRSS8	Kontrolle	AFE	0.027383317	1
NM_173481.2:1845	NM_173481	126353	ENSG00000099812	MISP	UIP	AFE	0.027471472	1
NM_003246.2:3465	NM_003246	7057	ENSG00000137801	THBS1	Kontrolle	AFE	0.02755036	1
NM_001530.2:1985	NM_001530	3091	ENSG00000100644	HIF1A	NSIP	AFE	0.027618852	1
NM_021073.2:1570	NM_021073	653	ENSG00000112175	BMP5	UIP	Kontrolle	0.027679711	1
NM_004864.2:180	NM_004864	9518	ENSG00000130513	GDF15	NSIP	Kontrolle	0.027722567	1
NM_004244.4:1630	NM_004244	9332	ENSG00000177575	CD163	UIP	AFE	0.027848938	1
NM_000551.2:1280	NM_000551	7428	ENSG00000134086	VHL	UIP	Kontrolle	0.027893677	1
NR_003573.1:1013	NR_003573	304		ANXA2P2	NSIP	Kontrolle	0.027949959	1
NM_000615.5:1620	NM_000615	4684	ENSG00000149294	NCAM1	UIP	AFE	0.028089525	1
NM_002593.3:1258	NM_002593	5118	ENSG00000106333	PCOLCE	UIP	Kontrolle	0.028200919	1
NM_002625.2:564	NM_002625	5207	ENSG00000158571	PFKFB1	UIP	AFE	0.028331963	1
NM_005465.4:287	NM_005465	10000	ENSG00000117020	AKT3	UIP	Kontrolle	0.028356517	1
NM_003998.2:1675	NM_003998	4790	ENSG00000109320	NFKB1	UIP	Kontrolle	0.028390871	1
NM_003862.1:850	NM_003862	8817	ENSG00000156427	FGF18	Kontrolle	AFE	0.028435176	1
NM_000601.4:550	NM_000601	3082	ENSG00000019991	HGF	Kontrolle	AFE	0.028494177	1
NM_198576.2:2750	NM_198576	375790	ENSG00000188157	AGRN	NSIP	Kontrolle	0.028654542	1
NM_001005862.1:1255	NM_001005862	2064	ENSG00000141736	ERBB2	UIP	Kontrolle	0.028659163	1

NM_001428.2:1689	NM_001428	2023	ENSG00000074800	ENO1	UIP	AFE	0.028728534	1
NM_001267.2:810	NM_001267	1101	ENSG00000136457	CHAD	UIP	AFE	0.028788108	1
NM_002852.3:1152	NM_002852	5806	ENSG00000163661	PTX3	UIP	NSIP	0.028810112	1
NM_014467.2:1420	NM_014467	27286	ENSG00000102359	SRPX2	UIP	NSIP	0.028882498	1
NM_019055.5:3080	NM_019055	54538	ENSG00000154133	ROBO4	Kontrolle	AFE	0.028912522	1
NM_005163.2:1772	NM_005163	207	ENSG00000142208	AKT1	UIP	AFE	0.028954484	1
NM_014428.1:1925	NM_014428	27134	ENSG00000105289	TJP3	UIP	Kontrolle	0.028956698	1
NM_002427.2:951	NM_002427	4322	ENSG00000137745	MMP13	UIP	NSIP	0.029046749	1
NR_003573.1:1013	NR_003573	304		ANXA2P2	Kontrolle	AFE	0.029173965	1
NM_001146289.1:860	NM_001146289	64175	ENSG00000117385	P3H1	NSIP	AFE	0.029191267	1
NM_006802.2:2060	NM_006802	10946	ENSG00000183431	SF3A3	NSIP	Kontrolle	0.029459996	1
NM_012340.3:1815	NM_012340	4773	ENSG00000101096	NFATC2	Kontrolle	AFE	0.029769468	1
NM_019027.3:150	NM_019027	54502	ENSG00000163694	RBM47	NSIP	AFE	0.029998372	1
NM_001976.4:1368	NM_001976	2027	ENSG00000108515	ENO3	UIP	AFE	0.030021864	1
NM_003106.2:151	NM_003106	6657	ENSG00000181449	SOX2	Kontrolle	AFE	0.03026698	1
NM_002845.3:1680	NM_002845	5797	ENSG00000173482	PTPRM	NSIP	Kontrolle	0.030382111	1
NM_000072.3:707	NM_000072	948	ENSG00000135218	CD36	UIP	Kontrolle	0.030394735	1
NM_012391.1:1335	NM_012391	25803	ENSG00000124664	SPDEF	UIP	Kontrolle	0.030566321	1
NM_022073.3:800	NM_022073	112399	ENSG00000129521	EGLN3	NSIP	AFE	0.030633911	1
NM_004329.2:1720	NM_004329	657	ENSG00000107779	BMPR1A	UIP	AFE	0.030736798	1
NM_002989.2:180	NM_002989	6366	ENSG00000137077	CCL21	NSIP	Kontrolle	0.030872316	1
NM_005429.2:565	NM_005429	7424	ENSG00000150630	VEGFC	UIP	Kontrolle	0.031019382	1
NM_005727.2:115	NM_005727	10103	ENSG00000117472	TSPAN1	UIP	Kontrolle	0.031163614	1
NM_024915.3:3690	NM_024915	79977	ENSG00000083307	GRHL2	UIP	AFE	0.031310896	1
NM_003012.3:3320	NM_003012	6422	ENSG00000104332	SFRP1	UIP	Kontrolle	0.031508306	1
NM_020733.1:1890	NM_020733	57493	ENSG00000173706	HEG1	UIP	Kontrolle	0.031762461	1
NM_012431.1:2184	NM_012431	9723	ENSG00000170381	SEMA3E	Kontrolle	AFE	0.031862304	1
NM_003246.2:3465	NM_003246	7057	ENSG00000137801	THBS1	UIP	Kontrolle	0.031915357	1
NM_001127500.1:1925	NM_001127500	4233	ENSG00000105976	MET	UIP	NSIP	0.031993899	1
NM_003118.2:910	NM_003118	6678	ENSG00000113140	SPARC	UIP	AFE	0.032064343	1
NM_001142443.1:925	NM_001142443	80153	ENSG00000179151	EDC3	Kontrolle	AFE	0.032255498	1
NM_000945.3:2385	NM_000945	5534	ENSG00000221823	PPP3R1	Kontrolle	AFE	0.032291424	1
NM_004799.2:2135	NM_004799	9372	ENSG00000157077	ZFYVE9	NSIP	Kontrolle	0.032432424	1
NM_018286.2:655	NM_018286	55273	ENSG00000166292	TMEM100	NSIP	AFE	0.032631109	1
NR_024115.1:2175	NR_024115			GIMAP6	Kontrolle	AFE	0.032650144	1
NM_001270407.1:840	NM_001270407	58494	ENSG00000154721	JAM2	UIP	NSIP	0.032944715	1
NM_019074.2:893	NM_019074	54567	ENSG00000128917	DLL4	UIP	Kontrolle	0.032982192	1
NM_016242.3:160	NM_016242	51705	ENSG00000164035	EMCN	UIP	Kontrolle	0.033001402	1
NM_024021.2:800	NM_024021	51338	ENSG00000110079	MS4A4A	Kontrolle	AFE	0.033106359	1
NM_001278506.1:304	NM_001278506	4682	ENSG00000103274	NUBP1	UIP	AFE	0.033169023	1
NM_006528.3:524	NM_006528	7980	ENSG00000105825	TFPI2	NSIP	AFE	0.033390008	1
NM_001109.4:762	NM_001109	101	ENSG00000151651	ADAM8	Kontrolle	AFE	0.033394908	1
NM_004530.2:2360	NM_004530	4313	ENSG00000087245	MMP2	NSIP	AFE	0.033566701	1
NM_000459.3:1894	NM_000459	7010	ENSG00000120156	TEK	Kontrolle	AFE	0.033567923	1
NM_198829.1:1250	NM_198829	5879	ENSG00000136238	RAC1	UIP	Kontrolle	0.033607081	1
NM_003248.3:985	NM_003248	7060	ENSG00000113296	THBS4	Kontrolle	AFE	0.033637221	1
NM_003064.2:330	NM_003064	6590	ENSG00000124107	SLPI	UIP	AFE	0.033658282	1
NM_002121.4:931	NM_002121	3115	ENSG00000223865	HLA-DPB1	Kontrolle	AFE	0.033675329	1
NM_016274.4:475	NM_016274	51177	ENSG00000023902	PLEKHO1	Kontrolle	AFE	0.033744357	1
NM_001540.3:374	NM_001540	3315	ENSG00000106211	HSPB1	UIP	Kontrolle	0.033929219	1
NM_006487.2:965	NM_006487	2192	ENSG00000077942	FBLN1	UIP	Kontrolle	0.033934268	1
NM_001146.3:2080	NM_001146	284	ENSG00000154188	ANGPT1	NSIP	AFE	0.034073577	1
NM_002203.2:475	NM_002203	3673	ENSG00000164171	ITGA2	UIP	AFE	0.034103403	1
NM_001087.3:412	NM_001087	14	ENSG00000127837	AAMP	Kontrolle	AFE	0.034279806	1
NM_000093.3:6345	NM_000093	1289	ENSG00000130635	COL5A1	UIP	Kontrolle	0.03438734	1
NM_001203.1:430	NM_001203	658	ENSG00000138696	BMPR1B	Kontrolle	AFE	0.034393854	1
NM_000954.5:180	NM_000954	5730	ENSG00000107317	PTGDS	NSIP	AFE	0.034402462	1
NM_021220.2:676	NM_021220	58495	ENSG00000125850	OVOL2	Kontrolle	AFE	0.034451925	1
NM_000267.2:1035	NM_000267	4763	ENSG00000196712	NF1	Kontrolle	AFE	0.034632663	1
NM_024505.2:2135	NM_024505	79400	ENSG00000255346	NOX5	Kontrolle	AFE	0.034762456	1
NM_002421.2:700	NM_002421	4312	ENSG00000196611	MMP1	UIP	NSIP	0.034810469	1
NM_001080512.1:2155	NM_001080512	80114	ENSG00000122870	BICC1	NSIP	AFE	0.034854715	1
NM_201282.1:360	NM_201282	1956	ENSG00000146648	EGFR	Kontrolle	AFE	0.034874257	1
NM_003199.1:1455	NM_003199	6925	ENSG00000196628	TCF4	Kontrolle	AFE	0.034956809	1
NM_015704.2:2880	NM_015704	27351	ENSG00000100418	DES1	UIP	Kontrolle	0.0350528	1
NM_032801.3:890	NM_032801	83700	ENSG00000166086	JAM3	NSIP	Kontrolle	0.035230494	1
NM_002404.1:370	NM_002404	4239	ENSG00000166482	MFAP4	Kontrolle	AFE	0.035274308	1
NM_144503.1:3650	NM_144503	50848	ENSG00000158769	F11R	UIP	Kontrolle	0.035484947	1
NM_001975.2:1855	NM_001975	2026	ENSG00000111674	ENO2	UIP	NSIP	0.035536301	1
NM_002006.4:620	NM_002006	2247	ENSG00000138685	FGF2	UIP	Kontrolle	0.035616352	1
NM_001005845.1:695	NM_001005845	8754	ENSG00000168615	ADAM9	UIP	AFE	0.035710876	1
NM_017564.9:3000	NM_017564	55576	ENSG00000136011	STAB2	UIP	AFE	0.035906128	1

NM_005045.2:345	NM_005045	5649	ENSG00000189056	RELN	NSIP	Kontrolle	0.035909058	1
NM_005985.2:63	NM_005985	6615	ENSG00000124216	SNAI1	UIP	Kontrolle	0.03592342	1
NM_001331.2:146	NM_001331	1500	ENSG00000198561	CTNND1	Kontrolle	AFE	0.036003324	1
NM_003392.3:475	NM_003392	7474	ENSG00000114251	WNT5A	UIP	Kontrolle	0.036214247	1
NM_017617.3:735	NM_017617	4851	ENSG00000148400	NOTCH1	Kontrolle	AFE	0.036216343	1
NM_000295.4:760	NM_000295	5265	ENSG00000197249	SERPINA1	Kontrolle	AFE	0.036284754	1
NM_139276.2:4535	NM_139276	6774	ENSG00000168610	STAT3	UIP	AFE	0.036695063	1
NM_000189.4:6880	NM_000189	3099	ENSG00000159399	HK2	NSIP	Kontrolle	0.036718341	1
NM_153603.3:1492	NM_153603	91949	ENSG00000168434	COG7	UIP	AFE	0.0367311	1
NM_024164.5:521	NM_024164	64499	ENSG00000197253	TPSB2	NSIP	Kontrolle	0.036743302	1
NM_012238.4:1595	NM_012238	23411	ENSG00000096717	SIRT1	UIP	Kontrolle	0.036804579	1
NM_022740.4:10305	NM_022740	28996	ENSG00000064393	HIPK2	NSIP	Kontrolle	0.036823324	1
NM_002205.2:925	NM_002205	3678	ENSG00000161638	ITGA5	UIP	Kontrolle	0.036985192	1
NM_004329.2:1720	NM_004329	657	ENSG00000107779	BMPR1A	UIP	Kontrolle	0.037005103	1
NM_001432.2:290	NM_001432	2069	ENSG00000124882	EREG	UIP	AFE	0.037005118	1
NM_199511.1:3235	NM_199511	151887	ENSG00000091986	CCDC80	NSIP	AFE	0.037011424	1
NM_002206.1:1170	NM_002206	3679	ENSG00000135424	ITGA7	NSIP	Kontrolle	0.037221858	1
NM_173198.1:2590	NM_173198	8013	ENSG00000119508	NR4A3	NSIP	AFE	0.03723321	1
NM_014256.3:1625	NM_014256	10331	ENSG00000179913	B3GNT3	UIP	AFE	0.037267022	1
NM_004441.3:1855	NM_004441	2047	ENSG00000154928	EPHB1	UIP	Kontrolle	0.037277307	1
NM_032470.3:1621	NM_032470	7148	ENSG00000168477	TNXB	NSIP	Kontrolle	0.037310561	1
NM_022119.3:499	NM_022119	64063	ENSG00000005001	PRSS22	UIP	AFE	0.037465581	1
NM_001562.2:48	NM_001562	3606	ENSG00000150782	IL18	UIP	Kontrolle	0.0376378	1
NM_013372.5:575	NM_013372	26585	ENSG00000166923	GREM1	NSIP	AFE	0.037690715	1
NM_002425.1:88	NM_002425	4319	ENSG00000166670	MMP10	UIP	Kontrolle	0.037758453	1
NM_000072.3:707	NM_000072	948	ENSG00000135218	CD36	Kontrolle	AFE	0.037890423	1
NM_004817.2:2785	NM_004817	9414	ENSG00000119139	TJP2	Kontrolle	AFE	0.037961711	1
NM_001038.4:2780	NM_001038	6337	ENSG00000111319	SCNN1A	UIP	Kontrolle	0.038069335	1
NM_172127.1:505	NM_172127	817	ENSG00000145349	CAMK2D	NSIP	Kontrolle	0.038303696	1
NM_001168298.1:840	NM_001168298	3579	ENSG00000180871	CXCR2	NSIP	Kontrolle	0.038332029	1
NM_003392.3:475	NM_003392	7474	ENSG00000114251	WNT5A	NSIP	Kontrolle	0.038493513	1
NM_002353.2:1840	NM_002353	4070	ENSG00000184292	TACSTD2	Kontrolle	AFE	0.03849362	1
NM_022097.3:1078	NM_022097	63928	ENSG00000166869	CHP2	Kontrolle	AFE	0.038548663	1
NM_015962.4:1022	NM_015962	51077	ENSG00000119616	FCF1	Kontrolle	AFE	0.038584694	1
NM_024505.2:2135	NM_024505	79400	ENSG00000255346	NOX5	UIP	AFE	0.038596298	1
NM_019894.3:1146	NM_019894	56649	ENSG00000137648	TMPRSS4	UIP	NSIP	0.038623184	1
NM_000227.3:4260	NM_000227	3909	ENSG00000053747	LAMA3	NSIP	Kontrolle	0.038723764	1
NM_001220.3:365	NM_001220	816	ENSG00000058404	CAMK2B	NSIP	AFE	0.038779379	1
NM_031219.2:616	NM_031219	81932	ENSG00000119431	HDHD3	UIP	Kontrolle	0.039031716	1
NM_006017.1:925	NM_006017	8842	ENSG00000007062	PROM1	UIP	NSIP	0.03907478	1
NM_001849.2:1925	NM_001849	1292	ENSG00000142173	COL6A2	NSIP	Kontrolle	0.039203978	1
NM_001164239.1:2490	NM_001164239	8449	ENSG00000204560	DHX16	Kontrolle	AFE	0.039264799	1
NM_080646.1:540	NM_080646	6899	ENSG00000184058	TBX1	NSIP	Kontrolle	0.039381913	1
NM_148979.2:800	NM_148979	1512	ENSG00000103811	CTSH	UIP	Kontrolle	0.039421998	1
NM_001004065.4:4956	NM_001004065	11217	ENSG00000241978	AKAP2	Kontrolle	AFE	0.039435889	1
NM_053046.3:1538	NM_053046	112398	ENSG00000269858	EGLN2	UIP	AFE	0.039526767	1
NM_005163.2:1772	NM_005163	207	ENSG00000142208	AKT1	Kontrolle	AFE	0.039586848	1
NM_015194.1:616	NM_015194	4642	ENSG00000176658	MYO1D	Kontrolle	AFE	0.039744252	1
NM_003467.2:1335	NM_003467	7852	ENSG00000121966	CXCR4	Kontrolle	AFE	0.04026527	1
NM_002205.2:925	NM_002205	3678	ENSG00000161638	ITGA5	UIP	AFE	0.040415475	1
NM_001220.3:365	NM_001220	816	ENSG00000058404	CAMK2B	Kontrolle	AFE	0.04044851	1
NM_004864.2:180	NM_004864	9518	ENSG00000130513	GDF15	UIP	AFE	0.040655943	1
NM_001005376.1:440	NM_001005376	5329	ENSG00000011422	PLAUR	NSIP	AFE	0.040670898	1
NM_203339.2:1376	NM_203339			CLU	UIP	Kontrolle	0.040706037	1
NM_002256.3:125	NM_002256	3814	ENSG00000170498	KISS1	Kontrolle	AFE	0.040975274	1
NM_022136.3:560	NM_022136	64092	ENSG00000155307	SAMSN1	UIP	AFE	0.04097825	1
NM_000459.3:1894	NM_000459	7010	ENSG00000120156	TEK	NSIP	Kontrolle	0.040994683	1
NM_014569.3:3688	NM_014569	23660	ENSG00000196652	ZKSCAN5	Kontrolle	AFE	0.041162816	1
NM_001109.4:762	NM_001109	101	ENSG00000151651	ADAM8	NSIP	AFE	0.04145778	1
NM_000526.4:523	NM_000526	3861	ENSG00000186847	KRT14	NSIP	Kontrolle	0.041579717	1
NM_005424.2:2610	NM_005424	7075	ENSG00000066056	TIE1	NSIP	AFE	0.041688369	1
NM_006419.2:210	NM_006419	10563	ENSG00000156234	CXCL13	Kontrolle	AFE	0.04168867	1
NM_006329.3:2242	NM_006329	10516	ENSG00000140092	FBLN5	UIP	NSIP	0.041754711	1
NM_005761.2:3705	NM_005761	10154	ENSG00000136040	PLXNC1	NSIP	AFE	0.041834588	1
NM_001753.3:434	NM_001753	857	ENSG00000105974	CAV1	UIP	Kontrolle	0.041843024	1
NM_004460.2:1490	NM_004460	2191	ENSG00000078098	FAP	NSIP	Kontrolle	0.042034656	1
NM_005100.3:640	NM_005100	9590	ENSG00000131016	AKAP12	Kontrolle	AFE	0.042057459	1
NM_002404.1:370	NM_002404	4239	ENSG00000166482	MFAP4	NSIP	Kontrolle	0.042191794	1
NM_001754.4:635	NM_001754	861	ENSG00000159216	RUNX1	NSIP	AFE	0.042380825	1
NM_001145.4:949	NM_001145	283	ENSG00000214274	ANG	Kontrolle	AFE	0.042432989	1
NM_018695.2:3675	NM_018695	55914	ENSG00000112851	ERBB2IP	Kontrolle	AFE	0.042580446	1
NM_020387.2:245	NM_020387	57111	ENSG00000132698	RAB25	Kontrolle	AFE	0.042590343	1

NM_030662.3:839	NM_030662	5605	ENSG00000126934	MAP2K2	UIP	Kontrolle	0.042596301	1
NM_015441.1:2920	NM_015441	25903	ENSG00000162745	OLFML2B	NSIP	Kontrolle	0.04269976	1
NM_004995.2:1470	NM_004995	4323	ENSG00000157227	MMP14	UIP	AFE	0.042803824	1
NM_002985.2:280	NM_002985	6352	ENSG00000271503	CCL5	Kontrolle	AFE	0.04280963	1
NM_018695.2:3675	NM_018695	55914	ENSG00000112851	ERBB2IP	NSIP	AFE	0.042854683	1
NM_153292.1:546	NM_153292	4843	ENSG00000007171	NOS2	NSIP	Kontrolle	0.042908407	1
NM_016205.2:2596	NM_016205	56034	ENSG00000145431	PDGFC	Kontrolle	AFE	0.04318217	1
NM_004689.2:450	NM_004689	9112	ENSG00000182979	MTA1	NSIP	Kontrolle	0.043238759	1
NM_001177704.1:614	NM_001177704	158326	ENSG00000164946	FREM1	UIP	Kontrolle	0.043292228	1
NM_024574.3:395	NM_024574	79625	ENSG00000173376	NDNF	NSIP	Kontrolle	0.043312262	1
NM_001263.3:3052	NM_001263	1040	ENSG00000163624	CDS1	UIP	AFE	0.043395707	1
NM_006350.2:575	NM_006350	10468	ENSG00000134363	FST	NSIP	Kontrolle	0.043438017	1
NM_000396.2:415	NM_000396	1513	ENSG00000143387	CTSK	UIP	AFE	0.043623679	1
NM_003442.5:925	NM_003442	7702	ENSG00000166478	ZNF143	UIP	AFE	0.043692369	1
NM_001306.3:606	NM_001306	1365	ENSG00000165215	CLDN3	UIP	Kontrolle	0.043736022	1
NM_001127217.2:1152	NM_001127217	4093	ENSG00000120693	SMAD9	UIP	AFE	0.043745231	1
NM_001159597.1:216	NM_001159597	26751	ENSG00000035115	SH3YL1	UIP	Kontrolle	0.043775008	1
NM_000640.2:400	NM_000640	3598	ENSG00000123496	IL13RA2	UIP	NSIP	0.043813439	1
NM_000064.2:4396	NM_000064	718	ENSG00000125730	C3	NSIP	AFE	0.043913907	1
NM_032794.1:1798	NM_032794			SLC44A4	UIP	AFE	0.044534098	1
NM_016242.3:160	NM_016242	51705	ENSG00000164035	EMCN	Kontrolle	AFE	0.044710291	1
NM_022965.2:3170	NM_022965	2261	ENSG00000068078	FGFR3	NSIP	AFE	0.044808348	1
NM_002202.2:1375	NM_002202	3670	ENSG00000016082	ISL1	UIP	AFE	0.044853165	1
NM_001105209.1:287	NM_001105209	3910	ENSG00000112769	LAMA4	UIP	Kontrolle	0.044872773	1
NM_003862.1:850	NM_003862	8817	ENSG00000156427	FGF18	UIP	Kontrolle	0.044898889	1
NM_001159597.1:216	NM_001159597	26751	ENSG00000035115	SH3YL1	UIP	AFE	0.044940243	1
NM_003677.3:2091	NM_003677	8562	ENSG00000139726	DENR	UIP	AFE	0.044994332	1
NM_006846.3:2595	NM_006846	11005	ENSG00000133750	SPINK5	UIP	AFE	0.045014001	1
NM_000507.3:590	NM_000507	2203	ENSG00000165140	FBP1	NSIP	Kontrolle	0.045218833	1
NM_017423.2:910	NM_017423	51809	ENSG00000109586	GALNT7	Kontrolle	AFE	0.045445046	1
NM_005901.5:1678	NM_005901	4087	ENSG00000175387	SMAD2	NSIP	AFE	0.045481299	1
NM_031902.3:390	NM_031902	64969	ENSG00000144029	MRP55	Kontrolle	AFE	0.045587816	1
NM_001837.2:980	NM_001837	1232	ENSG00000183625	CCR3	Kontrolle	AFE	0.045630904	1
NM_002165.2:345	NM_002165	3397	ENSG00000125968	ID1	NSIP	Kontrolle	0.045642384	1
NM_018055.3:320	NM_018055	4838	ENSG00000156574	NODAL	UIP	AFE	0.045710106	1
NM_006690.3:1280	NM_006690	10893	ENSG00000125966	MMP24	UIP	AFE	0.045794374	1
NM_000227.3:4260	NM_000227	3909	ENSG00000053747	LAMA3	UIP	NSIP	0.04591364	1
NM_006474.4:431	NM_006474	10630	ENSG00000162493	PDPN	UIP	Kontrolle	0.045976607	1
NM_001063.2:640	NM_001063	7018	ENSG00000091513	TF	NSIP	Kontrolle	0.045977073	1
NM_002483.4:1217	NM_002483	4680	ENSG00000086548	CEACAM6	NSIP	Kontrolle	0.045994758	1
NM_012340.3:1815	NM_012340	4773	ENSG00000101096	NFATC2	UIP	Kontrolle	0.046119217	1
NM_012120.2:1895	NM_012120	23607	ENSG00000198087	CD2AP	NSIP	AFE	0.046581883	1
NM_000961.3:1409	NM_000961	5740	ENSG00000124212	PTGIS	UIP	AFE	0.046691382	1
NM_030662.3:839	NM_030662	5605	ENSG00000126934	MAP2K2	Kontrolle	AFE	0.04674211	1
NM_053046.3:1538	NM_053046	112398	ENSG00000269858	EGLN2	NSIP	Kontrolle	0.046980107	1
NM_002353.2:1840	NM_002353	4070	ENSG00000184292	TACSTD2	NSIP	Kontrolle	0.047037476	1
NM_006896.3:1605	NM_006896	3204	ENSG00000122592	HOXA7	Kontrolle	AFE	0.047094988	1
NM_000393.3:4075	NM_000393	1290	ENSG00000204262	COL5A2	NSIP	AFE	0.047231224	1
NM_001988.2:5525	NM_001988	2125	ENSG00000167880	EVPL	Kontrolle	AFE	0.047238288	1
NM_001277764.1:530	NM_001277764	10519	ENSG00000185043	CIB1	Kontrolle	AFE	0.047305899	1
NM_005010.4:875	NM_005010	4897	ENSG00000091129	NRCAM	NSIP	AFE	0.047404782	1
NM_006121.2:690	NM_006121	3848	ENSG00000167768	KRT1	UIP	AFE	0.047409093	1
NM_001142443.1:925	NM_001142443	80153	ENSG00000179151	EDC3	UIP	AFE	0.047411732	1
NM_005486.2:685	NM_005486	10040	ENSG00000141198	TOM1L1	UIP	NSIP	0.047516863	1
NM_002625.2:564	NM_002625	5207	ENSG00000158571	PFKFB1	Kontrolle	AFE	0.04772124	1
NM_207361.4:9170	NM_207361	341640	ENSG00000150893	FREM2	NSIP	Kontrolle	0.047754657	1
NM_001129.3:3170	NM_001129	165	ENSG00000106624	AEBP1	NSIP	AFE	0.048141858	1
NM_000090.3:180	NM_000090	1281	ENSG00000168542	COL3A1	UIP	AFE	0.048249143	1
NM_005727.2:115	NM_005727	10103	ENSG00000117472	TSPAN1	UIP	AFE	0.048401837	1
NM_000175.2:1695	NM_000175	2821	ENSG00000105220	GPI	UIP	AFE	0.048526547	1
NM_022097.3:1078	NM_022097	63928	ENSG00000166869	CHP2	UIP	AFE	0.048605808	1
NM_014909.4:552	NM_014909	22846	ENSG00000071246	VASH1	UIP	Kontrolle	0.048656555	1
NM_212535.1:1750	NM_212535	5579	ENSG00000166501	PRKCB	NSIP	Kontrolle	0.048690446	1
NM_006528.3:524	NM_006528	7980	ENSG00000105825	TFPI2	UIP	NSIP	0.048735555	1
NM_012232.5:86	NM_012232	284119	ENSG00000177469	PTRF	NSIP	Kontrolle	0.048869014	1
NM_153292.1:546	NM_153292	4843	ENSG00000007171	NOS2	NSIP	AFE	0.049131946	1
NM_001167681.2:1406	NM_001167681	2313	ENSG00000151702	FLI1	UIP	AFE	0.049365739	1
NM_133459.3:310	NM_133459	147372	ENSG00000183287	CCBE1	NSIP	AFE	0.049609332	1
NM_000062.2:305	NM_000062	710	ENSG00000149131	SERPING1	UIP	AFE	0.049785535	1
NM_000358.2:2030	NM_000358	7045	ENSG00000120708	TGFBI	UIP	Kontrolle	0.049928037	1
NM_000584.2:25	NM_000584	3576	ENSG00000169429	CXCL8	NSIP	AFE	0.049930509	1
NM_016215.3:1252	NM_016215	51162	ENSG00000172889	EGFL7	NSIP	AFE	0.049935812	1



NM_001897.4:7642	NM_001897	1464	ENSG00000173546	CSPG4	UIP	NSIP	0.050142306	1
NM_001160103.1:2690	NM_001160103	79882	ENSG00000100722	ZC3H14	UIP	Kontrolle	0.050156955	1
NM_003068.3:740	NM_003068	6591	ENSG00000019549	SNAI2	UIP	Kontrolle	0.050343735	1
NM_002621.2:380	NM_002621	5199	ENSG00000126759	CFP	UIP	Kontrolle	0.050515896	1
NM_007037.4:2228	NM_007037	11095	ENSG00000134917	ADAMTS8	UIP	Kontrolle	0.050710937	1
NM_001270837.1:1042	NM_001270837	1397	ENSG00000182809	CRIP2	UIP	Kontrolle	0.050871665	1
NM_173198.1:2590	NM_173198	8013	ENSG00000119508	NR4A3	UIP	AFE	0.050930565	1
NM_001166133.1:526	NM_001166133	80144	ENSG00000138759	FRAS1	NSIP	Kontrolle	0.050937362	1
NM_000138.3:6420	NM_000138	2200	ENSG00000166147	FBN1	UIP	Kontrolle	0.050959159	1
NM_001001392.1:429	NM_001001392	960	ENSG00000026508	CD44	UIP	Kontrolle	0.051009397	1
NM_002658.2:793	NM_002658	5328	ENSG00000122861	PLAU	UIP	Kontrolle	0.051028277	1
NM_001146.3:2080	NM_001146	284	ENSG00000154188	ANGPT1	NSIP	Kontrolle	0.051030701	1
NM_003013.2:840	NM_003013	6423	ENSG00000145423	SFRP2	NSIP	AFE	0.051170463	1
NM_178190.2:334	NM_178190	93974	ENSG00000130770	ATPIF1	UIP	AFE	0.051234798	1
NM_004363.2:1961	NM_004363	1048	ENSG00000105388	CEACAM5	UIP	AFE	0.051273621	1
NM_033305.2:8260	NM_033305	23230	ENSG00000197969	VPS13A	UIP	AFE	0.051364528	1
NM_002615.4:888	NM_002615	5176	ENSG00000132386	SERPINF1	UIP	AFE	0.051541206	1
NM_001175.4:833	NM_001175	397	ENSG00000111348	ARHGDIB	NSIP	Kontrolle	0.051602802	1
NM_001025366.1:1325	NM_001025366	7422	ENSG00000112715	VEGFA	NSIP	AFE	0.051932551	1
NM_006852.2:2335	NM_006852	11011	ENSG00000146872	TLK2	UIP	AFE	0.052086948	1
NM_001060.3:385	NM_001060	6915	ENSG00000006638	TBXA2R	UIP	AFE	0.052242948	1
NM_001797.2:1835	NM_001797	1009	ENSG00000140937	CDH11	NSIP	Kontrolle	0.052251892	1
NM_005855.2:200	NM_005855	10267	ENSG00000132329	RAMP1	NSIP	Kontrolle	0.052441481	1
NM_016215.3:1252	NM_016215	51162	ENSG00000172889	EGFL7	UIP	AFE	0.05252688	1
NM_004095.3:363	NM_004095	1978	ENSG00000187840	EIF4EBP1	UIP	AFE	0.052541182	1
NM_005409.3:590	NM_005409	6373	ENSG00000169248	CXCL11	NSIP	Kontrolle	0.052704549	1
NM_032470.3:1621	NM_032470	7148	ENSG00000168477	TNXB	Kontrolle	AFE	0.052705468	1
NM_000526.4:523	NM_000526	3861	ENSG00000186847	KRT14	UIP	AFE	0.05274059	1
NM_001428.2:1689	NM_001428	2023	ENSG00000074800	ENO1	NSIP	AFE	0.052922608	1
NM_005854.2:282	NM_005854	10266	ENSG00000131477	RAMP2	NSIP	AFE	0.053039256	1
NM_015103.2:3711	NM_015103	23129	ENSG00000004399	PLXND1	UIP	AFE	0.053209942	1
NM_004441.3:1855	NM_004441	2047	ENSG00000154928	EPHB1	NSIP	Kontrolle	0.053278662	1
NM_053276.3:604	NM_053276	5212	ENSG00000205221	VIT	UIP	AFE	0.053341207	1
NM_016142.2:1000	NM_016142	51144	ENSG00000149084	HSD17B12	UIP	AFE	0.05345737	1
NM_001220488.1:210	NM_001220488	1012	ENSG00000140945	CDH13	UIP	Kontrolle	0.053659946	1
NM_014333.3:2840	NM_014333	23705	ENSG00000182985	CADM1	Kontrolle	AFE	0.053870845	1
NM_014248.2:162	NM_014248	9978	ENSG00000100387	RBX1	UIP	AFE	0.054087439	1
NM_144503.1:3650	NM_144503	50848	ENSG00000158769	F11R	Kontrolle	AFE	0.054314472	1
NM_000042.2:582	NM_000042	350	ENSG00000091583	APOH	UIP	Kontrolle	0.05446578	1
NM_001127217.2:1152	NM_001127217	4093	ENSG00000120693	SMAD9	NSIP	AFE	0.054540951	1
NM_006419.2:210	NM_006419	10563	ENSG00000156234	CXCL13	NSIP	Kontrolle	0.054594208	1
NM_003118.2:910	NM_003118	6678	ENSG00000113140	SPARC	NSIP	Kontrolle	0.054621177	1
NM_004443.3:3485	NM_004443	2049	ENSG00000182580	EPHB3	UIP	AFE	0.054638813	1
NM_001001392.1:429	NM_001001392	960	ENSG00000026508	CD44	NSIP	Kontrolle	0.054795392	1
NM_006121.2:690	NM_006121	3848	ENSG00000167768	KRT1	Kontrolle	AFE	0.054841379	1
NM_000961.3:1409	NM_000961	5740	ENSG00000124212	PTGIS	UIP	Kontrolle	0.054989165	1
NM_001425.2:350	NM_001425	2014	ENSG00000142227	EMP3	Kontrolle	AFE	0.055046654	1
NM_001077269.1:1660	NM_001077269	7456	ENSG00000115935	WIPF1	NSIP	AFE	0.055153874	1
NM_001273.2:2680	NM_001273	1108	ENSG00000111642	CHD4	UIP	Kontrolle	0.055165771	1
NM_001017970.2:2420	NM_001017970	161291	ENSG00000182107	TMEM30B	UIP	Kontrolle	0.05519756	1
NM_000889.1:1278	NM_000889	3695	ENSG00000139626	ITGB7	UIP	Kontrolle	0.055316243	1
NM_001553.1:690	NM_001553	3490	ENSG00000163453	IGFBP7	NSIP	Kontrolle	0.055399466	1
NM_005975.2:1715	NM_005975	5753	ENSG00000101213	PTK6	Kontrolle	AFE	0.055480282	1
NM_032801.3:890	NM_032801	83700	ENSG00000166086	JAM3	UIP	AFE	0.055674014	1
NM_002996.3:140	NM_002996	6376	ENSG00000006210	CX3CL1	UIP	NSIP	0.055791622	1
NM_021935.3:827	NM_021935	60675	ENSG00000163421	PROK2	UIP	AFE	0.055896872	1
NM_005902.3:4220	NM_005902	4088	ENSG00000166949	SMAD3	UIP	Kontrolle	0.055953775	1
NM_004095.3:363	NM_004095	1978	ENSG00000187840	EIF4EBP1	UIP	Kontrolle	0.056127515	1
NM_001167681.2:1406	NM_001167681	2313	ENSG00000151702	FLI1	Kontrolle	AFE	0.056168962	1
NM_001204.5:1875	NM_001204	659	ENSG00000204217	BMPR2	UIP	Kontrolle	0.056200989	1
NM_005027.2:3100	NM_005027	5296	ENSG00000105647	PIK3R2	NSIP	Kontrolle	0.056374855	1
NM_004054.2:415	NM_004054	719	ENSG00000171860	C3AR1	Kontrolle	AFE	0.056536088	1
NM_002310.3:2995	NM_002310	3977	ENSG00000113594	LIFR	NSIP	Kontrolle	0.056698137	1
NM_001975.2:1855	NM_001975	2026	ENSG00000111674	ENO2	UIP	Kontrolle	0.056719331	1
NM_001272046.1:3148	NM_001272046	340706	ENSG00000165816	VWA2	UIP	NSIP	0.056760942	1
NM_000479.3:1626	NM_000479	268	ENSG00000104899	AMH	Kontrolle	AFE	0.056921697	1
NM_025130.3:2267	NM_025130	80201	ENSG00000156510	HKDC1	UIP	AFE	0.057053691	1
NM_001546.2:588	NM_001546	3400	ENSG00000172201	ID4	UIP	Kontrolle	0.057319619	1
NM_004817.2:2785	NM_004817	9414	ENSG00000119139	TJP2	UIP	NSIP	0.057356499	1
NM_033001.2:920	NM_033001	2969	ENSG00000263001	GTF2I	UIP	AFE	0.057368511	1
NM_000175.2:1695	NM_000175	2821	ENSG00000105220	GPI	NSIP	AFE	0.057387031	1
NM_173157.1:1575	NM_173157	3164	ENSG00000123358	NR4A1	UIP	Kontrolle	0.057405693	1

NM_001963.4:1022	NM_001963	1950	ENSG00000138798	EGF	Kontrolle	AFE	0.057535292	1
NM_000304.2:1644	NM_000304	5376	ENSG00000109099	PMP22	NSIP	AFE	0.057684271	1
NM_001387.2:4790	NM_001387	1809	ENSG00000113657	DPYSL3	UIP	Kontrolle	0.057730964	1
NM_203384.1:1192	NM_203384	6050	ENSG00000023191	RNH1	NSIP	Kontrolle	0.057731348	1
NM_015013.3:2395	NM_015013	23028	ENSG00000004487	KDM1A	UIP	Kontrolle	0.057787216	1
NM_015874.3:850	NM_015874	3516	ENSG00000168214	RBPJ	NSIP	AFE	0.058171142	1
NM_022073.3:800	NM_022073	112399	ENSG00000129521	EGLN3	NSIP	Kontrolle	0.058265631	1
NM_212535.1:1750	NM_212535	5579	ENSG00000166501	PRKCB	NSIP	AFE	0.058457178	1
NM_002256.3:125	NM_002256	3814	ENSG00000170498	KISS1	UIP	AFE	0.058697549	1
NM_004345.3:220	NM_004345	820	ENSG00000164047	CAMP	Kontrolle	AFE	0.058782427	1
NM_183404.1:1110	NM_183404	5933	ENSG00000080839	RBL1	Kontrolle	AFE	0.058794236	1
NM_002660.2:2290	NM_002660	5335	ENSG00000124181	PLCG1	UIP	NSIP	0.058889376	1
NM_000291.2:1030	NM_000291	5230	ENSG00000102144	PGK1	Kontrolle	AFE	0.058931827	1
NM_002023.3:2050	NM_002023	2331	ENSG00000122176	FMOD	NSIP	AFE	0.059048345	1
NM_031476.3:2575	NM_031476	83716	ENSG00000103196	CRISPLD2	UIP	AFE	0.059163097	1
NM_003299.1:160	NM_003299	7184	ENSG00000166598	HSP90B1	UIP	AFE	0.059186986	1
NM_012116.3:652	NM_012116	23624	ENSG00000142273	CBLC	Kontrolle	AFE	0.059272453	1
NM_001164831.1:875	NM_001164831	53826	ENSG00000137726	FXVD6	NSIP	AFE	0.059282625	1
NM_005611.3:1310	NM_005611	5934	ENSG00000103479	RBL2	UIP	AFE	0.059392451	1
NM_000557.2:155	NM_000557	8200	ENSG00000125965	GDF5	Kontrolle	AFE	0.05961838	1
NM_002670.2:3261	NM_002670	5357	ENSG00000120756	PLS1	NSIP	Kontrolle	0.059627069	1
NM_004322.3:963	NM_004322	572	ENSG00000002330	BAD	UIP	AFE	0.059636315	1
NM_001146289.1:860	NM_001146289	64175	ENSG00000117385	P3H1	NSIP	Kontrolle	0.059733943	1
NM_003068.3:740	NM_003068	6591	ENSG00000019549	SNAI2	UIP	AFE	0.059824404	1
NM_025079.2:2140	NM_025079	80149	ENSG00000163874	ZC3H12A	UIP	AFE	0.059976632	1
NM_001080512.1:2155	NM_001080512	80114	ENSG00000122870	BICC1	NSIP	Kontrolle	0.059994427	1
NM_003238.2:1125	NM_003238	7042	ENSG00000092969	TGFB2	UIP	AFE	0.060099761	1
NM_001078.3:2535	NM_001078	7412	ENSG00000162692	VCAM1	UIP	Kontrolle	0.060265082	1
NM_003246.2:3465	NM_003246	7057	ENSG00000137801	THBS1	NSIP	AFE	0.060400593	1
NM_002661.2:525	NM_002661	5336	ENSG00000197943	PLCG2	Kontrolle	AFE	0.06045347	1
NM_001030049.1:433	NM_001030049	354	ENSG00000142515	KLK3	Kontrolle	AFE	0.060542132	1
NM_000228.2:695	NM_000228	3914	ENSG00000196878	LAMB3	NSIP	Kontrolle	0.060805952	1
NM_004985.3:327	NM_004985	3845	ENSG00000133703	KRAS	NSIP	Kontrolle	0.060945296	1
NM_001657.2:547	NM_001657	374	ENSG00000109321	AREG	UIP	AFE	0.061168818	1
NM_004360.2:1230	NM_004360	999	ENSG00000039068	CDH1	NSIP	Kontrolle	0.061940446	1
NM_001235.2:880	NM_001235	871	ENSG00000149257	SERPINH1	UIP	NSIP	0.062035431	1
NM_014210.3:564	NM_014210	2123	ENSG00000126860	EVI2A	UIP	AFE	0.062092279	1
NM_001168278.1:1050	NM_001168278	25937	ENSG000000018408	VWTR1	UIP	AFE	0.06214129	1
NM_003289.3:891	NM_003289	7169	ENSG00000198467	TPM2	UIP	Kontrolle	0.062195157	1
NM_004995.2:1470	NM_004995	4323	ENSG00000157227	MMP14	NSIP	AFE	0.062421173	1
NM_002354.1:415	NM_002354	4072	ENSG00000119888	EPCAM	Kontrolle	AFE	0.062850706	1
NM_002438.2:2693	NM_002438	4360	ENSG00000260314	MRC1	NSIP	AFE	0.06297054	1
NM_001937.3:1510	NM_001937	1805	ENSG00000143196	DPT	UIP	Kontrolle	0.063039024	1
NM_007037.4:2228	NM_007037	11095	ENSG00000134917	ADAMTS8	NSIP	Kontrolle	0.063510764	1
NM_022045.4:1792	NM_022045	27085	ENSG00000172167	MTBP	UIP	AFE	0.06351716	1
NM_017564.9:3000	NM_017564	55576	ENSG00000136011	STAB2	Kontrolle	AFE	0.063663164	1
NM_003248.3:985	NM_003248	7060	ENSG00000113296	THBS4	NSIP	Kontrolle	0.063676137	1
NM_003255.4:1555	NM_003255	7077	ENSG00000035862	TIMP2	UIP	Kontrolle	0.06381429	1
NM_015136.2:95	NM_015136	23166	ENSG00000010327	STAB1	UIP	Kontrolle	0.063952367	1
NM_024164.5:521	NM_024164	64499	ENSG00000197253	TPSB2	UIP	Kontrolle	0.064017818	1
NM_000618.3:491	NM_000618	3479	ENSG000000017427	IGF1	UIP	AFE	0.064052392	1
NM_001429.2:715	NM_001429	2033	ENSG00000100393	EP300	UIP	AFE	0.064166706	1
NM_000189.4:6880	NM_000189	3099	ENSG00000159399	HK2	UIP	Kontrolle	0.064282766	1
NM_006288.2:135	NM_006288	7070	ENSG00000154096	THY1	UIP	NSIP	0.064573219	1
NM_002880.3:1444	NM_002880	5894	ENSG00000132155	RAF1	UIP	NSIP	0.064830657	1
NM_003808.3:810	NM_003808	8741	ENSG00000161955	TNFSF13	UIP	Kontrolle	0.064903732	1
NM_000212.2:4485	NM_000212	3690	ENSG00000259207	ITGB3	NSIP	Kontrolle	0.064936688	1
NM_019894.3:1146	NM_019894	56649	ENSG00000137648	TMPRSS4	NSIP	Kontrolle	0.064944594	1
NM_032449.2:4182	NM_032449	200014	ENSG00000154222	CC2D1B	Kontrolle	AFE	0.065007424	1
NM_033305.2:8260	NM_033305	23230	ENSG00000197969	VPS13A	Kontrolle	AFE	0.065101949	1
NM_001432.2:290	NM_001432	2069	ENSG00000124882	EREG	NSIP	AFE	0.065107231	1
NM_001276.2:475	NM_001276	1116	ENSG00000133048	CHI3L1	UIP	AFE	0.065117487	1
NM_000358.2:2030	NM_000358	7045	ENSG00000120708	TGFB1	NSIP	AFE	0.065204215	1
NM_024545.3:3090	NM_024545	79595	ENSG00000136715	SAP130	Kontrolle	AFE	0.065251306	1
NM_144962.2:190	NM_144962	157310	ENSG00000134020	PEBP4	UIP	AFE	0.065491138	1
NM_000526.4:523	NM_000526	3861	ENSG00000186847	KRT14	Kontrolle	AFE	0.065594555	1
NM_002204.2:4550	NM_002204	3675	ENSG00000005884	ITGA3	UIP	NSIP	0.065599607	1
NM_002880.3:1444	NM_002880	5894	ENSG00000132155	RAF1	UIP	AFE	0.065700835	1
NM_018046.3:35	NM_018046	55109	ENSG00000164252	AGGF1	UIP	Kontrolle	0.065847871	1
NM_001846.2:1150	NM_001846	1284	ENSG00000134871	COL4A2	NSIP	AFE	0.066045434	1
NM_173214.1:3290	NM_173214	10725	ENSG00000102908	NFAT5	Kontrolle	AFE	0.066162935	1
NM_001040092.2:1980	NM_001040092	5168	ENSG00000136960	ENPP2	UIP	AFE	0.066305003	1

NM_005900.2:1850	NM_005900	4086	ENSG00000170365	SMAD1	UIP	Kontrolle	0.066371715	1
NM_015399.3:469	NM_015399	25855	ENSG00000174744	BRMS1	UIP	AFE	0.066415525	1
NM_000442.3:1365	NM_000442	5175	ENSG00000261371	PECAM1	Kontrolle	AFE	0.066454596	1
NM_001953.3:719	NM_001953	1890	ENSG00000025708	TYMP	UIP	Kontrolle	0.066487864	1
NM_001009552.1:1075	NM_001009552	5516	ENSG00000104695	PPP2CB	UIP	AFE	0.066602033	1
NM_001114309.1:460	NM_001114309	1999	ENSG00000163435	ELF3	NSIP	Kontrolle	0.066865334	1
NM_002996.3:140	NM_002996	6376	ENSG00000006210	CX3CL1	UIP	AFE	0.066922871	1
NM_007361.3:1995	NM_007361	22795	ENSG00000087303	NID2	UIP	AFE	0.067231701	1
NM_000094.2:390	NM_000094	1294	ENSG00000114270	COL7A1	NSIP	Kontrolle	0.067252303	1
NM_018192.2:985	NM_018192	55214	ENSG00000090530	P3H2	Kontrolle	AFE	0.067525802	1
NM_001270837.1:1042	NM_001270837	1397	ENSG00000182809	CRIP2	NSIP	AFE	0.067571151	1
NM_003333.3:288	NM_003333	7311	ENSG00000221983	UBA52	UIP	AFE	0.067862213	1
NM_024164.5:521	NM_024164	64499	ENSG00000197253	TPSB2	NSIP	AFE	0.068024561	1
NM_031479.3:1450	NM_031479	83729	ENSG00000139269	INHBE	Kontrolle	AFE	0.068180644	1
NM_001129.3:3170	NM_001129	165	ENSG00000106624	AEBP1	UIP	NSIP	0.068189275	1
NM_014795.3:549	NM_014795	9839	ENSG00000169554	ZEB2	UIP	AFE	0.068346475	1
NM_181825.2:442	NM_181825	4771	ENSG00000186575	NF2	Kontrolle	AFE	0.068663906	1
NM_001220.3:365	NM_001220	816	ENSG00000058404	CAMK2B	UIP	Kontrolle	0.068737385	1
NM_001165413.1:1670	NM_001165413	5054	ENSG00000106366	SERPINE1	UIP	NSIP	0.06876691	1
NM_002755.2:970	NM_002755	5604	ENSG00000169032	MAP2K1	UIP	NSIP	0.068978548	1
NM_000300.2:715	NM_000300	5320	ENSG00000188257	PLA2G2A	NSIP	AFE	0.069099733	1
NM_000314.4:1351	NM_000314	5728	ENSG00000171862	PTEN	Kontrolle	AFE	0.069142342	1
NM_005656.3:1079	NM_005656	7113	ENSG00000184012	TMPPRSS2	UIP	NSIP	0.069156685	1
NM_003200.3:858	NM_003200	6929	ENSG00000071564	TCF3	NSIP	Kontrolle	0.069197774	1
NM_171825.1:4080	NM_171825	815	ENSG00000070808	CAMK2A	UIP	AFE	0.069274101	1
NM_001704.1:885	NM_001704	577	ENSG00000135298	BAI3	UIP	AFE	0.069323416	1
NM_000474.3:393	NM_000474	7291	ENSG00000122691	TWIST1	NSIP	Kontrolle	0.069369402	1
NM_001837.2:980	NM_001837	1232	ENSG00000183625	CCR3	UIP	AFE	0.069621599	1
NM_000665.3:1057	NM_000665	43	ENSG00000087085	ACHE	UIP	AFE	0.070122804	1
NM_004469.2:580	NM_004469	2277	ENSG00000165197	FIGF	UIP	AFE	0.070365625	1
NM_004530.2:2360	NM_004530	4313	ENSG00000087245	MMP2	UIP	Kontrolle	0.070439698	1
NM_017957.2:2532	NM_017957	55040	ENSG00000049283	EPN3	Kontrolle	AFE	0.070563796	1
NM_004469.2:580	NM_004469	2277	ENSG00000165197	FIGF	UIP	NSIP	0.070888437	1
NM_014225.3:1440	NM_014225	5518	ENSG00000105568	PPP2R1A	UIP	AFE	0.071044171	1
NM_000660.3:1260	NM_000660	7040	ENSG00000105329	TGFB1	UIP	Kontrolle	0.071190262	1
NM_001430.3:4246	NM_001430	2034	ENSG00000116016	EPAS1	NSIP	Kontrolle	0.071391664	1
NM_019027.3:150	NM_019027	54502	ENSG00000163694	RBM47	Kontrolle	AFE	0.071527213	1
NM_004385.3:9915	NM_004385	1462	ENSG00000038427	VCAN	NSIP	AFE	0.071530002	1
NM_003810.2:115	NM_003810	8743	ENSG00000121858	TNFSF10	Kontrolle	AFE	0.071656298	1
NM_001034852.1:1990	NM_001034852	64093	ENSG00000198732	SMOC1	UIP	AFE	0.071719953	1
NM_014059.2:765	NM_014059	28984	ENSG00000102760	RGCC	UIP	NSIP	0.071829573	1
NM_001034915.2:1515	NM_001034915	54845	ENSG00000104413	ESRP1	UIP	AFE	0.071874724	1
NR_046324.1:194	NR_046324	1139	ENSG00000175344	CHRNA7	Kontrolle	AFE	0.071877115	1
NM_003013.2:840	NM_003013	6423	ENSG00000145423	SFRP2	UIP	NSIP	0.071895002	1
NM_002607.5:1276	NM_002607	5154	ENSG00000197461	PDGFA	NSIP	Kontrolle	0.07192993	1
NM_002427.2:951	NM_002427	4322	ENSG00000137745	MMP13	UIP	Kontrolle	0.071965837	1
NM_018192.2:985	NM_018192	55214	ENSG00000090530	P3H2	UIP	NSIP	0.07213452	1
NM_000615.5:1620	NM_000615	4684	ENSG00000149294	NCAM1	UIP	Kontrolle	0.072208802	1
NM_000963.1:495	NM_000963	5743	ENSG00000073756	PTGS2	UIP	AFE	0.072271388	1
NM_001040113.1:920	NM_001040113	4629	ENSG00000133392	MYH11	Kontrolle	AFE	0.072370232	1
NM_004342.6:3862	NM_004342	800	ENSG00000122786	CALD1	UIP	Kontrolle	0.072412896	1
NM_001005915.1:420	NM_001005915	2065	ENSG00000065361	ERBB3	Kontrolle	AFE	0.072463463	1
NM_139276.2:4535	NM_139276	6774	ENSG00000168610	STAT3	Kontrolle	AFE	0.072497067	1
NM_000963.1:495	NM_000963	5743	ENSG00000073756	PTGS2	NSIP	AFE	0.072642057	1
NM_001270407.1:840	NM_001270407	58494	ENSG00000154721	JAM2	UIP	AFE	0.073212653	1
NM_144962.2:190	NM_144962	157310	ENSG00000134020	PEBP4	Kontrolle	AFE	0.073354418	1
NM_207361.4:9170	NM_207361	341640	ENSG00000150893	FREM2	UIP	Kontrolle	0.073426543	1
NM_001077269.1:1660	NM_001077269	7456	ENSG00000115935	WIPF1	UIP	AFE	0.073551933	1
NM_003118.2:910	NM_003118	6678	ENSG00000113140	SPARC	UIP	Kontrolle	0.073719793	1
NM_021253.3:3140	NM_021253	56658	ENSG00000204599	TRIM39	NSIP	Kontrolle	0.073726158	1
NM_001846.2:1150	NM_001846	1284	ENSG00000134871	COL4A2	UIP	NSIP	0.073783602	1
NM_005343.2:396	NM_005343	3265	ENSG00000174775	HRAS	UIP	Kontrolle	0.073925314	1
NM_001387.2:4790	NM_001387	1809	ENSG00000113657	DPYSL3	NSIP	AFE	0.074244246	1
NM_001177704.1:614	NM_001177704	158326	ENSG00000164946	FREM1	NSIP	Kontrolle	0.074387251	1
NM_000576.2:840	NM_000576	3553	ENSG00000125538	IL1B	NSIP	Kontrolle	0.074510356	1
NM_005232.3:2075	NM_005232	2041	ENSG00000146904	EPHA1	Kontrolle	AFE	0.074778161	1
NM_001033081.2:568	NM_001033081	4610	ENSG00000116990	MYCL	Kontrolle	AFE	0.074956336	1
NM_021101.3:410	NM_021101	9076	ENSG00000163347	CLDN1	NSIP	Kontrolle	0.075150985	1
NM_000212.2:4485	NM_000212	3690	ENSG00000259207	ITGB3	Kontrolle	AFE	0.075287813	1
NM_001270407.1:840	NM_001270407	58494	ENSG00000154721	JAM2	UIP	Kontrolle	0.075550295	1
NM_001734.2:775	NM_001734	716	ENSG00000182326	C1S	NSIP	AFE	0.075610748	1
NM_015230.2:4875	NM_015230	116984	ENSG00000047365	ARAP2	NSIP	AFE	0.075638923	1

NM_022144.2:462	NM_022144	64102	ENSG00000000005	TNMD	Kontrolle	AFE	0.07573979	1
NM_003377.3:687	NM_003377	7423	ENSG00000173511	VEGFB	NSIP	AFE	0.07596613	1
NM_013258.3:714	NM_013258	29108	ENSG00000103490	PYCARD	UIP	AFE	0.076062606	1
NM_145259.2:5168	NM_145259	130399	ENSG00000123612	ACVR1C	Kontrolle	AFE	0.076393555	1
NM_006786.3:354	NM_006786	10911	ENSG00000049247	UTS2	Kontrolle	AFE	0.076555913	1
NM_002773.3:917	NM_002773	5652	ENSG00000052344	PRSS8	UIP	Kontrolle	0.076629915	1
NM_000619.2:970	NM_000619	3458	ENSG00000111537	IFNG	Kontrolle	AFE	0.07678464	1
NM_207446.2:1075	NM_207446	400451	ENSG00000185442	FAM174B	UIP	Kontrolle	0.076845415	1
NM_004054.2:415	NM_004054	719	ENSG00000171860	C3AR1	UIP	AFE	0.07689173	1
NM_015103.2:3711	NM_015103	23129	ENSG00000004399	PLXND1	UIP	NSIP	0.077124649	1
NM_006896.3:1605	NM_006896	3204	ENSG00000122592	HOXA7	UIP	AFE	0.077131916	1
NM_001015002.1:1065	NM_001015002	3993	ENSG00000073350	LLGL2	UIP	Kontrolle	0.077220845	1
NM_005954.2:165	NM_005954	4504	ENSG00000087250	MT3	UIP	AFE	0.077237479	1
NM_000090.3:180	NM_000090	1281	ENSG00000168542	COL3A1	NSIP	AFE	0.077366653	1
NM_032569.3:1470	NM_032569	84656	ENSG00000140632	GLYR1	UIP	AFE	0.077366678	1
NM_001432.2:290	NM_001432	2069	ENSG00000124882	EREG	NSIP	Kontrolle	0.077464375	1
NM_001719.2:1092	NM_001719	655	ENSG00000101144	BMP7	UIP	NSIP	0.077464599	1
NM_000104.3:1715	NM_000104	1545	ENSG00000138061	CYP1B1	NSIP	AFE	0.077652392	1
NM_198576.2:2750	NM_198576	375790	ENSG00000188157	AGRN	UIP	AFE	0.077693919	1
NM_000029.3:1711	NM_000029	183	ENSG00000135744	AGT	NSIP	AFE	0.07778932	1
NM_006516.2:2500	NM_006516	6513	ENSG00000117394	SLC2A1	UIP	Kontrolle	0.077982759	1
NM_004787.1:2430	NM_004787	9353	ENSG00000145147	SLIT2	Kontrolle	AFE	0.078215755	1
NM_001712.3:2455	NM_001712	634	ENSG00000079385	CEACAM1	Kontrolle	AFE	0.078215875	1
NM_018488.2:1560	NM_018488	9496	ENSG00000121075	TBX4	UIP	Kontrolle	0.078231522	1
NM_001306.3:606	NM_001306	1365	ENSG00000165215	CLDN3	UIP	AFE	0.07864127	1
NM_000175.2:1695	NM_000175	2821	ENSG00000105220	GPI	NSIP	Kontrolle	0.078694294	1
NM_002438.2:2693	NM_002438	4360	ENSG00000260314	MRC1	Kontrolle	AFE	0.078732522	1
NR_036430.1:65	NR_036430			SRGN	Kontrolle	AFE	0.078796246	1
NM_002872.3:1069	NM_002872	5880	ENSG00000128340	RAC2	UIP	Kontrolle	0.078994426	1
NM_001884.3:730	NM_001884	1404	ENSG00000145681	HAPLN1	NSIP	Kontrolle	0.07931618	1
NR_104213.1:475	NR_104213	51129	ENSG00000167772	ANGPTL4	NSIP	Kontrolle	0.079399662	1
NM_000088.3:4272	NM_000088	1277	ENSG00000108821	COL1A1	UIP	AFE	0.079587896	1
NM_002837.3:2625	NM_002837	5787	ENSG00000127329	PTPRB	UIP	NSIP	0.079835749	1
NM_000062.2:305	NM_000062	710	ENSG00000149131	SERPING1	Kontrolle	AFE	0.080113657	1
NM_173481.2:1845	NM_173481	126353	ENSG00000099812	MISP	Kontrolle	AFE	0.080139169	1
NM_001160103.1:2690	NM_001160103	79882	ENSG00000100722	ZC3H14	UIP	AFE	0.080249496	1
NM_002305.3:60	NM_002305	3956	ENSG00000100097	LGALS1	UIP	AFE	0.080393112	1
NM_002999.2:1310	NM_002999	6385	ENSG00000124145	SDC4	UIP	Kontrolle	0.080423074	1
NM_002426.3:769	NM_002426	4321	ENSG00000262406	MMP12	Kontrolle	AFE	0.080588035	1
NM_001105251.2:2292	NM_001105251	9765	ENSG00000039319	ZFYVE16	UIP	AFE	0.080736589	1
NM_014333.3:2840	NM_014333	23705	ENSG00000182985	CADM1	NSIP	Kontrolle	0.080764743	1
NM_001177704.1:614	NM_001177704	158326	ENSG00000164946	FREM1	UIP	AFE	0.081049094	1
NM_005650.1:925	NM_005650	6942	ENSG00000100207	TCF20	Kontrolle	AFE	0.081097808	1
NM_005100.3:640	NM_005100	9590	ENSG00000131016	AKAP12	NSIP	AFE	0.081351905	1
NM_199511.1:3235	NM_199511	151887	ENSG00000091986	CCDC80	UIP	AFE	0.082016256	1
NM_003254.2:329	NM_003254	7076	ENSG00000102265	TIMP1	NSIP	AFE	0.082036798	1
NM_001030049.1:433	NM_001030049	354	ENSG00000142515	KLK3	UIP	AFE	0.082305413	1
NM_001042494.1:3962	NM_001042494	9990	ENSG00000140199	SLC12A6	UIP	Kontrolle	0.082456141	1
NM_002880.3:1444	NM_002880	5894	ENSG00000132155	RAF1	UIP	Kontrolle	0.082506135	1
NM_004912.3:2648	NM_004912	889	ENSG00000001631	KRIT1	UIP	AFE	0.082596824	1
NM_001005376.1:440	NM_001005376	5329	ENSG00000011422	PLAUR	UIP	AFE	0.083060793	1
XM_005269604.1:379	XM_005269604			ZCCHC24	NSIP	Kontrolle	0.083075507	1
NM_001558.2:150	NM_001558	3587	ENSG00000110324	IL10RA	Kontrolle	AFE	0.083420545	1
NM_019027.3:150	NM_019027	54502	ENSG00000163694	RBM47	UIP	AFE	0.083573835	1
NM_001165414.1:1690	NM_001165414	3939	ENSG00000134333	LDHA	UIP	Kontrolle	0.084059212	1
NM_001562.2:48	NM_001562	3606	ENSG00000150782	IL18	NSIP	Kontrolle	0.084472592	1
NM_138735.2:1095	NM_138735	9378	ENSG00000179915	NRXN1	UIP	AFE	0.084575363	1
NM_000584.2:25	NM_000584	3576	ENSG00000169429	CXCL8	UIP	NSIP	0.084733691	1
NM_005560.3:787	NM_005560	3911	ENSG00000130702	LAMA5	UIP	AFE	0.08480166	1
NM_001754.4:635	NM_001754	861	ENSG00000159216	RUNX1	UIP	AFE	0.084841478	1
NM_001847.2:1070	NM_001847	1288	ENSG00000197565	COL4A6	UIP	AFE	0.085172485	1
NM_000397.3:2686	NM_000397	1536	ENSG00000165168	CYBB	Kontrolle	AFE	0.085198473	1
NM_018488.2:1560	NM_018488	9496	ENSG00000121075	TBX4	Kontrolle	AFE	0.085324831	1
NM_005417.3:1410	NM_005417	6714	ENSG00000197122	SRC	UIP	Kontrolle	0.085362053	1
NM_184041.2:1455	NM_184041	226	ENSG00000149925	ALDOA	NSIP	AFE	0.085394668	1
NM_024545.3:3090	NM_024545	79595	ENSG00000136715	SAP130	NSIP	AFE	0.085399415	1
NM_133468.4:476	NM_133468	168667	ENSG00000164619	BMPER	UIP	Kontrolle	0.085512293	1
NM_002276.4:96	NM_002276	3880	ENSG00000171345	KRT19	UIP	AFE	0.085599348	1
NM_030955.2:1955	NM_030955	81792	ENSG00000151388	ADAMTS12	UIP	AFE	0.086183776	1
NM_019894.3:1146	NM_019894	56649	ENSG00000137648	TMPRSS4	Kontrolle	AFE	0.086401818	1
NM_005611.3:1310	NM_005611	5934	ENSG00000103479	RBL2	UIP	Kontrolle	0.086864287	1
NM_016142.2:1000	NM_016142	51144	ENSG00000149084	HSD17B12	UIP	Kontrolle	0.086888041	1

NM_003104.4:1345	NM_003104	6652	ENSG00000140263	SORD	UIP	Kontrolle	0.087242399	1
NM_005985.2:63	NM_005985	6615	ENSG00000124216	SNAI1	UIP	AFE	0.087253129	1
NM_001912.4:1072	NM_001912	1514	ENSG00000135047	CTSL	NSIP	AFE	0.087324328	1
NM_001079675.1:1535	NM_001079675	2118	ENSG00000175832	ETV4	UIP	AFE	0.087453757	1
NM_000177.4:1075	NM_000177	2934	ENSG00000148180	GSN	Kontrolle	AFE	0.087594471	1
NM_001256725.1:806	NM_001256725	10713	ENSG00000168883	USP39	Kontrolle	AFE	0.087699283	1
NM_207446.2:1075	NM_207446	400451	ENSG00000185442	FAM174B	UIP	AFE	0.08774108	1
NM_001060.3:385	NM_001060	6915	ENSG00000006638	TBXA2R	UIP	Kontrolle	0.08789968	1
NM_001164239.1:2490	NM_001164239	8449	ENSG00000204560	DHX16	UIP	Kontrolle	0.088021652	1
NM_001256725.1:806	NM_001256725	10713	ENSG00000168883	USP39	NSIP	Kontrolle	0.088026922	1
NM_001915.3:1065	NM_001915	1534	ENSG00000008283	CYB561	UIP	AFE	0.088554576	1
NM_025130.3:2267	NM_025130	80201	ENSG00000156510	HKDC1	Kontrolle	AFE	0.088709013	1
NM_004774.3:806	NM_004774	5469	ENSG00000125686	MED1	UIP	AFE	0.088908053	1
NM_003095.2:225	NM_003095	6636	ENSG00000139343	SNRPF	UIP	NSIP	0.088959595	1
NM_000640.2:400	NM_000640	3598	ENSG00000123496	IL13RA2	UIP	Kontrolle	0.088999876	1
NM_007085.4:1610	NM_007085	11167	ENSG00000163430	FSTL1	UIP	Kontrolle	0.08900276	1
NM_002020.1:955	NM_002020	2324	ENSG00000037280	FLT4	NSIP	AFE	0.089085963	1
NM_020770.2:1112	NM_020770	57530	ENSG00000143375	CGN	Kontrolle	AFE	0.08918641	1
NM_198098.1:1230	NM_198098	358	ENSG00000240583	AQP1	NSIP	Kontrolle	0.089300919	1
NM_001897.4:7642	NM_001897	1464	ENSG00000173546	CSPG4	NSIP	AFE	0.089647564	1
NM_002438.2:2693	NM_002438	4360	ENSG00000260314	MRC1	UIP	AFE	0.089697167	1
NM_003810.2:115	NM_003810	8743	ENSG00000121858	TNFSF10	NSIP	Kontrolle	0.089711311	1
NM_139266.1:455	NM_139266	6772	ENSG00000115415	STAT1	Kontrolle	AFE	0.089717804	1
NM_015850.2:1335	NM_015850	2260	ENSG00000077782	FGFR1	UIP	Kontrolle	0.089734987	1
NM_002985.2:280	NM_002985	6352	ENSG00000271503	CCL5	NSIP	Kontrolle	0.090320229	1
NM_000295.4:760	NM_000295	5265	ENSG00000197249	SERPINA1	UIP	NSIP	0.090379032	1
NM_017617.3:735	NM_017617	4851	ENSG00000148400	NOTCH1	UIP	Kontrolle	0.090850768	1
NM_000295.4:760	NM_000295	5265	ENSG00000197249	SERPINA1	UIP	Kontrolle	0.090858627	1
NM_005100.3:640	NM_005100	9590	ENSG00000131016	AKAP12	UIP	NSIP	0.090910023	1
NM_171825.1:4080	NM_171825	815	ENSG00000070808	CAMK2A	Kontrolle	AFE	0.090937057	1
NM_001753.3:434	NM_001753	857	ENSG00000105974	CAV1	NSIP	Kontrolle	0.09138636	1
NM_001145.4:949	NM_001145	283	ENSG00000214274	ANG	UIP	AFE	0.091847848	1
NM_001015001.1:286	NM_001015001	548596	ENSG00000223572	CKMT1A	UIP	Kontrolle	0.091937268	1
NM_001077693.3:168	NM_001077693	641700	ENSG00000249751	ECSCR	Kontrolle	AFE	0.092092468	1
NM_138957.2:430	NM_138957	5594	ENSG00000100030	MAPK1	NSIP	Kontrolle	0.092176967	1
NM_145333.1:670	NM_145333	6885	ENSG00000135341	MAP3K7	UIP	NSIP	0.092491634	1
NM_005417.3:1410	NM_005417	6714	ENSG00000197122	SRC	Kontrolle	AFE	0.092586245	1
NM_001552.2:1520	NM_001552	3487	ENSG00000141753	IGFBP4	NSIP	AFE	0.092628135	1
NM_002204.2:4550	NM_002204	3675	ENSG00000005884	ITGA3	UIP	AFE	0.092723436	1
NM_001160103.1:2690	NM_001160103	79882	ENSG00000100722	ZC3H14	NSIP	Kontrolle	0.092802479	1
NM_001915.3:1065	NM_001915	1534	ENSG00000008283	CYB561	UIP	Kontrolle	0.092942777	1
NR_104213.1:475	NR_104213	51129	ENSG00000167772	ANGPTL4	UIP	NSIP	0.093087279	1
NM_002310.3:2995	NM_002310	3977	ENSG00000113594	LIFR	UIP	AFE	0.09337347	1
NM_005009.2:820	NM_005009	4833	ENSG00000103202	NME4	Kontrolle	AFE	0.093392195	1
NM_148979.2:800	NM_148979	1512	ENSG00000103811	CTSH	NSIP	AFE	0.093509569	1
NM_032569.3:1470	NM_032569	84656	ENSG00000140632	GLYR1	UIP	Kontrolle	0.093704185	1
NM_007085.4:1610	NM_007085	11167	ENSG00000163430	FSTL1	UIP	AFE	0.094006043	1
NM_013372.5:575	NM_013372	26585	ENSG00000166923	GREM1	NSIP	Kontrolle	0.094554603	1
NM_004219.2:542	NM_004219	9232	ENSG00000164611	PTTG1	UIP	AFE	0.094674748	1
NM_032364.5:1166	NM_032364	85406	ENSG00000135392	DNAJC14	UIP	AFE	0.094712925	1
NM_005900.2:1850	NM_005900	4086	ENSG00000170365	SMAD1	Kontrolle	AFE	0.094731287	1
NM_002670.2:3261	NM_002670	5357	ENSG00000120756	PLS1	UIP	Kontrolle	0.094960731	1
NM_002020.1:955	NM_002020	2324	ENSG00000003728	FLT4	UIP	NSIP	0.094995978	1
NM_001165413.1:1670	NM_001165413	5054	ENSG00000106366	SERPINE1	NSIP	AFE	0.09510107	1
NM_000618.3:491	NM_000618	3479	ENSG00000017427	IGF1	NSIP	AFE	0.095891471	1
XM_005269604.1:379	XM_005269604			ZCCHC24	UIP	AFE	0.096037869	1
NM_000594.2:1010	NM_000594	7124	ENSG00000232810	TNF	NSIP	Kontrolle	0.096182986	1
NM_001077693.3:168	NM_001077693	641700	ENSG00000249751	ECSCR	UIP	Kontrolle	0.096282349	1
NM_005903.5:1044	NM_005903	4090	ENSG00000113658	SMAD5	UIP	AFE	0.096328446	1
NM_001127500.1:1925	NM_001127500	4233	ENSG00000105976	MET	NSIP	Kontrolle	0.096570682	1
NM_032470.3:1621	NM_032470	7148	ENSG00000168477	TNXB	UIP	AFE	0.096707472	1
NM_001174071.1:790	NM_001174071	256987	ENSG00000164300	SERINC5	UIP	AFE	0.097077079	1
NM_002852.3:1152	NM_002852	5806	ENSG00000163661	PTX3	UIP	AFE	0.097258762	1
NM_004443.3:3485	NM_004443	2049	ENSG00000182580	EPHB3	NSIP	Kontrolle	0.097329951	1
NM_001719.2:1092	NM_001719	655	ENSG00000101144	BMP7	NSIP	AFE	0.097358698	1
NM_002293.3:4915	NM_002293	3915	ENSG00000135862	LAMC1	UIP	AFE	0.097553442	1
NM_005924.4:1184	NM_005924	4223	ENSG00000106511	MEOX2	NSIP	Kontrolle	0.09755951	1
NM_000619.2:970	NM_000619	3458	ENSG00000111537	IFNG	NSIP	Kontrolle	0.097567429	1
NM_004787.1:2430	NM_004787	9353	ENSG00000145147	SLIT2	UIP	NSIP	0.097711632	1
NM_003573.2:3644	NM_003573	8425	ENSG00000090006	LTBP4	NSIP	AFE	0.098042037	1
NM_002989.2:180	NM_002989	6366	ENSG00000137077	CCL21	UIP	Kontrolle	0.098455993	1
NM_016205.2:2596	NM_016205	56034	ENSG00000145431	PDGFC	UIP	NSIP	0.098536741	1

NM_001754.4:635	NM_001754	861	ENSG00000159216	RUNX1	UIP	Kontrolle	0.098904907	1
NM_004774.3:806	NM_004774	5469	ENSG00000125686	MED1	Kontrolle	AFE	0.098948439	1
NM_000042.2:582	NM_000042	350	ENSG00000091583	APOH	Kontrolle	AFE	0.099084921	1
NM_005901.5:1678	NM_005901	4087	ENSG00000175387	SMAD2	NSIP	Kontrolle	0.099269744	1
NM_001018017.1:725	NM_001018017	4582	ENSG00000185499	MUC1	NSIP	Kontrolle	0.099270209	1
NM_001711.3:1935	NM_001711	633	ENSG00000182492	BGN	UIP	Kontrolle	0.099358436	1
NM_001273.2:2680	NM_001273	1108	ENSG00000111642	CHD4	NSIP	AFE	0.099369003	1
NM_000228.2:695	NM_000228	3914	ENSG00000196878	LAMB3	UIP	Kontrolle	0.099409321	1
NM_004799.2:2135	NM_004799	9372	ENSG00000157077	ZFYVE9	UIP	Kontrolle	0.099603286	1
NM_002609.3:840	NM_002609	5159	ENSG00000113721	PDGFRB	UIP	NSIP	0.099622821	1
NM_003299.1:160	NM_003299	7184	ENSG00000166598	HSP90B1	NSIP	Kontrolle	0.100250835	1
NM_000889.1:1278	NM_000889	3695	ENSG00000139626	ITGB7	Kontrolle	AFE	0.100386228	1
NM_015874.3:850	NM_015874	3516	ENSG00000168214	RBPJ	Kontrolle	AFE	0.100440578	1
NM_006690.3:1280	NM_006690	10893	ENSG00000125966	MMP24	UIP	NSIP	0.100622587	1
NM_000325.5:1381	NM_000325	5308	ENSG00000164093	PITX2	UIP	AFE	0.100719369	1
NM_001976.4:1368	NM_001976	2027	ENSG00000108515	ENO3	UIP	Kontrolle	0.100940702	1
NM_005727.2:115	NM_005727	10103	ENSG00000117472	TSPAN1	UIP	NSIP	0.101246942	1
NM_014265.4:920	NM_014265	10863	ENSG00000042980	ADAM28	UIP	Kontrolle	0.101321807	1
NM_001135935.1:910	NM_001135935	10631	ENSG00000133110	POSTN	NSIP	Kontrolle	0.101483644	1
NM_004830.2:640	NM_004830	9439	ENSG00000112282	MED23	UIP	AFE	0.10152926	1
NM_002410.4:1233	NM_002410	4249	ENSG00000152127	MGAT5	NSIP	AFE	0.101666313	1
NM_004571.3:3655	NM_004571	5316	ENSG00000160199	PKNOX1	UIP	AFE	0.101732233	1
NM_004985.3:327	NM_004985	3845	ENSG00000133703	KRAS	UIP	Kontrolle	0.101861473	1
NM_001004065.4:4956	NM_001004065	11217	ENSG00000241978	AKAP2	UIP	NSIP	0.10188299	1
NM_001042494.1:3962	NM_001042494	9990	ENSG00000140199	SLC12A6	Kontrolle	AFE	0.102055271	1
NM_003442.5:925	NM_003442	7702	ENSG00000166478	ZNF143	UIP	Kontrolle	0.10246237	1
NM_005445.3:3525	NM_005445	9126	ENSG00000108055	SMC3	Kontrolle	AFE	0.102493657	1
NM_0015399.3:469	NM_0015399	25855	ENSG00000174744	BRMS1	UIP	NSIP	0.102767667	1
NM_000888.3:1090	NM_000888	3694	ENSG00000115221	ITGB6	Kontrolle	AFE	0.102826565	1
NM_001146.3:2080	NM_001146	284	ENSG00000154188	ANGPT1	UIP	NSIP	0.10299011	1
NM_000640.2:400	NM_000640	3598	ENSG00000123496	IL13RA2	UIP	AFE	0.103251443	1
NM_001773.2:2050	NM_001773	947	ENSG00000174059	CD34	NSIP	Kontrolle	0.10326976	1
NM_001042494.1:3962	NM_001042494	9990	ENSG00000140199	SLC12A6	NSIP	Kontrolle	0.103313421	1
NM_004799.2:2135	NM_004799	9372	ENSG00000157077	ZFYVE9	Kontrolle	AFE	0.103324418	1
NM_012232.5:86	NM_012232	284119	ENSG00000177469	PTRF	Kontrolle	AFE	0.103358501	1
NM_006665.3:1625	NM_006665	10855	ENSG00000173083	HPSE	Kontrolle	AFE	0.103465286	1
NM_012217.2:585	NM_012217	23430	ENSG00000095917	TPSD1	Kontrolle	AFE	0.103791188	1
NM_002660.2:2290	NM_002660	5335	ENSG00000124181	PLCG1	NSIP	Kontrolle	0.10389109	1
NM_001955.2:770	NM_001955	1906	ENSG00000078401	EDN1	NSIP	AFE	0.104055006	1
NM_001015002.1:1065	NM_001015002	3993	ENSG00000073350	LLGL2	Kontrolle	AFE	0.104126129	1
NM_000888.3:1090	NM_000888	3694	ENSG00000115221	ITGB6	UIP	AFE	0.104131829	1
NM_006147.2:1430	NM_006147	3664	ENSG00000117595	IRF6	UIP	NSIP	0.104163621	1
NM_005381.2:1492	NM_005381	4691	ENSG00000115053	NCL	UIP	Kontrolle	0.104208795	1
NM_032801.3:890	NM_032801	83700	ENSG00000166086	JAM3	Kontrolle	AFE	0.10451473	1
NM_001203.1:430	NM_001203	658	ENSG00000138696	BMPR1B	UIP	NSIP	0.10465682	1
NM_001429.2:715	NM_001429	2033	ENSG00000100393	EP300	NSIP	AFE	0.104823173	1
NM_139266.1:455	NM_139266	6772	ENSG00000115415	STAT1	UIP	AFE	0.104965811	1
NM_002615.4:888	NM_002615	5176	ENSG00000132386	SERPINF1	NSIP	AFE	0.105078242	1
NM_014256.3:1625	NM_014256	10331	ENSG00000179913	B3GNT3	UIP	Kontrolle	0.105204099	1
NM_000660.3:1260	NM_000660	7040	ENSG00000105329	TGFB1	NSIP	AFE	0.105436726	1
NM_007361.3:1995	NM_007361	22795	ENSG00000087303	NID2	NSIP	Kontrolle	0.105590243	1
NM_001127217.2:1152	NM_001127217	4093	ENSG00000120693	SMAD9	UIP	Kontrolle	0.105778076	1
NM_001331.2:146	NM_001331	1500	ENSG00000198561	CTNND1	NSIP	AFE	0.106153254	1
NM_006472.1:255	NM_006472	10628	ENSG00000265972	TXNIP	UIP	Kontrolle	0.106508582	1
NM_017423.2:910	NM_017423	51809	ENSG00000109586	GALNT7	UIP	AFE	0.106560552	1
NM_033305.2:8260	NM_033305	23230	ENSG00000197969	VPS13A	NSIP	AFE	0.106692939	1
NM_000557.2:155	NM_000557	8200	ENSG00000125965	GDF5	UIP	AFE	0.106812366	1
NM_002146.4:2840	NM_002146	3213	ENSG00000120093	HOXB3	NSIP	Kontrolle	0.106895395	1
NM_003573.2:3644	NM_003573	8425	ENSG00000090006	LTBP4	NSIP	Kontrolle	0.107511682	1
NM_002467.3:1610	NM_002467	4609	ENSG00000136997	MYC	UIP	AFE	0.107526978	1
NM_001836.2:561	NM_001836	1215	ENSG00000092009	CMA1	UIP	AFE	0.107583296	1
NM_001034852.1:1990	NM_001034852	64093	ENSG00000198732	SMOC1	Kontrolle	AFE	0.107647548	1
NM_001204.5:1875	NM_001204	659	ENSG00000204217	BMPR2	UIP	NSIP	0.107754714	1
NM_022136.3:560	NM_022136	64092	ENSG00000155307	SAMSN1	NSIP	AFE	0.108010374	1
NM_002006.4:620	NM_002006	2247	ENSG00000138685	FGF2	NSIP	AFE	0.108109263	1
NM_001167681.2:1406	NM_001167681	2313	ENSG00000151702	FLI1	UIP	NSIP	0.108282573	1
NM_003095.2:225	NM_003095	6636	ENSG00000139343	SNRPF	NSIP	AFE	0.108658961	1
NM_207195.1:1355	NM_207195	8751	ENSG00000143537	ADAM15	UIP	Kontrolle	0.108679863	1
NM_022361.4:980	NM_022361	64208	ENSG00000132429	POPDC3	Kontrolle	AFE	0.108985642	1
NM_006869.2:570	NM_006869	11033	ENSG00000105963	ADAP1	Kontrolle	AFE	0.10910188	1
NM_005623.2:689	NM_005623	6355	ENSG00000108700	CCL8	NSIP	AFE	0.109112248	1
NM_148979.2:800	NM_148979	1512	ENSG00000103811	CTSH	NSIP	Kontrolle	0.109232129	1

NM_024164.5:521	NM_024164	64499	ENSG00000197253	TPSB2	UIP	AFE	0.109413207	1
NM_002006.4:620	NM_002006	2247	ENSG00000138685	FGF2	UIP	NSIP	0.10961302	1
NM_172350.1:365	NM_172350	4179	ENSG00000117335	CD46	NSIP	Kontrolle	0.109658376	1
NM_172174.1:1685	NM_172174	3600	ENSG00000164136	IL15	Kontrolle	AFE	0.109707031	1
NM_005474.4:3160	NM_005474	10014	ENSG00000108840	HDAC5	NSIP	AFE	0.109822253	1
NM_013258.3:714	NM_013258	29108	ENSG00000103490	PYCARD	UIP	Kontrolle	0.109890786	1
NM_002166.4:505	NM_002166	3398	ENSG00000115738	ID2	NSIP	Kontrolle	0.109944561	1
NM_173157.1:1575	NM_173157	3164	ENSG00000123358	NR4A1	NSIP	AFE	0.109950883	1
NM_003212.2:1567	NM_003212	6997	ENSG00000241186	TGDF1	UIP	AFE	0.110702221	1
NM_015704.2:2880	NM_015704	27351	ENSG00000100418	DES1	NSIP	Kontrolle	0.110720984	1
NM_000093.3:6345	NM_000093	1289	ENSG00000130635	COL5A1	UIP	NSIP	0.110883469	1
NM_001168298.1:840	NM_001168298	3579	ENSG00000180871	CXCR2	UIP	Kontrolle	0.111069112	1
NM_207195.1:1355	NM_207195	8751	ENSG00000143537	ADAM15	NSIP	Kontrolle	0.111285775	1
NM_001276.2:475	NM_001276	1116	ENSG00000133048	CHI3L1	NSIP	AFE	0.111842856	1
NM_005903.5:1044	NM_005903	4090	ENSG00000113658	SMAD5	UIP	Kontrolle	0.111857966	1
NM_000141.4:647	NM_000141	2263	ENSG00000066468	FGFR2	NSIP	AFE	0.111929106	1
NM_004689.2:450	NM_004689	9112	ENSG00000182979	MTA1	UIP	Kontrolle	0.111935273	1
NM_003561.1:779	NM_003561	8399	ENSG00000069764	PLA2G10	NSIP	AFE	0.111957347	1
NM_005381.2:1492	NM_005381	4691	ENSG00000115053	NCL	Kontrolle	AFE	0.111992752	1
NM_002986.2:378	NM_002986	6356	ENSG00000172156	CCL11	NSIP	AFE	0.112072308	1
NM_005127.2:980	NM_005127	9976	ENSG00000118052	CLEC2B	UIP	AFE	0.112416777	1
NM_020672.1:460	NM_020672	57402	ENSG00000189334	S100A14	NSIP	Kontrolle	0.112494459	1
NM_022740.4:10305	NM_022740	28996	ENSG00000064393	HIPK2	Kontrolle	AFE	0.112625132	1
NM_016242.3:160	NM_016242	51705	ENSG00000164035	EMCN	UIP	NSIP	0.112647346	1
NM_000228.2:695	NM_000228	3914	ENSG00000196878	LAMB3	NSIP	AFE	0.112754435	1
NM_001174071.1:790	NM_001174071	256987	ENSG00000164300	SERINC5	UIP	Kontrolle	0.113181531	1
NM_004836.5:938	NM_004836	9451	ENSG00000172071	EIF2AK3	UIP	NSIP	0.113348865	1
NM_001164239.1:2490	NM_001164239	8449	ENSG00000204560	DHX16	NSIP	Kontrolle	0.113388822	1
NM_001975.2:1855	NM_001975	2026	ENSG00000111674	ENO2	NSIP	AFE	0.11340749	1
NM_000038.3:6850	NM_000038	324	ENSG00000134982	APC	Kontrolle	AFE	0.113567777	1
NM_002425.1:88	NM_002425	4319	ENSG00000166670	MMP10	NSIP	AFE	0.113611306	1
NM_001792.3:941	NM_001792	1000	ENSG00000170558	CDH2	UIP	AFE	0.113683229	1
NM_001190848.1:795	NM_001190848	4850	ENSG00000080802	CNOT4	UIP	AFE	0.114025609	1
NM_006802.2:2060	NM_006802	10946	ENSG00000183431	SF3A3	Kontrolle	AFE	0.114212435	1
NR_024115.1:2175	NR_024115			GIMAP6	UIP	Kontrolle	0.114257694	1
NM_005854.2:282	NM_005854	10266	ENSG00000131477	RAMP2	Kontrolle	AFE	0.114381346	1
NM_001278506.1:304	NM_001278506	4682	ENSG00000103274	NUBP1	UIP	Kontrolle	0.114381869	1
NM_001988.2:5525	NM_001988	2125	ENSG00000167880	EVPL	UIP	AFE	0.114414446	1
NM_012116.3:652	NM_012116	23624	ENSG00000142273	CBLC	UIP	NSIP	0.114510344	1
NM_001177704.1:614	NM_001177704	158326	ENSG00000164946	FREM1	NSIP	AFE	0.114901583	1
NM_014159.6:1386	NM_014159	29072	ENSG00000181555	SETD2	UIP	AFE	0.115318759	1
NM_001546.2:588	NM_001546	3400	ENSG00000172201	ID4	UIP	AFE	0.115327262	1
NM_017680.3:175	NM_017680	54829	ENSG00000106819	ASPN	NSIP	Kontrolle	0.115526441	1
NM_002999.2:1310	NM_002999	6385	ENSG00000124145	SDC4	NSIP	Kontrolle	0.115526887	1
NM_005406.1:2660	NM_005406	6093	ENSG00000067900	ROCK1	Kontrolle	AFE	0.115533327	1
NM_0022965.2:3170	NM_0022965	2261	ENSG00000068078	FGFR3	UIP	Kontrolle	0.11563573	1
NM_002354.1:415	NM_002354	4072	ENSG00000119888	EPCAM	NSIP	Kontrolle	0.115978108	1
NM_001005731.1:4151	NM_001005731	3691	ENSG00000132470	ITGB4	Kontrolle	AFE	0.116140778	1
NM_001429.2:715	NM_001429	2033	ENSG00000100393	EP300	UIP	Kontrolle	0.116200712	1
NM_005924.4:1184	NM_005924	4223	ENSG00000106511	MEOX2	UIP	Kontrolle	0.116639536	1
NM_005902.3:4220	NM_005902	4088	ENSG00000166949	SMAD3	NSIP	Kontrolle	0.116649243	1
NM_001553.1:690	NM_001553	3490	ENSG00000163453	IGFBP7	UIP	AFE	0.11672397	1
NM_003573.2:3644	NM_003573	8425	ENSG00000090006	LTBP4	UIP	AFE	0.116810581	1
NM_002121.4:931	NM_002121	3115	ENSG00000223865	HLA-DPB1	NSIP	AFE	0.116824976	1
NM_001307.3:175	NM_001307	1366	ENSG00000181885	CLDN7	Kontrolle	AFE	0.11724293	1
NM_006528.3:524	NM_006528	7980	ENSG00000105825	TFPI2	Kontrolle	AFE	0.117987794	1
NM_000269.2:500	NM_000269	4830	ENSG00000239672	NME1	UIP	AFE	0.11840164	1
NM_182471.1:2105	NM_182471	5315	ENSG00000067225	PKM	NSIP	AFE	0.118564028	1
NM_015293.1:7755	NM_015293	23345	ENSG00000131018	SYNE1	UIP	AFE	0.118568584	1
NM_014059.2:765	NM_014059	28984	ENSG00000102760	RGCC	Kontrolle	AFE	0.119088503	1
NM_005474.4:3160	NM_005474	10014	ENSG00000108840	HDAC5	NSIP	Kontrolle	0.119318572	1
NM_002020.1:955	NM_002020	2324	ENSG00000037280	FLT4	Kontrolle	AFE	0.119855096	1
NM_001165928.2:965	NM_001165928	1605	ENSG00000173402	DAG1	UIP	Kontrolle	0.119904209	1
NM_022144.2:462	NM_022144	64102	ENSG00000000005	TNMD	UIP	AFE	0.120045431	1
NM_024574.3:395	NM_024574	79625	ENSG00000173376	NDNF	NSIP	AFE	0.120203815	1
NM_003106.2:151	NM_003106	6657	ENSG00000181449	SOX2	NSIP	AFE	0.120347309	1
NM_002845.3:1680	NM_002845	5797	ENSG00000173482	PTPRM	Kontrolle	AFE	0.120582677	1
NM_138957.2:430	NM_138957	5594	ENSG00000100030	MAPK1	NSIP	AFE	0.12059728	1
NM_006802.2:2060	NM_006802	10946	ENSG00000183431	SF3A3	UIP	Kontrolle	0.120808054	1
NM_000396.2:415	NM_000396	1513	ENSG00000143387	CTSK	UIP	NSIP	0.120945635	1
NM_015704.2:2880	NM_015704	27351	ENSG00000100418	DES1	UIP	AFE	0.121429255	1
NM_004982.2:880	NM_004982	3764	ENSG00000121361	KCNJ8	NSIP	AFE	0.121465232	1

NM_001558.2:150	NM_001558	3587	ENSG00000110324	IL10RA	UIP	Kontrolle	0.121495854	1
NM_012120.2:1895	NM_012120	23607	ENSG00000198087	CD2AP	NSIP	Kontrolle	0.122028646	1
NM_014248.2:162	NM_014248	9978	ENSG00000100387	RBX1	UIP	Kontrolle	0.122086612	1
NM_173198.1:2590	NM_173198	8013	ENSG00000119508	NR4A3	UIP	Kontrolle	0.122177476	1
NM_003952.2:980	NM_003952	6199	ENSG00000175634	RPS6KB2	NSIP	Kontrolle	0.122194321	1
NM_001797.2:1835	NM_001797	1009	ENSG00000140937	CDH11	UIP	NSIP	0.122421777	1
NM_000089.3:2635	NM_000089	1278	ENSG00000164692	COL1A2	UIP	AFE	0.122679646	1
NM_030662.3:839	NM_030662	5605	ENSG00000126934	MAP2K2	NSIP	Kontrolle	0.123126504	1
NM_000269.2:500	NM_000269	4830	ENSG00000239672	NME1	NSIP	Kontrolle	0.123397162	1
NM_018695.2:3675	NM_018695	55914	ENSG00000112851	ERBB2IP	UIP	Kontrolle	0.123501679	1
NM_003177.3:1685	NM_003177	6850	ENSG00000165025	SYK	Kontrolle	AFE	0.123592361	1
NM_153292.1:546	NM_153292	4843	ENSG00000007171	NOS2	UIP	Kontrolle	0.123706237	1
NM_005026.3:2978	NM_005026	5293	ENSG00000171608	PIK3CD	UIP	Kontrolle	0.123870033	1
NM_002989.2:180	NM_002989	6366	ENSG00000137077	CCL21	NSIP	AFE	0.124509273	1
NM_032794.1:1798	NM_032794		SLC44A4	NSIP	Kontrolle	0.124864063	1	
NM_005429.2:565	NM_005429	7424	ENSG00000150630	VEGFC	UIP	AFE	0.124948491	1
NM_002963.2:69	NM_002963	6278	ENSG00000143556	S100A7	UIP	AFE	0.125063763	1
NM_001105.2:1665	NM_001105	90	ENSG00000115170	ACVR1	NSIP	AFE	0.125080201	1
NM_001146289.1:860	NM_001146289	64175	ENSG00000117385	P3H1	UIP	NSIP	0.125147825	1
NM_005343.2:396	NM_005343	3265	ENSG00000174775	HRAS	UIP	NSIP	0.125172401	1
NM_000906.2:3490	NM_000906	4881	ENSG00000169418	NPR1	UIP	Kontrolle	0.125297461	1
NM_178190.2:334	NM_178190	93974	ENSG00000130770	ATPIF1	NSIP	AFE	0.125307933	1
NM_004635.3:415	NM_004635	7867	ENSG00000114738	MAPKAPK3	UIP	NSIP	0.125363908	1
NM_173157.1:1575	NM_173157	3164	ENSG00000123358	NR4A1	UIP	AFE	0.125399595	1
NM_015399.3:469	NM_015399	25855	ENSG00000174744	BRMS1	UIP	Kontrolle	0.12550693	1
NM_015194.1:616	NM_015194	4642	ENSG00000176658	MYO1D	UIP	Kontrolle	0.12574323	1
NM_005545.3:2072	NM_005545	3671	ENSG00000129009	ISLR	UIP	AFE	0.125793282	1
NM_001042404.1:1800	NM_001042404	9859	ENSG00000143702	CEP170	NSIP	AFE	0.125795222	1
NM_001702.1:3640	NM_001702	575	ENSG00000181790	BAI1	UIP	Kontrolle	0.125938712	1
NM_002404.1:370	NM_002404	4239	ENSG00000166482	MFAP4	UIP	Kontrolle	0.126060079	1
NM_006147.2:1430	NM_006147	3664	ENSG00000117595	IRF6	UIP	Kontrolle	0.126133737	1
NM_021220.2:676	NM_021220	58495	ENSG00000125850	OVOL2	NSIP	AFE	0.126433977	1
NM_007008.2:275	NM_007008	57142	ENSG00000115310	RTN4	UIP	NSIP	0.126523951	1
NM_002609.3:840	NM_002609	5159	ENSG00000113721	PDGFRB	UIP	Kontrolle	0.127194425	1
NM_153603.3:1492	NM_153603	91949	ENSG00000168434	COG7	NSIP	Kontrolle	0.127558983	1
NM_000020.1:1710	NM_000020	94	ENSG00000139567	ACVRL1	NSIP	AFE	0.127624153	1
NM_001142443.1:925	NM_001142443	80153	ENSG00000179151	EDC3	NSIP	AFE	0.127733531	1
NM_000042.2:582	NM_000042	350	ENSG00000091583	APOH	NSIP	Kontrolle	0.127806412	1
NM_000665.3:1057	NM_000665	43	ENSG00000087085	ACHE	UIP	Kontrolle	0.128316117	1
NM_005360.4:888	NM_005360	4094	ENSG00000178573	MAF	UIP	Kontrolle	0.128344018	1
NM_001977.3:2940	NM_001977	2028	ENSG00000138792	ENPEP	UIP	AFE	0.128350932	1
NM_001256725.1:806	NM_001256725	10713	ENSG00000168883	USP39	UIP	Kontrolle	0.128467626	1
NM_013230.2:1859	NM_013230	100133941	ENSG00000272398	CD24	NSIP	AFE	0.128557572	1
NM_001523.2:859	NM_001523	3036	ENSG00000105509	HAS1	Kontrolle	AFE	0.128620199	1
NM_001098424.1:1460	NM_001098424	1739	ENSG00000075711	DLG1	Kontrolle	AFE	0.12879229	1
NM_002425.1:88	NM_002425	4319	ENSG00000166670	MMP10	Kontrolle	AFE	0.129124245	1
NM_012293.1:1960	NM_012293	7837	ENSG00000130508	PXDN	UIP	NSIP	0.129251019	1
NM_005424.2:2610	NM_005424	7075	ENSG00000066056	TIE1	Kontrolle	AFE	0.129325203	1
NM_022097.3:1078	NM_022097	63928	ENSG00000166869	CHP2	NSIP	AFE	0.129723498	1
NM_003952.2:980	NM_003952	6199	ENSG00000175634	RPS6KB2	Kontrolle	AFE	0.129797685	1
NM_006516.2:2500	NM_006516	6513	ENSG00000117394	SLC2A1	Kontrolle	AFE	0.130160381	1
NM_024545.3:3090	NM_024545	79595	ENSG00000136715	SAP130	UIP	NSIP	0.130296917	1
NM_018286.2:655	NM_018286	55273	ENSG00000166292	TMEM100	NSIP	Kontrolle	0.130536165	1
NM_005924.4:1184	NM_005924	4223	ENSG00000106511	MEOX2	NSIP	AFE	0.130548186	1
NM_004864.2:180	NM_004864	9518	ENSG00000130513	GDF15	NSIP	AFE	0.130571293	1
NM_006270.3:330	NM_006270	6237	ENSG00000126458	RRAS	UIP	Kontrolle	0.130698322	1
NM_004443.3:3485	NM_004443	2049	ENSG00000182580	EPHB3	Kontrolle	AFE	0.130770574	1
NM_001235.2:880	NM_001235	871	ENSG00000149257	SERPINH1	NSIP	AFE	0.131265512	1
NM_001915.3:1065	NM_001915	1534	ENSG00000008283	CYB561	NSIP	AFE	0.131330141	1
NM_006017.1:925	NM_006017	8842	ENSG00000007062	PROM1	NSIP	AFE	0.131371837	1
NM_000214.2:915	NM_000214	182	ENSG00000101384	JAG1	UIP	AFE	0.131420564	1
NM_198477.1:440	NM_198477	284340	ENSG00000189377	CXCL17	NSIP	AFE	0.131728985	1
NM_001277764.1:530	NM_001277764	10519	ENSG00000185043	CIB1	NSIP	AFE	0.131906288	1
NM_002207.2:2380	NM_002207	3680	ENSG00000144668	ITGA9	NSIP	Kontrolle	0.131973392	1
NM_005529.5:2715	NM_005529	3339	ENSG00000142798	HSPG2	UIP	Kontrolle	0.132685626	1
NM_006350.2:575	NM_006350	10468	ENSG00000134363	FST	Kontrolle	AFE	0.132868416	1
NM_000212.2:4485	NM_000212	3690	ENSG00000259207	ITGB3	UIP	Kontrolle	0.132898052	1
NM_001165928.2:965	NM_001165928	1605	ENSG00000173402	DAG1	Kontrolle	AFE	0.133048263	1
NM_001915.3:1065	NM_001915	1534	ENSG00000008283	CYB561	NSIP	Kontrolle	0.133173024	1
NM_007037.4:2228	NM_007037	11095	ENSG00000134917	ADAMTS8	Kontrolle	AFE	0.133278231	1
NM_003255.4:1555	NM_003255	7077	ENSG00000035862	TIMP2	NSIP	AFE	0.133347687	1
NM_005486.2:685	NM_005486	10040	ENSG00000141198	TOM1L1	UIP	Kontrolle	0.133481444	1



NM_014909.4:552	NM_014909	22846	ENSG00000071246	VASH1	UIP	AFE	0.133676303	1
NM_019055.5:3080	NM_019055	54538	ENSG00000154133	ROBO4	UIP	NSIP	0.133707053	1
NM_153292.1:546	NM_153292	4843	ENSG00000007171	NOS2	UIP	AFE	0.134005376	1
NM_005343.2:396	NM_005343	3265	ENSG00000174775	HRAS	UIP	AFE	0.134030972	1
NM_006786.3:354	NM_006786	10911	ENSG00000049247	UTS2	UIP	AFE	0.134568287	1
NM_024545.3:3090	NM_024545	79595	ENSG00000136715	SAP130	UIP	Kontrolle	0.134629295	1
NM_002020.1:955	NM_002020	2324	ENSG00000037280	FLT4	UIP	Kontrolle	0.134651027	1
NM_004469.2:580	NM_004469	2277	ENSG00000165197	FIGF	Kontrolle	AFE	0.134725893	1
NM_001005862.1:1255	NM_001005862	2064	ENSG00000141736	ERBB2	NSIP	Kontrolle	0.134802073	1
NM_005559.2:5230	NM_005559	284217	ENSG00000101680	LAMA1	NSIP	AFE	0.134884673	1
NM_005560.3:787	NM_005560	3911	ENSG00000130702	LAMA5	UIP	Kontrolle	0.134963862	1
NM_134261.2:1715	NM_134261	6095	ENSG00000069667	RORA	UIP	NSIP	0.135083875	1
NM_003177.3:1685	NM_003177	6850	ENSG00000165025	SYK	NSIP	AFE	0.135153575	1
NM_004184.3:1851	NM_004184	7453	ENSG00000140105	WARS	UIP	Kontrolle	0.135192631	1
NM_173198.1:2590	NM_173198	8013	ENSG00000119508	NR4A3	NSIP	Kontrolle	0.135373595	1
NM_002228.3:140	NM_002228	3725	ENSG00000177606	JUN	UIP	AFE	0.135444415	1
NM_182471.1:2105	NM_182471	5315	ENSG00000067225	PKM	UIP	Kontrolle	0.135744198	1
NM_005230.2:905	NM_005230	2004	ENSG00000111145	ELK3	NSIP	Kontrolle	0.135832134	1
NM_002276.4:96	NM_002276	3880	ENSG00000171345	KRT19	UIP	Kontrolle	0.135925303	1
NM_015850.2:1335	NM_015850	2260	ENSG00000077782	FGFR1	UIP	AFE	0.136097252	1
NM_001079846.1:4818	NM_001079846	1387	ENSG00000005339	CREBBP	UIP	NSIP	0.136187237	1
NM_001005376.1:440	NM_001005376	5329	ENSG00000011422	PLAUR	Kontrolle	AFE	0.136231565	1
NM_002986.2:378	NM_002986	6356	ENSG00000172156	CCL11	UIP	NSIP	0.136874761	1
NM_004985.3:327	NM_004985	3845	ENSG00000133703	KRAS	NSIP	AFE	0.13702208	1
NM_001040092.2:1980	NM_001040092	5168	ENSG00000136960	ENPP2	NSIP	AFE	0.137030785	1
NM_001114309.1:460	NM_001114309	1999	ENSG00000163435	ELF3	UIP	Kontrolle	0.13706127	1
NM_001040092.2:1980	NM_001040092	5168	ENSG00000136960	ENPP2	Kontrolle	AFE	0.137064882	1
NM_057179.2:482	NM_057179	117581	ENSG000000233608	TWIST2	UIP	AFE	0.13771783	1
NM_001017970.2:2420	NM_001017970	161291	ENSG00000182107	TMEM30B	Kontrolle	AFE	0.138054075	1
NM_181825.2:442	NM_181825	4771	ENSG00000186575	NF2	NSIP	Kontrolle	0.138231382	1
NM_000041.2:96	NM_000041	348	ENSG00000130203	APOE	Kontrolle	AFE	0.138332911	1
NM_007008.2:275	NM_007008	57142	ENSG00000115310	RTN4	NSIP	AFE	0.138366485	1
NM_032642.2:1745	NM_032642	81029	ENSG00000111186	WNT5B	UIP	AFE	0.138464448	1
NM_002214.2:2609	NM_002214	3696	ENSG00000105855	ITGB8	Kontrolle	AFE	0.138716489	1
NM_004982.2:880	NM_004982	3764	ENSG00000121361	KCNJ8	Kontrolle	AFE	0.138728223	1
NM_000029.3:1711	NM_000029	183	ENSG00000135744	AGT	UIP	AFE	0.138791775	1
NM_002052.3:2140	NM_002052	2626	ENSG00000136574	GATA4	Kontrolle	AFE	0.138852094	1
NM_018046.3:35	NM_018046	55109	ENSG00000164252	AGGF1	NSIP	Kontrolle	0.138917634	1
NM_022648.4:6080	NM_022648	7145	ENSG00000079308	TNS1	UIP	Kontrolle	0.139115027	1
NM_005611.3:1310	NM_005611	5934	ENSG00000103479	RBL2	NSIP	AFE	0.139151005	1
NM_001920.3:420	NM_001920	1634	ENSG000000011465	DCN	UIP	AFE	0.139261236	1
NM_018964.3:810	NM_018964	54020	ENSG00000160190	SLC37A1	UIP	AFE	0.139447652	1
NM_005026.3:2978	NM_005026	5293	ENSG00000171608	PIK3CD	UIP	AFE	0.139777978	1
NM_001018017.1:725	NM_001018017	4582	ENSG00000185499	MUC1	UIP	Kontrolle	0.140001378	1
NM_000619.2:970	NM_000619	3458	ENSG00000111537	IFNG	UIP	Kontrolle	0.140172873	1
NM_000577.3:480	NM_000577	3557	ENSG00000136689	IL1RN	UIP	Kontrolle	0.140386442	1
NM_003095.2:225	NM_003095	6636	ENSG00000139343	SNRPF	NSIP	Kontrolle	0.140394328	1
NM_004460.2:1490	NM_004460	2191	ENSG00000078098	FAP	UIP	Kontrolle	0.140465826	1
NM_053276.3:604	NM_053276	5212	ENSG00000205221	VIT	Kontrolle	AFE	0.140564208	1
NM_015568.2:2860	NM_015568	26051	ENSG00000101445	PPP1R16B	NSIP	Kontrolle	0.140653803	1
NM_000138.3:6420	NM_000138	2200	ENSG00000166147	FBN1	UIP	AFE	0.141202197	1
NM_033395.1:3775	NM_033395	85459	ENSG00000166004	CEP295	Kontrolle	AFE	0.14122833	1
NM_002136.3:560	NM_002136	64092	ENSG00000155307	SAMSN1	Kontrolle	AFE	0.141389148	1
NM_001912.4:1072	NM_001912	1514	ENSG00000135047	CTSL	UIP	Kontrolle	0.141552766	1
NM_002317.4:1575	NM_002317	4015	ENSG00000113083	LOX	NSIP	AFE	0.141561859	1
NM_001127217.2:1152	NM_001127217	4093	ENSG00000120693	SMAD9	Kontrolle	AFE	0.141635592	1
NM_006270.3:330	NM_006270	6237	ENSG00000126458	RRAS	UIP	NSIP	0.141712425	1
NM_001018017.1:725	NM_001018017	4582	ENSG00000185499	MUC1	NSIP	AFE	0.141729937	1
NM_016155.4:804	NM_016155	4326	ENSG00000198598	MMP17	UIP	AFE	0.141910695	1
NM_001278506.1:304	NM_001278506	4682	ENSG00000103274	NUBP1	Kontrolle	AFE	0.141982276	1
NM_005230.2:905	NM_005230	2004	ENSG00000111145	ELK3	UIP	Kontrolle	0.142213985	1
NM_002426.3:769	NM_002426	4321	ENSG00000262406	MMP12	NSIP	Kontrolle	0.142398622	1
NM_000906.2:3490	NM_000906	4881	ENSG00000169418	NPR1	Kontrolle	AFE	0.142661381	1
NM_021073.2:1570	NM_021073	653	ENSG00000112175	BMP5	NSIP	Kontrolle	0.142979678	1
NM_012243.1:605	NM_012243	23443	ENSG00000117620	SLC35A3	UIP	AFE	0.143230137	1
NM_001400.4:802	NM_001400	1901	ENSG00000170989	S1PR1	UIP	Kontrolle	0.143298121	1
NM_005623.2:689	NM_005623	6355	ENSG00000108700	CCL8	NSIP	Kontrolle	0.143312543	1
NM_002427.2:951	NM_002427	4322	ENSG00000137745	MMP13	Kontrolle	AFE	0.143444483	1
NM_004360.2:1230	NM_004360	999	ENSG00000039068	CDH1	UIP	Kontrolle	0.143577483	1
NM_017564.9:3000	NM_017564	55576	ENSG00000136011	STAB2	NSIP	Kontrolle	0.143588213	1
NM_012238.4:1595	NM_012238	23411	ENSG00000096717	SIRT1	NSIP	Kontrolle	0.143639312	1
NM_005429.2:565	NM_005429	7424	ENSG00000150630	VEGFC	UIP	NSIP	0.143658779	1

NM_001098210.1:1815	NM_001098210	1499	ENSG00000168036	CTNNB1	NSIP	AFE	0.143937697	1
NM_001040113.1:920	NM_001040113	4629	ENSG00000133392	MYH11	UIP	Kontrolle	0.144000348	1
NM_003561.1:779	NM_003561	8399	ENSG00000069764	PLA2G10	UIP	Kontrolle	0.144151259	1
NM_201282.1:360	NM_201282	1956	ENSG00000146648	EGFR	UIP	AFE	0.144344447	1
NM_014363.4:1475	NM_014363	26278	ENSG00000151835	SACS	NSIP	Kontrolle	0.144612368	1
NM_001937.3:1510	NM_001937	1805	ENSG00000143196	DPT	Kontrolle	AFE	0.145055498	1
NM_000682.4:2885	NM_000682	151	ENSG00000274286	ADRA2B	UIP	Kontrolle	0.145099642	1
NM_004635.3:415	NM_004635	7867	ENSG00000114738	MAPKAPK3	UIP	AFE	0.145666936	1
NM_003177.3:1685	NM_003177	6850	ENSG00000165025	SYK	UIP	AFE	0.145875684	1
NM_177438.2:5060	NM_177438	23405	ENSG00000100697	DICER1	UIP	Kontrolle	0.146108707	1
NM_004342.6:3862	NM_004342	800	ENSG00000122786	CALD1	NSIP	AFE	0.146162636	1
NM_017957.2:2532	NM_017957	55040	ENSG00000049283	EPN3	UIP	Kontrolle	0.146253346	1
NM_003012.3:3320	NM_003012	6422	ENSG00000104332	SFRP1	NSIP	AFE	0.146294049	1
NM_001114309.1:460	NM_001114309	1999	ENSG00000163435	ELF3	Kontrolle	AFE	0.146627677	1
NM_020672.1:460	NM_020672	57402	ENSG00000189334	S100A14	UIP	AFE	0.146753295	1
NM_002755.2:970	NM_002755	5604	ENSG00000169032	MAP2K1	NSIP	AFE	0.146834371	1
NM_033001.2:920	NM_033001	2969	ENSG00000263001	GTF2I	Kontrolle	AFE	0.147186568	1
NM_007111.4:1826	NM_007111	7027	ENSG00000198176	TFDP1	UIP	Kontrolle	0.147190077	1
NM_012238.4:1595	NM_012238	23411	ENSG00000096717	SIRT1	UIP	AFE	0.147680389	1
NM_002253.2:1420	NM_002253	3791	ENSG00000128052	KDR	UIP	NSIP	0.147747696	1
NM_000576.2:840	NM_000576	3553	ENSG00000125538	IL1B	UIP	Kontrolle	0.147859774	1
NM_001270837.1:1042	NM_001270837	1397	ENSG00000182809	CRIP2	UIP	AFE	0.147972994	1
NM_005761.2:3705	NM_005761	10154	ENSG00000136040	PLXNC1	Kontrolle	AFE	0.148020741	1
NM_001017970.2:2420	NM_001017970	161291	ENSG00000182107	TMEM30B	NSIP	Kontrolle	0.148108857	1
NM_001159597.1:216	NM_001159597	26751	ENSG00000035115	SH3YL1	NSIP	Kontrolle	0.148380708	1
NM_001165413.1:1670	NM_001165413	5054	ENSG00000106366	SERPINE1	UIP	Kontrolle	0.148421486	1
NM_005100.3:640	NM_005100	9590	ENSG00000131016	AKAP12	UIP	Kontrolle	0.148530834	1
NM_012217.2:585	NM_012217	23430	ENSG00000095917	TPSD1	UIP	Kontrolle	0.148542781	1
NM_000141.4:647	NM_000141	2263	ENSG00000066468	FGFR2	UIP	Kontrolle	0.148569587	1
NM_017637.5:1800	NM_017637	54796	ENSG00000173068	BNC2	Kontrolle	AFE	0.148657873	1
NM_003161.2:310	NM_003161	6198	ENSG00000108443	RPS6KB1	NSIP	AFE	0.148951272	1
NM_198576.2:2750	NM_198576	375790	ENSG00000188157	AGRN	NSIP	AFE	0.149082782	1
NM_002483.4:1217	NM_002483	4680	ENSG00000086548	CEACAM6	UIP	NSIP	0.14916109	1
NM_016274.4:475	NM_016274	51177	ENSG00000023902	PLEKHO1	UIP	Kontrolle	0.149281126	1
NM_005232.3:2075	NM_005232	2041	ENSG00000146904	EPHA1	UIP	AFE	0.149281886	1
NM_020770.2:1112	NM_020770	57530	ENSG00000143375	CGN	NSIP	Kontrolle	0.149414845	1
NM_003238.2:1125	NM_003238	7042	ENSG00000092969	TGFB2	UIP	NSIP	0.149444183	1
NM_003199.1:1455	NM_003199	6925	ENSG00000196628	TCF4	UIP	Kontrolle	0.149494352	1
NM_001159597.1:216	NM_001159597	26751	ENSG00000035115	SH3YL1	NSIP	AFE	0.149617638	1
NM_053032.2:710	NM_053032	4638	ENSG00000065534	MYLK	NSIP	Kontrolle	0.149710971	1
NM_000581.2:745	NM_000581	2876	ENSG00000233276	GPX1	Kontrolle	AFE	0.149764421	1
NM_002214.2:2609	NM_002214	3696	ENSG00000105855	ITGB8	UIP	AFE	0.150319057	1
NM_183404.1:1110	NM_183404	5933	ENSG00000080839	RBL1	NSIP	Kontrolle	0.150362902	1
NM_001015001.1:286	NM_001015001	548596	ENSG00000223572	CKMT1A	Kontrolle	AFE	0.150418558	1
NM_003573.2:3644	NM_003573	8425	ENSG00000090006	LTBP4	UIP	Kontrolle	0.150424764	1
NM_003638.1:1215	NM_003638	8516	ENSG00000077943	ITGA8	Kontrolle	AFE	0.150669032	1
NM_024065.4:23	NM_024065	79031	ENSG00000115539	PDCL3	UIP	Kontrolle	0.151396611	1
NM_018192.2:985	NM_018192	55214	ENSG00000090530	P3H2	NSIP	AFE	0.151496214	1
NM_002483.4:1217	NM_002483	4680	ENSG00000086548	CEACAM6	NSIP	AFE	0.152574986	1
NM_001005862.1:1255	NM_001005862	2064	ENSG00000141736	ERBB2	UIP	AFE	0.152806493	1
NM_006288.2:135	NM_006288	7070	ENSG00000154096	THY1	NSIP	AFE	0.152970898	1
NM_004444.4:1680	NM_004444	2050	ENSG00000196411	EPHB4	NSIP	AFE	0.153096577	1
NM_000214.2:915	NM_000214	182	ENSG00000101384	JAG1	UIP	Kontrolle	0.153227137	1
NM_014256.3:1625	NM_014256	10331	ENSG00000179913	B3GNT3	UIP	NSIP	0.153380544	1
NM_152696.3:2105	NM_152696	204851	ENSG00000163349	HIPK1	UIP	AFE	0.153547408	1
NM_005475.2:4285	NM_005475	10019	ENSG00000111252	SH2B3	UIP	NSIP	0.153626116	1
NM_003467.2:1335	NM_003467	7852	ENSG00000121966	CXCR4	UIP	AFE	0.153727087	1
NM_016274.4:475	NM_016274	51177	ENSG00000023902	PLEKHO1	UIP	AFE	0.15382165	1
NM_014210.3:564	NM_014210	2123	ENSG00000126860	EV12A	UIP	Kontrolle	0.154044606	1
NM_001168298.1:840	NM_001168298	3579	ENSG00000180871	CXCR2	UIP	NSIP	0.154179722	1
NM_021935.3:827	NM_021935	60675	ENSG00000163421	PROK2	UIP	NSIP	0.154306874	1
NM_001429.2:715	NM_001429	2033	ENSG00000100393	EP300	NSIP	Kontrolle	0.154657763	1
NM_001847.2:1070	NM_001847	1288	ENSG00000197565	COL4A6	Kontrolle	AFE	0.154729326	1
NM_000300.2:715	NM_000300	5320	ENSG00000188257	PLA2G2A	NSIP	Kontrolle	0.154827624	1
NM_198098.1:1230	NM_198098	358	ENSG00000240583	AQP1	UIP	Kontrolle	0.154833799	1
NM_002345.3:1285	NM_002345	4060	ENSG00000139329	LUM	NSIP	AFE	0.154946576	1
NM_003255.4:1555	NM_003255	7077	ENSG00000035862	TIMP2	UIP	AFE	0.1550025	1
NM_001273.2:2680	NM_001273	1108	ENSG00000111642	CHD4	Kontrolle	AFE	0.155018304	1
NM_003467.2:1335	NM_003467	7852	ENSG00000121966	CXCR4	NSIP	AFE	0.155150348	1
NM_000639.1:625	NM_000639	356	ENSG00000117560	FASLG	UIP	NSIP	0.155520351	1
NM_002019.4:530	NM_002019	2321	ENSG00000102755	FLT1	Kontrolle	AFE	0.155622102	1
NM_000227.3:4260	NM_000227	3909	ENSG00000053747	LAMA3	NSIP	AFE	0.156495992	1

NM_016242.3:160	NM_016242	51705	ENSG00000164035	EMCN	NSIP	AFE	0.156522134	1
NM_000601.4:550	NM_000601	3082	ENSG00000019991	HGF	NSIP	Kontrolle	0.156560298	1
NM_021101.3:410	NM_021101	9076	ENSG00000163347	CLDN1	UIP	NSIP	0.156605815	1
NM_000906.2:3490	NM_000906	4881	ENSG00000169418	NPR1	NSIP	AFE	0.157251715	1
NM_001109.4:762	NM_001109	101	ENSG00000151651	ADAM8	UIP	AFE	0.157293124	1
NM_004360.2:1230	NM_004360	999	ENSG00000039068	CDH1	NSIP	AFE	0.157320536	1
NM_001080512.1:2155	NM_001080512	80114	ENSG00000122870	BICC1	UIP	NSIP	0.157465602	1
NM_004322.3:963	NM_004322	572	ENSG00000002330	BAD	NSIP	Kontrolle	0.157742158	1
NM_001723.4:1870	NM_001723	667	ENSG00000151914	DST	NSIP	AFE	0.157750157	1
NM_184041.2:1455	NM_184041	226	ENSG00000149925	ALDOA	UIP	AFE	0.157785448	1
NM_018326.2:315	NM_018326	55303	ENSG00000133574	GIMAP4	UIP	Kontrolle	0.15828364	1
NM_001267.2:810	NM_001267	1101	ENSG00000136457	CHAD	Kontrolle	AFE	0.158457772	1
NM_001065.2:515	NM_001065	7132	ENSG00000067182	TNFRSF1A	NSIP	AFE	0.158558515	1
NM_006350.2:575	NM_006350	10468	ENSG00000134363	FST	UIP	Kontrolle	0.158713494	1
NM_012232.5:86	NM_012232	284119	ENSG00000177469	PTRF	NSIP	AFE	0.159122306	1
NM_001897.4:7642	NM_001897	1464	ENSG00000173546	CSPG4	Kontrolle	AFE	0.159426372	1
NM_005465.4:287	NM_005465	10000	ENSG00000117020	AKT3	NSIP	AFE	0.1596959	1
NM_000963.1:495	NM_000963	5743	ENSG00000073756	PTGS2	NSIP	Kontrolle	0.159875792	1
NM_052846.1:3113	NM_052846	90187	ENSG00000183798	EMILIN3	NSIP	AFE	0.159900334	1
NR_104213.1:475	NR_104213	51129	ENSG00000167772	ANGPTL4	NSIP	AFE	0.160288117	1
NM_018046.3:35	NM_018046	55109	ENSG00000164252	AGGF1	UIP	AFE	0.160491473	1
NM_016274.4:475	NM_016274	51177	ENSG00000023902	PLEKHO1	NSIP	AFE	0.160508337	1
NM_000454.4:35	NM_000454	6647	ENSG00000142168	SOD1	NSIP	Kontrolle	0.160617921	1
NM_001202.3:395	NM_001202	652	ENSG00000125378	BMP4	Kontrolle	AFE	0.160832568	1
NM_022648.4:6080	NM_022648	7145	ENSG00000079308	TNS1	NSIP	Kontrolle	0.160876192	1
NM_018728.2:2400	NM_018728	55930	ENSG00000128833	MYO5C	UIP	NSIP	0.160976671	1
NM_000906.2:3490	NM_000906	4881	ENSG00000169418	NPR1	UIP	NSIP	0.161128582	1
NM_002253.2:1420	NM_002253	3791	ENSG00000128052	KDR	NSIP	AFE	0.161289694	1
NM_001005376.1:440	NM_001005376	5329	ENSG00000011422	PLAUR	NSIP	Kontrolle	0.161332014	1
NM_005560.3:787	NM_005560	3911	ENSG00000130702	LAMA5	NSIP	AFE	0.161387862	1
NM_003829.4:6092	NM_003829	8777	ENSG00000107186	MPDZ	UIP	NSIP	0.161424159	1
NM_001797.2:1835	NM_001797	1009	ENSG00000140937	CDH11	NSIP	AFE	0.161895911	1
NM_001164831.1:875	NM_001164831	53826	ENSG00000137726	FXYP6	UIP	AFE	0.161935916	1
NM_004836.5:938	NM_004836	9451	ENSG00000172071	EIF2AK3	Kontrolle	AFE	0.161980006	1
NM_005486.2:685	NM_005486	10040	ENSG00000141198	TOM1L1	UIP	AFE	0.162024821	1
NM_017729.3:1914	NM_017729	54869	ENSG00000131037	EPS8L1	NSIP	Kontrolle	0.162049494	1
NM_006665.3:1625	NM_006665	10855	ENSG00000173083	HPSE	NSIP	Kontrolle	0.162096535	1
NM_012395.2:3645	NM_012395	5218	ENSG00000058091	CDK14	UIP	AFE	0.163346359	1
NM_004836.5:938	NM_004836	9451	ENSG00000172071	EIF2AK3	UIP	AFE	0.163371821	1
NM_019102.2:895	NM_019102	3202	ENSG00000106004	HOXA5	NSIP	Kontrolle	0.163478712	1
NM_003118.2:910	NM_003118	6678	ENSG00000113140	SPARC	NSIP	AFE	0.163583487	1
NM_002425.1:88	NM_002425	4319	ENSG00000166670	MMP10	UIP	AFE	0.164286338	1
NM_005251.2:1389	NM_005251	2303	ENSG00000176692	FOXC2	UIP	Kontrolle	0.164332996	1
NM_014333.3:2840	NM_014333	23705	ENSG00000182985	CADM1	UIP	AFE	0.164479713	1
NM_001393.2:1700	NM_001393	1842	ENSG00000106823	ECM2	UIP	NSIP	0.164665451	1
NM_001911.2:160	NM_001911	1511	ENSG00000100448	CTSG	NSIP	Kontrolle	0.164712552	1
NM_014248.2:162	NM_014248	9978	ENSG00000100387	RBX1	UIP	NSIP	0.164737627	1
NM_007361.3:1995	NM_007361	22795	ENSG00000087303	NID2	UIP	Kontrolle	0.164764478	1
NM_001546.2:588	NM_001546	3400	ENSG00000172201	ID4	UIP	NSIP	0.165013898	1
NM_002725.3:5250	NM_002725	5549	ENSG00000188783	PRELP	UIP	Kontrolle	0.165219629	1
NM_022739.3:2605	NM_022739	64750	ENSG00000108854	SMURF2	NSIP	Kontrolle	0.165374379	1
NM_005424.2:2610	NM_005424	7075	ENSG00000066056	TIE1	UIP	AFE	0.165687701	1
NM_032642.2:1745	NM_032642	81029	ENSG00000111186	WNT5B	UIP	Kontrolle	0.166031018	1
NM_007108.2:800	NM_007108	6923	ENSG00000103363	TCEB2	Kontrolle	AFE	0.166234135	1
NM_005381.2:1492	NM_005381	4691	ENSG00000115053	NCL	NSIP	AFE	0.166298248	1
NM_000963.1:495	NM_000963	5743	ENSG00000073756	PTGS2	UIP	Kontrolle	0.166513384	1
NM_144503.1:3650	NM_144503	50848	ENSG00000158769	F11R	NSIP	Kontrolle	0.166636277	1
NM_014265.4:920	NM_014265	10863	ENSG00000042980	ADAM28	NSIP	AFE	0.166766955	1
NM_001773.2:2050	NM_001773	947	ENSG00000174059	CD34	UIP	Kontrolle	0.166871213	1
NM_001387.2:4790	NM_001387	1809	ENSG00000113657	DPYSL3	NSIP	Kontrolle	0.166914885	1
NM_053046.3:1538	NM_053046	112398	ENSG00000269858	EGLN2	NSIP	AFE	0.167261749	1
NM_003561.1:779	NM_003561	8399	ENSG00000069764	PLA2G10	UIP	NSIP	0.1679467	1
NM_004994.2:1530	NM_004994	4318	ENSG00000100985	MMP9	UIP	Kontrolle	0.168084955	1
NM_000210.1:3065	NM_000210	3655	ENSG00000091409	ITGA6	Kontrolle	AFE	0.168100112	1
NM_025079.2:2140	NM_025079	80149	ENSG00000163874	ZC3H12A	NSIP	Kontrolle	0.168585082	1
NM_032364.5:1166	NM_032364	85406	ENSG00000135392	DNAJC14	UIP	Kontrolle	0.168799088	1
NM_031476.3:2575	NM_031476	83716	ENSG00000103196	CRISPLD2	NSIP	AFE	0.169061896	1
NM_016155.4:804	NM_016155	4326	ENSG00000198598	MMP17	UIP	Kontrolle	0.169567606	1
NM_001165414.1:1690	NM_001165414	3939	ENSG00000134333	LDHA	NSIP	Kontrolle	0.169579999	1
NM_012340.3:1815	NM_012340	4773	ENSG00000101096	NFATC2	NSIP	AFE	0.169971018	1
NM_181349.1:5162	NM_181349	57154	ENSG00000198742	SMURF1	NSIP	Kontrolle	0.169990661	1
NM_000020.1:1710	NM_000020	94	ENSG00000139567	ACVRL1	UIP	AFE	0.170091117	1

NM_012232.5:86	NM_012232	284119	ENSG00000177469	PTRF	UIP	Kontrolle	0.170132013	1
NM_001142633.1:3335	NM_001142633	23533	ENSG00000141506	PIK3R5	UIP	NSIP	0.170289456	1
NM_005558.3:1860	NM_005558	3898	ENSG00000159166	LAD1	UIP	AFE	0.17051759	1
NM_000177.4:1075	NM_000177	2934	ENSG00000148180	GSN	UIP	Kontrolle	0.171567454	1
NM_001552.2:1520	NM_001552	3487	ENSG00000141753	IGFBP4	NSIP	Kontrolle	0.171702889	1
NM_002705.4:2435	NM_002705	5493	ENSG00000118898	PPL	NSIP	AFE	0.17188447	1
NM_001009552.1:1075	NM_001009552	5516	ENSG00000104695	PPP2CB	NSIP	Kontrolle	0.171965651	1
NM_002660.2:2290	NM_002660	5335	ENSG00000124181	PLCG1	UIP	AFE	0.172032446	1
NM_134261.2:1715	NM_134261	6095	ENSG00000069667	RORA	Kontrolle	AFE	0.172147019	1
NM_002228.3:140	NM_002228	3725	ENSG00000177606	JUN	NSIP	AFE	0.172604343	1
NM_001400.4:802	NM_001400	1901	ENSG00000170989	S1PR1	UIP	AFE	0.172772916	1
NM_000122.1:1950	NM_000122	2071	ENSG00000163161	ERCC3	NSIP	Kontrolle	0.172788339	1
NM_002310.3:2995	NM_002310	3977	ENSG00000113594	LIFR	UIP	Kontrolle	0.173384093	1
NM_004985.3:327	NM_004985	3845	ENSG00000133703	KRAS	UIP	AFE	0.173618619	1
NM_000479.3:1626	NM_000479	268	ENSG00000104899	AMH	UIP	AFE	0.173872657	1
NM_003255.4:1555	NM_003255	7077	ENSG00000035862	TIMP2	NSIP	Kontrolle	0.173948121	1
NR_036430.1:65	NR_036430			SRGN	UIP	AFE	0.174762226	1
NM_181349.1:5162	NM_181349	57154	ENSG00000198742	SMURF1	NSIP	AFE	0.174833916	1
NM_001040113.1:920	NM_001040113	4629	ENSG00000133392	MYH11	NSIP	AFE	0.175099212	1
NM_005902.3:4220	NM_005902	4088	ENSG00000166949	SMAD3	UIP	AFE	0.175178109	1
NM_000397.3:2686	NM_000397	1536	ENSG00000165168	CYBB	NSIP	AFE	0.175388064	1
NM_000575.3:1085	NM_000575	3552	ENSG00000115008	IL1A	NSIP	AFE	0.175449533	1
NR_003573.1:1013	NR_003573	304		ANXA2P2	UIP	Kontrolle	0.175580892	1
NM_178190.2:334	NM_178190	93974	ENSG00000130770	ATPIF1	UIP	Kontrolle	0.175623962	1
NM_003808.3:810	NM_003808	8741	ENSG00000161955	TNFSF13	UIP	AFE	0.175736641	1
NM_012340.3:1815	NM_012340	4773	ENSG00000101096	NFATC2	UIP	AFE	0.175880062	1
NM_020387.2:245	NM_020387	57111	ENSG00000132698	RAB25	UIP	AFE	0.176049363	1
NM_001626.2:1450	NM_001626	208	ENSG00000105221	AKT2	UIP	NSIP	0.176562675	1
NM_003189.2:4635	NM_003189	6886	ENSG00000162367	TAL1	UIP	Kontrolle	0.176634485	1
NM_002658.2:793	NM_002658	5328	ENSG00000122861	PLAU	NSIP	Kontrolle	0.177214422	1
NM_001129.3:3170	NM_001129	165	ENSG00000106624	AEBP1	UIP	Kontrolle	0.177458312	1
NM_002621.2:380	NM_002621	5199	ENSG00000126759	CFP	UIP	AFE	0.177544067	1
NM_005498.4:78	NM_005498	10053	ENSG00000129354	AP1M2	NSIP	Kontrolle	0.177937097	1
NM_000889.1:1278	NM_000889	3695	ENSG00000139626	ITGB7	NSIP	Kontrolle	0.178131507	1
NM_001127198.1:1266	NM_001127198	11322	ENSG00000141524	TMC6	Kontrolle	AFE	0.178419154	1
NM_144962.2:190	NM_144962	157310	ENSG00000134020	PEBP4	NSIP	AFE	0.178573632	1
NM_003248.3:985	NM_003248	7060	ENSG00000113296	THBS4	NSIP	AFE	0.178733455	1
NM_024915.3:3690	NM_024915	79977	ENSG00000083307	GRHL2	NSIP	AFE	0.178947906	1
NM_016232.4:700	NM_016232	9173	ENSG00000115602	IL1RL1	NSIP	AFE	0.179051381	1
NM_005650.1:925	NM_005650	6942	ENSG00000100207	TCF20	UIP	AFE	0.179280975	1
NM_003380.2:694	NM_003380	7431	ENSG00000026025	VIM	UIP	AFE	0.179536504	1
NM_198477.1:440	NM_198477	284340	ENSG00000189377	CXCL17	UIP	NSIP	0.180194366	1
NM_203339.2:1376	NM_203339			CLU	NSIP	Kontrolle	0.180266157	1
NM_004912.3:2648	NM_004912	889	ENSG00000001631	KRIT1	NSIP	AFE	0.181310411	1
NM_001792.3:941	NM_001792	1000	ENSG00000170558	CDH2	NSIP	AFE	0.181368493	1
NM_000454.4:35	NM_000454	6647	ENSG00000142168	SOD1	NSIP	AFE	0.181440799	1
NM_001220488.1:210	NM_001220488	1012	ENSG00000140945	CDH13	Kontrolle	AFE	0.181513903	1
NM_207195.1:1355	NM_207195	8751	ENSG00000143537	ADAM15	UIP	AFE	0.181573272	1
NM_012116.3:652	NM_012116	23624	ENSG00000142273	CBLC	NSIP	Kontrolle	0.181642889	1
NM_024320.2:1005	NM_024320	79170	ENSG00000167183	PRR15L	Kontrolle	AFE	0.181843756	1
NM_001098210.1:1815	NM_001098210	1499	ENSG00000168036	CTNNB1	UIP	Kontrolle	0.181940475	1
NM_004244.4:1630	NM_004244	9332	ENSG00000177575	CD163	UIP	NSIP	0.181964336	1
NM_001278506.1:304	NM_001278506	4682	ENSG00000103274	NUBP1	NSIP	AFE	0.181982702	1
NM_003883.2:1455	NM_003883	8841	ENSG00000171720	HDAC3	Kontrolle	AFE	0.182316943	1
NM_000089.3:2635	NM_000089	1278	ENSG00000164692	COL1A2	NSIP	AFE	0.183059528	1
NM_007085.4:1610	NM_007085	11167	ENSG00000163430	FSTL1	NSIP	Kontrolle	0.183145486	1
NM_031219.2:616	NM_031219	81932	ENSG00000119431	HDHD3	NSIP	Kontrolle	0.18338072	1
NM_000442.3:1365	NM_000442	5175	ENSG00000261371	PECAM1	UIP	AFE	0.183462764	1
NR_003573.1:1013	NR_003573	304		ANXA2P2	NSIP	AFE	0.183547729	1
NM_001530.2:1985	NM_001530	3091	ENSG00000100644	HIF1A	UIP	NSIP	0.183768385	1
NM_018488.2:1560	NM_018488	9496	ENSG00000121075	TBX4	NSIP	AFE	0.18394817	1
NM_000546.2:1330	NM_000546	7157	ENSG00000141510	TP53	NSIP	Kontrolle	0.184187698	1
NM_001123041.2:743	NM_001123041	729230	ENSG00000121807	CCR2	UIP	AFE	0.18459124	1
NM_001387.2:4790	NM_001387	1809	ENSG00000113657	DPYSL3	UIP	AFE	0.185014447	1
NM_002010.2:1565	NM_002010	2254	ENSG00000102678	FGF9	Kontrolle	AFE	0.185099546	1
NM_004635.3:415	NM_004635	7867	ENSG00000114738	MAPKAPK3	Kontrolle	AFE	0.185360972	1
NM_001657.2:547	NM_001657	374	ENSG00000109321	AREG	NSIP	AFE	0.185734575	1
NM_005611.3:1310	NM_005611	5934	ENSG00000103479	RBL2	NSIP	Kontrolle	0.18591743	1
NM_005985.2:63	NM_005985	6615	ENSG00000124216	SNAI1	UIP	NSIP	0.186018462	1
NR_024168.1:2575	NR_024168			TLR4	NSIP	AFE	0.186304395	1
NM_020405.4:900	NM_020405	57125	ENSG00000161381	PLXDC1	UIP	AFE	0.186507844	1
NM_001190848.1:795	NM_001190848	4850	ENSG00000080802	CNOT4	UIP	Kontrolle	0.186570428	1

NM_001160103.1:2690	NM_001160103	79882	ENSG00000100722	ZC3H14	NSIP	AFE	0.18657263	1
NM_002426.3:769	NM_002426	4321	ENSG00000262406	MMP12	UIP	Kontrolle	0.186650026	1
NM_001430.3:4246	NM_001430	2034	ENSG00000116016	EPAS1	UIP	AFE	0.186666646	1
NM_002202.2:1375	NM_002202	3670	ENSG00000016082	ISL1	NSIP	Kontrolle	0.186866133	1
NM_002852.3:1152	NM_002852	5806	ENSG00000163661	PTX3	NSIP	Kontrolle	0.187062216	1
NM_004787.1:2430	NM_004787	9353	ENSG00000145147	SLIT2	NSIP	Kontrolle	0.187277833	1
NM_133468.4:476	NM_133468	168667	ENSG00000164619	BMPER	UIP	NSIP	0.187329339	1
NM_000325.5:1381	NM_000325	5308	ENSG00000164093	PITX2	Kontrolle	AFE	0.187521333	1
NM_001034852.1:1990	NM_001034852	64093	ENSG00000198732	SMOC1	UIP	NSIP	0.187637748	1
NM_001165928.2:965	NM_001165928	1605	ENSG00000173402	DAG1	NSIP	AFE	0.187802263	1
XM_005254140.1:174	XM_005254140			CHP1	UIP	AFE	0.188056427	1
NM_001953.3:719	NM_001953	1890	ENSG00000025708	TYMP	NSIP	Kontrolle	0.188059309	1
NM_007111.4:1826	NM_007111	7027	ENSG00000198176	TFDP1	UIP	AFE	0.188329954	1
NM_181504.2:1105	NM_181504	5295	ENSG00000145675	PIK3R1	NSIP	Kontrolle	0.188552484	1
NM_001975.2:1855	NM_001975	2026	ENSG00000111674	ENO2	Kontrolle	AFE	0.188586678	1
NM_004635.3:415	NM_004635	7867	ENSG00000114738	MAPKAPK3	NSIP	Kontrolle	0.188946565	1
NM_022136.3:560	NM_022136	64092	ENSG00000155307	SAMSN1	UIP	Kontrolle	0.189034043	1
NM_000945.3:2385	NM_000945	5534	ENSG00000221823	PPP3R1	UIP	Kontrolle	0.189297035	1
NM_001105251.2:2292	NM_001105251	9765	ENSG00000039319	ZFYVE16	Kontrolle	AFE	0.189472652	1
NM_001523.2:859	NM_001523	3036	ENSG00000105509	HAS1	NSIP	AFE	0.190105471	1
NM_013258.3:714	NM_013258	29108	ENSG00000103490	PYCARD	NSIP	AFE	0.1903867	1
NM_001911.2:160	NM_001911	1511	ENSG00000100448	CTSG	NSIP	AFE	0.190842481	1
NM_015850.2:1335	NM_015850	2260	ENSG00000077782	FGFR1	NSIP	Kontrolle	0.190957006	1
NM_002593.3:1258	NM_002593	5118	ENSG00000106333	PCOLCE	NSIP	AFE	0.191029496	1
NM_030662.3:839	NM_030662	5605	ENSG00000126934	MAP2K2	UIP	AFE	0.191454405	1
NM_003238.2:1125	NM_003238	7042	ENSG00000092969	TGFB2	UIP	Kontrolle	0.191617412	1
NM_000582.2:760	NM_000582	6696	ENSG00000118785	SPP1	NSIP	Kontrolle	0.191760535	1
NM_006775.2:838	NM_006775	9444	ENSG00000112531	QKI	NSIP	Kontrolle	0.191914324	1
NM_003442.5:925	NM_003442	7702	ENSG00000166478	ZNF143	NSIP	AFE	0.191996066	1
NM_003621.2:2350	NM_003621	8495	ENSG00000166387	PPFIBP2	UIP	AFE	0.192033466	1
NM_024107.2:1485	NM_024107	79089	ENSG00000168591	TMUB2	UIP	NSIP	0.192054167	1
NM_002610.3:401	NM_002610	5163	ENSG00000152256	PDK1	NSIP	AFE	0.192562618	1
NM_031219.2:616	NM_031219	81932	ENSG00000119431	HDHD3	UIP	AFE	0.192586465	1
NM_001263.3:3052	NM_001263	1040	ENSG00000163624	CDS1	NSIP	Kontrolle	0.192604534	1
NM_152852.2:146	NM_152852	64231	ENSG00000110077	MS4A6A	Kontrolle	AFE	0.192698277	1
NM_001719.2:1092	NM_001719	655	ENSG00000101144	BMP7	Kontrolle	AFE	0.192801224	1
NM_001228.4:301	NM_001228	841	ENSG00000064012	CASP8	UIP	AFE	0.192882474	1
NM_031479.3:1450	NM_031479	83729	ENSG00000139269	INHBE	UIP	AFE	0.193040762	1
NM_001034915.2:1515	NM_001034915	54845	ENSG00000104413	ESRP1	NSIP	Kontrolle	0.193343132	1
NM_001428.2:1689	NM_001428	2023	ENSG00000074800	ENO1	Kontrolle	AFE	0.193499913	1
NM_004095.3:363	NM_004095	1978	ENSG00000187840	EIF4EBP1	NSIP	AFE	0.193500405	1
NM_004345.3:220	NM_004345	820	ENSG00000164047	CAMP	UIP	AFE	0.193570654	1
NM_001553.1:690	NM_001553	3490	ENSG00000163453	IGFBP7	UIP	Kontrolle	0.193799001	1
NM_000149.3:2342	NM_000149	2525	ENSG00000171124	FUT3	Kontrolle	AFE	0.193904897	1
NM_000062.2:305	NM_000062	710	ENSG00000149131	SERPING1	NSIP	AFE	0.194113698	1
NM_000900.2:305	NM_000900	4256	ENSG00000111341	MGP	NSIP	AFE	0.194141029	1
NM_001105251.2:2292	NM_001105251	9765	ENSG00000039319	ZFYVE16	UIP	Kontrolle	0.194177537	1
NM_001063.2:640	NM_001063	7018	ENSG00000091513	TF	UIP	AFE	0.19471172	1
NM_003299.1:160	NM_003299	7184	ENSG00000166598	HSP90B1	UIP	NSIP	0.194779023	1
NM_005795.3:1585	NM_005795	10203	ENSG00000064989	CALCRL	NSIP	Kontrolle	0.195851875	1
NM_001005915.1:420	NM_001005915	2065	ENSG00000065361	ERBB3	UIP	AFE	0.195978606	1
NM_005562.2:2819	NM_005562	3918	ENSG00000058085	LAMC2	UIP	AFE	0.196600465	1
NM_003161.2:310	NM_003161	6198	ENSG00000108443	RPS6KB1	NSIP	Kontrolle	0.196668581	1
NM_139276.2:4535	NM_139276	6774	ENSG00000168610	STAT3	UIP	NSIP	0.196676924	1
NM_001276.2:475	NM_001276	1116	ENSG00000133048	CHI3L1	UIP	Kontrolle	0.19706736	1
NM_006408.3:580	NM_006408	10551	ENSG00000106541	AGR2	UIP	NSIP	0.197194135	1
NM_014428.1:1925	NM_014428	27134	ENSG00000105289	TJP3	NSIP	AFE	0.19720479	1
NM_002986.2:378	NM_002986	6356	ENSG00000172156	CCL11	Kontrolle	AFE	0.197787893	1
NM_006682.2:250	NM_006682	10875	ENSG00000127951	FGL2	Kontrolle	AFE	0.197817076	1
NM_004830.2:640	NM_004830	9439	ENSG00000112282	MED23	NSIP	AFE	0.198036572	1
NM_000266.2:505	NM_000266	4693	ENSG00000124479	NDP	UIP	AFE	0.198270826	1
NM_002166.4:505	NM_002166	3398	ENSG00000115738	ID2	NSIP	AFE	0.198348997	1
NM_014586.1:1280	NM_014586	30811	ENSG00000142149	HUNK	NSIP	Kontrolle	0.198600223	1
NM_001175.4:833	NM_001175	397	ENSG00000111348	ARHGDI1B	UIP	Kontrolle	0.199159276	1
NM_015013.3:2395	NM_015013	23028	ENSG00000004487	KDM1A	NSIP	Kontrolle	0.199407036	1
NM_001228.4:301	NM_001228	841	ENSG00000064012	CASP8	UIP	NSIP	0.199629121	1
NM_020126.3:2443	NM_020126	56848	ENSG00000063176	SPHK2	UIP	Kontrolle	0.199648229	1
NM_015962.4:1022	NM_015962	51077	ENSG00000119616	FCF1	UIP	AFE	0.199907894	1
NM_002133.2:781	NM_002133	3162	ENSG00000100292	HMOX1	NSIP	AFE	0.199915627	1
NM_000582.2:760	NM_000582	6696	ENSG00000118785	SPP1	NSIP	AFE	0.20006078	1
NM_005417.3:1410	NM_005417	6714	ENSG00000197122	SRC	UIP	NSIP	0.200213948	1
NM_000507.3:590	NM_000507	2203	ENSG00000165140	FBP1	NSIP	AFE	0.201251478	1

NM_005127.2:980	NM_005127	9976	ENSG00000110852	CLEC2B	Kontrolle	AFE	0.201266965	1
NM_005406.1:2660	NM_005406	6093	ENSG00000067900	ROCK1	UIP	Kontrolle	0.201360247	1
XM_006711928.1:724	XM_006711928			EMILIN1	UIP	Kontrolle	0.201860377	1
NM_005558.3:1860	NM_005558	3898	ENSG00000159166	LAD1	UIP	Kontrolle	0.203096625	1
NM_006869.2:570	NM_006869	11033	ENSG00000105963	ADAP1	UIP	AFE	0.203292588	1
NM_016232.4:700	NM_016232	9173	ENSG00000115602	IL1RL1	UIP	NSIP	0.203860331	1
NM_001271814.1:90	NM_001271814	26279	ENSG00000117215	PLA2G2D	UIP	NSIP	0.203925247	1
NM_004095.3:363	NM_004095	1978	ENSG00000187840	EIF4EBP1	NSIP	Kontrolle	0.203948957	1
NM_005562.2:2819	NM_005562	3918	ENSG00000058085	LAMC2	UIP	Kontrolle	0.204763199	1
NM_000600.1:220	NM_000600	3569	ENSG00000136244	IL6	UIP	NSIP	0.205073895	1
NM_005490.2:412	NM_005490	10045	ENSG00000125731	SH2D3A	Kontrolle	AFE	0.205216165	1
NM_002228.3:140	NM_002228	3725	ENSG00000177606	JUN	Kontrolle	AFE	0.205232479	1
NM_000104.3:1715	NM_000104	1545	ENSG00000138061	CYP1B1	NSIP	Kontrolle	0.205259542	1
NM_003621.2:2350	NM_003621	8495	ENSG00000166387	PPFIBP2	Kontrolle	AFE	0.205369585	1
NM_014159.6:1386	NM_014159	29072	ENSG00000181555	SETD2	Kontrolle	AFE	0.206229143	1
NM_000304.2:1644	NM_000304	5376	ENSG00000109099	PMP22	UIP	Kontrolle	0.206337881	1
NM_006690.3:1280	NM_006690	10893	ENSG00000125966	MMP24	NSIP	Kontrolle	0.206379594	1
NM_005474.4:3160	NM_005474	10014	ENSG00000108840	HDAC5	UIP	AFE	0.206400725	1
NM_201282.1:360	NM_201282	1956	ENSG00000146648	EGFR	NSIP	Kontrolle	0.206687261	1
NM_003333.3:288	NM_003333	7311	ENSG00000221983	UBA52	NSIP	AFE	0.206810932	1
NM_012340.3:1815	NM_012340	4773	ENSG00000101096	NFATC2	NSIP	Kontrolle	0.206848507	1
NM_022078.2:1685	NM_022078	63906	ENSG00000198746	GPATCH3	NSIP	AFE	0.206868393	1
NM_001657.2:547	NM_001657	374	ENSG00000109321	AREG	Kontrolle	AFE	0.206904161	1
NM_003761.3:260	NM_003761	8673	ENSG00000118640	VAMP8	NSIP	Kontrolle	0.207028291	1
NM_007008.2:275	NM_007008	57142	ENSG00000115310	RTN4	NSIP	Kontrolle	0.207117993	1
NM_172350.1:365	NM_172350	4179	ENSG00000117335	CD46	NSIP	AFE	0.207375235	1
NM_006270.3:330	NM_006270	6237	ENSG00000126458	RRAS	UIP	AFE	0.207647706	1
NM_0053276.3:604	NM_0053276	5212	ENSG00000205221	VIT	UIP	NSIP	0.207663594	1
NM_000291.2:1030	NM_000291	5230	ENSG00000102144	PGK1	NSIP	Kontrolle	0.207773897	1
NM_002353.2:1840	NM_002353	4070	ENSG00000184292	TACSTD2	UIP	NSIP	0.207824752	1
NM_020848.2:7395	NM_020848	57608	ENSG00000165757	KIAA1462	Kontrolle	AFE	0.207985344	1
NM_018286.2:655	NM_018286	55273	ENSG00000166292	TMEM100	UIP	NSIP	0.208135107	1
NM_022073.3:800	NM_022073	112399	ENSG00000129521	EGLN3	UIP	NSIP	0.208187279	1
NM_012293.1:1960	NM_012293	7837	ENSG00000130508	PXDN	UIP	Kontrolle	0.208258568	1
NM_002615.4:888	NM_002615	5176	ENSG00000132386	SERPINF1	NSIP	Kontrolle	0.208897362	1
NM_000507.3:590	NM_000507	2203	ENSG00000165140	FBP1	UIP	Kontrolle	0.209343486	1
NM_030582.3:4490	NM_030582	80781	ENSG00000182871	COL18A1	UIP	AFE	0.209471118	1
NR_024115.1:2175	NR_024115			GIMAP6	NSIP	Kontrolle	0.209631037	1
NM_005424.2:2610	NM_005424	7075	ENSG00000066056	TIE1	UIP	NSIP	0.209660491	1
NM_012116.3:652	NM_012116	23624	ENSG00000142273	CBLC	UIP	AFE	0.210110142	1
NM_033001.2:920	NM_033001	2969	ENSG00000263001	GTF2I	NSIP	AFE	0.210117638	1
NM_001164831.1:875	NM_001164831	53826	ENSG00000137726	FXYP6	NSIP	Kontrolle	0.210222146	1
NM_000393.3:4075	NM_000393	1290	ENSG00000204262	COL5A2	UIP	NSIP	0.210494049	1
NM_001032367.1:1315	NM_001032367	6692	ENSG00000166145	SPINT1	Kontrolle	AFE	0.210932578	1
NM_016167.3:335	NM_016167	51406	ENSG00000225921	NOL7	NSIP	AFE	0.210939082	1
NM_014057.3:995	NM_014057	4969	ENSG00000106809	OGN	UIP	AFE	0.210994332	1
NM_015364.2:360	NM_015364	23643	ENSG00000154589	LY96	NSIP	AFE	0.211085155	1
NM_001050.2:1060	NM_001050	6752	ENSG00000180616	SSTR2	UIP	Kontrolle	0.211254362	1
NM_000138.3:6420	NM_000138	2200	ENSG00000166147	FBN1	NSIP	AFE	0.21127097	1
NM_003064.2:330	NM_003064	6590	ENSG00000124107	SLPI	NSIP	AFE	0.211461737	1
NM_005266.5:1992	NM_005266	2702	ENSG00000265107	GJA5	UIP	AFE	0.211515444	1
NM_032364.5:1166	NM_032364	85406	ENSG00000135392	DNAJC14	NSIP	AFE	0.211863718	1
NM_001723.4:1870	NM_001723	667	ENSG00000151914	DST	UIP	Kontrolle	0.212006145	1
NM_003064.2:330	NM_003064	6590	ENSG00000124107	SLPI	NSIP	Kontrolle	0.212661462	1
NM_001039802.1:390	NM_001039802	998	ENSG00000070831	CDC42	NSIP	AFE	0.212858465	1
NM_006665.3:1625	NM_006665	10855	ENSG00000173083	HPSE	UIP	AFE	0.213214002	1
NM_002305.3:60	NM_002305	3956	ENSG00000100097	LGALS1	NSIP	AFE	0.213328541	1
NM_006121.2:690	NM_006121	3848	ENSG00000167768	KRT1	NSIP	AFE	0.213347209	1
NM_207195.1:1355	NM_207195	8751	ENSG00000143567	ADAM15	NSIP	AFE	0.213414362	1
NM_003657.2:2305	NM_003657	8537	ENSG00000064787	BCAS1	NSIP	AFE	0.213730439	1
NM_002133.2:781	NM_002133	3162	ENSG00000100292	HMOX1	UIP	AFE	0.213798236	1
NM_001204.5:1875	NM_001204	659	ENSG00000204217	BMPR2	Kontrolle	AFE	0.214104549	1
NM_000961.3:1409	NM_000961	5740	ENSG00000124212	PTGIS	NSIP	Kontrolle	0.214358175	1
NM_001025366.1:1325	NM_001025366	7422	ENSG00000112715	VEGFA	UIP	NSIP	0.214869772	1
NM_018286.2:655	NM_018286	55273	ENSG00000166292	TMEM100	UIP	AFE	0.215230264	1
NM_022144.2:462	NM_022144	64102	ENSG00000000005	TNMD	NSIP	Kontrolle	0.215241071	1
NM_003808.3:810	NM_003808	8741	ENSG00000161955	TNFSF13	NSIP	Kontrolle	0.215353515	1
NM_014210.3:564	NM_014210	2123	ENSG00000126860	EV12A	NSIP	AFE	0.215470793	1
NM_001711.3:1935	NM_001711	633	ENSG00000182492	BGN	UIP	AFE	0.21563022	1
NM_024915.3:3690	NM_024915	79977	ENSG00000083307	GRHL2	NSIP	Kontrolle	0.215635171	1
NM_052972.2:1480	NM_052972	116844	ENSG00000171236	LRG1	UIP	Kontrolle	0.21582006	1
NM_020733.1:1890	NM_020733	57493	ENSG00000173706	HEG1	UIP	NSIP	0.215948886	1

NM_003829.4:6092	NM_003829	8777	ENSG00000107186	MPDZ	UIP	AFE	0.216020408	1
NM_002985.2:280	NM_002985	6352	ENSG00000271503	CCL5	NSIP	AFE	0.216087453	1
NM_001039802.1:390	NM_001039802	998	ENSG00000070831	CDC42	NSIP	Kontrolle	0.21617843	1
NM_003380.2:694	NM_003380	7431	ENSG00000026025	VIM	NSIP	AFE	0.216411413	1
NM_001977.3:2940	NM_001977	2028	ENSG00000138792	ENPEP	UIP	NSIP	0.216505637	1
NM_001168278.1:1050	NM_001168278	25937	ENSG00000018408	WWTR1	UIP	NSIP	0.216677568	1
NM_005900.2:1850	NM_005900	4086	ENSG00000170365	SMAD1	NSIP	Kontrolle	0.216893404	1
NM_006846.3:2595	NM_006846	11005	ENSG00000133710	SPINK5	NSIP	Kontrolle	0.217185635	1
NM_003883.2:1455	NM_003883	8841	ENSG00000171720	HDAC3	UIP	NSIP	0.2173974	1
NM_003810.2:115	NM_003810	8743	ENSG00000121858	TNFSF10	UIP	AFE	0.217434679	1
NM_012217.2:585	NM_012217	23430	ENSG00000095917	TPSD1	NSIP	Kontrolle	0.217985587	1
NM_001005731.1:4151	NM_001005731	3691	ENSG00000132470	ITGB4	NSIP	Kontrolle	0.218236328	1
NM_000300.2:715	NM_000300	5320	ENSG00000188257	PLA2G2A	UIP	NSIP	0.218251379	1
NM_001540.3:374	NM_001540	3315	ENSG00000106211	HSPB1	NSIP	AFE	0.218360234	1
NM_000576.2:840	NM_000576	3553	ENSG00000125538	IL1B	Kontrolle	AFE	0.218374799	1
NM_006852.2:2335	NM_006852	11011	ENSG00000146872	TLK2	UIP	Kontrolle	0.218793166	1
NM_080646.1:540	NM_080646	6899	ENSG00000184058	TBX1	UIP	NSIP	0.219551715	1
NM_006690.3:1280	NM_006690	10893	ENSG00000125966	MMP24	Kontrolle	AFE	0.219601108	1
NM_001393.2:1700	NM_001393	1842	ENSG00000106823	ECM2	NSIP	AFE	0.219605999	1
NM_003872.2:805	NM_003872	8828	ENSG00000118257	NRP2	NSIP	AFE	0.21972643	1
NM_014210.3:564	NM_014210	2123	ENSG00000126860	EVI2A	Kontrolle	AFE	0.219728528	1
NM_001664.2:1230	NM_001664	387	ENSG00000067560	RHOA	UIP	AFE	0.220010883	1
NM_002214.2:2609	NM_002214	3696	ENSG00000105855	ITGB8	UIP	NSIP	0.22023259	1
NM_000358.2:2030	NM_000358	7045	ENSG00000120708	TGFBI	UIP	AFE	0.220367107	1
NM_001098424.1:1460	NM_001098424	1739	ENSG00000075711	DLG1	UIP	Kontrolle	0.220535303	1
NM_001912.4:1072	NM_001912	1514	ENSG00000135047	CTSL	Kontrolle	AFE	0.220546137	1
NM_003638.1:1215	NM_003638	8516	ENSG00000077943	ITGA8	NSIP	AFE	0.221138881	1
NM_005343.2:396	NM_005343	3265	ENSG00000174775	HRAS	NSIP	AFE	0.221248507	1
NM_004244.4:1630	NM_004244	9332	ENSG00000177575	CD163	NSIP	AFE	0.221387764	1
NM_000526.4:523	NM_000526	3861	ENSG00000186847	KRT14	NSIP	AFE	0.221787744	1
NM_021101.3:410	NM_021101	9076	ENSG00000163347	CLDN1	NSIP	AFE	0.222146149	1
NM_024065.4:23	NM_024065	79031	ENSG00000115539	PDCL3	UIP	AFE	0.222406286	1
NR_046324.1:194	NR_046324	1139	ENSG00000175344	CHRNA7	NSIP	AFE	0.2227606	1
NM_015850.2:1335	NM_015850	2260	ENSG00000077782	FGFR1	NSIP	AFE	0.223145656	1
NM_000210.1:3065	NM_000210	3655	ENSG00000091409	ITGA6	UIP	AFE	0.223230834	1
NM_005474.4:3160	NM_005474	10014	ENSG00000108840	HDAC5	UIP	Kontrolle	0.223347767	1
NM_001558.2:150	NM_001558	3587	ENSG00000110324	IL10RA	NSIP	AFE	0.223849595	1
NM_003808.3:810	NM_003808	8741	ENSG00000161955	TNFSF13	Kontrolle	AFE	0.224087755	1
NM_001338.3:1937	NM_001338	1525	ENSG00000154639	CXADR	UIP	Kontrolle	0.224202073	1
NM_015136.2:95	NM_015136	23166	ENSG00000010327	STAB1	UIP	AFE	0.224256639	1
NM_001122821.1:2385	NM_001122821	6418	ENSG00000119335	SET	UIP	Kontrolle	0.22430565	1
NM_005545.3:2072	NM_005545	3671	ENSG00000129009	ISLR	NSIP	AFE	0.22490198	1
NM_004054.2:415	NM_004054	719	ENSG00000171860	C3AR1	NSIP	AFE	0.225300741	1
NM_001166133.1:526	NM_001166133	80144	ENSG00000138759	FRAS1	UIP	Kontrolle	0.225562892	1
NM_000300.2:715	NM_000300	5320	ENSG00000188257	PLA2G2A	UIP	AFE	0.225684697	1
NM_001523.2:859	NM_001523	3036	ENSG00000105509	HAS1	UIP	AFE	0.225780132	1
NM_173198.1:2590	NM_173198	8013	ENSG00000119508	NR4A3	Kontrolle	AFE	0.225926218	1
NM_004912.3:2648	NM_004912	889	ENSG00000001631	KRIT1	UIP	Kontrolle	0.225934445	1
NM_015194.1:616	NM_015194	4642	ENSG00000176658	MYO1D	NSIP	Kontrolle	0.22597285	1
NM_006846.3:2595	NM_006846	11005	ENSG00000133710	SPINK5	UIP	NSIP	0.226220434	1
NM_020126.3:2443	NM_020126	56848	ENSG00000063176	SPHK2	UIP	AFE	0.226707552	1
NM_001128128.1:1450	NM_001128128	6935	ENSG00000148516	ZEB1	UIP	NSIP	0.226828752	1
NR_024168.1:2575	NR_024168			TLR4	NSIP	Kontrolle	0.226832518	1
NM_005656.3:1079	NM_005656	7113	ENSG00000184012	TMPRSS2	NSIP	AFE	0.226974224	1
NM_004322.3:963	NM_004322	572	ENSG0000002330	BAD	NSIP	AFE	0.227040386	1
NM_001267.2:810	NM_001267	1101	ENSG00000136457	CHAD	UIP	Kontrolle	0.227269529	1
NM_002104.2:700	NM_002104	3003	ENSG00000113088	GZMK	Kontrolle	AFE	0.227297194	1
NM_001203.1:430	NM_001203	658	ENSG00000138696	BMPR1B	NSIP	AFE	0.227756014	1
NM_004184.3:1851	NM_004184	7453	ENSG00000140105	WARS	UIP	AFE	0.22778774	1
NM_001142633.1:3335	NM_001142633	23533	ENSG00000141506	PIK3R5	NSIP	AFE	0.227964259	1
NM_002310.3:2995	NM_002310	3977	ENSG00000113594	LIFR	NSIP	AFE	0.228192368	1
NM_003183.4:1595	NM_003183	6868	ENSG00000151694	ADAM17	NSIP	Kontrolle	0.22833044	1
NM_032470.3:1621	NM_032470	7148	ENSG00000168477	TNXB	NSIP	AFE	0.228491258	1
NM_002660.2:2290	NM_002660	5335	ENSG00000124181	PLCG1	NSIP	AFE	0.228835337	1
NM_053032.2:710	NM_053032	4638	ENSG00000065534	MYLK	UIP	AFE	0.229649201	1
NM_004342.6:3862	NM_004342	800	ENSG00000122786	CALD1	UIP	NSIP	0.229770508	1
NM_178190.2:334	NM_178190	93974	ENSG00000130770	ATPIF1	NSIP	Kontrolle	0.230147644	1
NM_003010.2:2830	NM_003010	6416	ENSG00000065559	MAP2K4	NSIP	Kontrolle	0.230687358	1
NM_000581.2:745	NM_000581	2876	ENSG00000233276	GPX1	UIP	AFE	0.230789701	1
NM_002483.4:1217	NM_002483	4680	ENSG00000086548	CEACAM6	Kontrolle	AFE	0.230812565	1
NM_012279.2:2260	NM_012279	23567	ENSG00000113761	ZNF346	Kontrolle	AFE	0.231061944	1
NM_005465.4:287	NM_005465	10000	ENSG00000117020	AKT3	NSIP	Kontrolle	0.231378092	1

NM_012120.2:1895	NM_012120	23607	ENSG00000198087	CD2AP	UIP	NSIP	0.231485532	1
NM_001272046.1:3148	NM_001272046	340706	ENSG00000165816	VWA2	Kontrolle	AFE	0.231675507	1
NM_198477.1:440	NM_198477	284340	ENSG00000189377	CXCL17	NSIP	Kontrolle	0.231718431	1
NM_000321.1:2110	NM_000321	5925	ENSG00000139687	RB1	UIP	NSIP	0.232034974	1
NM_000577.3:480	NM_000577	3557	ENSG00000136689	IL1RN	Kontrolle	AFE	0.232333089	1
NM_005359.3:1370	NM_005359	4089	ENSG00000141646	SMAD4	UIP	Kontrolle	0.232351978	1
NM_014428.1:1925	NM_014428	27134	ENSG00000105289	TJP3	UIP	NSIP	0.232399259	1
NM_015704.2:2880	NM_015704	27351	ENSG00000100418	DESI1	Kontrolle	AFE	0.233099485	1
NM_001100431.1:160	NM_001100431	11326	ENSG00000155659	VSIG4	NSIP	AFE	0.233148244	1
NM_000104.3:1715	NM_000104	1545	ENSG00000138061	CYP1B1	UIP	Kontrolle	0.233174105	1
NM_002755.2:970	NM_002755	5604	ENSG00000169032	MAP2K1	NSIP	Kontrolle	0.233270115	1
NM_032794.1:1798	NM_032794			SLC44A4	NSIP	AFE	0.233294354	1
NM_003199.1:1455	NM_003199	6925	ENSG00000196628	TCF4	UIP	NSIP	0.233512697	1
NM_002345.3:1285	NM_002345	4060	ENSG00000139329	LUM	UIP	Kontrolle	0.233644018	1
NM_003161.2:310	NM_003161	6198	ENSG00000108443	RPS6KB1	UIP	AFE	0.233668361	1
NM_001060.3:385	NM_001060	6915	ENSG00000006638	TBXA2R	NSIP	AFE	0.233817376	1
NM_012395.2:3645	NM_012395	5218	ENSG00000058091	CDK14	Kontrolle	AFE	0.233995147	1
NM_003952.2:980	NM_003952	6199	ENSG00000175634	RPS6KB2	NSIP	AFE	0.2340152	1
NM_001657.2:547	NM_001657	374	ENSG00000109321	AREG	UIP	Kontrolle	0.234372305	1
NM_005409.3:590	NM_005409	6373	ENSG00000169248	CXCL11	Kontrolle	AFE	0.234592208	1
NM_001065.2:515	NM_001065	7132	ENSG00000067182	TNFRSF1A	UIP	NSIP	0.235004231	1
NM_001773.2:2050	NM_001773	947	ENSG00000174059	CD34	Kontrolle	AFE	0.235022694	1
NM_000581.2:745	NM_000581	2876	ENSG00000233276	GPX1	NSIP	AFE	0.235395764	1
NM_002192.2:490	NM_002192	3624	ENSG00000122641	INHBA	NSIP	Kontrolle	0.236071219	1
NM_018046.3:35	NM_018046	55109	ENSG00000164252	AGGF1	NSIP	AFE	0.236331106	1
NM_005475.2:4285	NM_005475	10019	ENSG00000111252	SH2B3	NSIP	AFE	0.236469712	1
NM_002649.2:2125	NM_002649	5294	ENSG00000105851	PIK3CG	Kontrolle	AFE	0.236531913	1
NM_0015103.2:3711	NM_0015103	23129	ENSG00000004399	PLXND1	Kontrolle	AFE	0.23722324	1
NM_005761.2:3705	NM_005761	10154	ENSG00000136040	PLXNC1	UIP	AFE	0.237246099	1
NM_001127500.1:1925	NM_001127500	4233	ENSG00000105976	MET	UIP	Kontrolle	0.237286479	1
NM_001204.5:1875	NM_001204	659	ENSG00000204217	BMPR2	UIP	AFE	0.237860598	1
NM_002146.4:2840	NM_002146	3213	ENSG00000120093	HOXB3	Kontrolle	AFE	0.237945718	1
NM_002438.2:2693	NM_002438	4360	ENSG00000260314	MRC1	NSIP	Kontrolle	0.237989767	1
NM_020997.2:1405	NM_020997	10637	ENSG00000243709	LEFTY1	UIP	AFE	0.238036459	1
NM_015874.3:850	NM_015874	3516	ENSG00000168214	RBPJ	NSIP	Kontrolle	0.23810087	1
NM_000122.1:1950	NM_000122	2071	ENSG00000163161	ERCC3	Kontrolle	AFE	0.238124079	1
NM_005424.2:2610	NM_005424	7075	ENSG00000066056	TIE1	NSIP	Kontrolle	0.238226381	1
NM_000269.2:500	NM_000269	4830	ENSG00000239672	NME1	UIP	Kontrolle	0.238300985	1
NM_001849.2:1925	NM_001849	1292	ENSG00000142173	COL6A2	UIP	Kontrolle	0.238771947	1
NM_002104.2:700	NM_002104	3003	ENSG00000113088	GZMK	NSIP	NSIP	0.238785028	1
NM_057179.2:482	NM_057179	117581	ENSG00000233608	TWIST2	UIP	Kontrolle	0.239195571	1
NM_000601.4:550	NM_000601	3082	ENSG00000019991	HGF	UIP	AFE	0.239217552	1
NM_000600.1:220	NM_000600	3569	ENSG00000136244	IL6	Kontrolle	AFE	0.239253855	1
NM_000584.2:25	NM_000584	3576	ENSG00000169429	CXCL8	Kontrolle	AFE	0.239313837	1
NM_000346.2:2135	NM_000346	6662	ENSG00000125398	SOX9	UIP	AFE	0.239359041	1
NM_002052.3:2140	NM_002052	2626	ENSG00000136574	GATA4	UIP	AFE	0.239406878	1
NM_000582.2:760	NM_000582	6696	ENSG00000118785	SPP1	UIP	AFE	0.239765412	1
NM_000454.4:35	NM_000454	6647	ENSG00000142168	SOD1	UIP	Kontrolle	0.23994607	1
NM_198098.1:1230	NM_198098	358	ENSG00000240583	AQP1	UIP	AFE	0.240132789	1
NM_022078.2:1685	NM_022078	63906	ENSG00000198746	GPATCH3	Kontrolle	AFE	0.240570604	1
NM_002253.2:1420	NM_002253	3791	ENSG00000128052	KDR	NSIP	Kontrolle	0.240672159	1
NM_024896.2:852	NM_024896	79956	ENSG00000099219	ERMP1	NSIP	AFE	0.240764148	1
NM_002214.2:2609	NM_002214	3696	ENSG00000105855	ITGB8	NSIP	Kontrolle	0.240817426	1
NM_182692.1:340	NM_182692	6733	ENSG00000135250	SRPK2	NSIP	Kontrolle	0.240821571	1
NM_004443.3:3485	NM_004443	2049	ENSG00000182580	EPHB3	NSIP	AFE	0.241062971	1
NM_001127217.2:1152	NM_001127217	4093	ENSG00000120693	SMAD9	NSIP	Kontrolle	0.241082521	1
NM_152696.3:2105	NM_152696	204851	ENSG00000163349	HIPK1	UIP	Kontrolle	0.241356734	1
NM_000201.2:2253	NM_000201	3383	ENSG00000090339	ICAM1	UIP	NSIP	0.241757769	1
NM_003256.2:1000	NM_003256	7079	ENSG00000087303	TIMP4	UIP	AFE	0.241842125	1
NM_001552.2:1520	NM_001552	3487	ENSG00000141753	IGFBP4	UIP	AFE	0.24192548	1
NM_002205.2:925	NM_002205	3678	ENSG00000161638	ITGA5	NSIP	AFE	0.242010064	1
NM_001955.2:770	NM_001955	1906	ENSG00000078401	EDN1	UIP	NSIP	0.242300444	1
NM_001150.1:2670	NM_001150	290	ENSG00000166825	ANPEP	NSIP	AFE	0.242310362	1
NM_001204355.1:730	NM_001204355	50859	ENSG00000196104	SPOCK3	UIP	NSIP	0.24232634	1
NM_007361.3:1995	NM_007361	22795	ENSG00000087303	NID2	NSIP	AFE	0.242365851	1
NM_178812.3:828	NM_178812	92140	ENSG00000147649	MTDH	NSIP	AFE	0.242453017	1
NM_003278.2:607	NM_003278	7123	ENSG00000163815	CLEC3B	NSIP	AFE	0.242640103	1
NM_016274.4:475	NM_016274	51177	ENSG00000023902	PLEKHO1	NSIP	Kontrolle	0.242752632	1
NM_000077.3:975	NM_000077	1029	ENSG00000147889	CDKN2A	UIP	AFE	0.24290302	1
NM_005902.3:4220	NM_005902	4088	ENSG00000166949	SMAD3	NSIP	AFE	0.242975501	1
NM_181504.2:1105	NM_181504	5295	ENSG00000145675	PIK3R1	UIP	Kontrolle	0.24303764	1
NM_001562.2:48	NM_001562	3606	ENSG00000150782	IL18	UIP	AFE	0.243553088	1



NM_001955.2:770	NM_001955	1906	ENSG00000078401	EDN1	NSIP	Kontrolle	0.243622803	1
NM_052972.2:1480	NM_052972	116844	ENSG00000171236	LRG1	NSIP	Kontrolle	0.243687313	1
NM_015715.3:2415	NM_015715	50487	ENSG00000100078	PLA2G3	NSIP	Kontrolle	0.24386281	1
NM_000665.3:1057	NM_000665	43	ENSG00000087085	ACHE	NSIP	AFE	0.243870638	1
NM_001837.2:980	NM_001837	1232	ENSG00000183625	CCR3	UIP	NSIP	0.24387287	1
NM_002006.4:620	NM_002006	2247	ENSG00000138685	FGF2	Kontrolle	AFE	0.243977699	1
NM_004219.2:542	NM_004219	9232	ENSG00000164611	PTTG1	Kontrolle	AFE	0.244275069	1
NM_052846.1:3113	NM_052846	90187	ENSG00000183798	EMILIN3	Kontrolle	AFE	0.24449645	1
NM_022648.4:6080	NM_022648	7145	ENSG00000079308	TNS1	Kontrolle	AFE	0.244816751	1
NM_153831.2:965	NM_153831	5747	ENSG00000169398	PTK2	UIP	AFE	0.245305088	1
NM_000442.3:1365	NM_000442	5175	ENSG00000261371	PECAM1	NSIP	Kontrolle	0.245324705	1
NM_002192.2:490	NM_002192	3624	ENSG00000122641	INHBA	UIP	NSIP	0.24544906	1
NM_015103.2:3711	NM_015103	23129	ENSG00000004399	PLXND1	NSIP	Kontrolle	0.245505627	1
NM_014057.3:995	NM_014057	4969	ENSG00000106809	OGN	UIP	NSIP	0.245562466	1
NM_001005915.1:420	NM_001005915	2065	ENSG00000065361	ERBB3	NSIP	Kontrolle	0.24561211	1
NM_001119.4:622	NM_001119	118	ENSG00000087274	ADD1	NSIP	AFE	0.245706097	1
NM_006472.1:255	NM_006472	10628	ENSG00000265972	TXNIP	UIP	NSIP	0.245768338	1
NM_002293.3:4915	NM_002293	3915	ENSG00000135862	LAMC1	UIP	Kontrolle	0.245881328	1
NM_002205.2:925	NM_002205	3678	ENSG00000161638	ITGA5	NSIP	Kontrolle	0.245890919	1
NM_001953.3:719	NM_001953	1890	ENSG00000025708	TYMP	UIP	AFE	0.246330643	1
NM_014909.4:552	NM_014909	22846	ENSG00000071246	VASH1	NSIP	Kontrolle	0.24633308	1
NM_022093.1:3580	NM_022093	63923	ENSG00000120332	TNN	NSIP	AFE	0.246714234	1
NM_001278506.1:304	NM_001278506	4682	ENSG00000103274	NUBP1	UIP	NSIP	0.246839233	1
NM_004282.3:785	NM_004282	9532	ENSG00000112208	BAG2	Kontrolle	AFE	0.247156778	1
NM_001425.2:350	NM_001425	2014	ENSG00000142227	EMP3	NSIP	Kontrolle	0.247367969	1
NM_018728.2:2400	NM_018728	55930	ENSG00000128833	MYO5C	NSIP	Kontrolle	0.247469997	1
NM_005761.2:3705	NM_005761	10154	ENSG00000136040	PLXNC1	UIP	NSIP	0.247792063	1
NM_004095.3:363	NM_004095	1978	ENSG00000087840	EIF4EBP1	UIP	NSIP	0.248336815	1
NM_006472.1:255	NM_006472	10628	ENSG00000265972	TXNIP	UIP	AFE	0.2483377	1
NM_002963.2:69	NM_002963	6278	ENSG00000143556	S100A7	NSIP	Kontrolle	0.24834383	1
NM_002410.4:1233	NM_002410	4249	ENSG00000152127	MGAT5	UIP	NSIP	0.248599986	1
NM_001331.2:146	NM_001331	1500	ENSG00000198561	CTNND1	UIP	AFE	0.248766983	1
NM_001175.4:833	NM_001175	397	ENSG00000111348	ARHGDI	UIP	AFE	0.248970739	1
NM_000175.2:1695	NM_000175	2821	ENSG00000105220	GPI	UIP	Kontrolle	0.249251863	1
NM_004689.2:450	NM_004689	9112	ENSG00000182979	MTA1	NSIP	AFE	0.2493084	1
NM_002661.2:525	NM_002661	5336	ENSG00000197943	PLCG2	NSIP	AFE	0.249444884	1
NM_006665.3:1625	NM_006665	10855	ENSG00000173083	HPSE	UIP	NSIP	0.249638697	1
NM_004817.2:2785	NM_004817	9414	ENSG00000119139	TJP2	NSIP	AFE	0.249929303	1
NM_145333.1:670	NM_145333	6885	ENSG00000135341	MAP3K7	UIP	Kontrolle	0.24997175	1
NM_000575.3:1085	NM_000575	3552	ENSG00000115008	IL1A	UIP	Kontrolle	0.25013945	1
NM_001837.2:980	NM_001837	1232	ENSG00000183625	CCR3	NSIP	Kontrolle	0.25017667	1
NM_014467.2:1420	NM_014467	27286	ENSG00000102359	SRPX2	UIP	Kontrolle	0.250570671	1
NM_000266.2:505	NM_000266	4693	ENSG00000124479	NDP	UIP	Kontrolle	0.250574452	1
NM_004282.3:785	NM_004282	9532	ENSG00000112208	BAG2	UIP	AFE	0.250938443	1
NM_005780.2:460	NM_005780	10186	ENSG00000183722	LHFP	NSIP	Kontrolle	0.251464346	1
NM_003212.2:1567	NM_003212	6997	ENSG00000241186	TDGF1	NSIP	AFE	0.251874956	1
NM_181825.2:442	NM_181825	4771	ENSG00000186575	NF2	UIP	Kontrolle	0.251900599	1
NM_005163.2:1772	NM_005163	207	ENSG00000142208	AKT1	UIP	Kontrolle	0.252030467	1
NM_005266.5:1992	NM_005266	2702	ENSG00000265107	GJA5	UIP	NSIP	0.25294491	1
NM_002661.2:525	NM_002661	5336	ENSG00000197943	PLCG2	UIP	Kontrolle	0.253209427	1
NM_004444.4:1680	NM_004444	2050	ENSG00000196411	EPHB4	UIP	AFE	0.253383758	1
NM_001143981.1:1120	NM_001143981	91851	ENSG00000101938	CHRDL1	NSIP	Kontrolle	0.253629084	1
NM_145333.1:670	NM_145333	6885	ENSG00000135341	MAP3K7	NSIP	Kontrolle	0.253667317	1
NM_002989.2:180	NM_002989	6366	ENSG00000137077	CCL21	UIP	NSIP	0.253803546	1
NM_024574.3:395	NM_024574	79625	ENSG00000173376	NDNF	UIP	NSIP	0.253902364	1
NM_000314.4:1351	NM_000314	5728	ENSG00000171862	PTEN	NSIP	Kontrolle	0.253933989	1
NM_017637.5:1800	NM_017637	54796	ENSG00000173068	BNC2	UIP	Kontrolle	0.25399537	1
NM_001165414.1:1690	NM_001165414	3939	ENSG00000134333	LDHA	UIP	NSIP	0.254066618	1
NM_000346.2:2135	NM_000346	6662	ENSG00000125398	SOX9	Kontrolle	AFE	0.254207488	1
NM_015874.3:850	NM_015874	3516	ENSG00000168214	RBPJ	UIP	AFE	0.254866559	1
NM_001018017.1:725	NM_001018017	4582	ENSG00000185499	MUC1	UIP	NSIP	0.255251482	1
NM_003289.3:891	NM_003289	7169	ENSG00000198467	TPM2	NSIP	AFE	0.255294578	1
NM_003883.2:1455	NM_003883	8841	ENSG00000171720	HDAC3	NSIP	AFE	0.255709601	1
NM_013230.2:1859	NM_013230	100133941	ENSG00000272398	CD24	NSIP	Kontrolle	0.255747516	1
NM_001920.3:420	NM_001920	1634	ENSG00000011465	DCN	NSIP	AFE	0.255787973	1
NM_000228.2:695	NM_000228	3914	ENSG00000196878	LAMB3	UIP	AFE	0.255931655	1
NM_001884.3:730	NM_001884	1404	ENSG00000145681	HAPLN1	Kontrolle	AFE	0.255940842	1
NM_002467.3:1610	NM_002467	4609	ENSG00000136997	MYC	Kontrolle	AFE	0.255976568	1
NM_001204355.1:730	NM_001204355	50859	ENSG00000196104	SPOCK3	NSIP	AFE	0.256109636	1
NM_139266.1:455	NM_139266	6772	ENSG00000115415	STAT1	NSIP	AFE	0.256284657	1
NM_177438.2:5060	NM_177438	23405	ENSG00000100697	DICER1	Kontrolle	AFE	0.256355545	1
NM_004444.4:1680	NM_004444	2050	ENSG00000196411	EPHB4	NSIP	Kontrolle	0.25656407	1

NM_003442.5:925	NM_003442	7702	ENSG00000166478	ZNF143	UIP	NSIP	0.256669921	1
NM_001702.1:3640	NM_001702	575	ENSG00000181790	BAI1	NSIP	AFE	0.256687511	1
NM_000314.4:1351	NM_000314	5728	ENSG00000171862	PTEN	UIP	AFE	0.256747721	1
NM_001004065.4:4956	NM_001004065	11217	ENSG00000241978	AKAP2	NSIP	AFE	0.256816859	1
NM_005529.5:2715	NM_005529	3339	ENSG00000142798	HSPG2	NSIP	AFE	0.256852218	1
NM_004538.4:1070	NM_004538	4675	ENSG00000186310	NAP1L3	Kontrolle	AFE	0.256941004	1
NM_133468.4:476	NM_133468	168667	ENSG00000164619	BMPER	UIP	AFE	0.257008669	1
NM_000594.2:1010	NM_000594	7124	ENSG00000232810	TNF	UIP	AFE	0.25706048	1
NM_005215.1:3100	NM_005215	1630	ENSG00000187323	DCC	Kontrolle	AFE	0.257201481	1
NM_019074.2:893	NM_019074	54567	ENSG00000128917	DLL4	NSIP	AFE	0.2574522	1
NM_002467.3:1610	NM_002467	4609	ENSG00000136997	MYC	UIP	Kontrolle	0.257508972	1
NM_004329.2:1720	NM_004329	657	ENSG00000107779	BMPR1A	NSIP	AFE	0.257650666	1
NM_004517.2:983	NM_004517	3611	ENSG00000166333	ILK	UIP	AFE	0.259188461	1
NM_005560.3:787	NM_005560	3911	ENSG00000130702	LAMA5	NSIP	Kontrolle	0.259586269	1
NM_212482.1:1776	NM_212482	2335	ENSG00000115414	FN1	NSIP	AFE	0.259613181	1
NM_006218.2:2445	NM_006218	5290	ENSG00000121879	PIK3CA	UIP	Kontrolle	0.259910468	1
NM_000062.2:305	NM_000062	710	ENSG00000149131	SERPING1	UIP	Kontrolle	0.260254942	1
NM_213560.1:2153	NM_213560	5585	ENSG00000123143	PKN1	UIP	AFE	0.261068166	1
NM_002438.2:2693	NM_002438	4360	ENSG00000260314	MRC1	UIP	Kontrolle	0.261076031	1
NM_030582.3:4490	NM_030582	80781	ENSG00000182871	COL18A1	UIP	NSIP	0.261433187	1
NM_019102.2:895	NM_019102	3202	ENSG00000106004	HOXA5	NSIP	AFE	0.261539605	1
NM_018964.3:810	NM_018964	54020	ENSG00000160190	SLC37A1	NSIP	Kontrolle	0.261687831	1
NM_002845.3:1680	NM_002845	5797	ENSG00000173482	PTPRM	NSIP	AFE	0.262326908	1
NM_001199140.1:3564	NM_001199140	83607	ENSG00000144233	AMMECR1L	Kontrolle	AFE	0.26247954	1
XM_005254140.1:174	XM_005254140		CHP1	NSIP	AFE	0.26285441	1	
NM_006361.5:1220	NM_006361	10481	ENSG00000159184	HOXB13	NSIP	Kontrolle	0.262906381	1
NM_001032409.1:805	NM_001032409	4938	ENSG00000089127	OAS1	UIP	NSIP	0.262924324	1
NM_020672.1:460	NM_020672	57402	ENSG00000189334	S100A14	UIP	NSIP	0.263043325	1
NM_001119.4:622	NM_001119	118	ENSG00000087274	ADD1	NSIP	Kontrolle	0.263665375	1
NM_031902.3:390	NM_031902	64969	ENSG00000144029	MRPS5	UIP	Kontrolle	0.263833828	1
NM_001098424.1:1460	NM_001098424	1739	ENSG00000075711	DLG1	NSIP	AFE	0.264337617	1
NM_006419.2:210	NM_006419	10563	ENSG00000156234	CXCL13	UIP	NSIP	0.264386282	1
NM_001040113.1:920	NM_001040113	4629	ENSG00000133392	MYH11	UIP	NSIP	0.26444839	1
NM_014909.4:552	NM_014909	22846	ENSG00000071246	VASH1	Kontrolle	AFE	0.26462072	1
NM_005343.2:396	NM_005343	3265	ENSG00000174775	HRAS	NSIP	Kontrolle	0.2650335	1
NM_001267.2:810	NM_001267	1101	ENSG00000136457	CHAD	NSIP	AFE	0.265272904	1
NM_020733.1:1890	NM_020733	57493	ENSG00000173706	HEG1	NSIP	AFE	0.265312218	1
NM_006702.3:3941	NM_006702	10908	ENSG00000032444	PNPLA6	UIP	Kontrolle	0.265541473	1
NR_024168.1:2575	NR_024168		TLR4	UIP	AFE	0.266167497	1	
NM_014248.2:162	NM_014248	9978	ENSG00000100387	RBX1	Kontrolle	AFE	0.266585502	1
NM_005009.2:820	NM_005009	4833	ENSG00000103202	NME4	UIP	AFE	0.26661513	1
NM_172127.1:505	NM_172127	817	ENSG00000145349	CAMK2D	UIP	AFE	0.266646184	1
NM_001079846.1:4818	NM_001079846	1387	ENSG00000005339	CREBBP	Kontrolle	AFE	0.267541829	1
NM_001847.2:1070	NM_001847	1288	ENSG00000197565	COL4A6	NSIP	AFE	0.26765504	1
NM_002744.4:771	NM_002744	5590	ENSG00000067606	PRKCZ	UIP	NSIP	0.267667139	1
NM_002353.2:1840	NM_002353	4070	ENSG00000184292	TACSTD2	UIP	AFE	0.267948512	1
NM_178812.3:828	NM_178812	92140	ENSG00000147649	MTDH	UIP	AFE	0.268340351	1
NM_001012331.1:1365	NM_001012331	4914	ENSG00000198400	NTRK1	NSIP	Kontrolle	0.269142414	1
NM_003246.2:3465	NM_003246	7057	ENSG00000137801	THBS1	UIP	NSIP	0.269574521	1
NR_024115.1:2175	NR_024115		GIMAP6	UIP	AFE	0.269770645	1	
NM_203384.1:1192	NM_203384	6050	ENSG00000023191	RNH1	UIP	NSIP	0.269914389	1
NM_001425.2:350	NM_001425	2014	ENSG00000142227	EMP3	UIP	AFE	0.270120698	1
XM_005254140.1:174	XM_005254140		CHP1	UIP	Kontrolle	0.270203735	1	
NM_145259.2:5168	NM_145259	130399	ENSG00000123612	ACVR1C	UIP	AFE	0.270393249	1
NM_182692.1:340	NM_182692	6733	ENSG00000135250	SRPK2	UIP	Kontrolle	0.27047422	1
NM_024320.2:1005	NM_024320	79170	ENSG00000167183	PRR15L	NSIP	Kontrolle	0.270614132	1
NM_012391.1:1335	NM_012391	25803	ENSG00000124664	SPDEF	NSIP	AFE	0.270860306	1
NM_006775.2:838	NM_006775	9444	ENSG00000112531	QKI	NSIP	AFE	0.271109921	1
NM_053046.3:1538	NM_053046	112398	ENSG00000269858	EGLN2	Kontrolle	AFE	0.271521415	1
NM_001164831.1:875	NM_001164831	53826	ENSG00000137726	FXYD6	Kontrolle	AFE	0.271581744	1
NM_013230.2:1859	NM_013230	100133941	ENSG00000272398	CD24	UIP	NSIP	0.271872867	1
NM_024756.2:3040	NM_024756	79812	ENSG00000173269	MMRN2	UIP	AFE	0.272025221	1
NM_001664.2:1230	NM_001664	387	ENSG00000067560	RHOA	UIP	Kontrolle	0.272041621	1
NM_001400.4:802	NM_001400	1901	ENSG00000170989	S1PR1	UIP	NSIP	0.272223077	1
NM_001034852.1:1990	NM_001034852	64093	ENSG00000198732	SMOC1	NSIP	Kontrolle	0.272371826	1
NM_003638.1:1215	NM_003638	8516	ENSG00000077943	ITGA8	UIP	AFE	0.272436278	1
NM_032864.3:335	NM_032864	84950	ENSG00000134748	PRPF38A	NSIP	AFE	0.272713042	1
NM_012082.3:1850	NM_012082	23414	ENSG00000169946	ZFPM2	UIP	AFE	0.273081043	1
NM_002467.3:1610	NM_002467	4609	ENSG00000136997	MYC	NSIP	AFE	0.27309425	1
NM_017729.3:1914	NM_017729	54869	ENSG00000131037	EPS8L1	NSIP	AFE	0.273149901	1
NM_000665.3:1057	NM_000665	43	ENSG00000087085	ACHE	NSIP	Kontrolle	0.27324285	1
NM_007111.4:1826	NM_007111	7027	ENSG00000198176	TFDP1	NSIP	Kontrolle	0.273279175	1

NM_001988.2:5525	NM_001988	2125	ENSG00000167880	EVPL	NSIP	AFE	0.273327312	1
NM_000639.1:625	NM_000639	356	ENSG00000117560	FASLG	UIP	AFE	0.273336132	1
NM_000888.3:1090	NM_000888	3694	ENSG00000115221	ITGB6	NSIP	AFE	0.273768175	1
NM_005562.2:2819	NM_005562	3918	ENSG00000058085	LAMC2	NSIP	AFE	0.274138544	1
NM_001079675.1:1535	NM_001079675	2118	ENSG00000175832	ETV4	UIP	Kontrolle	0.274314383	1
NM_017680.3:175	NM_017680	54829	ENSG00000106819	ASPN	UIP	AFE	0.274367236	1
XM_005269604.1:379	XM_005269604			ZCCHC24	NSIP	AFE	0.274428308	1
NM_001105.2:1665	NM_001105	90	ENSG00000115170	ACVR1	UIP	Kontrolle	0.274565164	1
NM_005127.2:980	NM_005127	9976	ENSG00000110852	CLEC2B	NSIP	NSIP	0.274672009	1
NM_024065.4:23	NM_024065	79031	ENSG00000115539	PDCL3	NSIP	Kontrolle	0.27469131	1
NM_021220.2:676	NM_021220	58495	ENSG00000125850	OVOL2	UIP	NSIP	0.274788382	1
NM_015364.2:360	NM_015364	23643	ENSG00000154589	LY96	UIP	AFE	0.274856888	1
NM_033666.2:2000	NM_033666	3688	ENSG00000150093	ITGB1	NSIP	AFE	0.275505055	1
NM_004994.2:1530	NM_004994	4318	ENSG00000100985	MMP9	UIP	NSIP	0.27583832	1
NM_005854.2:282	NM_005854	10266	ENSG00000131477	RAMP2	UIP	NSIP	0.276031206	1
NM_001558.2:150	NM_001558	3587	ENSG00000110324	IL10RA	UIP	AFE	0.276118034	1
NM_005924.4:1184	NM_005924	4223	ENSG00000106511	MEOX2	UIP	NSIP	0.276175232	1
NM_006147.2:1430	NM_006147	3664	ENSG00000117595	IRF6	NSIP	AFE	0.27625919	1
NM_033305.2:8260	NM_033305	23230	ENSG00000197969	VPS13A	UIP	Kontrolle	0.276265249	1
NM_080923.2:154	NM_080923			PTPRC	NSIP	AFE	0.276557187	1
NM_004244.4:1630	NM_004244	9332	ENSG00000177575	CD163	UIP	Kontrolle	0.276734361	1
NM_031219.2:616	NM_031219	81932	ENSG00000119431	HDHD3	Kontrolle	AFE	0.276760404	1
NM_001702.1:3640	NM_001702	575	ENSG00000181790	BAI1	Kontrolle	AFE	0.276787757	1
NM_012082.3:1850	NM_012082	23414	ENSG00000169946	ZFPM2	NSIP	AFE	0.277168708	1
NM_001530.2:1985	NM_001530	3091	ENSG00000100644	HIF1A	UIP	Kontrolle	0.27795678	1
NM_004830.2:640	NM_004830	9439	ENSG00000112282	MED23	Kontrolle	AFE	0.27799751	1
NM_003200.3:858	NM_003200	6929	ENSG00000071564	TCF3	UIP	AFE	0.278584185	1
NM_003810.2:115	NM_003810	8743	ENSG00000121858	TNFSF10	UIP	Kontrolle	0.278972604	1
NM_015230.2:4875	NM_015230	116984	ENSG00000047365	ARAP2	UIP	NSIP	0.279312584	1
NM_020126.3:2443	NM_020126	56848	ENSG00000063176	SPHK2	NSIP	Kontrolle	0.279450071	1
NM_003278.2:607	NM_003278	7123	ENSG00000163815	CLEC3B	Kontrolle	AFE	0.279697941	1
NM_024915.3:3690	NM_024915	79977	ENSG00000083307	GRHL2	UIP	NSIP	0.27977075	1
NM_001128128.1:1450	NM_001128128	6935	ENSG00000148516	ZEB1	UIP	AFE	0.279786394	1
NM_001005845.1:695	NM_001005845	8754	ENSG00000168615	ADAM9	UIP	NSIP	0.280873009	1
NM_001060.3:385	NM_001060	6915	ENSG00000006638	TBXA2R	NSIP	Kontrolle	0.281164989	1
NM_004363.2:1961	NM_004363	1048	ENSG00000105388	CEACAM5	UIP	NSIP	0.281312829	1
NR_036430.1:65	NR_036430			SRGN	NSIP	AFE	0.281350351	1
NM_020126.3:2443	NM_020126	56848	ENSG00000063176	SPHK2	NSIP	AFE	0.28185088	1
NM_002649.2:2125	NM_002649	5294	ENSG00000105851	PIK3CG	UIP	NSIP	0.281909682	1
NM_004571.3:3655	NM_004571	5316	ENSG00000160199	PKNOX1	Kontrolle	AFE	0.282389011	1
NM_006682.2:250	NM_006682	10875	ENSG00000127951	FGL2	UIP	Kontrolle	0.282478876	1
NM_006988.3:2840	NM_006988	9510	ENSG00000154734	ADAMTS1	UIP	Kontrolle	0.282709381	1
NM_001147.2:1775	NM_001147	285	ENSG00000091879	ANGPT2	Kontrolle	AFE	0.282783124	1
NM_003998.2:1675	NM_003998	4790	ENSG00000109320	NFKB1	UIP	NSIP	0.282852882	1
NM_006017.1:925	NM_006017	8842	ENSG00000007062	PROM1	Kontrolle	AFE	0.282983585	1
NM_003064.2:330	NM_003064	6590	ENSG00000124107	SLPI	UIP	NSIP	0.283142504	1
NM_001626.2:1450	NM_001626	208	ENSG00000105221	AKT2	UIP	Kontrolle	0.283168765	1
NM_001504.1:80	NM_001504	2833	ENSG00000186810	CXCR3	NSIP	Kontrolle	0.283918259	1
NM_057175.3:4145	NM_057175	80155	ENSG00000164134	NAA15	UIP	AFE	0.283993717	1
NM_006361.5:1220	NM_006361	10481	ENSG00000159184	HOBX13	UIP	NSIP	0.284013979	1
NM_003469.3:1400	NM_003469	7857	ENSG00000171951	SCG2	Kontrolle	AFE	0.28428004	1
NM_001018017.1:725	NM_001018017	4582	ENSG00000185499	MUC1	UIP	AFE	0.284391396	1
NM_017957.2:2532	NM_017957	55040	ENSG00000049283	EPN3	NSIP	AFE	0.284467651	1
NM_002293.3:4915	NM_002293	3915	ENSG00000135862	LAMC1	NSIP	AFE	0.284640666	1
NM_172350.1:365	NM_172350	4179	ENSG00000117335	CD46	Kontrolle	AFE	0.28468388	1
NM_000358.2:2030	NM_000358	7045	ENSG00000120708	TGFBI	UIP	NSIP	0.284996068	1
NM_015568.2:2860	NM_015568	26051	ENSG00000101445	PPP1R16B	NSIP	AFE	0.285423526	1
NM_019055.5:3080	NM_019055	54538	ENSG00000154133	ROBO4	UIP	AFE	0.285518635	1
NM_001754.4:635	NM_001754	861	ENSG00000159216	RUNX1	NSIP	Kontrolle	0.286073662	1
NM_003810.2:115	NM_003810	8743	ENSG00000121858	TNFSF10	UIP	NSIP	0.286222903	1
NM_022739.3:2605	NM_022739	64750	ENSG00000108854	SMURF2	UIP	NSIP	0.2863154	1
NM_000020.1:1710	NM_000020	94	ENSG00000139567	ACVRL1	NSIP	Kontrolle	0.286990012	1
NM_004184.3:1851	NM_004184	7453	ENSG00000140105	WARS	UIP	NSIP	0.287952558	1
NM_002202.2:1375	NM_002202	3670	ENSG00000016082	ISL1	UIP	NSIP	0.28799585	1
NM_005445.3:3525	NM_005445	9126	ENSG00000108055	SMC3	NSIP	Kontrolle	0.288054731	1
NM_003299.1:160	NM_003299	7184	ENSG00000166598	HSP90B1	NSIP	AFE	0.288165084	1
NM_001010855.3:1112	NM_001010855	146850	ENSG00000276231	PIK3R6	NSIP	Kontrolle	0.288782994	1
NM_001615.3:921	NM_001615	72	ENSG00000163017	ACTG2	UIP	Kontrolle	0.28908328	1
NM_003998.2:1675	NM_003998	4790	ENSG00000109320	NFKB1	NSIP	AFE	0.289169252	1
NM_001190848.1:795	NM_001190848	4850	ENSG00000080802	CNOT4	UIP	NSIP	0.289227186	1
NM_002410.4:1233	NM_002410	4249	ENSG00000152127	MGAT5	UIP	Kontrolle	0.289279064	1
NM_001723.4:1870	NM_001723	667	ENSG00000151914	DST	NSIP	Kontrolle	0.289287432	1

NM_012238.4:1595	NM_012238	23411	ENSG00000096717	SIRT1	Kontrolle	AFE	0.289317546	1
NM_002104.2:700	NM_002104	3003	ENSG00000113088	GZMK	NSIP	Kontrolle	0.289745522	1
NM_003106.2:151	NM_003106	6657	ENSG00000181449	SOX2	UIP	NSIP	0.289794621	1
NM_004363.2:1961	NM_004363	1048	ENSG00000105388	CEACAM5	Kontrolle	AFE	0.289989866	1
NM_006682.2:250	NM_006682	10875	ENSG00000127951	FGL2	NSIP	Kontrolle	0.290098818	1
NM_001270837.1:1042	NM_001270837	1397	ENSG00000182809	CRIP2	Kontrolle	AFE	0.290490458	1
NM_001015001.1:286	NM_001015001	548596	ENSG00000223572	CKMT1A	NSIP	AFE	0.290687229	1
NM_012243.1:605	NM_012243	23443	ENSG00000117620	SLC35A3	UIP	Kontrolle	0.290792781	1
NM_005901.5:1678	NM_005901	4087	ENSG00000175387	SMAD2	UIP	NSIP	0.291014562	1
NM_013258.3:714	NM_013258	29108	ENSG00000103490	PYCARD	NSIP	Kontrolle	0.29153491	1
NM_001977.3:2940	NM_001977	2028	ENSG00000138792	ENPEP	UIP	Kontrolle	0.291409583	1
NM_001143981.1:1120	NM_001143981	91851	ENSG00000101938	CHRD1	UIP	Kontrolle	0.291808758	1
NM_182471.1:2105	NM_182471	5315	ENSG00000067225	PKM	NSIP	Kontrolle	0.291922939	1
NM_017729.3:1914	NM_017729	54869	ENSG00000131037	EPS8L1	Kontrolle	AFE	0.292214655	1
NM_002231.3:1211	NM_002231	3732	ENSG00000085117	CD82	UIP	AFE	0.293007934	1
NM_080923.2:154	NM_080923			PTPRC	NSIP	Kontrolle	0.293249275	1
NM_001552.2:1520	NM_001552	3487	ENSG00000141753	IGFBP4	UIP	NSIP	0.29336866	1
NM_001711.3:1935	NM_001711	633	ENSG00000182492	BGN	NSIP	AFE	0.294333298	1
NM_006182.2:1706	NM_006182	4921	ENSG00000162733	DDR2	UIP	NSIP	0.294367248	1
NM_006182.2:1706	NM_006182	4921	ENSG00000162733	DDR2	NSIP	AFE	0.29517535	1
NM_032642.2:1745	NM_032642	81029	ENSG0000011186	WNT5B	UIP	NSIP	0.295429178	1
NR_046324.1:194	NR_046324	1139	ENSG00000175344	CHRNA7	UIP	Kontrolle	0.295452458	1
NM_004867.4:988	NM_004867	9452	ENSG00000078596	ITM2A	UIP	Kontrolle	0.295494633	1
NM_001204857.1:330	NM_001204857	6921	ENSG00000154582	TCEB1	UIP	AFE	0.295633511	1
NM_001307.3:175	NM_001307	1366	ENSG00000181885	CLDN7	NSIP	AFE	0.295670257	1
NM_000557.2:155	NM_000557	8200	ENSG00000125965	GDF5	NSIP	Kontrolle	0.295674841	1
NM_002023.3:2050	NM_002023	2331	ENSG00000122176	FMOD	UIP	NSIP	0.295846776	1
NM_003012.3:3320	NM_003012	6422	ENSG00000104332	SFRP1	UIP	AFE	0.296032748	1
NM_001042494.1:3962	NM_001042494	9990	ENSG00000140199	SLC12A6	UIP	AFE	0.296137771	1
NM_014467.2:1420	NM_014467	27286	ENSG00000102359	SRPX2	Kontrolle	AFE	0.296159507	1
NM_181501.1:1875	NM_181501	3672	ENSG00000213949	ITGA1	UIP	NSIP	0.296296048	1
NM_001847.2:1070	NM_001847	1288	ENSG00000197565	COL4A6	UIP	NSIP	0.296722818	1
NM_001010855.3:1112	NM_001010855	146850	ENSG00000276231	PIK3R6	NSIP	AFE	0.296783005	1
NM_001012331.1:1365	NM_001012331	4914	ENSG00000198400	NTRK1	NSIP	AFE	0.296917015	1
NM_003829.4:6092	NM_003829	8777	ENSG00000107186	MPDZ	NSIP	Kontrolle	0.297001062	1
NM_032777.9:1278	NM_032777	25960	ENSG00000020181	GPR124	NSIP	Kontrolle	0.297086767	1
NM_001175.4:833	NM_001175	397	ENSG00000111348	ARHGDI8	NSIP	AFE	0.29731651	1
NM_030662.3:839	NM_030662	5605	ENSG00000126934	MAP2K2	NSIP	AFE	0.297439649	1
NM_005045.2:345	NM_005045	5649	ENSG00000189056	RELN	UIP	Kontrolle	0.297589412	1
NM_181504.2:1105	NM_181504	5295	ENSG00000145675	PIK3R1	Kontrolle	AFE	0.29793267	1
NM_002621.2:380	NM_002621	5199	ENSG00000126759	CFP	NSIP	AFE	0.298639993	1
NM_001253845.1:610	NM_001253845	79924	ENSG00000128165	ADM2	UIP	AFE	0.298899009	1
NM_002023.3:2050	NM_002023	2331	ENSG00000122176	FMOD	NSIP	Kontrolle	0.299015232	1
NM_007108.2:800	NM_007108	6923	ENSG00000103363	TCEB2	NSIP	AFE	0.299019563	1
NM_002538.3:1975	NM_002538	100506658	ENSG00000197822	OCLN	UIP	AFE	0.299116812	1
NM_002985.2:280	NM_002985	6352	ENSG00000271503	CCL5	UIP	NSIP	0.299252511	1
NM_005924.4:1184	NM_005924	4223	ENSG00000106511	MEOX2	UIP	AFE	0.299773828	1
NM_005251.2:1389	NM_005251	2303	ENSG00000176692	FOXC2	Kontrolle	AFE	0.300075914	1
NM_001449.4:1032	NM_001449	2273	ENSG00000022267	FHL1	UIP	AFE	0.300307553	1
NM_003809.2:339	NM_003809	8742	ENSG00000239697	TNFSF12	UIP	Kontrolle	0.300763504	1
NM_001050.2:1060	NM_001050	6752	ENSG00000180616	SSTR2	UIP	AFE	0.301057794	1
NM_000269.2:500	NM_000269	4830	ENSG00000239672	NME1	NSIP	AFE	0.301141057	1
NM_183404.1:1110	NM_183404	5933	ENSG00000080839	RBL1	UIP	AFE	0.30130212	1
NM_003248.3:985	NM_003248	7060	ENSG00000113296	THBS4	UIP	AFE	0.301855962	1
NM_001626.2:1450	NM_001626	208	ENSG00000105221	AKT2	UIP	AFE	0.302312044	1
NM_000526.4:523	NM_000526	3861	ENSG00000186847	KRT14	UIP	NSIP	0.302406611	1
NM_173214.1:3290	NM_173214	10725	ENSG00000102908	NFAT5	UIP	AFE	0.302488581	1
NM_016215.3:1252	NM_016215	51162	ENSG00000172889	EGFL7	NSIP	Kontrolle	0.302556835	1
NM_002999.2:1310	NM_002999	6385	ENSG00000124145	SDC4	NSIP	AFE	0.302601373	1
NM_005903.5:1044	NM_005903	4090	ENSG00000113658	SMAD5	UIP	NSIP	0.30265422	1
NM_022045.4:1792	NM_022045	27085	ENSG00000172167	MTBP	NSIP	AFE	0.303399286	1
NM_015715.3:2415	NM_015715	50487	ENSG00000100078	PLA2G3	UIP	Kontrolle	0.303405538	1
NM_002204.2:4550	NM_002204	3675	ENSG00000005884	ITGA3	NSIP	Kontrolle	0.303856888	1
NM_003873.5:370	NM_003873	8829	ENSG00000099250	NRP1	UIP	Kontrolle	0.303862604	1
NM_015704.2:2880	NM_015704	27351	ENSG00000100418	DES1	UIP	NSIP	0.304027251	1
NM_001897.4:7642	NM_001897	1464	ENSG00000173546	CSPG4	NSIP	Kontrolle	0.304213343	1
NM_003883.2:1455	NM_003883	8841	ENSG00000171720	HDAC3	UIP	Kontrolle	0.304271921	1
NM_005360.4:888	NM_005360	4094	ENSG00000178573	MAF	UIP	AFE	0.30458273	1
NM_003677.3:2091	NM_003677	8562	ENSG00000139726	DENR	UIP	NSIP	0.304984606	1
NM_183404.1:1110	NM_183404	5933	ENSG00000080839	RBL1	NSIP	AFE	0.30520932	1
NM_004571.3:3655	NM_004571	5316	ENSG00000160199	PKNOX1	UIP	Kontrolle	0.305325084	1
NM_000889.1:1278	NM_000889	3695	ENSG00000139626	ITGB7	UIP	NSIP	0.305364096	1

NM_001884.3:730	NM_001884	1404	ENSG00000145681	HAPLN1	UIP	NSIP	0.305762934	1
NM_004441.3:1855	NM_004441	2047	ENSG00000154928	EPHB1	NSIP	AFE	0.305939792	1
NM_002872.3:1069	NM_002872	5880	ENSG00000128340	RAC2	NSIP	Kontrolle	0.305990374	1
NM_000454.4:35	NM_000454	6647	ENSG00000142168	SOD1	UIP	AFE	0.306005542	1
NM_024065.4:23	NM_024065	79031	ENSG00000115539	PDCL3	NSIP	AFE	0.306112683	1
NM_002852.3:1152	NM_002852	5806	ENSG00000163661	PTX3	Kontrolle	AFE	0.30612146	1
NM_001174071.1:790	NM_001174071	256987	ENSG00000164300	SERINC5	UIP	NSIP	0.306403895	1
NM_005498.4:78	NM_005498	10053	ENSG00000129354	AP1M2	UIP	Kontrolle	0.306661094	1
NM_001040092.2:1980	NM_001040092	5168	ENSG00000136960	ENPP2	UIP	NSIP	0.306938428	1
XM_005254140.1:174	XM_005254140		CHP1	NSIP	Kontrolle	0.307016906	1	
NM_001145.4:949	NM_001145	283	ENSG00000214274	ANG	NSIP	Kontrolle	0.307324881	1
NM_001937.3:1510	NM_001937	1805	ENSG00000143196	DPT	NSIP	AFE	0.307430509	1
NM_015293.1:7755	NM_015293	23345	ENSG00000131018	SYNE1	NSIP	AFE	0.30761123	1
NM_001731.2:775	NM_001731	694	ENSG00000133639	BTG1	UIP	AFE	0.307806354	1
NM_001122821.1:2385	NM_001122821	6418	ENSG00000119335	SET	NSIP	Kontrolle	0.307867481	1
NM_001018077.1:1665	NM_001018077	2908	ENSG00000113580	NR3C1	UIP	NSIP	0.307882816	1
NM_005475.2:4285	NM_005475	10019	ENSG00000111252	SH2B3	NSIP	Kontrolle	0.308648225	1
NM_000077.3:975	NM_000077	1029	ENSG00000147889	CDKN2A	UIP	Kontrolle	0.308794124	1
NM_000575.3:1085	NM_000575	3552	ENSG00000115008	IL1A	UIP	AFE	0.309004949	1
NM_198829.1:1250	NM_198829	5879	ENSG00000136238	RAC1	NSIP	AFE	0.309013541	1
NM_024756.2:3040	NM_024756	79812	ENSG00000173269	MMRN2	Kontrolle	AFE	0.309431041	1
NM_002310.3:2995	NM_002310	3977	ENSG00000113594	LIFR	UIP	NSIP	0.309548898	1
NM_007146.2:700	NM_007146	7716	ENSG00000136451	VEZF1	NSIP	Kontrolle	0.309892623	1
NM_004763.3:1690	NM_004763	9270	ENSG00000119185	ITGB1BP1	UIP	Kontrolle	0.310309775	1
NM_000077.3:975	NM_000077	1029	ENSG00000147889	CDKN2A	UIP	NSIP	0.310376118	1
NM_022739.3:2605	NM_022739	64750	ENSG00000108854	SMURF2	NSIP	AFE	0.311146473	1
NM_001220.3:365	NM_001220	816	ENSG00000058404	CAMK2B	UIP	AFE	0.311213739	1
NM_003657.2:2305	NM_003657	8537	ENSG00000064787	BCAS1	NSIP	Kontrolle	0.311510885	1
NM_018326.2:315	NM_018326	55303	ENSG00000133574	GIMAP4	UIP	NSIP	0.311630269	1
NM_001911.2:160	NM_001911	1511	ENSG00000100448	CTSG	UIP	NSIP	0.311722513	1
NM_001087.3:412	NM_001087	14	ENSG00000127837	AAMP	NSIP	AFE	0.311893262	1
NM_003677.3:2091	NM_003677	8562	ENSG00000139726	DENR	NSIP	AFE	0.312101286	1
NM_006500.2:2482	NM_006500	4162	ENSG00000076706	MCAM	NSIP	AFE	0.312849227	1
NM_001135000.1:920	NM_001135000	10979	ENSG00000073712	FERMT2	UIP	Kontrolle	0.313274293	1
NM_001135000.1:920	NM_001135000	10979	ENSG00000073712	FERMT2	UIP	NSIP	0.31330419	1
NM_001127198.1:1266	NM_001127198	11322	ENSG00000141524	TMC6	NSIP	AFE	0.314052833	1
NM_006528.3:524	NM_006528	7980	ENSG00000105825	TFPI2	UIP	Kontrolle	0.314430422	1
NM_003761.3:260	NM_003761	8673	ENSG00000118640	VAMP8	NSIP	AFE	0.314467241	1
NM_001846.2:1150	NM_001846	1284	ENSG00000134871	COL4A2	UIP	AFE	0.314764752	1
NM_001999.3:9850	NM_001999	2201	ENSG00000138829	FBN2	UIP	AFE	0.31494545	1
NM_002354.1:415	NM_002354	4072	ENSG00000119888	EPCAM	UIP	AFE	0.316166879	1
NM_014795.3:549	NM_014795	9839	ENSG00000169554	ZEB2	NSIP	AFE	0.316398244	1
NM_005954.2:165	NM_005954	4504	ENSG00000087250	MT3	NSIP	AFE	0.316573539	1
NM_006786.3:354	NM_006786	10911	ENSG00000049247	UTS2	NSIP	AFE	0.316680696	1
NM_207446.2:1075	NM_207446	400451	ENSG00000185442	FAM174B	UIP	NSIP	0.316722873	1
NM_001976.4:1368	NM_001976	2027	ENSG00000108515	ENO3	NSIP	AFE	0.316987917	1
NM_000594.2:1010	NM_000594	7124	ENSG00000232810	TNF	UIP	Kontrolle	0.316994858	1
NM_000266.2:505	NM_000266	4693	ENSG00000124479	NDP	NSIP	AFE	0.317056161	1
NM_017617.3:735	NM_017617	4851	ENSG00000148400	NOTCH1	UIP	NSIP	0.317726578	1
NM_024574.3:395	NM_024574	79625	ENSG00000173376	NDNF	UIP	Kontrolle	0.31774297	1
NM_004360.2:1230	NM_004360	999	ENSG00000039068	CDH1	UIP	NSIP	0.318301721	1
NM_000954.5:180	NM_000954	5730	ENSG00000107317	PTGDS	UIP	AFE	0.3185347	1
NM_014159.6:1386	NM_014159	29072	ENSG00000181555	SETD2	NSIP	AFE	0.318665852	1
NM_007111.4:1826	NM_007111	7027	ENSG00000198176	TFDP1	NSIP	AFE	0.318681168	1
NM_001993.3:1030	NM_001993	2152	ENSG00000117525	F3	NSIP	Kontrolle	0.31882446	1
NM_003952.2:980	NM_003952	6199	ENSG00000175634	RPS6KB2	UIP	Kontrolle	0.320477764	1
NM_212535.1:1750	NM_212535	5579	ENSG00000166501	PRKCB	UIP	Kontrolle	0.320538431	1
NM_005409.3:590	NM_005409	6373	ENSG00000169248	CXCL11	UIP	Kontrolle	0.321348666	1
NM_019074.2:893	NM_019074	54567	ENSG00000128917	DLL4	NSIP	Kontrolle	0.321387564	1
NM_032864.3:335	NM_032864	84950	ENSG00000134748	PRPF38A	UIP	AFE	0.322121865	1
NM_016167.3:335	NM_016167	51406	ENSG00000225921	NOL7	NSIP	Kontrolle	0.322422486	1
NM_032777.9:1278	NM_032777	25960	ENSG00000020181	GPR124	UIP	AFE	0.322847264	1
NM_001098424.1:1460	NM_001098424	1739	ENSG00000075711	DLG1	UIP	NSIP	0.323629066	1
NM_001039802.1:390	NM_001039802	998	ENSG00000070831	CDC42	UIP	NSIP	0.323683528	1
NM_006147.2:1430	NM_006147	3664	ENSG00000117595	IRF6	NSIP	Kontrolle	0.323705894	1
NM_000615.5:1620	NM_000615	4684	ENSG00000149294	NCAM1	NSIP	AFE	0.323753948	1
NM_033001.2:920	NM_033001	2969	ENSG00000263001	GTF2I	UIP	Kontrolle	0.323806065	1
NM_001122821.1:2385	NM_001122821	6418	ENSG00000119335	SET	UIP	AFE	0.32419619	1
NM_001449.4:1032	NM_001449	2273	ENSG00000022267	FHL1	NSIP	AFE	0.324368843	1
NM_005251.2:1389	NM_005251	2303	ENSG00000176692	FOXC2	NSIP	Kontrolle	0.324500056	1
NM_006988.3:2840	NM_006988	9510	ENSG00000154734	ADAMTS1	UIP	AFE	0.324899511	1
NM_004994.2:1530	NM_004994	4318	ENSG00000100985	MMP9	UIP	AFE	0.325387357	1

NM_000177.4:1075	NM_000177	2934	ENSG00000148180	GSN	NSIP	AFE	0.325737337	1
NM_002146.4:2840	NM_002146	3213	ENSG00000120093	HOXB3	UIP	AFE	0.326102307	1
NM_022078.2:1685	NM_022078	63906	ENSG00000198746	GPATCH3	UIP	Kontrolle	0.326296484	1
NM_000557.2:155	NM_000557	8200	ENSG00000125965	GDF5	UIP	NSIP	0.326538929	1
NM_001042404.1:1800	NM_001042404	9859	ENSG00000143702	CEP170	UIP	Kontrolle	0.326633682	1
NM_024505.2:2135	NM_024505	79400	ENSG00000255346	NOX5	NSIP	AFE	0.326814476	1
NM_000615.5:1620	NM_000615	4684	ENSG00000149294	NCAM1	NSIP	Kontrolle	0.327555886	1
NM_002293.3:4915	NM_002293	3915	ENSG00000135862	LAMC1	Kontrolle	AFE	0.327732328	1
NM_004385.3:9915	NM_004385	1462	ENSG00000038427	VCAN	NSIP	Kontrolle	0.327829006	1
NM_005045.2:345	NM_005045	5649	ENSG00000189056	RELN	UIP	NSIP	0.328152284	1
NM_005406.1:2660	NM_005406	6093	ENSG00000067900	ROCK1	NSIP	Kontrolle	0.328323475	1
NM_002011.3:1585	NM_002011	2264	ENSG00000160867	FGFR4	UIP	Kontrolle	0.329010386	1
NM_019027.3:150	NM_019027	54502	ENSG00000163694	RBM47	UIP	NSIP	0.329662327	1
NM_001165413.1:1670	NM_001165413	5054	ENSG00000106366	SERPINE1	NSIP	Kontrolle	0.32970093	1
NM_033305.2:8260	NM_033305	23230	ENSG00000197969	VPS13A	NSIP	Kontrolle	0.329943019	1
NM_000584.2:25	NM_000584	3576	ENSG00000169429	CXCL8	UIP	AFE	0.329959218	1
NM_000479.3:1626	NM_000479	268	ENSG00000104899	AMH	NSIP	AFE	0.330357358	1
NR_002766.2:691	NR_002766	55384	ENSG00000214548	MEG3	NSIP	AFE	0.330447378	1
NM_004912.3:2648	NM_004912	889	ENSG00000001631	KRIT1	Kontrolle	AFE	0.330697118	1
NM_002986.2:378	NM_002986	6356	ENSG00000172156	CCL11	UIP	Kontrolle	0.330760224	1
NM_199121.2:3664	NM_199121	64856	ENSG00000179403	VWA1	NSIP	Kontrolle	0.330778058	1
NM_000041.2:96	NM_000041	348	ENSG00000130203	APOE	UIP	NSIP	0.330785997	1
NM_213560.1:2153	NM_213560	5585	ENSG00000123143	PKN1	UIP	Kontrolle	0.331588957	1
NM_001273.2:2680	NM_001273	1108	ENSG00000111642	CHD4	NSIP	Kontrolle	0.331705366	1
NM_003808.3:810	NM_003808	8741	ENSG00000161955	TNFSF13	NSIP	AFE	0.332640192	1
NM_001963.4:1022	NM_001963	1950	ENSG00000138798	EGF	NSIP	Kontrolle	0.333128378	1
NM_004830.2:640	NM_004830	9439	ENSG00000112282	MED23	UIP	Kontrolle	0.333266758	1
NM_000266.2:505	NM_000266	4693	ENSG00000124479	NDP	NSIP	Kontrolle	0.334132895	1
NM_000954.5:180	NM_000954	5730	ENSG00000107317	PTGDS	UIP	NSIP	0.334458488	1
NM_001263.3:3052	NM_001263	1040	ENSG00000163624	CDS1	UIP	NSIP	0.334497651	1
NM_030955.2:1955	NM_030955	81792	ENSG00000151388	ADAMTS12	UIP	NSIP	0.334796594	1
NM_181825.2:442	NM_181825	4771	ENSG00000186575	NF2	UIP	NSIP	0.334945376	1
NM_004444.4:1680	NM_004444	2050	ENSG00000196411	EPHB4	UIP	NSIP	0.335006147	1
NM_022144.2:462	NM_022144	64102	ENSG00000000005	TNMD	UIP	NSIP	0.3351471	1
NM_018238.3:816	NM_018238	55750	ENSG00000006530	AGK	NSIP	Kontrolle	0.335551108	1
NM_000945.3:2385	NM_000945	5534	ENSG00000221823	PPP3R1	NSIP	Kontrolle	0.335607161	1
NM_019055.5:3080	NM_019055	54538	ENSG00000154133	ROBO4	NSIP	AFE	0.335794082	1
NM_020848.2:7395	NM_020848	57608	ENSG00000165757	KIAA1462	NSIP	Kontrolle	0.336692689	1
NM_015103.2:3711	NM_015103	23129	ENSG00000004399	PLXND1	UIP	Kontrolle	0.336811534	1
NM_000122.1:1950	NM_000122	2071	ENSG00000163161	ERCC3	NSIP	AFE	0.337927874	1
NM_145333.1:670	NM_145333	6885	ENSG00000135341	MAP3K7	NSIP	AFE	0.338000527	1
NM_002203.2:475	NM_002203	3673	ENSG00000164171	ITGA2	NSIP	AFE	0.33801892	1
NM_005010.4:875	NM_005010	4897	ENSG00000091129	NRCAM	UIP	AFE	0.338135285	1
NM_005954.2:165	NM_005954	4504	ENSG00000087250	MT3	UIP	Kontrolle	0.338516768	1
NM_000961.3:1409	NM_000961	5740	ENSG00000124212	PTGIS	UIP	NSIP	0.338850733	1
NM_022045.4:1792	NM_022045	27085	ENSG00000172167	MTBP	NSIP	Kontrolle	0.33891142	1
NM_017564.9:3000	NM_017564	55576	ENSG00000136011	STAB2	UIP	NSIP	0.338923622	1
NM_002133.2:781	NM_002133	3162	ENSG00000100292	HMOX1	NSIP	Kontrolle	0.339124	1
NM_002483.4:1217	NM_002483	4680	ENSG00000086548	CEACAM6	UIP	Kontrolle	0.339782917	1
NM_001562.2:48	NM_001562	3606	ENSG00000150782	IL18	UIP	NSIP	0.339784888	1
NM_000212.2:4485	NM_000212	3690	ENSG00000259207	ITGB3	UIP	NSIP	0.340037533	1
NM_080923.2:154	NM_080923			PTPRC	UIP	Kontrolle	0.340440612	1
NM_002422.3:25	NM_002422	4314	ENSG00000149968	MMP3	UIP	NSIP	0.340477621	1
NM_001168278.1:1050	NM_001168278	25937	ENSG00000018408	VWTR1	NSIP	AFE	0.340658509	1
NM_001123041.2:743	NM_001123041	729230	ENSG00000121807	CCR2	NSIP	AFE	0.34093544	1
NM_005854.2:282	NM_005854	10266	ENSG00000131477	RAMP2	UIP	AFE	0.341048238	1
NM_212535.1:1750	NM_212535	5579	ENSG00000166501	PRKCB	UIP	AFE	0.341244936	1
NM_033666.2:2000	NM_033666	3688	ENSG00000150093	ITGB1	UIP	Kontrolle	0.34159225	1
NM_004538.4:1070	NM_004538	4675	ENSG00000186310	NAP1L3	UIP	AFE	0.341595159	1
NM_002353.2:1840	NM_002353	4070	ENSG00000184292	TACSTD2	UIP	Kontrolle	0.341730801	1
NR_024168.1:2575	NR_024168			TLR4	UIP	Kontrolle	0.342045684	1
NM_031479.3:1450	NM_031479	83729	ENSG00000139269	INHBE	NSIP	AFE	0.342230245	1
NM_014059.2:765	NM_014059	28984	ENSG00000102760	RGCC	NSIP	Kontrolle	0.342799508	1
NM_005650.1:925	NM_005650	6942	ENSG00000100207	TCF20	UIP	Kontrolle	0.342888378	1
NM_017617.3:735	NM_017617	4851	ENSG00000148400	NOTCH1	NSIP	AFE	0.344045288	1
NM_001167580.1:2154	NM_001167580	9899	ENSG00000185518	SV2B	UIP	AFE	0.344083436	1
NM_001920.3:420	NM_001920	1634	ENSG00000011465	DCN	UIP	Kontrolle	0.34437608	1
NM_057179.2:482	NM_057179	117581	ENSG00000233608	TWIST2	UIP	NSIP	0.344394482	1
NM_005562.2:2819	NM_005562	3918	ENSG00000058085	LAMC2	NSIP	Kontrolle	0.344456556	1
NM_001122821.1:2385	NM_001122821	6418	ENSG00000119335	SET	NSIP	AFE	0.34458269	1
NM_005656.3:1079	NM_005656	7113	ENSG00000184012	TMPRSS2	Kontrolle	AFE	0.344589485	1
NM_001123041.2:743	NM_001123041	729230	ENSG00000121807	CCR2	UIP	Kontrolle	0.344762504	1

NM_003278.2:607	NM_003278	7123	ENSG00000163815	CLEC3B	UIP	NSIP	0.345102064	1
NM_001271814.1:90	NM_001271814	26279	ENSG00000117215	PLA2G2D	UIP	AFE	0.345115567	1
NM_001307.3:175	NM_001307	1366	ENSG00000181885	CLDN7	UIP	AFE	0.345478003	1
NM_000575.3:1085	NM_000575	3552	ENSG00000115008	IL1A	NSIP	Kontrolle	0.345871513	1
NM_016155.4:804	NM_016155	4326	ENSG00000198598	MMP17	NSIP	Kontrolle	0.345916964	1
NM_013943.2:1702	NM_013943	25932	ENSG00000169504	CLIC4	Kontrolle	AFE	0.346278986	1
NM_004431.2:1525	NM_004431	1969	ENSG00000142627	EPHA2	NSIP	AFE	0.346788312	1
NM_004774.3:806	NM_004774	5469	ENSG00000125686	MED1	NSIP	AFE	0.34739784	1
NM_006474.4:431	NM_006474	10630	ENSG00000162493	PDPN	UIP	NSIP	0.34743098	1
NM_000041.2:96	NM_000041	348	ENSG00000130203	APOE	UIP	Kontrolle	0.347492295	1
NM_002986.2:378	NM_002986	6356	ENSG00000172156	CCL11	NSIP	Kontrolle	0.347852762	1
NM_001712.3:2455	NM_001712	634	ENSG00000079385	CEACAM1	NSIP	Kontrolle	0.347860507	1
NM_001142633.1:3335	NM_001142633	23533	ENSG00000141506	PIK3R5	NSIP	Kontrolle	0.347888937	1
NM_032794.1:1798	NM_032794		SLC44A4	Kontrolle	AFE	0.348287301	1	
NM_020733.1:1890	NM_020733	57493	ENSG00000173706	HEG1	NSIP	Kontrolle	0.348605722	1
NM_003199.1:1455	NM_003199	6925	ENSG00000196628	TCF4	NSIP	AFE	0.34933926	1
NM_020997.2:1405	NM_020997	10637	ENSG00000243709	LEFTY1	NSIP	AFE	0.349897791	1
NM_005903.5:1044	NM_005903	4090	ENSG00000113658	SMAD5	NSIP	AFE	0.350370003	1
NM_000546.2:1330	NM_000546	7157	ENSG00000141510	TP53	UIP	AFE	0.350857144	1
NM_005266.5:1992	NM_005266	2702	ENSG00000265107	GJA5	UIP	Kontrolle	0.351248316	1
NM_022073.3:800	NM_022073	112399	ENSG00000129521	EGLN3	UIP	AFE	0.351276521	1
NM_002609.3:840	NM_002609	5159	ENSG00000113721	PDGFRB	NSIP	Kontrolle	0.351559461	1
NM_001005862.1:1255	NM_001005862	2064	ENSG00000141736	ERBB2	NSIP	AFE	0.35163417	1
NM_005009.2:820	NM_005009	4833	ENSG00000103202	NME4	NSIP	Kontrolle	0.352115711	1
NM_000698.2:735	NM_000698	240	ENSG000000012779	ALOX5	UIP	AFE	0.352415877	1
NM_002625.2:564	NM_002625	5207	ENSG00000158571	PFKFB1	UIP	NSIP	0.353467626	1
NM_004571.3:3655	NM_004571	5316	ENSG00000160199	PKNOX1	NSIP	AFE	0.353759532	1
NM_024021.2:800	NM_024021	51338	ENSG00000110079	MS4A4A	UIP	Kontrolle	0.354073195	1
NM_004967.3:876	NM_004967	3381	ENSG00000029559	IBSP	Kontrolle	AFE	0.354704489	1
NM_003068.3:740	NM_003068	6591	ENSG00000019549	SNAI2	NSIP	AFE	0.354900627	1
NM_001005862.1:1255	NM_001005862	2064	ENSG00000141736	ERBB2	Kontrolle	AFE	0.355138724	1
NM_006516.2:2500	NM_006516	6513	ENSG00000117394	SLC2A1	NSIP	Kontrolle	0.355139712	1
NM_000639.1:625	NM_000639	356	ENSG00000117560	FASLG	NSIP	Kontrolle	0.35532726	1
NM_053276.3:604	NM_053276	5212	ENSG00000205221	VIT	NSIP	Kontrolle	0.35537571	1
NM_002607.5:1276	NM_002607	5154	ENSG00000197461	PDGFA	UIP	Kontrolle	0.355689999	1
NM_004763.3:1690	NM_004763	9270	ENSG00000119185	ITGB1BP1	NSIP	Kontrolle	0.356154329	1
NM_015441.1:2920	NM_015441	25903	ENSG00000162745	OLFML2B	UIP	NSIP	0.356184584	1
NM_181825.2:442	NM_181825	4771	ENSG00000186575	NF2	NSIP	AFE	0.356352601	1
NM_005359.3:1370	NM_005359	4089	ENSG00000141646	SMAD4	NSIP	AFE	0.356657098	1
NM_014333.3:2840	NM_014333	23705	ENSG00000182985	CADM1	UIP	NSIP	0.356711674	1
NM_004469.2:580	NM_004469	2277	ENSG00000165197	FIGF	NSIP	Kontrolle	0.35682876	1
NM_012395.2:3645	NM_012395	5218	ENSG00000058091	CDK14	NSIP	AFE	0.356917451	1
NM_018488.2:1560	NM_018488	9496	ENSG00000121075	TBX4	UIP	NSIP	0.356951461	1
NM_007085.4:1610	NM_007085	11167	ENSG00000163430	FSTL1	NSIP	AFE	0.357329477	1
NM_002872.3:1069	NM_002872	5880	ENSG00000128340	RAC2	UIP	AFE	0.357430947	1
NM_032364.5:1166	NM_032364	85406	ENSG00000135392	DNAJC14	NSIP	Kontrolle	0.357843137	1
NM_000304.2:1644	NM_000304	5376	ENSG00000109099	PMP22	UIP	NSIP	0.357862383	1
NM_003104.4:1345	NM_003104	6652	ENSG00000140263	SORD	NSIP	AFE	0.358534512	1
NM_001105250.1:2286	NM_001105250	9369	ENSG00000021645	NRXN3	UIP	AFE	0.358869033	1
NM_001040092.2:1980	NM_001040092	5168	ENSG00000136960	ENPP2	NSIP	Kontrolle	0.3590976	1
NM_016167.3:335	NM_016167	51406	ENSG00000225921	NOL7	Kontrolle	AFE	0.359774442	1
NM_005623.2:689	NM_005623	6355	ENSG00000108700	CCL8	UIP	AFE	0.36048164	1
NM_000888.3:1090	NM_000888	3694	ENSG00000115221	ITGB6	NSIP	Kontrolle	0.360530345	1
NM_015136.2:95	NM_015136	23166	ENSG00000010327	STAB1	UIP	NSIP	0.361084287	1
NM_004982.2:880	NM_004982	3764	ENSG00000121361	KCNJ8	UIP	AFE	0.361393428	1
NM_001449.4:1032	NM_001449	2273	ENSG00000022267	FHL1	Kontrolle	AFE	0.362029069	1
NM_003068.3:740	NM_003068	6591	ENSG00000019549	SNAI2	NSIP	Kontrolle	0.362081806	1
NM_001147.2:1775	NM_001147	285	ENSG00000091879	ANGPT2	NSIP	Kontrolle	0.362142863	1
NM_001174071.1:790	NM_001174071	256987	ENSG00000164300	SERINC5	NSIP	AFE	0.362657561	1
NM_000546.2:1330	NM_000546	7157	ENSG00000141510	TP53	UIP	Kontrolle	0.362756002	1
NM_006702.3:3941	NM_006702	10908	ENSG00000032444	PNPLA6	UIP	NSIP	0.363068189	1
NM_019074.2:893	NM_019074	54567	ENSG00000128917	DLL4	UIP	AFE	0.363264829	1
NM_001963.4:1022	NM_001963	1950	ENSG00000138798	EGF	UIP	Kontrolle	0.363644508	1
NM_153609.2:2929	NM_153609	164656	ENSG00000187045	TMPRSS6	Kontrolle	AFE	0.363820228	1
NM_003873.5:370	NM_003873	8829	ENSG00000099250	NRP1	UIP	NSIP	0.363942648	1
NM_002661.2:525	NM_002661	5336	ENSG00000197943	PLCG2	UIP	NSIP	0.36397107	1
NM_001504.1:80	NM_001504	2833	ENSG00000186810	CXCR3	Kontrolle	AFE	0.364027474	1
NM_005009.2:820	NM_005009	4833	ENSG00000103202	NME4	UIP	NSIP	0.364086044	1
NM_144962.2:190	NM_144962	157310	ENSG00000134020	PEBP4	UIP	NSIP	0.365292271	1
NM_000888.3:1090	NM_000888	3694	ENSG00000115221	ITGB6	UIP	NSIP	0.365763162	1
NM_001937.3:1510	NM_001937	1805	ENSG00000143196	DPT	UIP	NSIP	0.365881133	1
NM_001204355.1:730	NM_001204355	50859	ENSG00000196104	SPOCK3	NSIP	Kontrolle	0.365883746	1

NM_015399.3:469	NM_015399	25855	ENSG00000174744	BRMS1	NSIP	AFE	0.366107096	1
NM_203384.1:1192	NM_203384	6050	ENSG00000023191	RNH1	UIP	AFE	0.366383454	1
NM_004345.3:220	NM_004345	820	ENSG00000164047	CAMP	NSIP	AFE	0.366872558	1
NM_015013.3:2395	NM_015013	23028	ENSG00000004487	KDM1A	UIP	AFE	0.367012649	1
NM_138735.2:1095	NM_138735	9378	ENSG00000179915	NRXN1	NSIP	Kontrolle	0.367109794	1
NM_001428.2:1689	NM_001428	2023	ENSG00000074800	ENO1	NSIP	Kontrolle	0.367807722	1
NM_182471.1:2105	NM_182471	5315	ENSG00000067225	PKM	UIP	NSIP	0.368454657	1
NM_022045.4:1792	NM_022045	27085	ENSG00000172167	MTBP	UIP	NSIP	0.368543338	1
NM_199121.2:3664	NM_199121	64856	ENSG00000179403	VWA1	UIP	AFE	0.368597324	1
NM_000214.2:915	NM_000214	182	ENSG00000101384	JAG1	UIP	NSIP	0.368632243	1
NM_005163.2:1772	NM_005163	207	ENSG00000142208	AKT1	NSIP	AFE	0.368985813	1
NM_002649.2:2125	NM_002649	5294	ENSG00000105851	PIK3CG	NSIP	Kontrolle	0.3696027	1
NM_002019.4:530	NM_002019	2321	ENSG00000102755	FLT1	UIP	AFE	0.369784172	1
NM_015429.3:4081	NM_015429	25890	ENSG00000154175	ABI3BP	Kontrolle	AFE	0.369860911	1
NM_002593.3:1258	NM_002593	5118	ENSG00000106333	PCOLCE	UIP	AFE	0.370172285	1
NM_005623.2:689	NM_005623	6355	ENSG00000180700	CCL8	UIP	NSIP	0.37054081	1
NM_181349.1:5162	NM_181349	57154	ENSG00000198742	SMURF1	UIP	NSIP	0.370889275	1
NM_000038.3:6850	NM_000038	324	ENSG00000134982	APC	UIP	AFE	0.371319799	1
NM_014586.1:1280	NM_014586	30811	ENSG00000142149	HUNK	Kontrolle	AFE	0.371365184	1
NM_006988.3:2840	NM_006988	9510	ENSG00000154734	ADAMTS1	NSIP	Kontrolle	0.371435941	1
NM_001836.2:561	NM_001836	1215	ENSG00000092009	CMA1	UIP	NSIP	0.371538959	1
NM_016205.2:2596	NM_016205	56034	ENSG00000145431	PDGFC	UIP	Kontrolle	0.371661541	1
NM_005127.2:980	NM_005127	9976	ENSG00000110852	CLEC2B	NSIP	AFE	0.37179632	1
NM_002317.4:1575	NM_002317	4015	ENSG00000113083	LOX	UIP	Kontrolle	0.372092269	1
NM_004441.3:1855	NM_004441	2047	ENSG00000154928	EPHB1	UIP	NSIP	0.372289083	1
NM_025079.2:2140	NM_025079	80149	ENSG00000163874	ZC3H12A	NSIP	AFE	0.372811938	1
NM_153831.2:965	NM_153831	5747	ENSG00000169398	PTK2	UIP	Kontrolle	0.373209544	1
NM_012293.1:1960	NM_012293	7837	ENSG00000130508	PXDN	NSIP	AFE	0.373246011	1
NM_033395.1:3775	NM_033395	85459	ENSG00000166004	CEP295	NSIP	Kontrolle	0.373587628	1
NM_001032367.1:1315	NM_001032367	6692	ENSG00000166145	SPINT1	UIP	AFE	0.373729208	1
NM_002725.3:5250	NM_002725	5549	ENSG00000188783	PRELP	NSIP	Kontrolle	0.374373143	1
NM_000228.2:695	NM_000228	3914	ENSG00000196878	LAMB3	UIP	NSIP	0.374727347	1
NM_005359.3:1370	NM_005359	4089	ENSG00000141646	SMAD4	UIP	NSIP	0.375114055	1
NM_025130.3:2267	NM_025130	80201	ENSG00000156510	HKDC1	NSIP	AFE	0.375217322	1
NM_018055.3:320	NM_018055	4838	ENSG00000156574	NODAL	NSIP	AFE	0.375389931	1
NM_016639.1:575	NM_016639	51330	ENSG0000006327	TNFRSF12A	Kontrolle	AFE	0.375447471	1
NM_024896.2:852	NM_024896	79956	ENSG00000099219	ERMP1	UIP	AFE	0.375542382	1
NM_004530.2:2360	NM_004530	4313	ENSG00000087245	MMP2	NSIP	Kontrolle	0.376467145	1
NM_152696.3:2105	NM_152696	204851	ENSG00000163349	HIPK1	NSIP	AFE	0.376686299	1
NM_002989.2:180	NM_002989	6366	ENSG00000137077	CCL21	Kontrolle	AFE	0.376874513	1
NM_002837.3:2625	NM_002837	5787	ENSG00000127329	PTPRB	UIP	AFE	0.376913306	1
NM_003106.2:151	NM_003106	6657	ENSG00000181449	SOX2	NSIP	Kontrolle	0.377516446	1
NM_001105251.2:2292	NM_001105251	9765	ENSG00000039319	ZFYVE16	UIP	NSIP	0.377583058	1
NM_001167681.2:1406	NM_001167681	2313	ENSG00000151702	FLI1	NSIP	Kontrolle	0.377683977	1
NM_004460.2:1490	NM_004460	2191	ENSG00000078098	FAP	UIP	NSIP	0.377832631	1
NM_178310.1:820	NM_178310	333929	ENSG00000185669	SNAI3	NSIP	Kontrolle	0.378186585	1
NM_001147.2:1775	NM_001147	285	ENSG00000091879	ANGPT2	UIP	AFE	0.378963994	1
NM_002660.2:2290	NM_002660	5335	ENSG00000124181	PLCG1	Kontrolle	AFE	0.37898178	1
NM_001731.2:775	NM_001731	694	ENSG00000133639	BTG1	NSIP	AFE	0.379019992	1
NM_003248.3:985	NM_003248	7060	ENSG00000113296	THBS4	UIP	NSIP	0.379289245	1
NM_001615.3:921	NM_001615	72	ENSG00000163017	ACTG2	Kontrolle	AFE	0.379749737	1
NM_006182.2:1706	NM_006182	4921	ENSG00000162733	DDR2	NSIP	Kontrolle	0.37990054	1
NM_002999.2:1310	NM_002999	6385	ENSG00000124145	SDC4	UIP	AFE	0.379912457	1
NM_053032.2:710	NM_053032	4638	ENSG00000065534	MYLK	UIP	Kontrolle	0.380198883	1
NM_001615.3:921	NM_001615	72	ENSG00000163017	ACTG2	UIP	NSIP	0.380601574	1
NM_012120.2:1895	NM_012120	23607	ENSG00000198087	CD2AP	Kontrolle	AFE	0.38094797	1
NM_005359.3:1370	NM_005359	4089	ENSG00000141646	SMAD4	Kontrolle	AFE	0.380996665	1
NM_020770.2:1112	NM_020770	57530	ENSG00000143375	CGN	UIP	Kontrolle	0.381014124	1
NM_032777.9:1278	NM_032777	25960	ENSG00000020181	GPR124	NSIP	AFE	0.381015148	1
NM_006121.2:690	NM_006121	3848	ENSG00000167768	KRT1	UIP	NSIP	0.381261936	1
NM_002467.3:1610	NM_002467	4609	ENSG00000136997	MYC	UIP	NSIP	0.381452382	1
NM_134261.2:1715	NM_134261	6095	ENSG00000069667	RORA	UIP	AFE	0.381768181	1
NM_001204.5:1875	NM_001204	659	ENSG00000204217	BMPR2	NSIP	AFE	0.381823644	1
NM_006896.3:1605	NM_006896	3204	ENSG00000122592	HOXA7	NSIP	AFE	0.381955234	1
NM_031219.2:616	NM_031219	81932	ENSG00000119431	HDHD3	NSIP	AFE	0.381958352	1
NM_015213.2:4604	NM_015213	23258	ENSG00000184014	DENND5A	Kontrolle	AFE	0.382260653	1
NM_005975.2:1715	NM_005975	5753	ENSG00000101213	PTK6	NSIP	AFE	0.383072286	1
NM_203339.2:1376	NM_203339			CLU	UIP	AFE	0.383121044	1
NM_000314.4:1351	NM_000314	5728	ENSG00000171862	PTEN	UIP	Kontrolle	0.383328315	1
NM_003809.2:339	NM_003809	8742	ENSG00000239697	TNFSF12	NSIP	AFE	0.383443978	1
NM_057175.3:4145	NM_057175	80155	ENSG00000164134	NAA15	Kontrolle	AFE	0.383680254	1
NM_001033081.2:568	NM_001033081	4610	ENSG00000116990	MYCL	NSIP	AFE	0.383782033	1



NM_001202.3:395	NM_001202	652	ENSG00000125378	BMP4	NSIP	Kontrolle	0.383984832	1
NM_022119.3:499	NM_022119	64063	ENSG00000005001	PRSS22	Kontrolle	AFE	0.38402018	1
NM_020997.2:1405	NM_020997	10637	ENSG00000243709	LEFTY1	NSIP	Kontrolle	0.384386258	1
NM_182692.1:340	NM_182692	6733	ENSG00000135250	SRPK2	Kontrolle	AFE	0.384654894	1
NM_001845.4:780	NM_001845	1282	ENSG00000187498	COL4A1	NSIP	AFE	0.38469102	1
NM_001005915.1:420	NM_001005915	2065	ENSG00000065361	ERBB3	UIP	Kontrolle	0.384826285	1
NM_139276.2:4535	NM_139276	6774	ENSG00000168610	STAT3	NSIP	Kontrolle	0.384829868	1
NM_001146.3:2080	NM_001146	284	ENSG00000154188	ANGPT1	UIP	AFE	0.385095725	1
NM_012293.1:1960	NM_012293	7837	ENSG00000130508	PXDN	NSIP	Kontrolle	0.385099917	1
NM_005954.2:165	NM_005954	4504	ENSG00000087250	MT3	Kontrolle	AFE	0.385444056	1
NM_005041.3:2120	NM_005041	5551	ENSG00000180644	PRF1	Kontrolle	AFE	0.385524787	1
NM_031902.3:390	NM_031902	64969	ENSG00000144029	MRP55	NSIP	AFE	0.385598778	1
NM_015568.2:2860	NM_015568	26051	ENSG00000101445	PPP1R16B	UIP	Kontrolle	0.385797411	1
NM_015013.3:2395	NM_015013	23028	ENSG00000004487	KDM1A	UIP	NSIP	0.386122564	1
NM_022136.3:560	NM_022136	64092	ENSG00000155307	SAMSN1	UIP	NSIP	0.386325224	1
NM_001734.2:775	NM_001734	716	ENSG00000182326	C1S	NSIP	Kontrolle	0.386402049	1
NM_000641.2:1145	NM_000641	3589	ENSG00000095752	IL11	NSIP	AFE	0.386758312	1
NM_022119.3:499	NM_022119	64063	ENSG00000005001	PRSS22	NSIP	Kontrolle	0.386853753	1
NM_014210.3:564	NM_014210	2123	ENSG00000126860	EV12A	UIP	NSIP	0.386870219	1
NM_001128128.1:1450	NM_001128128	6935	ENSG00000148516	ZEB1	Kontrolle	AFE	0.386881153	1
NM_198829.1:1250	NM_198829	5879	ENSG00000136238	RAC1	NSIP	Kontrolle	0.38716041	1
NM_000149.3:2342	NM_000149	2525	ENSG00000171124	FUT3	UIP	NSIP	0.387318415	1
NM_001128128.1:1450	NM_001128128	6935	ENSG00000148516	ZEB1	NSIP	Kontrolle	0.387594852	1
NM_006852.2:2335	NM_006852	11011	ENSG00000146872	TLK2	UIP	NSIP	0.388059877	1
NM_003380.2:694	NM_003380	7431	ENSG00000026025	VIM	UIP	Kontrolle	0.388398759	1
NM_001165928.2:965	NM_001165928	1605	ENSG00000173402	DAG1	UIP	AFE	0.388749089	1
NM_001018077.1:1665	NM_001018077	2908	ENSG00000113580	NR3C1	NSIP	AFE	0.38927785	1
NM_145259.2:5168	NM_145259	130399	ENSG00000123612	ACVR1C	NSIP	AFE	0.389352951	1
NM_001123041.2:743	NM_001123041	729230	ENSG00000121807	CCR2	Kontrolle	AFE	0.389387615	1
NM_001953.3:719	NM_001953	1890	ENSG00000025708	TYMP	NSIP	AFE	0.389890042	1
NM_021253.3:3140	NM_021253	56658	ENSG00000204599	TRIM39	UIP	AFE	0.390360166	1
NM_003012.3:3320	NM_003012	6422	ENSG00000104332	SFRP1	UIP	NSIP	0.390422741	1
NM_018695.2:3675	NM_018695	55914	ENSG00000112851	ERBB2IP	UIP	NSIP	0.390496939	1
NM_001165928.2:965	NM_001165928	1605	ENSG00000173402	DAG1	UIP	NSIP	0.39060688	1
NM_003254.2:329	NM_003254	7076	ENSG00000102265	TIMP1	UIP	Kontrolle	0.390623842	1
NM_003161.2:310	NM_003161	6198	ENSG00000108443	RPS6KB1	UIP	Kontrolle	0.390715016	1
NM_005854.2:282	NM_005854	10266	ENSG00000131477	RAMP2	UIP	Kontrolle	0.39112868	1
NM_001912.4:1072	NM_001912	1514	ENSG00000135047	CTSL	UIP	NSIP	0.391330206	1
NM_003278.2:607	NM_003278	7123	ENSG00000163815	CLEC3B	UIP	Kontrolle	0.3913696	1
NM_001220.3:365	NM_001220	816	ENSG00000058404	CAMK2B	UIP	NSIP	0.391696199	1
NM_000641.2:1145	NM_000641	3589	ENSG00000095752	IL11	NSIP	Kontrolle	0.391741611	1
NM_171825.1:4080	NM_171825	815	ENSG00000070808	CAMK2A	NSIP	AFE	0.39178399	1
NM_173481.2:1845	NM_173481	126353	ENSG00000099812	MISP	NSIP	AFE	0.392255606	1
NM_022965.2:3170	NM_022965	2261	ENSG00000068078	FGFR3	UIP	NSIP	0.392449064	1
NM_170679.2:630	NM_170679	6500	ENSG00000113558	SKP1	UIP	Kontrolle	0.392848127	1
NM_002852.3:1152	NM_002852	5806	ENSG00000163661	PTX3	UIP	Kontrolle	0.39300388	1
NM_006702.3:3941	NM_006702	10908	ENSG00000032444	PNPLA6	Kontrolle	AFE	0.393129501	1
NM_001032409.1:805	NM_001032409	4938	ENSG00000089127	OAS1	NSIP	Kontrolle	0.39318832	1
NM_001975.2:1855	NM_001975	2026	ENSG00000111674	ENO2	UIP	AFE	0.393250908	1
NM_003392.3:475	NM_003392	7474	ENSG00000114251	WNT5A	UIP	NSIP	0.393408328	1
NM_000601.4:550	NM_000601	3082	ENSG00000019991	HGF	UIP	Kontrolle	0.393562592	1
NM_001005845.1:695	NM_001005845	8754	ENSG00000168615	ADAM9	UIP	Kontrolle	0.393984076	1
NM_003371.3:2699	NM_003371	7410	ENSG00000160293	VAV2	UIP	NSIP	0.395865473	1
NM_005010.4:875	NM_005010	4897	ENSG00000091129	NRCAM	UIP	NSIP	0.396087502	1
NM_001166133.1:526	NM_001166133	80144	ENSG00000138759	FRAS1	Kontrolle	AFE	0.39640084	1
NM_000397.3:2686	NM_000397	1536	ENSG00000165168	CYBB	UIP	NSIP	0.39643118	1
NM_080923.2:154	NM_080923			PTPRC	UIP	AFE	0.396476504	1
NM_002609.3:840	NM_002609	5159	ENSG00000113721	PDGFRB	NSIP	AFE	0.397350266	1
NM_002256.3:125	NM_002256	3814	ENSG00000170498	KISS1	NSIP	Kontrolle	0.397640647	1
NM_001065.2:515	NM_001065	7132	ENSG00000067182	TNFRSF1A	UIP	Kontrolle	0.39767929	1
NM_001228.4:301	NM_001228	841	ENSG00000064012	CASP8	NSIP	Kontrolle	0.397768273	1
NM_001042494.1:3962	NM_001042494	9990	ENSG00000140199	SLC12A6	NSIP	AFE	0.398843254	1
NM_016639.1:575	NM_016639	51330	ENSG00000006327	TNFRSF12A	UIP	AFE	0.398947676	1
NM_002996.3:140	NM_002996	6376	ENSG00000006210	CX3CL1	NSIP	AFE	0.399236852	1
NM_153831.2:965	NM_153831	5747	ENSG00000169398	PTK2	NSIP	AFE	0.399700815	1
NM_004282.3:785	NM_004282	9532	ENSG00000112208	BAG2	UIP	NSIP	0.399728926	1
NM_015293.1:7755	NM_015293	23345	ENSG00000131018	SYNE1	Kontrolle	AFE	0.400379453	1
NM_015364.2:360	NM_015364	23643	ENSG00000154589	LY96	NSIP	Kontrolle	0.400651096	1
NM_001001392.1:429	NM_001001392	960	ENSG00000026508	CD44	UIP	AFE	0.401370696	1
NM_000210.1:3065	NM_000210	3655	ENSG00000091409	ITGA6	NSIP	Kontrolle	0.401499816	1
NM_004689.2:450	NM_004689	9112	ENSG00000182979	MTA1	UIP	NSIP	0.401571355	1
NM_032794.1:1798	NM_032794			SLC44A4	UIP	NSIP	0.401761544	1

NM_004912.3:2648	NM_004912	889	ENSG0000001631	KRIT1	NSIP	Kontrolle	0.402164049	1
NM_003592.2:1487	NM_003592	8454	ENSG00000005130	CUL1	UIP	Kontrolle	0.402245967	1
NM_002426.3:769	NM_002426	4321	ENSG00000262406	MMP12	NSIP	AFE	0.402572777	1
NM_201282.1:360	NM_201282	1956	ENSG00000146648	EGFR	NSIP	AFE	0.402748139	1
NM_004369.3:2782	NM_004369	1293	ENSG00000163359	COL6A3	NSIP	AFE	0.403272999	1
NM_004329.2:1720	NM_004329	657	ENSG00000107779	BMPR1A	NSIP	Kontrolle	0.403429868	1
NM_002744.4:771	NM_002744	5590	ENSG00000067606	PRKCZ	UIP	AFE	0.403768775	1
NM_002166.4:505	NM_002166	3398	ENSG00000115738	ID2	UIP	NSIP	0.404155315	1
NM_005650.1:925	NM_005650	6942	ENSG00000100207	TCF20	NSIP	AFE	0.404617073	1
NM_002115.1:495	NM_002115	3101	ENSG00000160883	HK3	Kontrolle	AFE	0.404659445	1
NM_005975.2:1715	NM_005975	5753	ENSG00000101213	PTK6	UIP	Kontrolle	0.40495089	1
NM_024756.2:3040	NM_024756	79812	ENSG00000173269	MMRN2	UIP	NSIP	0.405026307	1
NM_000660.3:1260	NM_000660	7040	ENSG00000105329	TGFB1	UIP	AFE	0.405031333	1
NM_002256.3:125	NM_002256	3814	ENSG00000170498	KISS1	UIP	NSIP	0.405743617	1
NM_001034915.2:1515	NM_001034915	54845	ENSG00000104413	ESRP1	NSIP	AFE	0.405896455	1
NM_022361.4:980	NM_022361	64208	ENSG00000152927	POPOC3	UIP	AFE	0.40594773	1
NM_002610.3:401	NM_002610	5163	ENSG00000152256	PDK1	UIP	Kontrolle	0.406229204	1
NM_002318.2:40	NM_002318	4017	ENSG00000134013	LOXL2	NSIP	AFE	0.406553682	1
NM_001005731.1:4151	NM_001005731	3691	ENSG00000132470	ITGB4	UIP	NSIP	0.407091411	1
NM_002019.4:530	NM_002019	2321	ENSG00000102755	FLT1	NSIP	AFE	0.407121029	1
NM_001647.3:613	NM_001647	347	ENSG00000189058	APOD	UIP	Kontrolle	0.407572778	1
NM_057175.3:4145	NM_057175	80155	ENSG00000164134	NAA15	UIP	NSIP	0.408095616	1
NM_005429.2:565	NM_005429	7424	ENSG00000150630	VEGFC	Kontrolle	AFE	0.408140921	1
NM_003873.5:370	NM_003873	8829	ENSG00000099250	NRP1	UIP	AFE	0.408547181	1
NM_006802.2:2060	NM_006802	10946	ENSG00000183431	SF3A3	UIP	NSIP	0.409119197	1
NM_003829.4:6092	NM_003829	8777	ENSG00000107186	MPDZ	Kontrolle	AFE	0.409152933	1
NM_001135935.1:910	NM_001135935	10631	ENSG00000133110	POSTN	NSIP	AFE	0.409312509	1
NM_000212.2:4485	NM_000212	3690	ENSG00000152927	ITGB3	UIP	AFE	0.409678934	1
NM_004836.5:938	NM_004836	9451	ENSG00000172071	EIF2AK3	NSIP	Kontrolle	0.409974744	1
NM_001127491.1:1103	NM_001127491	3689	ENSG00000160255	ITGB2	UIP	AFE	0.41007373	1
NM_003010.2:2830	NM_003010	6416	ENSG00000065559	MAP2K4	Kontrolle	AFE	0.410142224	1
NM_006361.5:1220	NM_006361	10481	ENSG00000159184	HOXB13	NSIP	AFE	0.41101414	1
NM_002421.2:700	NM_002421	4312	ENSG00000196611	MMP1	Kontrolle	AFE	0.411968763	1
NM_006487.2:965	NM_006487	2192	ENSG00000077942	FBLN1	NSIP	AFE	0.412060784	1
NM_006988.3:2840	NM_006988	9510	ENSG00000154734	ADAMTS1	NSIP	AFE	0.412561246	1
NM_012082.3:1850	NM_012082	23414	ENSG00000169946	ZFPM2	Kontrolle	AFE	0.412857264	1
NM_000267.2:1035	NM_000267	4763	ENSG00000196712	NF1	UIP	Kontrolle	0.413243379	1
NM_001626.2:1450	NM_001626	208	ENSG00000105221	AKT2	NSIP	AFE	0.413286468	1
NM_002845.3:1680	NM_002845	5797	ENSG00000173482	PTPRM	UIP	NSIP	0.413372957	1
NM_000889.1:1278	NM_000889	3695	ENSG00000139626	ITGB7	NSIP	AFE	0.413651851	1
NM_032364.5:1166	NM_032364	85406	ENSG00000135392	DNAJC14	Kontrolle	AFE	0.41389811	1
NM_001277764.1:530	NM_001277764	10519	ENSG00000185043	CIB1	UIP	AFE	0.414174501	1
NM_006408.3:580	NM_006408	10551	ENSG00000106541	AGR2	NSIP	Kontrolle	0.414439204	1
NM_139276.2:4535	NM_139276	6774	ENSG00000168610	STAT3	NSIP	AFE	0.415027681	1
NM_003183.4:1595	NM_003183	6868	ENSG00000151694	ADAM17	NSIP	AFE	0.415266856	1
NM_001034915.2:1515	NM_001034915	54845	ENSG00000104413	ESRP1	UIP	NSIP	0.415283561	1
NM_001228.4:301	NM_001228	841	ENSG00000064012	CASP8	Kontrolle	AFE	0.415539138	1
NM_000450.2:1505	NM_000450	6401	ENSG0000007908	SELE	UIP	Kontrolle	0.41556012	1
NM_138957.2:430	NM_138957	5594	ENSG00000100030	MAPK1	UIP	NSIP	0.41568537	1
NM_005903.5:1044	NM_005903	4090	ENSG00000113658	SMAD5	NSIP	Kontrolle	0.415714448	1
NM_002996.3:140	NM_002996	6376	ENSG00000006210	CX3CL1	NSIP	Kontrolle	0.416349229	1
NM_002133.2:781	NM_002133	3162	ENSG00000100292	HMOX1	UIP	Kontrolle	0.416741558	1
NM_020997.2:1405	NM_020997	10637	ENSG00000243709	LEFTY1	UIP	Kontrolle	0.41692901	1
NM_019102.2:895	NM_019102	3202	ENSG00000106004	HOXA5	UIP	NSIP	0.417145105	1
NM_004244.4:1630	NM_004244	9332	ENSG00000177575	CD163	Kontrolle	AFE	0.417391639	1
NM_003442.5:925	NM_003442	7702	ENSG00000166478	ZNF143	Kontrolle	AFE	0.417680101	1
NM_006846.3:2595	NM_006846	11005	ENSG00000133710	SPINK5	NSIP	AFE	0.418064405	1
NM_001963.4:1022	NM_001963	1950	ENSG00000138798	EGF	NSIP	AFE	0.418216175	1
NM_003467.2:1335	NM_003467	7852	ENSG00000121966	CXCR4	NSIP	Kontrolle	0.418291219	1
NM_018488.2:1560	NM_018488	9496	ENSG00000121075	TBX4	UIP	AFE	0.418313444	1
NM_004763.3:1690	NM_004763	9270	ENSG00000119185	ITGB1BP1	NSIP	AFE	0.418356384	1
NM_003621.2:2350	NM_003621	8495	ENSG00000166387	PPFIBP2	NSIP	AFE	0.418736907	1
NM_004817.2:2785	NM_004817	9414	ENSG00000119139	TJP2	NSIP	Kontrolle	0.419371719	1
NM_001160103.1:2690	NM_001160103	79882	ENSG00000100722	ZC3H14	UIP	NSIP	0.419426835	1
NR_003573.1:1013	NR_003573	304	ENSG00000121966	ANXA2P2	UIP	AFE	0.419659735	1
NM_201282.1:360	NM_201282	1956	ENSG00000146648	EGFR	UIP	Kontrolle	0.419743711	1
NM_000507.3:590	NM_000507	2203	ENSG00000165140	FBP1	Kontrolle	AFE	0.41974787	1
NM_007008.2:275	NM_007008	57142	ENSG00000115310	RTN4	Kontrolle	AFE	0.419762594	1
NM_006121.2:690	NM_006121	3848	ENSG00000167768	KRT1	NSIP	Kontrolle	0.420930565	1
NM_001150.1:2670	NM_001150	290	ENSG00000166825	ANPEP	Kontrolle	AFE	0.421813296	1
NM_000088.3:4272	NM_000088	1277	ENSG00000108821	COL1A1	UIP	NSIP	0.421842276	1
NM_015715.3:2415	NM_015715	50487	ENSG00000100078	PLA2G3	UIP	AFE	0.422393152	1

NM_033395.1:3775	NM_033395	85459	ENSG00000166004	CEP295	UIP	Kontrolle	0.422691677	1
NM_001005845.1:695	NM_001005845	8754	ENSG00000168615	ADAM9	NSIP	AFE	0.424033482	1
NM_018055.3:320	NM_018055	4838	ENSG00000156574	NODAL	NSIP	Kontrolle	0.424120205	1
NM_005558.3:1860	NM_005558	3898	ENSG00000159166	LAD1	UIP	NSIP	0.424490478	1
NM_000632.3:515	NM_000632	3684	ENSG00000169896	ITGAM	NSIP	AFE	0.424943958	1
NM_019102.2:895	NM_019102	3202	ENSG00000106004	HOXA5	UIP	Kontrolle	0.425150217	1
NM_003677.3:2091	NM_003677	8562	ENSG00000139726	DENR	UIP	Kontrolle	0.425175461	1
NM_172127.1:505	NM_172127	817	ENSG00000145349	CAMK2D	UIP	Kontrolle	0.425294288	1
NM_005360.4:888	NM_005360	4094	ENSG00000178573	MAF	UIP	NSIP	0.425602421	1
NM_000395.2:492	NM_000395	1439	ENSG00000100368	CSF2RB	NSIP	Kontrolle	0.42581071	1
NM_000698.2:735	NM_000698	240	ENSG00000012779	ALOX5	UIP	Kontrolle	0.426918913	1
NM_001164239.1:2490	NM_001164239	8449	ENSG00000204560	DHX16	UIP	AFE	0.427196749	1
NM_004684.4:2265	NM_004684	8404	ENSG00000152583	SPARCL1	NSIP	AFE	0.427581525	1
NM_003829.4:6092	NM_003829	8777	ENSG00000107186	MPDZ	UIP	Kontrolle	0.427905363	1
NM_001105209.1:287	NM_001105209	3910	ENSG00000112769	LAMA4	NSIP	AFE	0.429560117	1
NM_003872.2:805	NM_003872	8828	ENSG00000118257	NRP2	UIP	NSIP	0.429818444	1
NM_000639.1:625	NM_000639	356	ENSG00000117560	FASLG	UIP	Kontrolle	0.429889539	1
NM_020848.2:7395	NM_020848	57608	ENSG00000165757	KIAA1462	UIP	Kontrolle	0.430167927	1
NM_172174.1:1685	NM_172174	3600	ENSG00000164136	IL15	NSIP	Kontrolle	0.430170921	1
NM_004774.3:806	NM_004774	5469	ENSG00000125686	MED1	UIP	Kontrolle	0.430246013	1
NM_005027.2:3100	NM_005027	5296	ENSG00000105647	PIK3R2	NSIP	AFE	0.430434646	1
NM_012391.1:1335	NM_012391	25803	ENSG00000124664	SPDEF	NSIP	Kontrolle	0.430534255	1
NM_002256.3:125	NM_002256	3814	ENSG00000170498	KISS1	NSIP	AFE	0.431179928	1
NM_024320.2:1005	NM_024320	79170	ENSG00000167183	PRR15L	UIP	Kontrolle	0.431220399	1
NM_018326.2:315	NM_018326	55303	ENSG00000133574	GIMAP4	Kontrolle	AFE	0.431236534	1
NM_002231.3:1211	NM_002231	3732	ENSG00000085117	CD82	NSIP	AFE	0.431290353	1
NM_001077269.1:1660	NM_001077269	7456	ENSG00000115935	WIPF1	UIP	NSIP	0.431979188	1
NM_032449.2:4182	NM_032449	200014	ENSG00000154222	CC2D1B	NSIP	Kontrolle	0.432070645	1
NM_003010.2:2830	NM_003010	6416	ENSG00000065559	MAP2K4	UIP	Kontrolle	0.432206411	1
NM_006487.2:965	NM_006487	2192	ENSG00000077942	FBLN1	NSIP	Kontrolle	0.432425358	1
NM_003638.1:1215	NM_003638	8516	ENSG00000077943	ITGA8	UIP	Kontrolle	0.432620306	1
NM_030955.2:1955	NM_030955	81792	ENSG00000151388	ADAMTS12	NSIP	Kontrolle	0.432632351	1
NM_001846.2:1150	NM_001846	1284	ENSG00000134871	COL4A2	UIP	Kontrolle	0.432730614	1
NM_013943.2:1702	NM_013943	25932	ENSG00000169504	CLIC4	UIP	NSIP	0.433200761	1
NM_022093.1:3580	NM_022093	63923	ENSG00000120332	TNN	UIP	NSIP	0.43347393	1
NM_001150.1:2670	NM_001150	290	ENSG00000166825	ANPEP	UIP	AFE	0.434730556	1
NM_000397.3:2686	NM_000397	1536	ENSG00000165168	CYBB	UIP	Kontrolle	0.434741006	1
NM_139276.2:4535	NM_139276	6774	ENSG00000168610	STAT3	UIP	Kontrolle	0.434753804	1
NM_000321.1:2110	NM_000321	5925	ENSG00000139687	RB1	NSIP	AFE	0.434763631	1
NM_003469.3:1400	NM_003469	7857	ENSG00000171951	SCG2	UIP	Kontrolle	0.435111791	1
NM_000454.4:35	NM_000454	6647	ENSG00000142168	SOD1	UIP	NSIP	0.435120612	1
NM_016215.3:1252	NM_016215	51162	ENSG00000172889	EGFL7	UIP	NSIP	0.435881692	1
NM_004054.2:415	NM_004054	719	ENSG00000171860	C3AR1	NSIP	Kontrolle	0.436383051	1
NM_001712.3:2455	NM_001712	634	ENSG00000079385	CEACAM1	UIP	AFE	0.436404562	1
NM_002276.4:96	NM_002276	3880	ENSG00000171345	KRT19	UIP	NSIP	0.43668417	1
NM_005127.2:980	NM_005127	9976	ENSG00000110852	CLEC2B	UIP	Kontrolle	0.43694585	1
NM_001999.3:9850	NM_001999	2201	ENSG00000138829	FBN2	Kontrolle	AFE	0.437050023	1
NM_004817.2:2785	NM_004817	9414	ENSG00000119139	TJP2	UIP	AFE	0.437252174	1
NM_003212.2:1567	NM_003212	6997	ENSG00000241186	TDGF1	UIP	Kontrolle	0.437399035	1
NM_004684.4:2265	NM_004684	8404	ENSG00000152583	SPARCL1	UIP	NSIP	0.438002362	1
NM_002192.2:490	NM_002192	3624	ENSG00000122641	INHBA	NSIP	AFE	0.439147026	1
NM_003104.4:1345	NM_003104	6652	ENSG00000140263	SORD	UIP	NSIP	0.439504618	1
NM_001077693.3:168	NM_001077693	641700	ENSG00000249751	ECSCR	NSIP	Kontrolle	0.439724751	1
NM_001005376.1:440	NM_001005376	5329	ENSG00000011422	PLAUR	UIP	Kontrolle	0.439950544	1
NM_017957.2:2532	NM_017957	55040	ENSG00000049283	EPN3	UIP	NSIP	0.440108827	1
NM_014225.3:1440	NM_014225	5518	ENSG00000105568	PPP2R1A	NSIP	AFE	0.440140873	1
NM_000321.1:2110	NM_000321	5925	ENSG00000139687	RB1	UIP	AFE	0.440253224	1
NM_000094.2:390	NM_000094	1294	ENSG00000114270	COL7A1	NSIP	AFE	0.440318142	1
NM_003371.3:2699	NM_003371	7410	ENSG00000160293	VAV2	NSIP	AFE	0.44037634	1
NM_001256741.1:1962	NM_001256741	25904	ENSG00000182973	CNOT10	NSIP	Kontrolle	0.441429173	1
NM_006500.2:2482	NM_006500	4162	ENSG00000076706	MCAM	UIP	NSIP	0.441671972	1
NM_000577.3:480	NM_000577	3557	ENSG00000136689	IL1RN	NSIP	Kontrolle	0.441906197	1
NM_003371.3:2699	NM_003371	7410	ENSG00000160293	VAV2	NSIP	Kontrolle	0.442687622	1
NM_002011.3:1585	NM_002011	2264	ENSG00000160867	FGFR4	UIP	NSIP	0.442715267	1
NM_004219.2:542	NM_004219	9232	ENSG00000164611	PTTG1	NSIP	AFE	0.443208287	1
NM_004967.3:876	NM_004967	3381	ENSG00000029559	IBSP	NSIP	Kontrolle	0.443454927	1
NM_002422.3:25	NM_002422	4314	ENSG00000149968	MMP3	UIP	AFE	0.443538785	1
NM_003872.2:805	NM_003872	8828	ENSG00000118257	NRP2	UIP	Kontrolle	0.44391271	1
NM_004867.4:988	NM_004867	9452	ENSG00000078596	ITM2A	UIP	NSIP	0.444445073	1
NM_005027.2:3100	NM_005027	5296	ENSG00000105647	PIK3R2	UIP	AFE	0.444801162	1
NM_001504.1:80	NM_001504	2833	ENSG00000186810	CXCR3	UIP	AFE	0.444992945	1
NM_002317.4:1575	NM_002317	4015	ENSG00000113083	LOX	UIP	NSIP	0.445648253	1

NM_001553.1:690	NM_001553	3490	ENSG00000163453	IGFBP7	UIP	NSIP	0.445674153	1
NM_001038.4:2780	NM_001038	6337	ENSG00000111319	SCNN1A	UIP	NSIP	0.445862851	1
NM_001993.3:1030	NM_001993	2152	ENSG00000117525	F3	NSIP	AFE	0.446127067	1
NM_000594.2:1010	NM_000594	7124	ENSG00000232810	TNF	UIP	NSIP	0.446254769	1
NM_022361.4:980	NM_022361	64208	ENSG00000132429	POPDC3	NSIP	Kontrolle	0.446304741	1
NM_177438.2:5060	NM_177438	23405	ENSG00000100697	DICER1	UIP	AFE	0.446375505	1
NM_015429.3:4081	NM_015429	25890	ENSG00000154175	ABI3BP	UIP	AFE	0.446574677	1
NM_000042.2:582	NM_000042	350	ENSG00000091583	APOH	UIP	AFE	0.446784747	1
NM_001999.3:9850	NM_001999	2201	ENSG00000138829	FBN2	UIP	NSIP	0.446831865	1
NM_001256725.1:806	NM_001256725	10713	ENSG00000168883	USP39	NSIP	AFE	0.447111273	1
NM_005498.4:78	NM_005498	10053	ENSG00000129354	AP1M2	Kontrolle	AFE	0.447124815	1
NM_001306.3:606	NM_001306	1365	ENSG00000165215	CLDN3	NSIP	AFE	0.447446431	1
NM_012391.1:1335	NM_012391	25803	ENSG00000124664	SPDEF	Kontrolle	AFE	0.447554466	1
NM_004363.2:1961	NM_004363	1048	ENSG00000105388	CEACAM5	NSIP	AFE	0.447688616	1
NM_004322.3:963	NM_004322	572	ENSG00000002330	BAD	Kontrolle	AFE	0.447932338	1
NM_001963.4:1022	NM_001963	1950	ENSG00000138798	EGF	UIP	AFE	0.448025005	1
NM_002421.2:700	NM_002421	4312	ENSG00000196611	MMP1	NSIP	Kontrolle	0.448327212	1
NM_003592.2:1487	NM_003592	8454	ENSG00000055130	CUL1	NSIP	Kontrolle	0.448440865	1
NM_001976.4:1368	NM_001976	2027	ENSG00000108515	ENO3	NSIP	Kontrolle	0.448459015	1
NM_002625.2:564	NM_002625	5207	ENSG00000158571	PFKFB1	NSIP	AFE	0.448712869	1
NM_052972.2:1480	NM_052972	116844	ENSG00000171236	LRG1	NSIP	AFE	0.448896782	1
NM_001277764.1:530	NM_001277764	10519	ENSG00000185043	CIB1	UIP	Kontrolle	0.449250145	1
NM_005045.2:345	NM_005045	5649	ENSG00000189056	RELN	NSIP	AFE	0.449441333	1
NM_015399.3:469	NM_015399	25855	ENSG00000174744	BRMS1	Kontrolle	AFE	0.449753296	1
NM_001015001.1:286	NM_001015001	548596	ENSG00000223572	CKMT1A	UIP	NSIP	0.450616894	1
NM_000641.2:1145	NM_000641	3589	ENSG00000095752	IL11	UIP	NSIP	0.450751643	1
NM_005343.2:396	NM_005343	3265	ENSG00000174775	HRAS	Kontrolle	AFE	0.450878757	1
NM_001135000.1:920	NM_001135000	10979	ENSG00000073712	FERMT2	UIP	AFE	0.450880454	1
NM_018964.3:810	NM_018964	54020	ENSG00000160190	SLC37A1	UIP	NSIP	0.450983844	1
NM_005938.2:35	NM_005938	4303	ENSG00000184481	FOXO4	NSIP	AFE	0.450994257	1
NM_021253.3:3140	NM_021253	56658	ENSG00000204599	TRIM39	UIP	NSIP	0.451405171	1
NM_001540.3:374	NM_001540	3315	ENSG00000106211	HSPB1	UIP	AFE	0.451502991	1
NM_001128128.1:1450	NM_001128128	6935	ENSG00000148516	ZEB1	UIP	Kontrolle	0.451518709	1
NM_001127198.1:1266	NM_001127198	11322	ENSG00000141524	TMC6	UIP	NSIP	0.451746862	1
NM_001702.1:3640	NM_001702	575	ENSG00000181790	BAI1	NSIP	Kontrolle	0.451869903	1
NM_002705.4:2435	NM_002705	5493	ENSG00000118898	PPL	UIP	AFE	0.451876271	1
NM_022648.4:6080	NM_022648	7145	ENSG00000079308	TNS1	NSIP	AFE	0.451983359	1
NM_178310.1:820	NM_178310	333929	ENSG00000185669	SNAI3	Kontrolle	AFE	0.45208847	1
NM_001142685.1:2100	NM_001142685	9743	ENSG00000134909	ARHGAP32	UIP	NSIP	0.452145852	1
NM_003883.2:1455	NM_003883	8841	ENSG00000171720	HDAC3	NSIP	Kontrolle	0.452238084	1
NM_000177.4:1075	NM_000177	2934	ENSG00000148180	GSN	UIP	NSIP	0.452467997	1
NM_003377.3:687	NM_003377	7423	ENSG00000173511	VEGFB	NSIP	Kontrolle	0.453042661	1
NM_080646.1:540	NM_080646	6899	ENSG00000184058	TBX1	Kontrolle	AFE	0.453549765	1
NM_002115.1:495	NM_002115	3101	ENSG00000160883	HK3	UIP	AFE	0.453652618	1
NM_022739.3:2605	NM_022739	64750	ENSG00000108854	SMURF2	Kontrolle	AFE	0.453793868	1
NM_001523.2:859	NM_001523	3036	ENSG00000105509	HAS1	UIP	Kontrolle	0.453992465	1
NM_001272046.1:3148	NM_001272046	340706	ENSG00000165816	VWA2	NSIP	Kontrolle	0.454042344	1
NM_004538.4:1070	NM_004538	4675	ENSG00000186310	NAP1L3	NSIP	Kontrolle	0.454058187	1
NM_001204857.1:330	NM_001204857	6921	ENSG00000154582	TCEB1	UIP	NSIP	0.454164941	1
NM_001040056.1:580	NM_001040056	5595	ENSG00000102882	MAPK3	UIP	AFE	0.454214344	1
NM_005780.2:460	NM_005780	10186	ENSG00000183722	LHFP	NSIP	AFE	0.45505103	1
NM_004867.4:988	NM_004867	9452	ENSG00000078596	ITM2A	UIP	AFE	0.455059942	1
NM_001276.2:475	NM_001276	1116	ENSG00000133048	CHI3L1	NSIP	Kontrolle	0.455601804	1
NM_001558.2:150	NM_001558	3587	ENSG00000110324	IL10RA	NSIP	Kontrolle	0.455756063	1
NM_003177.3:1685	NM_003177	6850	ENSG00000165025	SYK	NSIP	Kontrolle	0.456435166	1
NM_005855.2:200	NM_005855	10267	ENSG00000132329	RAMP1	UIP	NSIP	0.456640862	1
NM_005381.2:1492	NM_005381	4691	ENSG00000115053	NCL	NSIP	Kontrolle	0.457487785	1
NM_003657.2:2305	NM_003657	8537	ENSG00000064787	BCAS1	UIP	NSIP	0.457768018	1
NM_012395.2:3645	NM_012395	5218	ENSG00000058091	CDK14	UIP	Kontrolle	0.457796149	1
NM_003104.4:1345	NM_003104	6652	ENSG00000140263	SORD	Kontrolle	AFE	0.457930842	1
NM_002705.4:2435	NM_002705	5493	ENSG00000118898	PPL	UIP	NSIP	0.459949958	1
NM_005650.1:925	NM_005650	6942	ENSG00000100207	TCF20	UIP	NSIP	0.460267666	1
NM_001204857.1:330	NM_001204857	6921	ENSG00000154582	TCEB1	UIP	Kontrolle	0.460766756	1
NM_000682.4:2885	NM_000682	151	ENSG00000274286	ADRA2B	UIP	AFE	0.461050639	1
NM_020126.3:2443	NM_020126	56848	ENSG00000063176	SPHK2	UIP	NSIP	0.461069806	1
NM_003952.2:980	NM_003952	6199	ENSG00000175634	RPS6KB2	UIP	NSIP	0.461085613	1
NM_203339.2:1376	NM_203339			CLU	UIP	NSIP	0.461392751	1
NM_002954.5:650	NM_002954	6233	ENSG00000143947	RPS27A	UIP	Kontrolle	0.461522291	1
NM_002010.2:1565	NM_002010	2254	ENSG00000102678	FGF9	NSIP	Kontrolle	0.461554276	1
NM_172127.1:505	NM_172127	817	ENSG00000145349	CAMK2D	UIP	NSIP	0.462619526	1
NM_005938.2:35	NM_005938	4303	ENSG00000184481	FOXO4	UIP	AFE	0.46347492	1
NM_002610.3:401	NM_002610	5163	ENSG00000152256	PDK1	UIP	AFE	0.463554913	1

NM_006329.3:2242	NM_006329	10516	ENSG00000140092	FBLN5	NSIP	Kontrolle	0.463912715	1
NM_005529.5:2715	NM_005529	3339	ENSG00000142798	HSPG2	UIP	AFE	0.46399201	1
NM_138735.2:1095	NM_138735	9378	ENSG00000179915	NRXN1	NSIP	AFE	0.463992218	1
NM_012243.1:605	NM_012243	23443	ENSG00000117620	SLC35A3	NSIP	AFE	0.46423546	1
NM_002231.3:1211	NM_002231	3732	ENSG00000085117	CD82	UIP	Kontrolle	0.464349137	1
NM_001032409.1:805	NM_001032409	4938	ENSG00000089127	OAS1	NSIP	AFE	0.464386006	1
NM_001565.1:40	NM_001565	3627	ENSG00000169245	CXCL10	UIP	Kontrolle	0.465091363	1
NM_001145.4:949	NM_001145	283	ENSG00000214274	ANG	UIP	NSIP	0.465257433	1
NM_145259.2:5168	NM_145259	130399	ENSG00000123612	ACVR1C	NSIP	Kontrolle	0.465279521	1
NM_002006.4:620	NM_002006	2247	ENSG00000138685	FGF2	NSIP	Kontrolle	0.465633572	1
NM_001145.4:949	NM_001145	283	ENSG00000214274	ANG	NSIP	AFE	0.465644137	1
NM_003247.2:4460	NM_003247	7058	ENSG00000186340	THBS2	UIP	NSIP	0.466156907	1
NM_007108.2:800	NM_007108	6923	ENSG00000103363	TCEB2	UIP	AFE	0.46666257	1
NM_032864.3:335	NM_032864	84950	ENSG00000134748	PRPF38A	UIP	Kontrolle	0.466771435	1
NM_003212.2:1567	NM_003212	6997	ENSG00000241186	TDGF1	NSIP	Kontrolle	0.467071789	1
NM_000089.3:2635	NM_000089	1278	ENSG00000164692	COL1A2	UIP	NSIP	0.46748751	1
NM_000601.4:550	NM_000601	3082	ENSG00000019991	HGF	UIP	NSIP	0.468505443	1
NM_013943.2:1702	NM_013943	25932	ENSG00000169504	CLIC4	NSIP	AFE	0.468858872	1
NM_001018017.1:725	NM_001018017	4582	ENSG00000185499	MUC1	Kontrolle	AFE	0.469165018	1
NM_004517.2:983	NM_004517	3611	ENSG00000166333	ILK	Kontrolle	AFE	0.469616082	1
NM_001190848.1:795	NM_001190848	4850	ENSG00000080802	CNOT4	Kontrolle	AFE	0.470623999	1
NM_001032409.1:805	NM_001032409	4938	ENSG00000089127	OAS1	UIP	AFE	0.470893398	1
NM_001100431.1:160	NM_001100431	11326	ENSG00000155659	VSIG4	NSIP	Kontrolle	0.471123854	1
NM_014159.6:1386	NM_014159	29072	ENSG00000181555	SETD2	UIP	Kontrolle	0.471250255	1
NM_001256741.1:1962	NM_001256741	25904	ENSG00000182973	CNOT10	NSIP	AFE	0.472348001	1
NM_001164831.1:875	NM_001164831	53826	ENSG00000137726	FXYD6	UIP	Kontrolle	0.473216739	1
NM_002020.1:955	NM_002020	2324	ENSG00000037280	FLT4	NSIP	Kontrolle	0.473234429	1
NM_005556.3:1425	NM_005556	3855	ENSG00000135480	KRT7	NSIP	AFE	0.473668159	1
NM_005560.3:787	NM_005560	3911	ENSG00000130702	LAMA5	Kontrolle	AFE	0.473961179	1
NM_005556.3:1425	NM_005556	3855	ENSG00000135480	KRT7	UIP	AFE	0.474129484	1
NM_002115.1:495	NM_002115	3101	ENSG00000160883	HK3	NSIP	AFE	0.474894643	1
NM_032449.2:4182	NM_032449	200014	ENSG00000154222	CC2D1B	UIP	Kontrolle	0.475259323	1
NM_000682.4:2885	NM_000682	151	ENSG00000274286	ADRA2B	NSIP	Kontrolle	0.475331471	1
NM_006702.3:3941	NM_006702	10908	ENSG00000032444	PNPLA6	UIP	AFE	0.475593886	1
NM_004363.2:1961	NM_004363	1048	ENSG00000105388	CEACAM5	UIP	Kontrolle	0.475659713	1
NM_018695.2:3675	NM_018695	55914	ENSG00000112851	ERBB2IP	NSIP	Kontrolle	0.475833756	1
NM_000507.3:590	NM_000507	2203	ENSG00000165140	FBP1	UIP	AFE	0.475867336	1
NM_001150.1:2670	NM_001150	290	ENSG00000166825	ANPEP	UIP	NSIP	0.476930065	1
NM_004846.3:670	NM_004846	9470	ENSG00000135930	EIF4E2	Kontrolle	AFE	0.477687345	1
NM_000042.2:582	NM_000042	350	ENSG00000091583	APOH	UIP	NSIP	0.478065807	1
NM_207446.2:1075	NM_207446	400451	ENSG00000185442	FAM174B	NSIP	AFE	0.478171262	1
NM_012238.4:1595	NM_012238	23411	ENSG00000096717	SIRT1	NSIP	AFE	0.47862008	1
NM_001005915.1:420	NM_001005915	2065	ENSG00000065361	ERBB3	UIP	NSIP	0.478648698	1
NM_003998.2:1675	NM_003998	4790	ENSG00000109320	NFKB1	NSIP	Kontrolle	0.4787003	1
NM_004385.3:9915	NM_004385	1462	ENSG00000038427	VCAN	UIP	NSIP	0.479237923	1
NM_006775.2:838	NM_006775	9444	ENSG00000112531	QKI	NSIP	NSIP	0.479759136	1
NM_017680.3:175	NM_017680	54829	ENSG00000106819	ASPEN	NSIP	AFE	0.47998391	1
NM_015293.1:7755	NM_015293	23345	ENSG00000131018	SYNE1	UIP	Kontrolle	0.48034948	1
NM_005041.3:2120	NM_005041	5551	ENSG00000180644	PRF1	UIP	AFE	0.480463523	1
NM_013230.2:1859	NM_013230	100133941	ENSG00000272398	CD24	UIP	AFE	0.480685222	1
NM_006869.2:570	NM_006869	11033	ENSG00000105963	ADAP1	NSIP	AFE	0.481085636	1
NM_001773.2:2050	NM_001773	947	ENSG00000174059	CD34	UIP	NSIP	0.482803196	1
NM_002318.2:40	NM_002318	4017	ENSG00000134013	LOXL2	UIP	NSIP	0.483223519	1
NM_013258.3:714	NM_013258	29108	ENSG00000103490	PYCARD	UIP	NSIP	0.483326594	1
NM_004360.2:1230	NM_004360	999	ENSG00000039068	CDH1	UIP	AFE	0.483661528	1
NM_153831.2:965	NM_153831	5747	ENSG00000169398	PTK2	NSIP	Kontrolle	0.483865841	1
NM_024021.2:800	NM_024021	51338	ENSG00000110079	MS4A4A	UIP	NSIP	0.484026496	1
NR_002766.2:691	NR_002766	55384	ENSG00000214548	MEG3	UIP	AFE	0.484145161	1
NM_002010.2:1565	NM_002010	2254	ENSG00000102678	FGF9	UIP	AFE	0.484275066	1
NM_018046.3:35	NM_018046	55109	ENSG00000164252	AGGF1	Kontrolle	AFE	0.484624758	1
NM_003809.2:339	NM_003809	8742	ENSG00000239697	TNFSF12	UIP	NSIP	0.48481357	1
NM_001018077.1:1665	NM_001018077	2908	ENSG00000113580	NR3C1	NSIP	Kontrolle	0.485089727	1
NM_012238.4:1595	NM_012238	23411	ENSG00000096717	SIRT1	UIP	NSIP	0.485729795	1
NM_014909.4:552	NM_014909	22846	ENSG00000071246	VASH1	NSIP	AFE	0.486133003	1
NM_002276.4:96	NM_002276	3880	ENSG00000171345	KRT19	NSIP	AFE	0.486567161	1
NM_017637.5:1800	NM_017637	54796	ENSG00000173068	BNC2	NSIP	Kontrolle	0.486677159	1
NM_001150.1:2670	NM_001150	290	ENSG00000166825	ANPEP	NSIP	Kontrolle	0.487080056	1
NM_012232.5:86	NM_012232	284119	ENSG00000177469	PTRF	UIP	AFE	0.48710984	1
NM_004103.3:735	NM_004103	2185	ENSG00000120899	PTK2B	UIP	NSIP	0.487264338	1
NM_003254.2:329	NM_003254	7076	ENSG00000102265	TIMP1	UIP	NSIP	0.487275336	1
NM_001299.4:496	NM_001299	1264	ENSG00000130176	CNN1	NSIP	AFE	0.487299415	1
NM_004431.2:1525	NM_004431	1969	ENSG00000142627	EPHA2	Kontrolle	AFE	0.487572675	1

NM_004444.4:1680	NM_004444	2050	ENSG00000196411	EPHB4	Kontrolle	AFE	0.487601285	1
NM_198098.1:1230	NM_198098	358	ENSG00000240583	AQP1	NSIP	AFE	0.487702611	1
NM_052846.1:3113	NM_052846	90187	ENSG00000183798	EMILIN3	UIP	NSIP	0.487708267	1
NM_000477.5:855	NM_000477	213	ENSG00000163631	ALB	NSIP	Kontrolle	0.487775741	1
NM_181349.1:5162	NM_181349	57154	ENSG00000198742	SMURF1	UIP	AFE	0.488201411	1
NM_002276.4:96	NM_002276	3880	ENSG00000171345	KRT19	Kontrolle	AFE	0.489781036	1
NM_006408.3:580	NM_006408	10551	ENSG00000106541	AGR2	UIP	AFE	0.489909053	1
NM_006775.2:838	NM_006775	9444	ENSG00000112531	QKI	Kontrolle	AFE	0.490393751	1
NM_001050.2:1060	NM_001050	6752	ENSG00000180616	SSTR2	NSIP	Kontrolle	0.490437126	1
NM_001168278.1:1050	NM_001168278	25937	ENSG00000018408	VWTR1	NSIP	Kontrolle	0.491135128	1
NM_003621.2:2350	NM_003621	8495	ENSG00000166387	PPFIBP2	UIP	NSIP	0.491882263	1
NM_000546.2:1330	NM_000546	7157	ENSG00000141510	TP53	UIP	NSIP	0.492113756	1
NM_004684.4:2265	NM_004684	8404	ENSG00000152583	SPARCL1	NSIP	Kontrolle	0.492511071	1
NM_012279.2:2260	NM_012279	23567	ENSG00000113761	ZNF346	NSIP	AFE	0.49282204	1
NM_000395.2:492	NM_000395	1439	ENSG00000100368	CSF2RB	NSIP	AFE	0.49303139	1
XM_005254140.1:174	XM_005254140			CHP1	Kontrolle	AFE	0.49355902	1
NM_016639.1:575	NM_016639	51330	ENSG00000006327	TNFRSF12A	NSIP	Kontrolle	0.493757559	1
NM_003561.1:779	NM_003561	8399	ENSG00000069764	PLA2G10	Kontrolle	AFE	0.493953067	1
NM_000177.4:1075	NM_000177	2934	ENSG00000148180	GSN	NSIP	Kontrolle	0.494055849	1
NM_003650.3:525	NM_003650	8530	ENSG00000077984	CST7	UIP	Kontrolle	0.494430783	1
NM_002203.2:475	NM_002203	3673	ENSG00000164171	ITGA2	NSIP	Kontrolle	0.494574463	1
NM_002318.2:40	NM_002318	4017	ENSG00000134013	LOXL2	NSIP	Kontrolle	0.494947852	1
NM_003392.3:475	NM_003392	7474	ENSG00000114251	WNT5A	Kontrolle	AFE	0.494984762	1
NM_002538.3:1975	NM_002538	100506658	ENSG00000197822	OCLN	UIP	NSIP	0.495092224	1
NM_001018077.1:1665	NM_001018077	2908	ENSG00000113580	NR3C1	UIP	Kontrolle	0.495158498	1
NM_004571.3:3655	NM_004571	5316	ENSG00000160199	PKNOX1	UIP	NSIP	0.495241349	1
NM_024574.3:395	NM_024574	79625	ENSG00000173376	NDNF	Kontrolle	AFE	0.495976172	1
NM_005855.2:200	NM_005855	10267	ENSG00000132329	RAMP1	NSIP	AFE	0.496006618	1
NM_016155.4:804	NM_016155	4326	ENSG00000198598	MMP17	Kontrolle	AFE	0.496158952	1
NM_014586.1:1280	NM_014586	30811	ENSG00000142149	HUNK	NSIP	AFE	0.496575747	1
NM_012395.2:3645	NM_012395	5218	ENSG00000058091	CDK14	UIP	NSIP	0.496913237	1
NM_053046.3:1538	NM_053046	112398	ENSG00000269858	EGLN2	UIP	NSIP	0.497456767	1
NM_001147.2:1775	NM_001147	285	ENSG00000091879	ANGPT2	UIP	NSIP	0.497457604	1
NM_000576.2:840	NM_000576	3553	ENSG00000125538	IL1B	NSIP	AFE	0.497625133	1
NM_002989.2:180	NM_002989	6366	ENSG00000137077	CCL21	UIP	AFE	0.497781608	1
NM_016155.4:804	NM_016155	4326	ENSG00000198598	MMP17	NSIP	AFE	0.49795848	1
NM_001079874.1:352	NM_001079874	10451	ENSG00000134215	VAV3	Kontrolle	AFE	0.498229427	1
NM_000632.3:515	NM_000632	3684	ENSG00000169896	ITGAM	UIP	AFE	0.49859845	1
NM_007037.4:2228	NM_007037	11095	ENSG00000134917	ADAMTS8	UIP	NSIP	0.498664305	1
NM_001912.4:1072	NM_001912	1514	ENSG00000135047	CTSL	NSIP	Kontrolle	0.49920163	1
NM_001615.3:921	NM_001615	72	ENSG00000163017	ACTG2	NSIP	AFE	0.499305054	1
NM_006682.2:250	NM_006682	10875	ENSG00000127951	FGL2	UIP	AFE	0.499340492	1
NM_001015002.1:1065	NM_001015002	3993	ENSG00000073350	LLGL2	NSIP	AFE	0.499777393	1
NM_153603.3:1492	NM_153603	91949	ENSG00000168434	COG7	NSIP	AFE	0.500199882	1
NM_005417.3:1410	NM_005417	6714	ENSG00000197122	SRC	NSIP	Kontrolle	0.500262906	1
NM_003998.2:1675	NM_003998	4790	ENSG00000109320	NFKB1	Kontrolle	AFE	0.500595092	1
NM_002204.2:4550	NM_002204	3675	ENSG00000005884	ITGA3	NSIP	AFE	0.500766439	1
NM_002427.2:951	NM_002427	4322	ENSG00000137745	MMP13	NSIP	AFE	0.500810765	1
NM_001024847.1:1760	NM_001024847	7048	ENSG00000163513	TGFBR2	UIP	Kontrolle	0.500941199	1
NM_007037.4:2228	NM_007037	11095	ENSG00000134917	ADAMTS8	NSIP	AFE	0.501021814	1
NM_025079.2:2140	NM_025079	80149	ENSG00000163874	ZC3H12A	Kontrolle	AFE	0.501837976	1
NM_005682.4:1145	NM_005682	9289	ENSG00000205336	GPR56	UIP	AFE	0.50191756	1
NM_001001557.2:1908	NM_001001557	392255	ENSG00000156466	GDF6	NSIP	NSIP	0.502098707	1
NM_021978.3:1405	NM_021978	6768	ENSG00000149418	ST14	Kontrolle	AFE	0.502358322	1
NM_003650.3:525	NM_003650	8530	ENSG00000077984	CST7	NSIP	Kontrolle	0.50266075	1
NM_002755.2:970	NM_002755	5604	ENSG00000169032	MAP2K1	Kontrolle	AFE	0.503531089	1
NM_002963.2:69	NM_002963	6278	ENSG00000143556	S100A7	UIP	NSIP	0.503689541	1
NM_002954.5:650	NM_002954	6233	ENSG00000143947	RPS27A	NSIP	AFE	0.503902617	1
NM_001038.4:2780	NM_001038	6337	ENSG00000111319	SCNN1A	NSIP	AFE	0.503917373	1
NM_002354.1:415	NM_002354	4072	ENSG00000119888	EPCAM	UIP	NSIP	0.504517198	1
NM_003256.2:1000	NM_003256	7079	ENSG00000157150	TIMP4	UIP	NSIP	0.504597064	1
NM_005623.2:689	NM_005623	6355	ENSG00000108700	CCL8	Kontrolle	AFE	0.504791697	1
NM_001127198.1:1266	NM_001127198	11322	ENSG00000141524	TMC6	NSIP	Kontrolle	0.505667944	1
NM_005445.3:3525	NM_005445	9126	ENSG00000108055	SMC3	UIP	Kontrolle	0.505732085	1
NM_024320.2:1005	NM_024320	79170	ENSG00000167183	PRR15L	UIP	AFE	0.506174862	1
NM_005232.3:2075	NM_005232	2041	ENSG00000146904	EPHA1	NSIP	AFE	0.506175854	1
NM_001032409.1:805	NM_001032409	4938	ENSG00000089127	OAS1	UIP	Kontrolle	0.506303445	1
NM_005682.4:1145	NM_005682	9289	ENSG00000205336	GPR56	UIP	Kontrolle	0.506315561	1
NM_022078.2:1685	NM_022078	63906	ENSG00000198746	GPATCH3	NSIP	Kontrolle	0.506575156	1
NM_001270407.1:840	NM_001270407	58494	ENSG00000154721	JAM2	Kontrolle	AFE	0.506656095	1
NM_001955.2:770	NM_001955	1906	ENSG00000078401	EDN1	Kontrolle	AFE	0.507003813	1
NM_006682.2:250	NM_006682	10875	ENSG00000127951	FGL2	NSIP	AFE	0.507064701	1

NM_001105250.1:2286	NM_001105250	9369	ENSG00000021645	NRXN3	Kontrolle	AFE	0.507272053	1
NM_000576.2:840	NM_000576	3553	ENSG00000125538	IL1B	UIP	NSIP	0.507318917	1
NM_178310.1:820	NM_178310	333929	ENSG00000185669	SNAI3	NSIP	AFE	0.507350608	1
NM_001135000.1:920	NM_001135000	10979	ENSG00000073712	FERMT2	Kontrolle	AFE	0.508168995	1
NM_001256741.1:1962	NM_001256741	25904	ENSG00000182973	CNOT10	UIP	Kontrolle	0.50823543	1
NM_001428.2:1689	NM_001428	2023	ENSG00000074800	ENO1	UIP	Kontrolle	0.50884864	1
NM_002725.3:5250	NM_002725	5549	ENSG00000188783	PRELP	UIP	AFE	0.509409816	1
NM_001065.2:515	NM_001065	7132	ENSG00000067182	TNFRSF1A	NSIP	Kontrolle	0.509437275	1
NM_000632.3:515	NM_000632	3684	ENSG00000169896	ITGAM	NSIP	Kontrolle	0.509551486	1
NM_032801.3:890	NM_032801	83700	ENSG00000166086	JAM3	UIP	Kontrolle	0.509616039	1
NM_133459.3:310	NM_133459	147372	ENSG00000183287	CCBE1	UIP	Kontrolle	0.509987396	1
NM_000477.5:855	NM_000477	213	ENSG00000163631	ALB	UIP	Kontrolle	0.509993064	1
NM_024505.2:2135	NM_024505	79400	ENSG00000255346	NOX5	UIP	NSIP	0.510291592	1
NM_016639.1:575	NM_016639	51330	ENSG00000006327	TNFRSF12A	UIP	NSIP	0.510306854	1
NM_022093.1:3580	NM_022093	63923	ENSG00000120332	TNN	NSIP	Kontrolle	0.510622008	1
NM_001114309.1:460	NM_001114309	1999	ENSG00000103363	ELF3	NSIP	AFE	0.510688293	1
NM_006852.2:2335	NM_006852	11011	ENSG00000146872	TLK2	Kontrolle	AFE	0.510853879	1
NM_005498.4:78	NM_005498	10053	ENSG00000129354	AP1M2	NSIP	AFE	0.510922074	1
NM_001429.2:715	NM_001429	2033	ENSG00000100393	EP300	Kontrolle	AFE	0.51222442	1
NM_014586.1:1280	NM_014586	30811	ENSG00000142149	HUNK	UIP	Kontrolle	0.512323947	1
NR_024168.1:2575	NR_024168			TLR4	UIP	NSIP	0.512333693	1
NM_000149.3:2342	NM_000149	2525	ENSG00000171124	FUT3	UIP	Kontrolle	0.512563819	1
NM_052972.2:1480	NM_052972	116844	ENSG00000171236	LRG1	Kontrolle	AFE	0.512818441	1
NM_015704.2:2880	NM_015704	27351	ENSG00000100418	DESI1	NSIP	AFE	0.513262392	1
NM_001024847.1:1760	NM_001024847	7048	ENSG00000163513	TGFBR2	UIP	AFE	0.513663244	1
NM_001001392.1:429	NM_001001392	960	ENSG00000026508	CD44	NSIP	AFE	0.514124182	1
NM_001731.2:775	NM_001731	694	ENSG00000133639	BTG1	Kontrolle	AFE	0.514621063	1
NM_007108.2:800	NM_007108	6923	ENSG00000103363	TCEB2	UIP	NSIP	0.514668433	1
NM_005938.2:35	NM_005938	4303	ENSG00000184481	FOXO4	Kontrolle	AFE	0.514836729	1
NM_004635.3:415	NM_004635	7867	ENSG00000114738	MAPKAPK3	UIP	Kontrolle	0.51536528	1
NM_002293.3:4915	NM_002293	3915	ENSG00000135862	LAMC1	UIP	NSIP	0.51550231	1
NM_001063.2:640	NM_001063	7018	ENSG00000091513	TF	UIP	NSIP	0.515535313	1
NM_031902.3:390	NM_031902	64969	ENSG00000144029	MRPS5	UIP	NSIP	0.515614858	1
NM_153609.2:2929	NM_153609	164656	ENSG00000187045	TMPRSS6	NSIP	AFE	0.515740734	1
NM_001105251.2:2292	NM_001105251	9765	ENSG00000039319	ZFYVE16	NSIP	AFE	0.51582207	1
NM_000325.5:1381	NM_000325	5308	ENSG00000164093	PITX2	UIP	Kontrolle	0.515895761	1
NM_006896.3:1605	NM_006896	3204	ENSG00000122592	HOXA7	UIP	NSIP	0.515976879	1
NM_006329.3:2242	NM_006329	10516	ENSG00000140092	FBLN5	Kontrolle	AFE	0.516271724	1
NM_006914.3:1840	NM_006914	6096	ENSG00000198963	RORB	UIP	AFE	0.516365446	1
NM_012082.3:1850	NM_012082	23414	ENSG00000160946	ZFPM2	UIP	Kontrolle	0.5164911099	1
NM_024756.2:3040	NM_024756	79812	ENSG00000173269	MMRN2	NSIP	Kontrolle	0.516911385	1
NM_173198.1:2590	NM_173198	8013	ENSG00000119508	NR4A3	UIP	NSIP	0.517369956	1
NM_052972.2:1480	NM_052972	116844	ENSG00000171236	LRG1	UIP	AFE	0.517536931	1
NM_001030049.1:433	NM_001030049	354	ENSG00000142515	KLK3	NSIP	AFE	0.51760211	1
NM_152852.2:146	NM_152852	64231	ENSG00000110077	MS4A6A	UIP	Kontrolle	0.518139572	1
NM_024107.2:1485	NM_024107	79089	ENSG00000168591	TMUB2	NSIP	AFE	0.518241139	1
NM_014569.3:3688	NM_014569	23660	ENSG00000196652	ZKSCAN5	NSIP	Kontrolle	0.518715312	1
NM_014225.3:1440	NM_014225	5518	ENSG00000105568	PPP2R1A	UIP	Kontrolle	0.518760455	1
NM_004967.3:876	NM_004967	3381	ENSG00000029559	IBSP	UIP	AFE	0.518859577	1
NM_000963.1:495	NM_000963	5743	ENSG00000073756	PTGS2	Kontrolle	AFE	0.519004267	1
NM_004538.4:1070	NM_004538	4675	ENSG00000186310	NAP1L3	UIP	NSIP	0.519580085	1
NM_001731.2:775	NM_001731	694	ENSG00000133639	BTG1	UIP	Kontrolle	0.519916732	1
NM_002121.4:931	NM_002121	3115	ENSG00000223865	HLA-DPB1	UIP	Kontrolle	0.521609171	1
NM_002985.2:280	NM_002985	6352	ENSG00000271503	CCL5	UIP	AFE	0.52196978	1
NM_001100431.1:160	NM_001100431	11326	ENSG00000155659	VSIG4	UIP	AFE	0.52205321	1
NM_003256.2:1000	NM_003256	7079	ENSG00000157150	TIMP4	Kontrolle	AFE	0.522098119	1
NM_001220488.1:210	NM_001220488	1012	ENSG00000140945	CDH13	NSIP	Kontrolle	0.522260246	1
NM_024422.3:2200	NM_024422	1824	ENSG00000134755	DSC2	UIP	Kontrolle	0.523383423	1
NM_002427.2:951	NM_002427	4322	ENSG00000137745	MMP13	NSIP	Kontrolle	0.523490169	1
NM_004967.3:876	NM_004967	3381	ENSG00000029559	IBSP	UIP	NSIP	0.524078799	1
NM_024065.4:23	NM_024065	79031	ENSG00000115539	PDCL3	UIP	NSIP	0.524281811	1
NM_001220488.1:210	NM_001220488	1012	ENSG00000140945	CDH13	UIP	AFE	0.524702543	1
NM_022119.3:499	NM_022119	64063	ENSG00000005001	PRSS22	UIP	NSIP	0.524853282	1
NM_012211.3:650	NM_012211	22801	ENSG00000137809	ITGA11	UIP	NSIP	0.525150331	1
NM_002231.3:1211	NM_002231	3732	ENSG00000085117	CD82	Kontrolle	AFE	0.525573731	1
NM_152852.2:146	NM_152852	64231	ENSG00000110077	MS4A6A	UIP	AFE	0.526126138	1
NM_006218.2:2445	NM_006218	5290	ENSG00000121879	PIK3CA	NSIP	Kontrolle	0.526487293	1
NM_003200.3:858	NM_003200	6929	ENSG00000071564	TCF3	NSIP	AFE	0.526661248	1
NM_004830.2:640	NM_004830	9439	ENSG00000112282	MED23	NSIP	Kontrolle	0.527491483	1
NM_001305.3:1242	NM_001305	1364	ENSG00000189143	CLDN4	Kontrolle	AFE	0.527584501	1
NM_015715.3:2415	NM_015715	50487	ENSG00000100078	PLA2G3	NSIP	AFE	0.527593103	1
NM_001263.3:3052	NM_001263	1040	ENSG00000163624	CDS1	NSIP	AFE	0.528085862	1

NM_001146.3:2080	NM_001146	284	ENSG00000154188	ANGPT1	Kontrolle	AFE	0.528324836	1
NM_001168278.1:1050	NM_001168278	25937	ENSG00000018408	WWTR1	Kontrolle	AFE	0.528420272	1
NM_000389.2:1975	NM_000389	1026	ENSG00000124762	CDKN1A	UIP	NSIP	0.528820334	1
NM_001338.3:1937	NM_001338	1525	ENSG00000154639	CXADR	UIP	AFE	0.529148748	1
NM_005780.2:460	NM_005780	10186	ENSG00000183722	LHFP	UIP	NSIP	0.529252647	1
NM_001253845.1:610	NM_001253845	79924	ENSG00000128165	ADM2	UIP	Kontrolle	0.529646463	1
NM_030955.2:1955	NM_030955	81792	ENSG00000151388	ADAMTS12	NSIP	AFE	0.529922775	1
NM_004219.2:542	NM_004219	9232	ENSG00000164611	PTTG1	UIP	NSIP	0.529960527	1
NM_005490.2:412	NM_005490	10045	ENSG00000125731	SH2D3A	UIP	Kontrolle	0.530635492	1
NM_001306.3:606	NM_001306	1365	ENSG00000165215	CLDN3	Kontrolle	AFE	0.531274554	1
NM_020405.4:900	NM_020405	57125	ENSG00000161381	PLXDC1	UIP	NSIP	0.531546937	1
NM_052846.1:3113	NM_052846	90187	ENSG00000183798	EMILIN3	NSIP	Kontrolle	0.531551966	1
NM_004431.2:1525	NM_004431	1969	ENSG00000142627	EPHA2	UIP	NSIP	0.532067229	1
NM_003442.5:925	NM_003442	7702	ENSG00000166478	ZNF143	NSIP	Kontrolle	0.532151623	1
NM_003161.2:310	NM_003161	6198	ENSG00000108443	RPS6KB1	UIP	NSIP	0.533069312	1
NM_057179.2:482	NM_057179	117581	ENSG00000233608	TWIST2	Kontrolle	AFE	0.533098988	1
NM_002345.3:1285	NM_002345	4060	ENSG00000139329	LUM	NSIP	Kontrolle	0.533123396	1
NM_003161.2:310	NM_003161	6198	ENSG00000108443	RPS6KB1	Kontrolle	AFE	0.533449475	1
NM_018728.2:2400	NM_018728	55930	ENSG00000128833	MYO5C	NSIP	AFE	0.534498297	1
NM_001127491.1:1103	NM_001127491	3689	ENSG00000160255	ITGB2	UIP	NSIP	0.534530679	1
NM_002410.4:1233	NM_002410	4249	ENSG00000152127	MGAT5	NSIP	Kontrolle	0.534793735	1
NM_005490.2:412	NM_005490	10045	ENSG00000125731	SH2D3A	UIP	AFE	0.535447937	1
NM_006802.2:2060	NM_006802	10946	ENSG00000183431	SF3A3	NSIP	AFE	0.53564039	1
NM_000477.5:855	NM_000477	213	ENSG00000163631	ALB	Kontrolle	AFE	0.535861779	1
NM_032569.3:1470	NM_032569	84656	ENSG00000140632	GLYR1	NSIP	Kontrolle	0.535917628	1
NM_003131.2:4040	NM_003131	6722	ENSG00000112658	SRF	UIP	Kontrolle	0.535998349	1
NM_000479.3:1626	NM_000479	268	ENSG00000104899	AMH	UIP	Kontrolle	0.536494335	1
NM_001256741.1:1962	NM_001256741	25904	ENSG00000182973	CNOT10	UIP	AFE	0.537091025	1
NM_053032.2:710	NM_053032	4638	ENSG00000065534	MYLK	UIP	NSIP	0.537163952	1
NM_000228.2:695	NM_000228	3914	ENSG00000196878	LAMB3	Kontrolle	AFE	0.53728485	1
NR_024115.1:2175	NR_024115			GIMAP6	NSIP	AFE	0.537354289	1
NM_015013.3:2395	NM_015013	23028	ENSG00000004487	KDM1A	NSIP	AFE	0.537633477	1
NM_022361.4:980	NM_022361	64208	ENSG00000132429	POPDC3	UIP	Kontrolle	0.538596065	1
NM_020770.2:1112	NM_020770	57530	ENSG00000143375	CGN	UIP	NSIP	0.538767325	1
NM_006896.3:1605	NM_006896	3204	ENSG00000122592	HOXA7	NSIP	Kontrolle	0.538920829	1
NM_001114309.1:460	NM_001114309	1999	ENSG00000163435	ELF3	UIP	NSIP	0.539346145	1
NM_001999.3:9850	NM_001999	2201	ENSG00000138829	FBN2	NSIP	Kontrolle	0.539585868	1
NM_003177.3:1685	NM_003177	6850	ENSG00000165025	SYK	UIP	Kontrolle	0.539658163	1
NM_001270407.1:840	NM_001270407	58494	ENSG00000154721	JAM2	NSIP	AFE	0.539673287	1
NM_001647.3:613	NM_001647	347	ENSG00000189058	APOD	UIP	NSIP	0.540046972	1
NM_171825.1:4080	NM_171825	815	ENSG00000078088	CAMK2A	UIP	NSIP	0.540144698	1
NM_018055.3:320	NM_018055	4838	ENSG00000156574	NODAL	UIP	NSIP	0.540805434	1
NM_001034915.2:1515	NM_001034915	54845	ENSG00000104413	ESRP1	UIP	Kontrolle	0.540825758	1
NM_014467.2:1420	NM_014467	27286	ENSG00000102359	SRPX2	NSIP	AFE	0.541024226	1
NM_014467.2:1420	NM_014467	27286	ENSG00000102359	SRPX2	NSIP	Kontrolle	0.541839185	1
NM_003010.2:2830	NM_003010	6416	ENSG00000065559	MAP2K4	NSIP	AFE	0.541934515	1
NM_002999.2:1310	NM_002999	6385	ENSG00000124145	SDC4	Kontrolle	AFE	0.542068244	1
NM_001040056.1:580	NM_001040056	5595	ENSG00000102882	MAPK3	UIP	Kontrolle	0.542251573	1
NM_015962.4:1022	NM_015962	51077	ENSG00000119616	FCF1	NSIP	AFE	0.542278281	1
NM_002773.3:917	NM_002773	5652	ENSG00000052344	PRSS8	NSIP	AFE	0.542909982	1
NM_004054.2:415	NM_004054	719	ENSG00000171860	C3AR1	UIP	Kontrolle	0.544006504	1
NM_172174.1:1685	NM_172174	3600	ENSG00000164136	IL15	UIP	AFE	0.544867958	1
NM_001032367.1:1315	NM_001032367	6692	ENSG00000166145	SPINT1	NSIP	Kontrolle	0.544869397	1
NM_002203.2:475	NM_002203	3673	ENSG00000164171	ITGA2	UIP	NSIP	0.545053651	1
NM_000325.5:1381	NM_000325	5308	ENSG00000164093	PITX2	NSIP	AFE	0.545248738	1
NM_006914.3:1840	NM_006914	6096	ENSG00000198963	RORB	UIP	Kontrolle	0.545791526	1
NM_001338.3:1937	NM_001338	1525	ENSG00000154639	CXADR	UIP	NSIP	0.546016471	1
NM_004995.2:1470	NM_004995	4323	ENSG00000157227	MMP14	UIP	Kontrolle	0.546328435	1
NM_000395.2:492	NM_000395	1439	ENSG00000100368	CSF2RB	UIP	NSIP	0.54662458	1
NM_001647.3:613	NM_001647	347	ENSG00000189058	APOD	Kontrolle	AFE	0.546970684	1
NM_170679.2:630	NM_170679	6500	ENSG00000113558	SKP1	NSIP	AFE	0.54715278	1
NM_001553.1:690	NM_001553	3490	ENSG00000163453	IGFBP7	NSIP	AFE	0.547183241	1
NM_014586.1:1280	NM_014586	30811	ENSG00000142149	HUNK	UIP	NSIP	0.547313049	1
NM_000210.1:3065	NM_000210	3655	ENSG00000091409	ITGA6	NSIP	AFE	0.547542353	1
NM_000094.2:390	NM_000094	1294	ENSG00000114270	COL7A1	UIP	NSIP	0.547645882	1
NM_005406.1:2660	NM_005406	6093	ENSG00000067900	ROCK1	UIP	AFE	0.548570403	1
NM_006472.1:255	NM_006472	10628	ENSG00000265972	TXNIP	Kontrolle	AFE	0.548683936	1
NM_004349.2:1085	NM_004349	862	ENSG00000079102	RUNX1T1	NSIP	AFE	0.549132073	1
NM_005215.1:3100	NM_005215	1630	ENSG00000187323	DCC	NSIP	Kontrolle	0.549411433	1
NM_001884.3:730	NM_001884	1404	ENSG00000145681	HAPLN1	UIP	AFE	0.549970299	1
NM_001167580.1:2154	NM_001167580	9899	ENSG00000185518	SV2B	UIP	Kontrolle	0.550287911	1
NM_015568.2:2860	NM_015568	26051	ENSG00000101445	PPP1R16B	UIP	NSIP	0.550629084	1



NM_016142.2:1000	NM_016142	51144	ENSG00000149084	HSD17B12	NSIP	AFE	0.551472652	1
NM_005100.3:640	NM_005100	9590	ENSG00000131016	AKAP12	NSIP	Kontrolle	0.551704073	1
NM_001734.2:775	NM_001734	716	ENSG00000182326	C15	UIP	NSIP	0.552049914	1
NM_024756.2:3040	NM_024756	79812	ENSG00000173269	MMRN2	NSIP	AFE	0.552081073	1
NM_001425.2:350	NM_001425	2014	ENSG00000142227	EMP3	NSIP	AFE	0.552117241	1
NM_006218.2:2445	NM_006218	5290	ENSG00000121879	PIK3CA	Kontrolle	AFE	0.552187315	1
NM_004329.2:1720	NM_004329	657	ENSG00000107779	BMPR1A	UIP	NSIP	0.55272649	1
NM_021253.3:3140	NM_021253	56658	ENSG00000204599	TRIM39	UIP	Kontrolle	0.552952332	1
NM_005127.2:980	NM_005127	9976	ENSG00000110852	CLEC2B	NSIP	Kontrolle	0.553438011	1
NM_018238.3:816	NM_018238	55750	ENSG00000006530	AGK	UIP	Kontrolle	0.553548043	1
NM_005409.3:590	NM_005409	6373	ENSG00000169248	CXCL11	UIP	NSIP	0.553766002	1
NM_015874.3:850	NM_015874	3516	ENSG00000168214	RBPJ	UIP	NSIP	0.554608974	1
NM_004799.2:2135	NM_004799	9372	ENSG00000157077	ZFYVE9	NSIP	AFE	0.554760753	1
NM_018728.2:2400	NM_018728	55930	ENSG00000128833	MYO5C	UIP	Kontrolle	0.555171933	1
NM_004282.3:785	NM_004282	9532	ENSG00000112208	BAG2	NSIP	Kontrolle	0.555314593	1
NM_002426.3:769	NM_002426	4321	ENSG00000262406	MMP12	UIP	AFE	0.55547848	1
NM_033001.2:920	NM_033001	2969	ENSG00000263001	GTF2I	UIP	NSIP	0.555605777	1
NM_152696.3:2105	NM_152696	204851	ENSG00000163349	HIPK1	NSIP	Kontrolle	0.555890896	1
NM_000210.1:3065	NM_000210	3655	ENSG00000091409	ITGA6	UIP	NSIP	0.556589154	1
NM_138735.2:1095	NM_138735	9378	ENSG00000179915	NRXN1	UIP	NSIP	0.556670694	1
NM_020770.2:1112	NM_020770	57530	ENSG00000143375	CGN	UIP	AFE	0.556700221	1
NM_002052.3:2140	NM_002052	2626	ENSG00000136574	GATA4	NSIP	AFE	0.556789983	1
NM_212482.1:1776	NM_212482	2335	ENSG00000115414	FN1	UIP	Kontrolle	0.556811369	1
NM_001109.4:762	NM_001109	101	ENSG00000151651	ADAM8	UIP	NSIP	0.556858245	1
NM_002660.2:2290	NM_002660	5335	ENSG00000124181	PLCG1	UIP	Kontrolle	0.557302	1
NM_000321.1:2110	NM_000321	5925	ENSG00000139687	RB1	NSIP	Kontrolle	0.557666238	1
NM_000698.2:735	NM_000698	240	ENSG00000012779	ALOX5	NSIP	AFE	0.557881215	1
NM_005041.3:2120	NM_005041	5551	ENSG00000180644	PRF1	NSIP	AFE	0.558129721	1
NM_012232.5:86	NM_012232	284119	ENSG00000177469	PTRF	UIP	NSIP	0.558663103	1
NM_002354.1:415	NM_002354	4072	ENSG00000119888	EPCAM	UIP	Kontrolle	0.558895195	1
NM_001087.3:412	NM_001087	14	ENSG00000127837	AAMP	UIP	Kontrolle	0.559430667	1
NM_000615.5:1620	NM_000615	4684	ENSG00000149294	NCAM1	UIP	NSIP	0.55967773	1
NM_002963.2:69	NM_002963	6278	ENSG00000143556	S100A7	NSIP	AFE	0.55991306	1
NM_153609.2:2929	NM_153609	164656	ENSG00000187045	TMPRSS6	UIP	AFE	0.560123123	1
NM_002146.4:2840	NM_002146	3213	ENSG00000120093	HOXB3	NSIP	AFE	0.560170554	1
NM_005010.4:875	NM_005010	4897	ENSG00000091129	NRCAM	NSIP	Kontrolle	0.560501225	1
NM_012243.1:605	NM_012243	23443	ENSG00000117620	SLC35A3	NSIP	Kontrolle	0.560672158	1
NM_001142443.1:925	NM_001142443	80153	ENSG00000179151	EDC3	UIP	Kontrolle	0.560701178	1
NM_002422.3:25	NM_002422	4314	ENSG00000149968	MMP3	NSIP	Kontrolle	0.560860123	1
NM_000474.3:393	NM_000474	7291	ENSG00000122691	TWIST1	UIP	AFE	0.561309976	1
NM_006419.2:210	NM_006419	10563	ENSG00000156234	CXCL13	UIP	AFE	0.561553237	1
NM_000639.1:625	NM_000639	356	ENSG00000117560	FASLG	Kontrolle	AFE	0.561725536	1
NM_000325.5:1381	NM_000325	5308	ENSG00000164093	PITX2	UIP	NSIP	0.562597058	1
NM_032569.3:1470	NM_032569	84656	ENSG00000140632	GLYR1	NSIP	AFE	0.562840517	1
NM_015429.3:4081	NM_015429	25890	ENSG00000154175	ABI3BP	NSIP	AFE	0.563208944	1
NM_001664.2:1230	NM_001664	387	ENSG00000067560	RHOA	NSIP	AFE	0.563303571	1
NM_006500.2:2482	NM_006500	4162	ENSG00000076706	MCAM	NSIP	Kontrolle	0.563484198	1
NM_001079675.1:1535	NM_001079675	2118	ENSG00000175832	ETV4	NSIP	AFE	0.563857025	1
NM_001001557.2:1908	NM_001001557	392255	ENSG00000156466	GDF6	NSIP	Kontrolle	0.564050893	1
NM_002625.2:564	NM_002625	5207	ENSG00000158571	PFKFB1	NSIP	Kontrolle	0.565394766	1
NM_005727.2:115	NM_005727	10103	ENSG00000117472	TSPAN1	Kontrolle	AFE	0.565470845	1
NM_006852.2:2335	NM_006852	11011	ENSG00000146872	TLK2	NSIP	AFE	0.565614889	1
NM_003592.2:1487	NM_003592	8454	ENSG00000055130	CUL1	Kontrolle	AFE	0.565829108	1
NM_006419.2:210	NM_006419	10563	ENSG00000156234	CXCL13	NSIP	AFE	0.565862143	1
NM_198829.1:1250	NM_198829	5879	ENSG00000136238	RAC1	Kontrolle	AFE	0.566075721	1
NM_001122821.1:2385	NM_001122821	6418	ENSG00000119335	SET	UIP	NSIP	0.566436697	1
NM_004329.2:1720	NM_004329	657	ENSG00000107779	BMPR1A	Kontrolle	AFE	0.56655354	1
NM_000214.2:915	NM_000214	182	ENSG00000101384	JAG1	NSIP	AFE	0.566856981	1
NM_201282.1:360	NM_201282	1956	ENSG00000146648	EGFR	UIP	NSIP	0.567179568	1
NM_005475.2:4285	NM_005475	10019	ENSG00000111252	SH2B3	Kontrolle	AFE	0.567626963	1
NM_001015002.1:1065	NM_001015002	3993	ENSG00000073350	LLGL2	UIP	NSIP	0.567733415	1
NM_001425.2:350	NM_001425	2014	ENSG00000142227	EMP3	UIP	NSIP	0.567756787	1
NM_015441.1:2920	NM_015441	25903	ENSG00000162745	OLFML2B	NSIP	AFE	0.567841623	1
NM_001087.3:412	NM_001087	14	ENSG00000127837	AAMP	UIP	NSIP	0.568221744	1
NM_001562.2:48	NM_001562	3606	ENSG00000150782	IL18	Kontrolle	AFE	0.568374288	1
NM_003289.3:891	NM_003289	7169	ENSG00000198467	TPM2	UIP	NSIP	0.568404678	1
NM_000346.2:2135	NM_000346	6662	ENSG00000125398	SOX9	NSIP	Kontrolle	0.569067049	1
NM_024896.2:852	NM_024896	79956	ENSG00000099219	ERMP1	NSIP	Kontrolle	0.569325581	1
NM_001306.3:606	NM_001306	1365	ENSG00000165215	CLDN3	NSIP	Kontrolle	0.569607936	1
NM_001160103.1:2690	NM_001160103	79882	ENSG00000100722	ZC3H14	Kontrolle	AFE	0.570366216	1
NM_000479.3:1626	NM_000479	268	ENSG00000104899	AMH	UIP	NSIP	0.570515786	1
NM_001142685.1:2100	NM_001142685	9743	ENSG00000134909	ARHGAP32	NSIP	AFE	0.570637629	1

NM_003621.2:2350	NM_003621	8495	ENSG00000166387	PPFIBP2	NSIP	Kontrolle	0.570746328	1
NM_006702.3:3941	NM_006702	10908	ENSG000000032444	PNPLA6	NSIP	AFE	0.571258426	1
NM_144503.1:3650	NM_144503	50848	ENSG00000158769	F11R	UIP	AFE	0.571569778	1
NM_152696.3:2105	NM_152696	204851	ENSG00000163349	HIPK1	Kontrolle	AFE	0.571682571	1
NM_148979.2:800	NM_148979	1512	ENSG00000103811	CTSH	UIP	NSIP	0.572095301	1
NM_001848.2:3665	NM_001848	1291	ENSG00000142156	COL6A1	NSIP	Kontrolle	0.572294096	1
NM_052846.1:3113	NM_052846	90187	ENSG00000183798	EMILIN3	UIP	AFE	0.572371597	1
NM_001127198.1:1266	NM_001127198	11322	ENSG00000141524	TMC6	UIP	AFE	0.572540386	1
NM_004425.3:1345	NM_004425	1893	ENSG00000143369	ECM1	NSIP	AFE	0.573388239	1
NM_004567.2:400	NM_004567	5210	ENSG00000114268	PFKFB4	UIP	NSIP	0.573643205	1
NM_006516.2:2500	NM_006516	6513	ENSG00000117394	SLC2A1	UIP	AFE	0.573821096	1
NM_005045.2:345	NM_005045	5649	ENSG00000189056	RELN	UIP	AFE	0.573962976	1
NM_000291.2:1030	NM_000291	5230	ENSG00000102144	PGK1	UIP	NSIP	0.574097966	1
NM_001005845.1:695	NM_001005845	8754	ENSG00000168615	ADAM9	NSIP	Kontrolle	0.574422431	1
NM_001135000.1:920	NM_001135000	10979	ENSG00000073120	FERMT2	NSIP	AFE	0.574859144	1
NM_012082.3:1850	NM_012082	23414	ENSG00000169946	ZFPM2	NSIP	Kontrolle	0.576177596	1
NM_001712.3:2455	NM_001712	634	ENSG00000079385	CEACAM1	UIP	NSIP	0.576864949	1
NM_005026.3:2978	NM_005026	5293	ENSG00000171608	PIK3CD	NSIP	AFE	0.577022849	1
NM_080923.2:154	NM_080923			PTPRC	UIP	NSIP	0.577083413	1
NM_001753.3:434	NM_001753	857	ENSG00000105974	CAV1	UIP	NSIP	0.578038376	1
NM_057175.3:4145	NM_057175	80155	ENSG00000164134	NAA15	NSIP	Kontrolle	0.578154655	1
NM_005938.2:35	NM_005938	4303	ENSG00000184481	FOXO4	NSIP	Kontrolle	0.578321809	1
NM_004103.3:735	NM_004103	2185	ENSG00000120899	PTK2B	NSIP	AFE	0.57854611	1
NM_005215.1:3100	NM_005215	1630	ENSG00000187323	DCC	UIP	Kontrolle	0.5788714	1
NM_024107.2:1485	NM_024107	79089	ENSG00000168591	TMUB2	Kontrolle	AFE	0.578976513	1
NM_014363.4:1475	NM_014363	26278	ENSG00000151835	SACS	UIP	AFE	0.579216328	1
NM_002207.2:2380	NM_002207	3680	ENSG00000144668	ITGA9	UIP	NSIP	0.579242378	1
NM_001032367.1:1315	NM_001032367	6692	ENSG00000166145	SPINT1	NSIP	AFE	0.579323486	1
NM_014265.4:920	NM_014265	10863	ENSG00000042980	ADAM28	UIP	AFE	0.579388746	1
NM_173481.2:1845	NM_173481	126353	ENSG00000099812	MISP	UIP	Kontrolle	0.58005477	1
NM_006487.2:965	NM_006487	2192	ENSG00000077942	FBLN1	UIP	NSIP	0.580540606	1
NM_001711.3:1935	NM_001711	633	ENSG00000182492	BGN	UIP	NSIP	0.580605255	1
NM_001704.1:885	NM_001704	577	ENSG00000135298	BAI3	UIP	Kontrolle	0.580639403	1
NM_000314.4:1351	NM_000314	5728	ENSG00000171862	PTEN	UIP	NSIP	0.580731129	1
NM_000551.2:1280	NM_000551	7428	ENSG00000134086	VHL	NSIP	Kontrolle	0.580842111	1
NM_001797.2:1835	NM_001797	1009	ENSG00000140937	CDH11	UIP	Kontrolle	0.581200915	1
NM_001620.2:14454	NM_001620	79026	ENSG00000124942	AHNAK	UIP	NSIP	0.581352355	1
NM_000945.3:2385	NM_000945	5534	ENSG00000221823	PPP3R1	NSIP	AFE	0.581449849	1
NM_005761.2:3705	NM_005761	10154	ENSG00000136040	PLXNC1	UIP	Kontrolle	0.581547424	1
NM_000064.2:4396	NM_000064	718	ENSG00000125730	C3	UIP	Kontrolle	0.581934355	1
NM_001127491.1:1103	NM_001127491	3689	ENSG00000160255	ITGB2	UIP	Kontrolle	0.582068738	1
NM_005381.2:1492	NM_005381	4691	ENSG00000115053	NCL	UIP	NSIP	0.582387299	1
NM_001523.2:859	NM_001523	3036	ENSG00000105509	HAS1	UIP	NSIP	0.582610793	1
NM_213560.1:2153	NM_213560	5585	ENSG00000123143	PKN1	NSIP	AFE	0.582963256	1
NM_001267.2:810	NM_001267	1101	ENSG00000136457	CHAD	UIP	NSIP	0.583479491	1
NM_022073.3:800	NM_022073	112399	ENSG00000129521	EGLN3	Kontrolle	AFE	0.583779655	1
NM_003013.2:840	NM_003013	6423	ENSG00000145423	SFRP2	UIP	AFE	0.584112143	1
NM_001988.2:5525	NM_001988	2125	ENSG00000167880	EVPL	UIP	Kontrolle	0.584342046	1
NM_001142685.1:2100	NM_001142685	9743	ENSG00000134909	ARHGAP32	UIP	Kontrolle	0.584410094	1
NM_000189.4:6880	NM_000189	3099	ENSG00000159399	HK2	NSIP	AFE	0.584495625	1
NM_005901.5:1678	NM_005901	4087	ENSG00000175387	SMAD2	Kontrolle	AFE	0.584658864	1
NM_005010.4:875	NM_005010	4897	ENSG00000091129	NRCAM	UIP	Kontrolle	0.584673237	1
NM_015293.1:7755	NM_015293	23345	ENSG00000131018	SYNE1	NSIP	Kontrolle	0.584895056	1
NM_183404.1:1110	NM_183404	5933	ENSG00000080839	RBL1	UIP	Kontrolle	0.585079455	1
NM_182692.1:340	NM_182692	6733	ENSG00000135250	SRPK2	NSIP	AFE	0.586067749	1
NM_001146.3:2080	NM_001146	284	ENSG00000154188	ANGPT1	UIP	Kontrolle	0.586291655	1
NM_080923.2:154	NM_080923			PTPRC	Kontrolle	AFE	0.586588562	1
NM_152852.2:146	NM_152852	64231	ENSG00000110077	MS4A6A	NSIP	Kontrolle	0.587501724	1
NM_020387.2:245	NM_020387	57111	ENSG00000132698	RAB25	NSIP	Kontrolle	0.588145094	1
NM_004369.3:2782	NM_004369	1293	ENSG00000163359	COL6A3	UIP	NSIP	0.588394224	1
NM_000038.3:6850	NM_000038	324	ENSG00000134982	APC	NSIP	AFE	0.589150519	1
NM_003872.2:805	NM_003872	8828	ENSG00000118257	NRP2	UIP	AFE	0.589294664	1
NM_004517.2:983	NM_004517	3611	ENSG00000166333	ILK	NSIP	AFE	0.589511851	1
NM_000227.3:4260	NM_000227	3909	ENSG00000053747	LAMA3	UIP	AFE	0.590257429	1
NM_003028.2:3200	NM_003028	6461	ENSG00000107338	SHB	NSIP	Kontrolle	0.59096831	1
NM_002621.2:380	NM_002621	5199	ENSG00000126759	CFP	UIP	NSIP	0.590974976	1
NM_004444.4:1680	NM_004444	2050	ENSG00000196411	EPHB4	UIP	Kontrolle	0.591166728	1
NM_017729.3:1914	NM_017729	54869	ENSG00000131037	EPS8L1	UIP	NSIP	0.591354524	1
NM_020387.2:245	NM_020387	57111	ENSG00000132698	RAB25	UIP	Kontrolle	0.591976634	1
NM_003561.1:779	NM_003561	8399	ENSG00000069764	PLA2G10	UIP	AFE	0.592001243	1
NM_002202.2:1375	NM_002202	3670	ENSG00000016082	ISL1	NSIP	AFE	0.592736745	1
NM_005026.3:2978	NM_005026	5293	ENSG00000171608	PIK3CD	Kontrolle	AFE	0.592739922	1

NM_001100431.1:160	NM_001100431	11326	ENSG00000155659	VSIG4	UIP	Kontrolle	0.593082427	1
NM_032801.3:890	NM_032801	83700	ENSG00000166086	JAM3	NSIP	AFE	0.593259297	1
NM_001202.3:395	NM_001202	652	ENSG00000125378	BMP4	UIP	AFE	0.593823404	1
NM_002010.2:1565	NM_002010	2254	ENSG00000102678	FGF9	UIP	NSIP	0.595052645	1
NM_006500.2:2482	NM_006500	4162	ENSG00000076706	MCAM	Kontrolle	AFE	0.596068551	1
NM_017564.9:3000	NM_017564	55576	ENSG00000136011	STAB2	UIP	Kontrolle	0.596205203	1
NM_207361.4:9170	NM_207361	341640	ENSG00000150893	FREM2	UIP	AFE	0.596708346	1
NM_006408.3:580	NM_006408	10551	ENSG00000106541	AGR2	NSIP	AFE	0.597034096	1
NM_022073.3:800	NM_022073	112399	ENSG00000129521	EGLN3	UIP	Kontrolle	0.59720162	1
NM_015136.2:95	NM_015136	23166	ENSG00000010327	STAB1	NSIP	AFE	0.59722504	1
NM_005623.2:689	NM_005623	6355	ENSG00000108700	CCL8	UIP	Kontrolle	0.597405169	1
NM_018326.2:315	NM_018326	55303	ENSG00000133574	GIMAP4	NSIP	Kontrolle	0.597906654	1
NM_002625.2:564	NM_002625	5207	ENSG00000158571	PFKFB1	UIP	Kontrolle	0.598204224	1
NM_004349.2:1085	NM_004349	862	ENSG00000079102	RUNX1T1	NSIP	Kontrolle	0.598840361	1
NM_031476.3:2575	NM_031476	83716	ENSG00000103196	CRISPLD2	UIP	Kontrolle	0.599696275	1
NM_012098.2:540	NM_012098	23452	ENSG00000136859	ANGPTL2	UIP	AFE	0.600664854	1
NM_005985.2:63	NM_005985	6615	ENSG00000124216	SNAI1	NSIP	Kontrolle	0.600693608	1
NM_001190848.1:795	NM_001190848	4850	ENSG00000080802	CNOT4	NSIP	AFE	0.600740205	1
NM_002872.3:1069	NM_002872	5880	ENSG00000128340	RAC2	Kontrolle	AFE	0.601189809	1
NM_004982.2:880	NM_004982	3764	ENSG00000121361	KCNJ8	UIP	NSIP	0.601320801	1
NM_014225.3:1440	NM_014225	5518	ENSG00000105568	PPP2R1A	UIP	NSIP	0.601993691	1
NM_003183.4:1595	NM_003183	6868	ENSG00000151694	ADAM17	UIP	NSIP	0.602457796	1
NM_024045.1:1185	NM_024045	79009	ENSG00000107625	DDX50	Kontrolle	AFE	0.602689821	1
NM_001098210.1:1815	NM_001098210	1499	ENSG00000168036	CTNNB1	NSIP	Kontrolle	0.602709395	1
NM_003677.3:2091	NM_003677	8562	ENSG00000139726	DENR	NSIP	Kontrolle	0.603082475	1
NM_003118.2:910	NM_003118	6678	ENSG00000113140	SPARC	UIP	NSIP	0.603400133	1
NM_003761.3:260	NM_003761	8673	ENSG00000118640	VAMP8	UIP	NSIP	0.603557027	1
NM_014569.3:3688	NM_014569	23660	ENSG00000196652	ZKSCAN5	UIP	Kontrolle	0.603755466	1
NM_022097.3:1078	NM_022097	63928	ENSG00000166869	CHP2	UIP	Kontrolle	0.603809174	1
NM_001142633.1:3335	NM_001142633	23533	ENSG00000141506	PIK3R5	UIP	Kontrolle	0.603890935	1
NM_001731.2:775	NM_001731	694	ENSG00000133639	BTG1	NSIP	Kontrolle	0.604015354	1
NM_003862.1:850	NM_003862	8817	ENSG00000156427	FGF18	UIP	NSIP	0.604177835	1
NM_000062.2:305	NM_000062	710	ENSG00000149131	SERPING1	NSIP	Kontrolle	0.604313862	1
NM_001562.2:48	NM_001562	3606	ENSG00000150782	IL18	NSIP	AFE	0.605550781	1
NM_019074.2:893	NM_019074	54567	ENSG00000128917	DLL4	UIP	NSIP	0.605662152	1
NM_024045.1:1185	NM_024045	79009	ENSG00000107625	DDX50	UIP	Kontrolle	0.605939461	1
NM_032449.2:4182	NM_032449	200014	ENSG00000154222	CC2D1B	UIP	AFE	0.606055703	1
NM_001167580.1:2154	NM_001167580	9899	ENSG00000185518	SV2B	UIP	NSIP	0.606144922	1
NM_002121.4:931	NM_002121	3115	ENSG00000223865	HLA-DPB1	NSIP	Kontrolle	0.606386736	1
NM_005954.2:165	NM_005954	4504	ENSG00000087250	MT3	NSIP	Kontrolle	0.606407594	1
NM_032569.3:1470	NM_032569	84656	ENSG00000140632	GLYR1	UIP	NSIP	0.607009067	1
NM_177438.2:5060	NM_177438	23405	ENSG00000100697	DICER1	NSIP	Kontrolle	0.607141912	1
NM_020672.1:460	NM_020672	57402	ENSG00000189334	S100A14	UIP	Kontrolle	0.607609704	1
NM_181349.1:5162	NM_181349	57154	ENSG00000198742	SMURF1	Kontrolle	AFE	0.608843754	1
NM_003333.3:288	NM_003333	7311	ENSG00000221983	UBA52	UIP	NSIP	0.608897007	1
NM_001387.2:4790	NM_001387	1809	ENSG00000113657	DPYSL3	NSIP	NSIP	0.609144813	1
NM_183404.1:1110	NM_183404	5933	ENSG00000080839	RBL1	UIP	NSIP	0.609243667	1
NM_000450.2:1505	NM_000450	6401	ENSG0000007908	SELE	UIP	AFE	0.60930983	1
NM_020387.2:245	NM_020387	57111	ENSG00000132698	RAB25	NSIP	AFE	0.609561811	1
NM_000682.4:2885	NM_000682	151	ENSG00000274286	ADRA2B	NSIP	AFE	0.60979092	1
NM_004443.3:3485	NM_004443	2049	ENSG00000182580	EPHB3	UIP	NSIP	0.609862843	1
NM_001135935.1:910	NM_001135935	10631	ENSG00000133110	POSTN	UIP	NSIP	0.610021886	1
NM_001063.2:640	NM_001063	7018	ENSG00000091513	TF	NSIP	AFE	0.610256	1
NM_000551.2:1280	NM_000551	7428	ENSG00000134086	VHL	UIP	NSIP	0.610324671	1
NM_004799.2:2135	NM_004799	9372	ENSG00000157077	ZFYVE9	UIP	AFE	0.610404939	1
NM_001657.2:547	NM_001657	374	ENSG00000109321	AREG	NSIP	Kontrolle	0.610571228	1
NM_000269.2:500	NM_000269	4830	ENSG00000239672	NME1	UIP	NSIP	0.610628782	1
NM_022144.2:462	NM_022144	64102	ENSG00000000005	TNMD	NSIP	AFE	0.610970354	1
NM_005761.2:3705	NM_005761	10154	ENSG00000136040	PLXNC1	NSIP	Kontrolle	0.611542472	1
NM_002963.2:69	NM_002963	6278	ENSG00000143556	S100A7	UIP	Kontrolle	0.611556896	1
NM_000346.2:2135	NM_000346	6662	ENSG00000125398	SOX9	UIP	NSIP	0.61176641	1
NM_001199140.1:3564	NM_001199140	83607	ENSG00000144233	AMMECR1L	UIP	Kontrolle	0.611800876	1
NM_004850.3:3140	NM_004850	9475	ENSG00000134318	ROCK2	NSIP	Kontrolle	0.611932925	1
NM_000577.3:480	NM_000577	3557	ENSG00000136689	IL1RN	UIP	NSIP	0.612305959	1
NM_000397.3:2686	NM_000397	1536	ENSG00000165168	CYBB	UIP	AFE	0.612313776	1
NM_199168.3:69	NM_199168	6387	ENSG00000107562	CXCL12	UIP	NSIP	0.612457039	1
NM_002649.2:2125	NM_002649	5294	ENSG00000105851	PIK3CG	UIP	AFE	0.612686625	1
NM_001005731.1:4151	NM_001005731	3691	ENSG00000132470	ITGB4	NSIP	AFE	0.612881837	1
NM_203384.1:1192	NM_203384	6050	ENSG00000023191	RNH1	NSIP	AFE	0.613255986	1
NM_015213.2:4604	NM_015213	23258	ENSG00000184014	DENND5A	NSIP	AFE	0.613458351	1
NM_003289.3:891	NM_003289	7169	ENSG00000198467	TPM2	UIP	AFE	0.613688036	1
NM_004345.3:220	NM_004345	820	ENSG00000164047	CAMP	UIP	Kontrolle	0.613896686	1

NM_152696.3:2105	NM_152696	204851	ENSG00000163349	HIPK1	UIP	NSIP	0.614689115	1
NM_182692.1:340	NM_182692	6733	ENSG00000135250	SRPK2	UIP	AFE	0.614771952	1
NM_001620.2:14454	NM_001620	79026	ENSG00000124942	AHNAK	NSIP	Kontrolle	0.614798094	1
NM_031479.3:1450	NM_031479	83729	ENSG00000139269	INHBE	NSIP	Kontrolle	0.61499431	1
NM_001400.4:802	NM_001400	1901	ENSG00000170989	S1PR1	NSIP	Kontrolle	0.615149	1
NM_000603.4:1456	NM_000603	4846	ENSG00000164867	NOS3	NSIP	Kontrolle	0.615442805	1
NM_172127.1:505	NM_172127	817	ENSG00000145349	CAMK2D	NSIP	AFE	0.616041726	1
NM_001657.2:547	NM_001657	374	ENSG00000109321	AREG	UIP	NSIP	0.616337309	1
NM_057175.3:4145	NM_057175	80155	ENSG00000164134	NAA15	NSIP	AFE	0.61647172	1
NM_000267.2:1035	NM_000267	4763	ENSG00000196712	NF1	NSIP	Kontrolle	0.61657756	1
NM_005251.2:1389	NM_005251	2303	ENSG00000176692	FOXC2	UIP	NSIP	0.618104211	1
NM_003131.2:4040	NM_003131	6722	ENSG00000112658	SRF	UIP	NSIP	0.618325343	1
NM_001299.4:496	NM_001299	1264	ENSG00000130176	CNN1	UIP	AFE	0.618439041	1
NM_004517.2:983	NM_004517	3611	ENSG00000166333	ILK	UIP	Kontrolle	0.61854882	1
NM_005556.3:1425	NM_005556	3855	ENSG00000135480	KRT7	Kontrolle	AFE	0.618788686	1
NM_001712.3:2455	NM_001712	634	ENSG00000079385	CEACAM1	UIP	Kontrolle	0.619548381	1
NM_005780.2:460	NM_005780	10186	ENSG00000183722	LHFP	UIP	Kontrolle	0.61957213	1
NM_001235.2:880	NM_001235	871	ENSG00000149257	SERPINH1	UIP	Kontrolle	0.620599584	1
NM_001127491.1:1103	NM_001127491	3689	ENSG00000160255	ITGB2	Kontrolle	AFE	0.620758819	1
NM_001135935.1:910	NM_001135935	10631	ENSG00000133110	POSTN	UIP	AFE	0.620900367	1
NM_001271814.1:90	NM_001271814	26279	ENSG00000117215	PLA2G2D	Kontrolle	AFE	0.621359472	1
NM_003104.4:1345	NM_003104	6652	ENSG00000140263	SORD	NSIP	Kontrolle	0.621572613	1
NM_004349.2:1085	NM_004349	862	ENSG00000079102	RUNX1T1	UIP	AFE	0.621696205	1
NM_002954.5:650	NM_002954	6233	ENSG00000143947	RPS27A	UIP	AFE	0.621792888	1
NM_003256.2:1000	NM_003256	7079	ENSG00000157150	TIMP4	NSIP	AFE	0.621828098	1
NM_001664.2:1230	NM_001664	387	ENSG00000067560	RHOA	NSIP	Kontrolle	0.622186492	1
NM_001030049.1:433	NM_001030049	354	ENSG00000142515	KLK3	UIP	NSIP	0.622283535	1
NM_004360.2:1230	NM_004360	999	ENSG00000039068	CDH1	Kontrolle	AFE	0.622383544	1
NM_002206.1:1170	NM_002206	3679	ENSG00000135424	ITGA7	NSIP	AFE	0.622413946	1
NM_002658.2:793	NM_002658	5328	ENSG00000122861	PLAU	UIP	NSIP	0.622535836	1
NM_000442.3:1365	NM_000442	5175	ENSG00000261371	PECAM1	NSIP	AFE	0.622601983	1
NM_015230.2:4875	NM_015230	116984	ENSG00000047365	ARAP2	Kontrolle	AFE	0.622629179	1
NM_001432.2:290	NM_001432	2069	ENSG00000124882	EREG	Kontrolle	AFE	0.62266059	1
NM_003469.3:1400	NM_003469	7857	ENSG00000171951	SCG2	NSIP	AFE	0.623221217	1
NM_003650.3:525	NM_003650	8530	ENSG00000077984	CST7	NSIP	AFE	0.624227995	1
NR_036430.1:65	NR_036430			SRGN	UIP	Kontrolle	0.624528104	1
NM_003278.2:607	NM_003278	7123	ENSG00000163815	CLEC3B	UIP	AFE	0.624632968	1
XM_005254140.1:174	XM_005254140			CHP1	UIP	NSIP	0.624659194	1
NM_025079.2:2140	NM_025079	80149	ENSG00000163874	ZC3H12A	UIP	NSIP	0.624972583	1
NM_022361.4:980	NM_022361	64208	ENSG00000132429	POPDC3	NSIP	AFE	0.625150333	1
NM_003333.3:288	NM_003333	7311	ENSG00000221983	UBA52	NSIP	Kontrolle	0.625467658	1
NM_000064.2:4396	NM_000064	718	ENSG00000125730	C3	NSIP	Kontrolle	0.62590863	1
NM_022119.3:499	NM_022119	64063	ENSG00000005001	PRSS22	NSIP	AFE	0.625918341	1
NM_018238.3:816	NM_018238	55750	ENSG00000006530	AGK	UIP	AFE	0.626398216	1
NM_001754.4:635	NM_001754	861	ENSG00000159216	RUNX1	UIP	NSIP	0.6269161	1
NM_001042404.1:1800	NM_001042404	9859	ENSG00000143702	CEP170	UIP	NSIP	0.627229601	1
NM_002872.3:1069	NM_002872	5880	ENSG00000128340	RAC2	NSIP	AFE	0.627459406	1
NM_001109.4:762	NM_001109	101	ENSG00000151651	ADAM8	NSIP	Kontrolle	0.627937608	1
NM_005406.1:2660	NM_005406	6093	ENSG00000067900	ROCK1	UIP	NSIP	0.628877497	1
NM_014569.3:3688	NM_014569	23660	ENSG00000196652	ZKSCAN5	UIP	AFE	0.628988443	1
NM_003657.2:2305	NM_003657	8537	ENSG00000064787	BCAS1	Kontrolle	AFE	0.629123252	1
NM_152852.2:146	NM_152852	64231	ENSG00000110077	MS4A6A	NSIP	AFE	0.629346562	1
NM_001079675.1:1535	NM_001079675	2118	ENSG00000175823	ETV4	UIP	NSIP	0.629467208	1
NM_004103.3:735	NM_004103	2185	ENSG00000120899	PTK2B	UIP	Kontrolle	0.630168048	1
NM_001884.3:730	NM_001884	1404	ENSG00000145681	HAPLN1	UIP	Kontrolle	0.630460137	1
NM_005215.1:3100	NM_005215	1630	ENSG00000187323	DCC	NSIP	AFE	0.630558018	1
NM_001331.2:146	NM_001331	1500	ENSG00000198561	CTNND1	UIP	NSIP	0.630602066	1
NM_003246.2:3465	NM_003246	7057	ENSG00000137801	THBS1	NSIP	Kontrolle	0.630765171	1
NM_015568.2:2860	NM_015568	26051	ENSG00000101445	PPP1R16B	Kontrolle	AFE	0.630869035	1
NM_001142685.1:2100	NM_001142685	9743	ENSG00000134909	ARHGAP32	UIP	AFE	0.631526138	1
NM_000041.2:96	NM_000041	348	ENSG00000130203	APOE	UIP	AFE	0.63180977	1
NM_000632.3:515	NM_000632	3684	ENSG00000169896	ITGAM	UIP	Kontrolle	0.631843681	1
NM_005975.2:1715	NM_005975	5753	ENSG00000101213	PTK6	UIP	NSIP	0.63258397	1
NM_001565.1:40	NM_001565	3627	ENSG00000169245	CXCL10	UIP	AFE	0.633003485	1
NM_053276.3:604	NM_053276	5212	ENSG00000205221	VIT	UIP	Kontrolle	0.633059447	1
NM_006017.1:925	NM_006017	8842	ENSG00000007062	PROM1	NSIP	Kontrolle	0.633788733	1
NM_001040056.1:580	NM_001040056	5595	ENSG00000102882	MAPK3	NSIP	AFE	0.634005632	1
NM_002422.3:25	NM_002422	4314	ENSG00000149968	MMP3	UIP	Kontrolle	0.634465423	1
NM_134261.2:1715	NM_134261	6095	ENSG00000069667	RORA	UIP	Kontrolle	0.634684723	1
NM_001202.3:395	NM_001202	652	ENSG00000125378	BMP4	UIP	NSIP	0.634870192	1
NM_000395.2:492	NM_000395	1439	ENSG00000100368	CSF2RB	UIP	Kontrolle	0.634880135	1
NM_001263.3:3052	NM_001263	1040	ENSG00000163624	CDS1	UIP	Kontrolle	0.63536083	1

NM_001079874.1:352	NM_001079874	10451	ENSG00000134215	VAV3	NSIP	Kontrolle	0.635548982	1
NM_000551.2:1280	NM_000551	7428	ENSG00000134086	VHL	NSIP	AFE	0.635620907	1
NM_001009552.1:1075	NM_001009552	5516	ENSG00000104695	PPP2CB	UIP	NSIP	0.635788848	1
NM_004282.3:785	NM_004282	9532	ENSG00000112208	BAG2	UIP	Kontrolle	0.635879441	1
NM_002954.5:650	NM_002954	6233	ENSG00000143947	RPS27A	NSIP	Kontrolle	0.636334251	1
NM_001753.3:434	NM_001753	857	ENSG00000105974	CAV1	NSIP	AFE	0.636386543	1
NM_021978.3:1405	NM_021978	6768	ENSG00000149418	ST14	NSIP	Kontrolle	0.636909315	1
NM_001449.4:1032	NM_001449	2273	ENSG00000022267	FHL1	UIP	Kontrolle	0.637151512	1
NM_001050.2:1060	NM_001050	6752	ENSG00000180616	SSTR2	Kontrolle	AFE	0.637627874	1
NM_003028.2:3200	NM_003028	6461	ENSG00000107338	SHB	UIP	NSIP	0.637685282	1
NM_171825.1:4080	NM_171825	815	ENSG00000070808	CAMK2A	UIP	Kontrolle	0.637778188	1
NM_053032.2:710	NM_053032	4638	ENSG00000065534	MYLK	NSIP	AFE	0.63834081	1
NM_005445.3:3525	NM_005445	9126	ENSG00000108055	SMC3	UIP	NSIP	0.638976073	1
NM_003189.2:4635	NM_003189	6886	ENSG00000162367	TAL1	NSIP	Kontrolle	0.639331535	1
NM_001773.2:2050	NM_001773	947	ENSG00000174059	CD34	UIP	AFE	0.639703126	1
NM_030955.2:1955	NM_030955	81792	ENSG00000151388	ADAMTS12	UIP	Kontrolle	0.639843561	1
NM_006270.3:330	NM_006270	6237	ENSG00000126458	RRAS	Kontrolle	AFE	0.639851956	1
NM_001723.4:1870	NM_001723	667	ENSG00000151914	DST	UIP	NSIP	0.63992852	1
NM_005985.2:63	NM_005985	6615	ENSG00000124216	SNAI1	Kontrolle	AFE	0.640316549	1
NM_003592.2:1487	NM_003592	8454	ENSG00000055130	CUL1	NSIP	AFE	0.640335859	1
NM_006218.2:2445	NM_006218	5290	ENSG00000121879	PIK3CA	UIP	AFE	0.640511696	1
NM_014159.6:1386	NM_014159	29072	ENSG00000181555	SETD2	UIP	NSIP	0.640735047	1
NM_005562.2:2819	NM_005562	3918	ENSG00000058085	LAMC2	Kontrolle	AFE	0.640807305	1
NM_001449.4:1032	NM_001449	2273	ENSG00000022267	FHL1	NSIP	Kontrolle	0.641911372	1
NM_134261.2:1715	NM_134261	6095	ENSG00000069667	RORA	NSIP	AFE	0.642220044	1
NM_003028.2:3200	NM_003028	6461	ENSG00000107338	SHB	NSIP	AFE	0.642265926	1
NM_016142.2:1000	NM_016142	51144	ENSG00000149084	HSD17B12	Kontrolle	AFE	0.642347498	1
NM_000577.3:480	NM_000577	3557	ENSG00000136689	IL1RN	UIP	AFE	0.642658793	1
NM_002104.2:700	NM_002104	3003	ENSG00000113088	GZMK	NSIP	AFE	0.64273709	1
NM_007361.3:1995	NM_007361	22795	ENSG00000087303	NID2	UIP	NSIP	0.642766306	1
NM_000041.2:96	NM_000041	348	ENSG00000130203	APOE	NSIP	AFE	0.6428803	1
NM_005215.1:3100	NM_005215	1630	ENSG00000187323	DCC	UIP	AFE	0.643161766	1
NM_000603.4:1456	NM_000603	4846	ENSG00000164867	NOS3	NSIP	AFE	0.643209456	1
NM_004431.2:1525	NM_004431	1969	ENSG00000142627	EPHA2	NSIP	Kontrolle	0.643313158	1
NM_002773.3:917	NM_002773	5652	ENSG00000052344	PRSS8	UIP	NSIP	0.6437813	1
NM_007108.2:800	NM_007108	6923	ENSG00000103363	TCEB2	NSIP	Kontrolle	0.64450542	1
NM_004219.2:542	NM_004219	9232	ENSG00000164611	PTTG1	UIP	Kontrolle	0.644863383	1
NM_000267.2:1035	NM_000267	4763	ENSG00000196712	NF1	NSIP	AFE	0.645179309	1
NM_002318.2:40	NM_002318	4017	ENSG00000134013	LOXL2	UIP	AFE	0.645379151	1
NM_001123041.2:743	NM_001123041	729230	ENSG00000121807	CCR2	UIP	NSIP	0.645456049	1
NM_001565.1:40	NM_001565	3627	ENSG00000169245	CXCL10	NSIP	Kontrolle	0.645475617	1
NM_001001557.2:1908	NM_001001557	392255	ENSG00000156466	GDF6	UIP	AFE	0.646081857	1
NM_024505.2:2135	NM_024505	79400	ENSG00000255346	NOX5	NSIP	Kontrolle	0.646259217	1
NM_173214.1:3290	NM_173214	10725	ENSG00000102908	NFAT5	UIP	NSIP	0.646260241	1
NM_016242.3:160	NM_016242	51705	ENSG00000164035	EMCN	NSIP	Kontrolle	0.64767779	1
NM_005465.4:287	NM_005465	10000	ENSG00000117020	AKT3	UIP	NSIP	0.647867229	1
NM_012116.3:652	NM_012116	23624	ENSG00000142273	CBLC	NSIP	AFE	0.648027126	1
NM_007108.2:800	NM_007108	6923	ENSG00000103363	TCEB2	UIP	Kontrolle	0.648680787	1
NM_000291.2:1030	NM_000291	5230	ENSG00000102144	PGK1	UIP	Kontrolle	0.648787973	1
NM_003189.2:4635	NM_003189	6886	ENSG00000162367	TAL1	UIP	NSIP	0.648848895	1
NM_001164239.1:2490	NM_001164239	8449	ENSG00000204560	DHX16	NSIP	AFE	0.648854254	1
NM_022648.4:6080	NM_022648	7145	ENSG00000079308	TNS1	UIP	AFE	0.649091954	1
NM_001540.3:374	NM_001540	3315	ENSG00000106211	HSPB1	UIP	NSIP	0.649465701	1
NM_002318.2:40	NM_002318	4017	ENSG00000134013	LOXL2	Kontrolle	AFE	0.649525424	1
NM_145259.2:5168	NM_145259	130399	ENSG00000123612	ACVR1C	UIP	Kontrolle	0.650671084	1
NM_000149.3:2342	NM_000149	2525	ENSG00000171124	FUT3	NSIP	Kontrolle	0.650703488	1
NM_016142.2:1000	NM_016142	51144	ENSG00000149084	HSD17B12	NSIP	Kontrolle	0.651413412	1
NM_001142633.1:3335	NM_001142633	23533	ENSG00000141506	PIK3R5	Kontrolle	AFE	0.652176277	1
NM_003952.2:980	NM_003952	6199	ENSG00000175634	RPS6KB2	UIP	AFE	0.652255959	1
NM_002207.2:2380	NM_002207	3680	ENSG00000144668	ITGA9	UIP	AFE	0.653662388	1
NM_001530.2:1985	NM_001530	3091	ENSG00000100644	HIF1A	NSIP	Kontrolle	0.653693563	1
NM_015962.4:1022	NM_015962	51077	ENSG00000119616	FCF1	NSIP	Kontrolle	0.653947778	1
NM_022648.4:6080	NM_022648	7145	ENSG00000079308	TNS1	UIP	NSIP	0.654165902	1
NM_004982.2:880	NM_004982	3764	ENSG00000121361	KCNJ8	UIP	Kontrolle	0.654807526	1
NM_003573.2:3644	NM_003573	8425	ENSG00000090006	LTBP4	Kontrolle	AFE	0.656968494	1
NM_015568.2:2860	NM_015568	26051	ENSG00000101445	PPP1R16B	UIP	AFE	0.657216914	1
NM_006182.2:1706	NM_006182	4921	ENSG00000162733	DDR2	UIP	Kontrolle	0.657583011	1
NM_013372.5:575	NM_013372	26585	ENSG00000166923	GREM1	UIP	NSIP	0.657793302	1
NM_002610.3:401	NM_002610	5163	ENSG00000152256	PDK1	UIP	NSIP	0.65794022	1
NM_003380.2:694	NM_003380	7431	ENSG00000026025	VIM	NSIP	Kontrolle	0.657987234	1
NM_024422.3:2200	NM_024422	1824	ENSG00000134755	DSC2	Kontrolle	AFE	0.658167798	1
NM_005545.3:2072	NM_005545	3671	ENSG00000129009	ISLR	UIP	NSIP	0.658527206	1

NM_212535.1:1750	NM_212535	5579	ENSG00000166501	PRKCB	UIP	NSIP	0.658832761	1
NM_000698.2:735	NM_000698	240	ENSG00000012779	ALOX5	UIP	NSIP	0.658854425	1
NM_003761.3:260	NM_003761	8673	ENSG00000118640	VAMP8	Kontrolle	AFE	0.659477343	1
NM_001105250.1:2286	NM_001105250	9369	ENSG00000021645	NRXN3	UIP	Kontrolle	0.659596789	1
NM_177438.2:5060	NM_177438	23405	ENSG00000100697	DICER1	UIP	NSIP	0.66016535	1
NM_000389.2:1975	NM_000389	1026	ENSG00000124762	CDKN1A	UIP	Kontrolle	0.660228823	1
NM_001105209.1:287	NM_001105209	3910	ENSG00000112769	LAMA4	UIP	AFE	0.660972019	1
NR_036430.1:65	NR_036430			SRGN	NSIP	Kontrolle	0.661015416	1
NM_003299.1:160	NM_003299	7184	ENSG00000166598	HSP90B1	UIP	Kontrolle	0.661276215	1
NM_001976.4:1368	NM_001976	2027	ENSG00000108515	ENO3	UIP	NSIP	0.661401968	1
NM_000665.3:1057	NM_000665	43	ENSG00000087085	ACHE	UIP	NSIP	0.66180368	1
NM_003377.3:687	NM_003377	7423	ENSG00000173511	VEGFB	UIP	Kontrolle	0.663320793	1
NM_001920.3:420	NM_001920	1634	ENSG00000011465	DCN	UIP	NSIP	0.6639891	1
NM_014795.3:549	NM_014795	9839	ENSG00000169554	ZEB2	UIP	Kontrolle	0.664207323	1
NM_133459.3:310	NM_133459	147372	ENSG00000183287	CCBE1	NSIP	Kontrolle	0.664312665	1
NM_001164831.1:875	NM_001164831	53826	ENSG00000137726	FXVD6	UIP	NSIP	0.664624933	1
NM_001204857.1:330	NM_001204857	6921	ENSG00000154582	TCEB1	Kontrolle	AFE	0.664791295	1
NM_018326.2:315	NM_018326	55303	ENSG00000133574	GIMAP4	NSIP	AFE	0.665020489	1
NM_003377.3:687	NM_003377	7423	ENSG00000173511	VEGFB	UIP	NSIP	0.665034966	1
NM_213560.1:2153	NM_213560	5585	ENSG00000123143	PKN1	NSIP	Kontrolle	0.665133986	1
NM_001836.2:561	NM_001836	1215	ENSG00000092009	CMA1	NSIP	AFE	0.66601833	1
NM_001060.3:385	NM_001060	6915	ENSG00000006638	TBXA2R	Kontrolle	AFE	0.666330164	1
NM_178812.3:828	NM_178812	92140	ENSG00000147649	MTDH	UIP	NSIP	0.666971112	1
NM_006487.2:965	NM_006487	2192	ENSG00000077942	FBLN1	UIP	AFE	0.667045857	1
NM_057175.3:4145	NM_057175	80155	ENSG00000164134	NAA15	UIP	Kontrolle	0.667200484	1
NR_002766.2:691	NR_002766	55384	ENSG00000214548	MEG3	UIP	NSIP	0.667383666	1
NM_005938.2:35	NM_005938	4303	ENSG00000184481	FOXO4	UIP	NSIP	0.667840873	1
NM_001143981.1:1120	NM_001143981	91851	ENSG00000101938	CHRD1	UIP	AFE	0.667868264	1
NM_004846.3:670	NM_004846	9470	ENSG00000135930	EIF4E2	UIP	AFE	0.667891178	1
NM_001845.4:780	NM_001845	1282	ENSG00000187498	COL4A1	UIP	Kontrolle	0.668559893	1
NM_057179.2:482	NM_057179	117581	ENSG00000233608	TWIST2	NSIP	Kontrolle	0.669152029	1
NM_001025366.1:1325	NM_001025366	7422	ENSG00000112715	VEGFA	Kontrolle	AFE	0.669214195	1
NM_002354.1:415	NM_002354	4072	ENSG00000119888	EPCAM	NSIP	AFE	0.669636237	1
NM_001253845.1:610	NM_001253845	79924	ENSG00000128165	ADM2	NSIP	AFE	0.669914568	1
NM_003199.1:1455	NM_003199	6925	ENSG00000196628	TCF4	UIP	AFE	0.669936099	1
NM_005900.2:1850	NM_005900	4086	ENSG00000170365	SMAD1	UIP	NSIP	0.670241219	1
NM_005474.4:3160	NM_005474	10014	ENSG00000108840	HDAC5	UIP	NSIP	0.670258188	1
NM_000459.3:1894	NM_000459	7010	ENSG00000120156	TEK	UIP	NSIP	0.670657388	1
NM_005611.3:1310	NM_005611	5934	ENSG00000103479	RBL2	Kontrolle	AFE	0.671465412	1
NM_005163.2:1772	NM_005163	207	ENSG00000142208	AKT1	NSIP	Kontrolle	0.67160427	1
NM_020405.4:900	NM_020405	57125	ENSG00000161381	PLXDC1	NSIP	AFE	0.671851649	1
NM_001079675.1:1535	NM_001079675	2118	ENSG00000175832	ETV4	Kontrolle	AFE	0.673199342	1
NM_000201.2:2253	NM_000201	3383	ENSG00000090339	ICAM1	Kontrolle	AFE	0.673261189	1
NM_003392.3:475	NM_003392	7474	ENSG00000114251	WNT5A	NSIP	AFE	0.67343346	1
NM_000104.3:1715	NM_000104	1545	ENSG00000138061	CYP1B1	UIP	NSIP	0.673578508	1
NM_001429.2:715	NM_001429	2033	ENSG00000100393	EP300	UIP	NSIP	0.673997888	1
NM_002276.4:96	NM_002276	3880	ENSG00000171345	KRT19	NSIP	Kontrolle	0.674117062	1
NM_001647.3:613	NM_001647	347	ENSG00000189058	APOD	NSIP	Kontrolle	0.674472155	1
NM_000474.3:393	NM_000474	7291	ENSG00000122691	TWIST1	NSIP	AFE	0.675534752	1
NM_000698.2:735	NM_000698	240	ENSG00000012779	ALOX5	NSIP	Kontrolle	0.675583182	1
NM_001704.1:885	NM_001704	577	ENSG00000135298	BAI3	UIP	NSIP	0.675709362	1
NM_001792.3:941	NM_001792	1000	ENSG00000170558	CDH2	UIP	NSIP	0.675895526	1
NM_001142443.1:925	NM_001142443	80153	ENSG00000179151	EDC3	NSIP	Kontrolle	0.6761627	1
NM_000314.4:1351	NM_000314	5728	ENSG00000171862	PTEN	NSIP	AFE	0.676478164	1
NM_000963.1:495	NM_000963	5743	ENSG00000073756	PTGS2	UIP	NSIP	0.676743952	1
NM_012431.1:2184	NM_012431	9723	ENSG00000170381	SEMA3E	UIP	NSIP	0.678596611	1
NM_199511.1:3235	NM_199511	151887	ENSG00000091986	CCDC80	UIP	NSIP	0.678693706	1
NM_024320.2:1005	NM_024320	79170	ENSG00000167183	PRR15L	UIP	NSIP	0.678897526	1
NM_001277764.1:530	NM_001277764	10519	ENSG00000185043	CIB1	UIP	NSIP	0.679727923	1
NM_006690.3:1280	NM_006690	10893	ENSG00000125966	MMP24	UIP	Kontrolle	0.679750102	1
NM_022144.2:462	NM_022144	64102	ENSG00000000005	TNMD	UIP	Kontrolle	0.679888157	1
NM_006218.2:2445	NM_006218	5290	ENSG00000121879	PIK3CA	UIP	NSIP	0.679950655	1
NM_006408.3:580	NM_006408	10551	ENSG00000106541	AGR2	UIP	Kontrolle	0.680059382	1
NM_012098.2:540	NM_012098	23452	ENSG00000136859	ANGPTL2	NSIP	AFE	0.680600713	1
NM_207361.4:9170	NM_207361	341640	ENSG00000150893	FREM2	UIP	NSIP	0.680706559	1
NM_024896.2:852	NM_024896	79956	ENSG00000099219	ERMP1	Kontrolle	AFE	0.680875006	1
NM_002231.3:1211	NM_002231	3732	ENSG00000085117	CD82	NSIP	Kontrolle	0.681405607	1
NM_005556.3:1425	NM_005556	3855	ENSG00000135480	KRT7	NSIP	Kontrolle	0.681563973	1
NM_002228.3:140	NM_002228	3725	ENSG00000177606	JUN	UIP	NSIP	0.681880843	1
NM_002880.3:1444	NM_002880	5894	ENSG00000132155	RAF1	Kontrolle	AFE	0.682001908	1
NM_024021.2:800	NM_024021	51338	ENSG00000110079	MS4A4A	NSIP	Kontrolle	0.682240259	1
NM_006094.3:5650	NM_006094	10395	ENSG00000164741	DLC1	NSIP	AFE	0.682723953	1

NM_001277764.1:530	NM_001277764	10519	ENSG00000185043	CIB1	NSIP	Kontrolle	0.683037593	1
NM_052972.2:1480	NM_052972	116844	ENSG00000171236	LRG1	UIP	NSIP	0.683703132	1
NM_005682.4:1145	NM_005682	9289	ENSG00000205336	GPR56	UIP	NSIP	0.684002017	1
NM_001620.2:14454	NM_001620	79026	ENSG00000124942	AHNAK	NSIP	AFE	0.685286991	1
NM_001975.2:1855	NM_001975	2026	ENSG00000111674	ENO2	NSIP	Kontrolle	0.685823834	1
NM_001001557.2:1908	NM_001001557	392255	ENSG00000156466	GDF6	NSIP	AFE	0.685949619	1
NM_001723.4:1870	NM_001723	667	ENSG00000151914	DST	UIP	AFE	0.686092431	1
NM_004567.2:400	NM_004567	5210	ENSG00000114268	PFKFB4	NSIP	AFE	0.686366033	1
NM_000038.3:6850	NM_000038	324	ENSG00000134982	APC	UIP	Kontrolle	0.686383842	1
NM_005556.3:1425	NM_005556	3855	ENSG00000135480	KRT7	UIP	Kontrolle	0.686863242	1
NM_001050.2:1060	NM_001050	6752	ENSG00000180616	SSTR2	UIP	NSIP	0.686940016	1
NM_003638.1:1215	NM_003638	8516	ENSG00000077943	ITGA8	NSIP	Kontrolle	0.687066175	1
NM_002206.1:1170	NM_002206	3679	ENSG00000135424	ITGA7	UIP	NSIP	0.687246031	1
NM_001331.2:146	NM_001331	1500	ENSG00000198561	CTNND1	UIP	Kontrolle	0.687704485	1
NM_003469.3:1400	NM_003469	7857	ENSG00000171951	SCG2	NSIP	Kontrolle	0.687934918	1
NM_000603.4:1456	NM_000603	4846	ENSG00000164867	NOS3	UIP	NSIP	0.687967311	1
NM_005465.4:287	NM_005465	10000	ENSG00000117020	AKT3	Kontrolle	AFE	0.689173496	1
NM_000900.2:305	NM_000900	4256	ENSG00000111341	MGP	UIP	Kontrolle	0.689197937	1
NM_013943.2:1702	NM_013943	25932	ENSG00000169504	CLIC4	NSIP	Kontrolle	0.689901365	1
NM_002999.2:1310	NM_002999	6385	ENSG00000124145	SDC4	UIP	NSIP	0.689903741	1
NM_001848.2:3665	NM_001848	1291	ENSG00000142156	COL6A1	UIP	Kontrolle	0.689937793	1
NM_198098.1:1230	NM_198098	358	ENSG00000240583	AQP1	UIP	NSIP	0.689948531	1
NM_032777.9:1278	NM_032777	25960	ENSG00000020181	GPR124	UIP	NSIP	0.689953901	1
NM_004431.2:1525	NM_004431	1969	ENSG00000142627	EPHA2	UIP	AFE	0.690144919	1
NM_001177704.1:614	NM_001177704	158326	ENSG00000164946	FREM1	UIP	NSIP	0.690920185	1
NM_172174.1:1685	NM_172174	3600	ENSG00000164136	IL15	UIP	NSIP	0.691208923	1
NM_002725.3:5250	NM_002725	5549	ENSG00000188783	PRELP	NSIP	AFE	0.691356359	1
NM_006869.2:570	NM_006869	11033	ENSG00000105963	ADAP1	UIP	NSIP	0.691404185	1
NM_001428.2:1689	NM_001428	2023	ENSG00000074800	ENO1	UIP	NSIP	0.691583662	1
NM_000291.2:1030	NM_000291	5230	ENSG00000102144	PGK1	UIP	AFE	0.691753219	1
NM_000141.4:647	NM_000141	2263	ENSG00000066468	FGFR2	NSIP	Kontrolle	0.692001748	1
NM_004850.3:3140	NM_004850	9475	ENSG00000134318	ROCK2	NSIP	AFE	0.692152142	1
NR_046324.1:194	NR_046324	1139	ENSG00000175344	CHRNA7	NSIP	Kontrolle	0.692289225	1
NM_024045.1:1185	NM_024045	79009	ENSG00000107625	DDX50	UIP	NSIP	0.692508057	1
NM_001145.4:949	NM_001145	283	ENSG00000214274	ANG	UIP	Kontrolle	0.692970865	1
NM_002166.4:505	NM_002166	3398	ENSG00000115738	ID2	Kontrolle	AFE	0.693066561	1
NM_004836.5:938	NM_004836	9451	ENSG00000172071	EIF2AK3	NSIP	AFE	0.693425241	1
NM_001504.1:80	NM_001504	2833	ENSG00000186810	CXCR3	NSIP	AFE	0.693936116	1
NM_001278506.1:304	NM_001278506	4682	ENSG00000103274	NUBP1	NSIP	Kontrolle	0.694543822	1
NM_001032367.1:1315	NM_001032367	6692	ENSG00000166145	SPINT1	UIP	NSIP	0.694711143	1
NM_024574.3:395	NM_024574	79625	ENSG00000173376	NDNF	UIP	AFE	0.69488042	1
NM_000175.2:1695	NM_000175	2821	ENSG00000105220	GPI	UIP	NSIP	0.694925617	1
NM_001425.2:350	NM_001425	2014	ENSG00000142227	EMP3	UIP	Kontrolle	0.695633999	1
NM_001256725.1:806	NM_001256725	10713	ENSG00000168883	USP39	UIP	NSIP	0.696227779	1
NM_170679.2:630	NM_170679	6500	ENSG00000113558	SKP1	UIP	AFE	0.696337904	1
NM_003862.1:850	NM_003862	8817	ENSG00000156427	FGF18	NSIP	AFE	0.696517871	1
NM_001105250.1:2286	NM_001105250	9369	ENSG00000021645	NRXN3	UIP	NSIP	0.697619206	1
NM_003012.3:3320	NM_003012	6422	ENSG00000104332	SFRP1	NSIP	Kontrolle	0.697869621	1
NM_000581.2:745	NM_000581	2876	ENSG00000233276	GPX1	UIP	Kontrolle	0.69872819	1
NM_000397.3:2686	NM_000397	1536	ENSG00000165168	CYBB	NSIP	Kontrolle	0.698883461	1
NM_199168.3:69	NM_199168	6387	ENSG00000107562	CXCL12	NSIP	AFE	0.699035245	1
NM_003592.2:1487	NM_003592	8454	ENSG00000055130	CUL1	UIP	AFE	0.699214952	1
NM_004763.3:1690	NM_004763	9270	ENSG00000119185	ITGB1BP1	UIP	AFE	0.699428548	1
NM_004184.3:1851	NM_004184	7453	ENSG00000140105	WARS	Kontrolle	AFE	0.699516989	1
NM_004349.2:1085	NM_004349	862	ENSG00000079102	RUNX1T1	UIP	Kontrolle	0.699722444	1
NM_000214.2:915	NM_000214	182	ENSG00000101384	JAG1	Kontrolle	AFE	0.700129511	1
NM_003883.2:1455	NM_003883	8841	ENSG00000171720	HDAC3	UIP	AFE	0.700368825	1
NM_004995.2:1470	NM_004995	4323	ENSG00000157227	MMP14	NSIP	Kontrolle	0.70063689	1
NM_005727.2:115	NM_005727	10103	ENSG00000117472	TSPAN1	NSIP	Kontrolle	0.700666318	1
NM_001142685.1:2100	NM_001142685	9743	ENSG00000134909	ARHGAP32	NSIP	Kontrolle	0.701289006	1
NM_002317.4:1575	NM_002317	4015	ENSG00000113083	LOX	NSIP	Kontrolle	0.701755761	1
NM_005429.2:565	NM_005429	7424	ENSG00000150630	VEGFC	NSIP	Kontrolle	0.702125138	1
NM_003872.2:805	NM_003872	8828	ENSG00000118257	NRP2	NSIP	Kontrolle	0.702971359	1
NM_005900.2:1850	NM_005900	4086	ENSG00000170365	SMAD1	NSIP	AFE	0.703469637	1
NM_001050.2:1060	NM_001050	6752	ENSG00000180616	SSTR2	NSIP	AFE	0.703657934	1
NM_018964.3:810	NM_018964	54020	ENSG00000160190	SLC37A1	UIP	Kontrolle	0.704017795	1
NM_005009.2:820	NM_005009	4833	ENSG00000103202	NME4	NSIP	AFE	0.704224384	1
NM_172350.1:365	NM_172350	4179	ENSG00000117335	CD46	UIP	NSIP	0.704378356	1
NM_004103.3:735	NM_004103	2185	ENSG00000120899	PTK2B	UIP	AFE	0.705148092	1
NM_138957.2:430	NM_138957	5594	ENSG00000100030	MAPK1	Kontrolle	AFE	0.705518434	1
NM_001127491.1:1103	NM_001127491	3689	ENSG00000160255	ITGB2	NSIP	AFE	0.705852133	1
NM_002773.3:917	NM_002773	5652	ENSG00000052344	PRSS8	NSIP	Kontrolle	0.705894579	1

NM_024422.3:2200	NM_024422	1824	ENSG00000134755	DSC2	UIP	AFE	0.705907283	1
NM_005795.3:1585	NM_005795	10203	ENSG00000064989	CALCRL	UIP	NSIP	0.70639929	1
NM_002649.2:2125	NM_002649	5294	ENSG00000105851	PIK3CG	NSIP	AFE	0.706870796	1
NM_006690.3:1280	NM_006690	10893	ENSG00000125966	MMP24	NSIP	AFE	0.707589592	1
NM_025130.3:2267	NM_025130	80201	ENSG00000156510	HKDC1	UIP	NSIP	0.707688677	1
NM_001040056.1:580	NM_001040056	5595	ENSG00000102882	MAPK3	NSIP	Kontrolle	0.709426903	1
NM_207195.1:1355	NM_207195	8751	ENSG00000143537	ADAM15	Kontrolle	AFE	0.709595717	1
NM_005903.5:1044	NM_005903	4090	ENSG00000113658	SMAD5	Kontrolle	AFE	0.710296456	1
NM_133468.4:476	NM_133468	168667	ENSG00000164619	BMPER	NSIP	Kontrolle	0.710309534	1
NM_001024847.1:1760	NM_001024847	7048	ENSG00000163513	TGFBR2	NSIP	Kontrolle	0.71051714	1
NM_002739.3:445	NM_002739	5582	ENSG00000126583	PRKCG	UIP	AFE	0.710548302	1
NM_006096.2:565	NM_006096	10397	ENSG00000104419	NDRG1	UIP	Kontrolle	0.710593605	1
NM_003010.2:2830	NM_003010	6416	ENSG00000065559	MAP2K4	UIP	AFE	0.710692932	1
NM_004567.2:400	NM_004567	5210	ENSG00000114268	PFKFB4	UIP	AFE	0.711343516	1
NM_001558.2:150	NM_001558	3587	ENSG00000110324	IL10RA	UIP	NSIP	0.711743903	1
NM_004345.3:220	NM_004345	820	ENSG00000164047	CAMP	NSIP	Kontrolle	0.711927081	1
NM_004635.3:415	NM_004635	7867	ENSG00000114738	MAPKAPK3	NSIP	AFE	0.712296739	1
NM_001253845.1:610	NM_001253845	79924	ENSG00000128165	ADM2	NSIP	Kontrolle	0.712661716	1
NM_002615.4:888	NM_002615	5176	ENSG00000132386	SERPINF1	UIP	NSIP	0.712719246	1
NM_000210.1:3065	NM_000210	3655	ENSG00000091409	ITGA6	UIP	Kontrolle	0.712782008	1
NM_012243.1:605	NM_012243	23443	ENSG00000117620	SLC35A3	Kontrolle	AFE	0.712930223	1
NM_005041.3:2120	NM_005041	5551	ENSG00000180644	PRF1	UIP	Kontrolle	0.71351347	1
NM_000062.2:305	NM_000062	710	ENSG00000149131	SERPING1	UIP	NSIP	0.713844514	1
NM_015874.3:850	NM_015874	3516	ENSG00000168214	RBPJ	UIP	Kontrolle	0.713869864	1
NM_001005376.1:440	NM_001005376	5329	ENSG000000011422	PLAUR	UIP	NSIP	0.714331482	1
NM_001077269.1:1660	NM_001077269	7456	ENSG00000115935	WIPF1	NSIP	Kontrolle	0.714688725	1
NM_020848.2:7395	NM_020848	57608	ENSG00000165757	KIAA1462	NSIP	AFE	0.716112795	1
NM_001177704.1:614	NM_001177704	158326	ENSG00000164946	FREM1	Kontrolle	AFE	0.716418277	1
NM_172174.1:1685	NM_172174	3600	ENSG00000164136	IL15	UIP	Kontrolle	0.717167377	1
NM_004846.3:670	NM_004846	9470	ENSG00000135930	EIF4E2	NSIP	Kontrolle	0.717310271	1
XM_006711928.1:724	XM_006711928			EMILIN1	NSIP	AFE	0.717498212	1
NM_006096.2:565	NM_006096	10397	ENSG00000104419	NDRG1	UIP	NSIP	0.717784551	1
NM_002670.2:3261	NM_002670	5357	ENSG00000120756	PLS1	NSIP	AFE	0.717861957	1
NM_001030049.1:433	NM_001030049	354	ENSG00000142515	KLK3	NSIP	Kontrolle	0.718087434	1
NM_003650.3:525	NM_003650	8530	ENSG00000077984	CST7	UIP	AFE	0.718183651	1
NM_138735.2:1095	NM_138735	9378	ENSG00000179915	NRXN1	UIP	Kontrolle	0.718372674	1
NM_014057.3:995	NM_014057	4969	ENSG00000106809	OGN	NSIP	AFE	0.718398146	1
NM_005558.3:1860	NM_005558	3898	ENSG00000159166	LAD1	Kontrolle	AFE	0.71911573	1
NM_001024847.1:1760	NM_001024847	7048	ENSG00000163513	TGFBR2	NSIP	AFE	0.719392725	1
NM_001256725.1:806	NM_001256725	10713	ENSG00000168883	USP39	UIP	AFE	0.719612888	1
NM_006869.2:570	NM_006869	11033	ENSG00000105963	ADAP1	NSIP	Kontrolle	0.719627419	1
NM_005251.2:1389	NM_005251	2303	ENSG00000176692	FOXC2	NSIP	AFE	0.72063887	1
NM_002052.3:2140	NM_002052	2626	ENSG00000136574	GATA4	UIP	NSIP	0.721412005	1
NM_004567.2:400	NM_004567	5210	ENSG00000114268	PFKFB4	UIP	Kontrolle	0.721456263	1
NM_000395.2:492	NM_000395	1439	ENSG00000100368	CSF2RB	Kontrolle	AFE	0.721852266	1
NM_017423.2:910	NM_017423	51809	ENSG00000109586	GALNT7	UIP	NSIP	0.722060679	1
NM_213560.1:2153	NM_213560	5585	ENSG00000123143	PKN1	UIP	NSIP	0.722251567	1
NM_000479.3:1626	NM_000479	268	ENSG00000104899	AMH	NSIP	Kontrolle	0.722329382	1
NM_000214.2:915	NM_000214	182	ENSG00000101384	JAG1	NSIP	Kontrolle	0.723082038	1
NM_001897.4:7642	NM_001897	1464	ENSG00000173546	CSPG4	UIP	AFE	0.723235796	1
NR_104213.1:475	NR_104213	51129	ENSG00000167772	ANGPTL4	UIP	Kontrolle	0.724589828	1
NM_001849.2:1925	NM_001849	1292	ENSG00000142173	COL6A2	UIP	NSIP	0.725040104	1
NM_000682.4:2885	NM_000682	151	ENSG00000274286	ADRA2B	Kontrolle	AFE	0.725511261	1
NM_001884.3:730	NM_001884	1404	ENSG00000145681	HAPLN1	NSIP	AFE	0.725933565	1
NM_001305.3:1242	NM_001305	1364	ENSG00000189143	CLDN4	NSIP	Kontrolle	0.726057147	1
NM_024107.2:1485	NM_024107	79089	ENSG00000168591	TMUB2	NSIP	Kontrolle	0.726294104	1
NM_173214.1:3290	NM_173214	10725	ENSG00000102908	NFAT5	UIP	Kontrolle	0.726392169	1
NM_014333.3:2840	NM_014333	23705	ENSG00000182985	CADM1	NSIP	AFE	0.726448378	1
NM_002293.3:4915	NM_002293	3915	ENSG00000135862	LAMC1	NSIP	Kontrolle	0.726454708	1
NM_004867.4:988	NM_004867	9452	ENSG00000078596	ITM2A	Kontrolle	AFE	0.728411698	1
NM_024422.3:2200	NM_024422	1824	ENSG00000134755	DSC2	UIP	NSIP	0.728458385	1
NM_006786.3:354	NM_006786	10911	ENSG00000049247	UTS2	NSIP	Kontrolle	0.729412759	1
NM_001005915.1:420	NM_001005915	2065	ENSG00000065361	ERBB3	NSIP	AFE	0.731078297	1
NM_006350.2:575	NM_006350	10468	ENSG00000134363	FST	UIP	NSIP	0.731515847	1
NM_005795.3:1585	NM_005795	10203	ENSG00000064989	CALCRL	NSIP	AFE	0.731568762	1
NM_004469.2:580	NM_004469	2277	ENSG00000165197	FIGF	NSIP	AFE	0.732072366	1
NM_001164239.1:2490	NM_001164239	8449	ENSG00000204560	DHX16	UIP	NSIP	0.732278158	1
NM_014569.3:3688	NM_014569	23660	ENSG00000196652	ZKSCAN5	NSIP	AFE	0.732461274	1
NM_003467.2:1335	NM_003467	7852	ENSG00000121966	CXCR4	UIP	NSIP	0.732683309	1
NM_024045.1:1185	NM_024045	79009	ENSG00000107625	DDX50	UIP	AFE	0.733010647	1
NM_013258.3:714	NM_013258	29108	ENSG00000103490	PYCARD	Kontrolle	AFE	0.733099699	1
NM_006270.3:330	NM_006270	6237	ENSG00000126458	RRAS	NSIP	AFE	0.733100605	1



NM_025130.3:2267	NM_025130	80201	ENSG00000156510	HKDC1	UIP	Kontrolle	0.733110652	1
NM_017617.3:735	NM_017617	4851	ENSG00000148400	NOTCH1	NSIP	Kontrolle	0.73324271	1
NM_000581.2:745	NM_000581	2876	ENSG0000023276	GPX1	UIP	NSIP	0.734298262	1
NM_005409.3:590	NM_005409	6373	ENSG00000169248	CXCL11	NSIP	AFE	0.734997205	1
NM_001305.3:1242	NM_001305	1364	ENSG00000189143	CLDN4	UIP	Kontrolle	0.735321688	1
NM_001664.2:1230	NM_001664	387	ENSG00000067560	RHOA	Kontrolle	AFE	0.735513907	1
NM_004994.2:1530	NM_004994	4318	ENSG00000100985	MMP9	NSIP	AFE	0.735693321	1
NM_001105.2:1665	NM_001105	90	ENSG00000115170	ACVR1	NSIP	Kontrolle	0.736068505	1
NM_015103.2:3711	NM_015103	23129	ENSG00000004399	PLXND1	NSIP	AFE	0.736114706	1
NM_003809.2:339	NM_003809	8742	ENSG00000239697	TNFSF12	UIP	AFE	0.736748702	1
NM_022097.3:1078	NM_022097	63928	ENSG00000166869	CHP2	UIP	NSIP	0.736991319	1
NM_002052.3:2140	NM_002052	2626	ENSG00000136574	GATA4	NSIP	Kontrolle	0.737297424	1
NM_144503.1:3650	NM_144503	50848	ENSG00000158769	F11R	NSIP	AFE	0.737302197	1
NM_001615.3:921	NM_001615	72	ENSG00000163017	ACTG2	UIP	AFE	0.737493333	1
NM_004846.3:670	NM_004846	9470	ENSG00000135930	EIF4E2	UIP	Kontrolle	0.737933733	1
NM_005498.4:78	NM_005498	10053	ENSG00000129354	AP1M2	UIP	AFE	0.737981635	1
NM_000454.4:35	NM_000454	6647	ENSG00000142168	SOD1	Kontrolle	AFE	0.738468428	1
NM_001620.2:14454	NM_001620	79026	ENSG00000124942	AHNAK	UIP	AFE	0.738582175	1
NM_033666.2:2000	NM_033666	3688	ENSG00000150093	ITGB1	UIP	NSIP	0.738631583	1
NM_173214.1:3290	NM_173214	10725	ENSG00000102908	NFAT5	NSIP	Kontrolle	0.738756286	1
NM_001098210.1:1815	NM_001098210	1499	ENSG00000168036	CTNNB1	UIP	NSIP	0.738780025	1
NM_001034852.1:1990	NM_001034852	64093	ENSG00000198732	SMOC1	UIP	Kontrolle	0.738843121	1
NM_001977.3:2940	NM_001977	2028	ENSG00000138792	ENPEP	NSIP	Kontrolle	0.73897919	1
NM_003131.2:4040	NM_003131	6722	ENSG00000112658	SRF	Kontrolle	AFE	0.73918085	1
NM_000291.2:1030	NM_000291	5230	ENSG00000102144	PGK1	NSIP	AFE	0.739271114	1
NM_181349.1:5162	NM_181349	57154	ENSG00000198742	SMURF1	UIP	Kontrolle	0.739303935	1
NM_001018077.1:1665	NM_001018077	2908	ENSG00000113580	NR3C1	Kontrolle	AFE	0.739359995	1
NM_005417.3:1410	NM_005417	6714	ENSG00000197122	SRC	NSIP	AFE	0.739616905	1
NM_002872.3:1069	NM_002872	5880	ENSG00000128340	RAC2	UIP	NSIP	0.739670379	1
NM_002880.3:1444	NM_002880	5894	ENSG00000132155	RAF1	NSIP	AFE	0.740114553	1
NM_004567.2:400	NM_004567	5210	ENSG00000114268	PFKFB4	NSIP	Kontrolle	0.740147293	1
NM_024896.2:852	NM_024896	79956	ENSG00000099219	ERMP1	UIP	Kontrolle	0.740185875	1
NM_005490.2:412	NM_005490	10045	ENSG00000125731	SH2D3A	NSIP	AFE	0.74141965	1
NM_002207.2:2380	NM_002207	3680	ENSG00000144668	ITGA9	NSIP	AFE	0.741713517	1
NM_031479.3:1450	NM_031479	83729	ENSG00000139269	INHBE	UIP	Kontrolle	0.741739278	1
NM_021978.3:1405	NM_021978	6768	ENSG00000149418	ST14	UIP	NSIP	0.741771244	1
NM_002744.4:771	NM_002744	5590	ENSG00000067606	PRKCZ	NSIP	AFE	0.741802418	1
NM_004850.3:3140	NM_004850	9475	ENSG00000134318	ROCK2	UIP	NSIP	0.741807346	1
NM_002422.3:25	NM_002422	4314	ENSG00000149968	MMP3	Kontrolle	AFE	0.741860389	1
NM_017423.2:910	NM_017423	51809	ENSG00000109586	GALNT7	NSIP	Kontrolle	0.741870838	1
NM_005486.2:685	NM_005486	10040	ENSG00000141198	TOM1L1	NSIP	AFE	0.742027719	1
NM_001976.4:1368	NM_001976	2027	ENSG00000108515	ENO3	Kontrolle	AFE	0.742696812	1
NM_002610.3:401	NM_002610	5163	ENSG00000152256	PDK1	NSIP	Kontrolle	0.742808027	1
NM_001080512.1:2155	NM_001080512	80114	ENSG00000122870	BICC1	UIP	Kontrolle	0.743405708	1
NM_001647.3:613	NM_001647	347	ENSG00000189058	APOD	NSIP	AFE	0.743570034	1
NM_005026.3:2978	NM_005026	5293	ENSG00000171608	PIK3CD	NSIP	Kontrolle	0.743607461	1
NM_001565.1:40	NM_001565	3627	ENSG00000169245	CXCL10	NSIP	AFE	0.744114937	1
NM_005027.2:3100	NM_005027	5296	ENSG00000105647	PIK3R2	UIP	NSIP	0.744410369	1
NM_178812.3:828	NM_178812	92140	ENSG00000147649	MTDH	NSIP	Kontrolle	0.744762043	1
NM_016242.3:160	NM_016242	51705	ENSG00000164035	EMCN	UIP	AFE	0.745496494	1
NM_015364.2:360	NM_015364	23643	ENSG00000154589	LY96	UIP	Kontrolle	0.7461671	1
NM_001199140.1:3564	NM_001199140	83607	ENSG00000144233	AMMECR1L	NSIP	Kontrolle	0.746434494	1
NM_002353.2:1840	NM_002353	4070	ENSG00000184292	TACSTD2	NSIP	AFE	0.746818161	1
NM_004994.2:1530	NM_004994	4318	ENSG00000100985	MMP9	Kontrolle	AFE	0.746854653	1
NM_012279.2:2260	NM_012279	23567	ENSG00000113761	ZNF346	UIP	AFE	0.747427313	1
NM_198477.1:440	NM_198477	284340	ENSG00000189377	CXCL17	Kontrolle	AFE	0.747474984	1
NM_018238.3:816	NM_018238	55750	ENSG00000006530	AGK	UIP	NSIP	0.747868524	1
NM_012120.2:1895	NM_012120	23607	ENSG00000198087	CD2AP	UIP	AFE	0.748167597	1
NM_012391.1:1335	NM_012391	25803	ENSG00000124664	SPDEF	UIP	NSIP	0.748744667	1
NM_004054.2:415	NM_004054	719	ENSG00000171860	C3AR1	UIP	NSIP	0.749246114	1
NM_004363.2:1961	NM_004363	1048	ENSG00000105388	CEACAM5	NSIP	Kontrolle	0.749325667	1
NM_001430.3:4246	NM_001430	2034	ENSG00000116016	EPAS1	NSIP	AFE	0.750251378	1
NM_018964.3:810	NM_018964	54020	ENSG00000160190	SLC37A1	NSIP	AFE	0.750444167	1
NM_199121.2:3664	NM_199121	64856	ENSG00000179403	VWA1	UIP	NSIP	0.750571584	1
NM_000632.3:515	NM_000632	3684	ENSG00000169896	ITGAM	UIP	NSIP	0.750770178	1
NM_001128128.1:1450	NM_001128128	6935	ENSG00000148516	ZEB1	NSIP	AFE	0.750873526	1
NM_015213.2:4604	NM_015213	23258	ENSG00000184014	DENND5A	NSIP	Kontrolle	0.751195755	1
NM_019894.3:1146	NM_019894	56649	ENSG00000137648	TMPRSS4	NSIP	AFE	0.751462925	1
NM_032449.2:4182	NM_032449	200014	ENSG00000154222	CC2D1B	NSIP	AFE	0.751489734	1
NM_001109.4:762	NM_001109	101	ENSG00000151651	ADAM8	UIP	Kontrolle	0.752098121	1
NM_001001557.2:1908	NM_001001557	392255	ENSG00000156466	GDF6	Kontrolle	AFE	0.752794833	1
NM_002104.2:700	NM_002104	3003	ENSG00000113088	GZMK	UIP	AFE	0.753097229	1

NM_001015002.1:1065	NM_001015002	3993	ENSG00000073350	LLGL2	UIP	AFE	0.754135761	1
NM_001079846.1:4818	NM_001079846	1387	ENSG00000005339	CREBBP	NSIP	Kontrolle	0.754424241	1
NM_001168298.1:840	NM_001168298	3579	ENSG00000180871	CXCR2	NSIP	AFE	0.756015876	1
NM_005780.2:460	NM_005780	10186	ENSG00000183722	LHFP	Kontrolle	AFE	0.756212318	1
NM_031902.3:390	NM_031902	64969	ENSG00000144029	MRPS5	NSIP	Kontrolle	0.756261462	1
NM_003183.4:1595	NM_003183	6868	ENSG00000151694	ADAM17	UIP	Kontrolle	0.756422506	1
NM_000267.2:1035	NM_000267	4763	ENSG00000196712	NF1	UIP	AFE	0.757029733	1
NM_005445.3:3525	NM_005445	9126	ENSG00000108055	SMC3	UIP	AFE	0.757213663	1
NM_001430.3:4246	NM_001430	2034	ENSG00000116016	EPAS1	UIP	NSIP	0.757223222	1
NM_022740.4:10305	NM_022740	28996	ENSG00000064393	HIPK2	NSIP	AFE	0.75811462	1
NM_003469.3:1400	NM_003469	7857	ENSG00000171951	SCG2	UIP	AFE	0.758169844	1
NM_181504.2:1105	NM_181504	5295	ENSG00000145675	PIK3R1	UIP	NSIP	0.758573526	1
NM_001009552.1:1075	NM_001009552	5516	ENSG00000104695	PPP2CB	NSIP	AFE	0.758814041	1
NM_001175.4:833	NM_001175	397	ENSG00000111348	ARHGDI8	UIP	NSIP	0.759003038	1
NM_000906.2:3490	NM_000906	4881	ENSG00000169418	NPR1	UIP	AFE	0.759399085	1
NM_024505.2:2135	NM_024505	79400	ENSG00000255346	NOX5	UIP	Kontrolle	0.759485614	1
NM_005938.2:35	NM_005938	4303	ENSG00000184481	FOXO4	UIP	Kontrolle	0.759499678	1
NM_016215.3:1252	NM_016215	51162	ENSG00000172889	EGFL7	UIP	Kontrolle	0.759505559	1
NM_002725.3:5250	NM_002725	5549	ENSG00000188783	PRELP	UIP	NSIP	0.759650926	1
NM_000189.4:6880	NM_000189	3099	ENSG00000159399	HK2	UIP	AFE	0.759767094	1
NM_022740.4:10305	NM_022740	28996	ENSG00000064393	HIPK2	UIP	AFE	0.760143459	1
NM_020848.2:7395	NM_020848	57608	ENSG00000165757	KIAA1462	UIP	AFE	0.760391905	1
NM_007111.4:1826	NM_007111	7027	ENSG00000198176	TFDP1	UIP	NSIP	0.76043018	1
NM_000358.2:2030	NM_000358	7045	ENSG00000120708	TGFBI	NSIP	Kontrolle	0.761827633	1
NM_004385.3:9915	NM_004385	1462	ENSG00000038427	VCAN	UIP	Kontrolle	0.762639992	1
NM_001273.2:2680	NM_001273	1108	ENSG00000111642	CHD4	UIP	NSIP	0.763009067	1
NM_006702.3:3941	NM_006702	10908	ENSG00000032444	PNPLA6	NSIP	Kontrolle	0.763583189	1
NM_015194.1:616	NM_015194	4642	ENSG00000176658	MYO1D	UIP	NSIP	0.763735825	1
NM_001033081.2:568	NM_001033081	4610	ENSG00000116990	MYCL	UIP	Kontrolle	0.763853359	1
NM_003131.2:4040	NM_003131	6722	ENSG00000112658	SRF	NSIP	AFE	0.763986331	1
NM_024065.4:23	NM_024065	79031	ENSG00000115539	PDCL3	Kontrolle	AFE	0.764123325	1
NM_001271814.1:90	NM_001271814	26279	ENSG00000117215	PLA2G2D	NSIP	AFE	0.764755596	1
NM_005445.3:3525	NM_005445	9126	ENSG00000108055	SMC3	UIP	AFE	0.764962392	1
NM_003650.3:525	NM_003650	8530	ENSG00000077984	CST7	UIP	NSIP	0.764982198	1
NM_022136.3:560	NM_022136	64092	ENSG00000155307	SAMSN1	NSIP	Kontrolle	0.765251719	1
NM_000450.2:1505	NM_000450	6401	ENSG00000007908	SELE	UIP	NSIP	0.765746817	1
NM_005026.3:2978	NM_005026	5293	ENSG00000171608	PIK3CD	UIP	NSIP	0.765935197	1
NM_001127198.1:1266	NM_001127198	11322	ENSG00000141524	TMC6	UIP	Kontrolle	0.767158861	1
NM_021978.3:1405	NM_021978	6768	ENSG00000149418	ST14	UIP	Kontrolle	0.767442353	1
NM_006500.2:2482	NM_006500	4162	ENSG00000076706	MCAM	UIP	Kontrolle	0.767468617	1
NM_004774.3:806	NM_004774	5469	ENSG00000125686	MED1	NSIP	Kontrolle	0.767555795	1
NM_001079675.1:1535	NM_001079675	2118	ENSG00000175832	ETV4	NSIP	Kontrolle	0.769091626	1
NM_001015001.1:286	NM_001015001	548596	ENSG00000223572	CKMT1A	NSIP	Kontrolle	0.769162395	1
NM_003238.2:1125	NM_003238	7042	ENSG00000092969	TGFB2	Kontrolle	AFE	0.769283797	1
NM_001393.2:1700	NM_001393	1842	ENSG00000106823	ECM2	UIP	AFE	0.769327847	1
NM_003278.2:607	NM_003278	7123	ENSG00000163815	CLEC3B	NSIP	Kontrolle	0.769576051	1
NM_001018077.1:1665	NM_001018077	2908	ENSG00000113580	NR3C1	UIP	AFE	0.769693529	1
NM_170679.2:630	NM_170679	6500	ENSG00000113558	SKP1	UIP	NSIP	0.769745175	1
NM_002739.3:445	NM_002739	5582	ENSG00000126583	PRKCG	UIP	NSIP	0.770251694	1
NM_005498.4:78	NM_005498	10053	ENSG00000129354	AP1M2	UIP	NSIP	0.770501446	1
NM_004787.1:2430	NM_004787	9353	ENSG00000145147	SLIT2	NSIP	AFE	0.77059704	1
NM_004425.3:1345	NM_004425	1893	ENSG00000143369	ECM1	UIP	AFE	0.771395655	1
NM_000295.4:760	NM_000295	5265	ENSG00000197249	SERPINA1	NSIP	Kontrolle	0.772279905	1
NR_024168.1:2575	NR_024168			TLR4	Kontrolle	AFE	0.773154185	1
NM_003638.1:1215	NM_003638	8516	ENSG00000077943	ITGA8	UIP	NSIP	0.77351427	1
NM_203384.1:1192	NM_203384	6050	ENSG00000023191	RNH1	UIP	Kontrolle	0.773525079	1
NM_001034852.1:1990	NM_001034852	64093	ENSG00000198732	SMOC1	NSIP	AFE	0.773578652	1
NM_001199140.1:3564	NM_001199140	83607	ENSG00000144233	AMMECR1L	NSIP	AFE	0.774548196	1
NM_001105209.1:287	NM_001105209	3910	ENSG00000112769	LAMA4	UIP	NSIP	0.774678468	1
NM_001167681.2:1406	NM_001167681	2313	ENSG00000151702	FLI1	NSIP	AFE	0.775312996	1
NM_001147.2:1775	NM_001147	285	ENSG00000091879	ANGPT2	NSIP	AFE	0.775605427	1
NM_004684.4:2265	NM_004684	8404	ENSG00000152583	SPARCL1	UIP	Kontrolle	0.776438308	1
NM_002773.3:917	NM_002773	5652	ENSG00000052344	PRSS8	UIP	AFE	0.776796575	1
NM_015962.4:1022	NM_015962	51077	ENSG00000119616	FCF1	UIP	NSIP	0.777382833	1
NM_001123041.2:743	NM_001123041	729230	ENSG00000121807	CCR2	NSIP	Kontrolle	0.777806373	1
NM_003809.2:339	NM_003809	8742	ENSG00000239697	TNFSF12	NSIP	Kontrolle	0.777979945	1
NM_022454.3:1374	NM_022454	64321	ENSG00000164736	SOX17	UIP	Kontrolle	0.77852091	1
NM_002422.3:25	NM_002422	4314	ENSG00000149968	MMMP3	NSIP	AFE	0.77872513	1
NM_033001.2:920	NM_033001	2969	ENSG00000263001	GTF2I	NSIP	Kontrolle	0.779270597	1
NM_002621.2:380	NM_002621	5199	ENSG00000126759	CFP	NSIP	Kontrolle	0.77933157	1
NM_005562.2:2819	NM_005562	3918	ENSG00000058085	LAMC2	UIP	NSIP	0.779580959	1
NM_170679.2:630	NM_170679	6500	ENSG00000113558	SKP1	NSIP	Kontrolle	0.779901978	1

NM_000149.3:2342	NM_000149	2525	ENSG00000171124	FUT3	NSIP	AFE	0.780174664	1
NM_004103.3:735	NM_004103	2185	ENSG00000120899	PTK2B	NSIP	Kontrolle	0.781049948	1
NM_000095.2:2164	NM_000095	1311	ENSG00000105664	COMP	UIP	AFE	0.78137041	1
NM_000945.3:2385	NM_000945	5534	ENSG00000221823	PPP3R1	UIP	NSIP	0.781470931	1
NM_001060.3:385	NM_001060	6915	ENSG00000006638	TBXA2R	UIP	NSIP	0.781507502	1
NM_001079874.1:352	NM_001079874	10451	ENSG00000134215	VAV3	UIP	AFE	0.781581755	1
NM_212482.1:1776	NM_212482	2335	ENSG00000115414	FN1	NSIP	Kontrolle	0.781730492	1
NM_001307.3:175	NM_001307	1366	ENSG00000181885	CLDN7	UIP	NSIP	0.782007611	1
NM_019055.5:3080	NM_019055	54538	ENSG00000154133	ROBO4	NSIP	Kontrolle	0.782034544	1
NM_001276.2:475	NM_001276	1116	ENSG00000133048	CHI3L1	UIP	NSIP	0.782037314	1
NM_012279.2:2260	NM_012279	23567	ENSG00000113761	ZNF346	UIP	NSIP	0.782142541	1
NM_001955.2:770	NM_001955	1906	ENSG00000078401	EDN1	UIP	AFE	0.782340838	1
NM_004349.2:1085	NM_004349	862	ENSG00000079102	RUNX1T1	UIP	NSIP	0.782654166	1
NM_001105250.1:2286	NM_001105250	9369	ENSG00000021645	NRXN3	NSIP	AFE	0.78279766	1
NM_012279.2:2260	NM_012279	23567	ENSG00000113761	ZNF346	UIP	Kontrolle	0.783415922	1
NM_032864.3:335	NM_032864	84950	ENSG00000134748	PRPF38A	UIP	NSIP	0.783436932	1
NM_000346.2:2135	NM_000346	6662	ENSG00000125398	SOX9	NSIP	AFE	0.78375748	1
NM_007146.2:700	NM_007146	7716	ENSG00000136451	VEZF1	NSIP	AFE	0.784038617	1
NM_007085.4:1610	NM_007085	11167	ENSG00000163430	FSTL1	UIP	NSIP	0.784083389	1
NM_033395.1:3775	NM_033395	85459	ENSG00000166004	CEP295	NSIP	AFE	0.784261834	1
NM_000507.3:590	NM_000507	2203	ENSG00000165140	FBP1	UIP	NSIP	0.784357254	1
NM_014248.2:162	NM_014248	9978	ENSG00000100387	RBX1	NSIP	AFE	0.784568136	1
NM_001010855.3:1112	NM_001010855	146850	ENSG00000276231	PIK3R6	UIP	NSIP	0.785156187	1
NM_003808.3:810	NM_003808	8741	ENSG00000161955	TNFSF13	UIP	NSIP	0.785987491	1
NM_181504.2:1105	NM_181504	5295	ENSG00000145675	PIK3R1	UIP	AFE	0.786029564	1
NM_000138.3:6420	NM_000138	2200	ENSG00000166147	FBN1	UIP	NSIP	0.786213612	1
NM_001204355.1:730	NM_001204355	50859	ENSG00000196104	SPOCK3	UIP	Kontrolle	0.786408789	1
NM_001105.2:1665	NM_001105	90	ENSG00000115170	ACVR1	UIP	NSIP	0.786502718	1
NM_003238.2:1125	NM_003238	7042	ENSG00000092969	TGFB2	NSIP	Kontrolle	0.786622786	1
NM_171825.1:4080	NM_171825	815	ENSG00000070808	CAMK2A	NSIP	Kontrolle	0.786895057	1
NM_006408.3:580	NM_006408	10551	ENSG00000106541	AGR2	Kontrolle	AFE	0.786949797	1
NM_181501.1:1875	NM_181501	3672	ENSG00000213949	ITGA1	NSIP	Kontrolle	0.787291797	1
NM_005266.5:1992	NM_005266	2702	ENSG00000265107	GJA5	NSIP	Kontrolle	0.787440525	1
NM_002010.2:1565	NM_002010	2254	ENSG00000102678	FGF9	UIP	Kontrolle	0.788248905	1
NM_000141.4:647	NM_000141	2263	ENSG00000066468	FGFR2	UIP	NSIP	0.788517311	1
NM_002202.2:1375	NM_002202	3670	ENSG00000016082	ISL1	UIP	Kontrolle	0.788811192	1
NM_003255.4:1555	NM_003255	7077	ENSG00000035862	TIMP2	UIP	NSIP	0.788904363	1
NM_006096.2:565	NM_006096	10397	ENSG00000104419	NDRG1	Kontrolle	AFE	0.78900177	1
NM_004684.4:2265	NM_004684	8404	ENSG00000152583	SPARCL1	Kontrolle	AFE	0.789457775	1
NM_003371.3:2699	NM_003371	7410	ENSG00000160293	VAV2	UIP	AFE	0.789491055	1
NM_181501.1:1875	NM_181501	3672	ENSG00000213949	ITGA1	NSIP	AFE	0.789594064	1
NM_032864.3:335	NM_032864	84950	ENSG00000134748	PRPF38A	NSIP	Kontrolle	0.790085172	1
NM_016155.4:804	NM_016155	4326	ENSG00000198598	MMP17	UIP	NSIP	0.790234684	1
NM_007111.4:1826	NM_007111	7027	ENSG00000198176	TFDP1	Kontrolle	AFE	0.79172639	1
NM_178812.3:828	NM_178812	92140	ENSG00000147649	MTDH	UIP	Kontrolle	0.792547311	1
NM_003829.4:6092	NM_003829	8777	ENSG00000107186	MPDZ	NSIP	AFE	0.793078634	1
NM_004689.2:450	NM_004689	9112	ENSG00000182979	MTA1	UIP	AFE	0.793144809	1
NM_003131.2:4040	NM_003131	6722	ENSG00000112658	SRF	UIP	AFE	0.793262198	1
NM_020387.2:245	NM_020387	57111	ENSG00000132698	RAB25	UIP	NSIP	0.794718287	1
NM_001307.3:175	NM_001307	1366	ENSG00000181885	CLDN7	NSIP	Kontrolle	0.795024139	1
NM_001077693.3:168	NM_001077693	641700	ENSG00000249751	ECSCR	NSIP	AFE	0.795378879	1
NM_003469.3:1400	NM_003469	7857	ENSG00000171951	SCG2	UIP	NSIP	0.797012084	1
NM_001955.2:770	NM_001955	1906	ENSG00000078401	EDN1	UIP	Kontrolle	0.797349801	1
NM_004349.2:1085	NM_004349	862	ENSG00000079102	RUNX1T1	Kontrolle	AFE	0.798206582	1
NM_000077.3:975	NM_000077	1029	ENSG00000147889	CDKN2A	NSIP	Kontrolle	0.798367768	1
NM_006528.3:524	NM_006528	7980	ENSG00000105825	TFPI2	UIP	AFE	0.798730652	1
NM_006096.2:565	NM_006096	10397	ENSG00000104419	NDRG1	NSIP	AFE	0.799361907	1
NM_004425.3:1345	NM_004425	1893	ENSG00000143369	ECM1	UIP	NSIP	0.79940248	1
NM_001704.1:885	NM_001704	577	ENSG00000135298	BAI3	NSIP	Kontrolle	0.799557534	1
NM_002725.3:5250	NM_002725	5549	ENSG00000188783	PRELP	Kontrolle	AFE	0.799937689	1
NM_004864.2:180	NM_004864	9518	ENSG00000130513	GDF15	UIP	NSIP	0.799946899	1
NM_024896.2:852	NM_024896	79956	ENSG00000099219	ERMP1	UIP	NSIP	0.800329523	1
NM_001837.2:980	NM_001837	1232	ENSG00000183625	CCR3	NSIP	AFE	0.800884535	1
NM_004830.2:640	NM_004830	9439	ENSG00000112282	MED23	UIP	NSIP	0.801170224	1
NM_001033081.2:568	NM_001033081	4610	ENSG00000116990	MYCL	NSIP	Kontrolle	0.802395847	1
NM_002986.2:378	NM_002986	6356	ENSG00000172156	CCL11	UIP	AFE	0.802826853	1
NM_207195.1:1355	NM_207195	8751	ENSG00000143537	ADAM15	UIP	NSIP	0.804583843	1
NM_001042404.1:1800	NM_001042404	9859	ENSG00000143702	CEP170	NSIP	Kontrolle	0.804702906	1
NM_145259.2:5168	NM_145259	130399	ENSG00000123612	ACVR1C	UIP	NSIP	0.80480745	1
NM_001204.5:1875	NM_001204	659	ENSG00000204217	BMPR2	NSIP	Kontrolle	0.805089641	1
NM_198477.1:440	NM_198477	284340	ENSG00000189377	CXCL17	UIP	AFE	0.805172694	1
NM_003256.2:1000	NM_003256	7079	ENSG00000157150	TIMP4	UIP	Kontrolle	0.805490451	1

NM_004431.2:1525	NM_004431	1969	ENSG00000142627	EPHA2	UIP	Kontrolle	0.805713813	1
NM_005230.2:905	NM_005230	2004	ENSG00000111145	ELK3	UIP	NSIP	0.806205328	1
NM_005232.3:2075	NM_005232	2041	ENSG00000146904	EPHA1	UIP	Kontrolle	0.806265437	1
NM_153831.2:965	NM_153831	5747	ENSG00000169398	PTK2	Kontrolle	AFE	0.807120913	1
NM_001135000.1:920	NM_001135000	10979	ENSG00000073712	FERMT2	NSIP	Kontrolle	0.807172994	1
NM_003371.3:2699	NM_003371	7410	ENSG00000160293	VAV2	UIP	Kontrolle	0.807178785	1
NM_001977.3:2940	NM_001977	2028	ENSG00000138792	ENPEP	Kontrolle	AFE	0.807760397	1
NM_021978.3:1405	NM_021978	6768	ENSG00000149418	ST14	NSIP	AFE	0.807811448	1
NM_178190.2:334	NM_178190	93974	ENSG00000130770	ATPIF1	Kontrolle	AFE	0.808387375	1
NM_003254.2:329	NM_003254	7076	ENSG00000102265	TIMP1	NSIP	Kontrolle	0.80860491	1
NM_003256.2:1000	NM_003256	7079	ENSG00000157150	TIMP4	NSIP	Kontrolle	0.809328256	1
NM_002146.4:2840	NM_002146	3213	ENSG00000120093	HOXB3	UIP	NSIP	0.809384007	1
NM_000639.1:625	NM_000639	356	ENSG00000117560	FASLG	NSIP	AFE	0.809600407	1
NM_000575.3:1085	NM_000575	3552	ENSG00000115008	IL1A	UIP	NSIP	0.80961361	1
NM_153609.2:2929	NM_153609	164656	ENSG00000187045	TMPRSS6	NSIP	Kontrolle	0.809915571	1
NM_024320.2:1005	NM_024320	79170	ENSG00000167183	PRR15L	NSIP	AFE	0.810259563	1
NM_213560.1:2153	NM_213560	5585	ENSG00000123143	PKN1	Kontrolle	AFE	0.810708133	1
NM_002670.2:3261	NM_002670	5357	ENSG00000120756	PLS1	UIP	NSIP	0.810711152	1
NM_006988.3:2840	NM_006988	9510	ENSG00000154734	ADAMTS1	Kontrolle	AFE	0.812016216	1
NM_000450.2:1505	NM_000450	6401	ENSG00000007908	SELE	NSIP	AFE	0.812636757	1
NM_004912.3:2648	NM_004912	889	ENSG00000001631	KRIT1	UIP	NSIP	0.813109135	1
NM_003592.2:1487	NM_003592	8454	ENSG00000055130	CUL1	UIP	NSIP	0.813161734	1
NM_006665.3:1625	NM_006665	10855	ENSG00000173083	HPSE	UIP	Kontrolle	0.813468607	1
NM_000459.3:1894	NM_000459	7010	ENSG00000120156	TEK	NSIP	AFE	0.813513029	1
NM_001030049.1:433	NM_001030049	354	ENSG00000142515	KLK3	UIP	Kontrolle	0.813762772	1
NM_000900.2:305	NM_000900	4256	ENSG00000111341	MGP	NSIP	Kontrolle	0.813771269	1
NM_021978.3:1405	NM_021978	6768	ENSG00000149418	ST14	UIP	AFE	0.814123712	1
NM_0012340.3:1815	NM_0012340	4773	ENSG00000101096	NFATC2	UIP	NSIP	0.815098916	1
NM_000945.3:2385	NM_000945	5534	ENSG00000221823	PPP3R1	UIP	AFE	0.815190907	1
NM_001098424.1:1460	NM_001098424	1739	ENSG00000075711	DLG1	NSIP	Kontrolle	0.815254549	1
NM_006988.3:2840	NM_006988	9510	ENSG00000154734	ADAMTS1	UIP	NSIP	0.815795634	1
NM_001012331.1:1365	NM_001012331	4914	ENSG00000198400	NTRK1	Kontrolle	AFE	0.816133032	1
NM_001079874.1:352	NM_001079874	10451	ENSG00000134215	VAV3	UIP	NSIP	0.816176548	1
NM_001734.2:775	NM_001734	716	ENSG00000182326	C1S	UIP	Kontrolle	0.81654591	1
NM_001993.3:1030	NM_001993	2152	ENSG00000117525	F3	Kontrolle	AFE	0.816684239	1
NM_002483.4:1217	NM_002483	4680	ENSG00000086548	CEACAM6	UIP	AFE	0.816715226	1
NM_022093.1:3580	NM_022093	63923	ENSG00000120332	TNN	UIP	Kontrolle	0.8170437	1
NM_004103.3:735	NM_004103	2185	ENSG00000120899	PTK2B	Kontrolle	AFE	0.817287482	1
NM_001988.2:5525	NM_001988	2125	ENSG00000167880	EVPL	UIP	NSIP	0.817470188	1
NM_006329.3:2242	NM_006329	10516	ENSG00000140092	FBLN5	NSIP	AFE	0.817504053	1
NM_000077.3:975	NM_000077	1029	ENSG00000147889	CDKN2A	NSIP	AFE	0.818245078	1
NM_001220488.1:210	NM_001220488	1012	ENSG00000140945	CDH13	UIP	NSIP	0.818285	1
NM_014248.2:162	NM_014248	9978	ENSG00000100387	RBX1	NSIP	Kontrolle	0.818317651	1
NM_004763.3:1690	NM_004763	9270	ENSG00000119185	ITGB1BP1	UIP	NSIP	0.818591191	1
NM_005230.2:905	NM_005230	2004	ENSG00000111145	ELK3	UIP	AFE	0.818704539	1
NM_024164.5:521	NM_024164	64499	ENSG00000197253	TPSB2	NSIP	NSIP	0.818795706	1
NM_000603.4:1456	NM_000603	4846	ENSG00000164867	NOS3	UIP	Kontrolle	0.818827216	1
NM_001167580.1:2154	NM_001167580	9899	ENSG00000185518	SV2B	Kontrolle	AFE	0.818898097	1
NM_001079846.1:4818	NM_001079846	1387	ENSG00000005339	CREBBP	NSIP	AFE	0.8193933	1
NM_000477.5:855	NM_000477	213	ENSG00000163631	ALB	UIP	AFE	0.820383973	1
NM_002305.3:60	NM_002305	3956	ENSG00000100097	LGALS1	UIP	Kontrolle	0.820876087	1
NM_139266.1:455	NM_139266	6772	ENSG00000115415	STAT1	NSIP	Kontrolle	0.821323594	1
NM_001204857.1:330	NM_001204857	6921	ENSG00000154582	TCEB1	NSIP	Kontrolle	0.821607764	1
NM_001042494.1:3962	NM_001042494	9990	ENSG00000140199	SLC12A6	UIP	NSIP	0.822091973	1
NM_015364.2:360	NM_015364	23643	ENSG00000154589	LY96	UIP	NSIP	0.822696728	1
NM_001087.3:412	NM_001087	14	ENSG00000127837	AAMP	UIP	AFE	0.822729003	1
NM_014265.4:920	NM_014265	10863	ENSG00000042980	ADAM28	UIP	NSIP	0.822840039	1
NM_005429.2:565	NM_005429	7424	ENSG00000150630	VEGFC	NSIP	AFE	0.823364855	1
NM_198829.1:1250	NM_198829	5879	ENSG00000136238	RAC1	UIP	NSIP	0.823438876	1
NM_001122821.1:2385	NM_001122821	6418	ENSG00000119335	SET	Kontrolle	AFE	0.823611379	1
NM_018055.3:320	NM_018055	4838	ENSG00000156574	NODAL	UIP	Kontrolle	0.824167596	1
NM_001040092.2:1980	NM_001040092	5168	ENSG00000136960	ENPP2	UIP	Kontrolle	0.824617692	1
NM_004219.2:542	NM_004219	9232	ENSG00000164611	PTTG1	NSIP	Kontrolle	0.82486047	1
NM_001077693.3:168	NM_001077693	641700	ENSG00000249751	ECSCR	UIP	NSIP	0.824901122	1
NM_002121.4:931	NM_002121	3115	ENSG00000223865	HLA-DPB1	UIP	NSIP	0.825086128	1
NM_002011.3:1585	NM_002011	2264	ENSG00000160867	FGFR4	NSIP	Kontrolle	0.825970949	1
NM_000641.2:1145	NM_000641	3589	ENSG00000095752	IL11	UIP	Kontrolle	0.826026892	1
NM_001999.3:9850	NM_001999	2201	ENSG00000138829	FBN2	UIP	Kontrolle	0.826337528	1
NM_001040113.1:920	NM_001040113	4629	ENSG00000133392	MYH11	UIP	AFE	0.826799161	1
NM_033395.1:3775	NM_033395	85459	ENSG00000166004	CEP295	UIP	AFE	0.827343607	1
NM_153603.3:1492	NM_153603	91949	ENSG00000168434	COG7	UIP	NSIP	0.827414489	1
NM_005266.5:1992	NM_005266	2702	ENSG00000265107	GJA5	NSIP	AFE	0.827441024	1

NM_001127500.1:1925	NM_001127500	4233	ENSG00000105976	MET	NSIP	AFE	0.827686069	1
NM_002661.2:525	NM_002661	5336	ENSG00000197943	PLCG2	NSIP	Kontrolle	0.828011025	1
NM_001937.3:1510	NM_001937	1805	ENSG00000143196	DPT	UIP	UIP	0.828037275	1
NM_000619.2:970	NM_000619	3458	ENSG00000111537	IFNG	NSIP	AFE	0.828113609	1
NM_024164.5:521	NM_024164	64499	ENSG00000197253	TPSB2	Kontrolle	AFE	0.828143817	1
NM_000450.2:1505	NM_000450	6401	ENSG00000007908	SELE	NSIP	Kontrolle	0.828303785	1
NM_001199140.1:3564	NM_001199140	83607	ENSG00000144233	AMMECR1L	UIP	AFE	0.828702025	1
NM_006096.2:565	NM_006096	10397	ENSG00000104419	NDRG1	UIP	AFE	0.82870279	1
NM_004774.3:806	NM_004774	5469	ENSG00000125686	MED1	UIP	NSIP	0.82894617	1
NM_004867.4:988	NM_004867	9452	ENSG00000078596	ITM2A	NSIP	AFE	0.829403643	1
NM_001620.2:14454	NM_001620	79026	ENSG00000124942	AHNAK	Kontrolle	AFE	0.830387474	1
NM_001147.2:1775	NM_001147	285	ENSG00000091879	ANGPT2	UIP	Kontrolle	0.830406077	1
NM_003761.3:260	NM_003761	8673	ENSG00000118640	VAMP8	UIP	Kontrolle	0.830538477	1
NM_012431.1:2184	NM_012431	9723	ENSG00000170381	SEMA3E	UIP	AFE	0.830713775	1
NM_030662.3:839	NM_030662	5605	ENSG00000126934	MAP2K2	UIP	NSIP	0.830754845	1
NM_006270.3:330	NM_006270	6237	ENSG00000126458	RRAS	NSIP	Kontrolle	0.830758684	1
NM_006665.3:1625	NM_006665	10855	ENSG00000173083	HPSE	NSIP	AFE	0.831207725	1
NM_005409.3:590	NM_005409	6373	ENSG00000169248	CXCL11	UIP	AFE	0.831488277	1
NM_000641.2:1145	NM_000641	3589	ENSG00000095752	IL11	UIP	AFE	0.832192452	1
NM_005490.2:412	NM_005490	10045	ENSG00000125731	SH2D3A	NSIP	Kontrolle	0.833239273	1
NM_012217.2:585	NM_012217	23430	ENSG00000095917	TPSD1	UIP	NSIP	0.833924237	1
NM_005985.2:63	NM_005985	6615	ENSG00000124216	SNAI1	NSIP	AFE	0.833945719	1
NM_007037.4:2228	NM_007037	11095	ENSG00000134917	ADAMTS8	UIP	AFE	0.834121959	1
NM_001005862.1:1255	NM_001005862	2064	ENSG00000141736	ERBB2	UIP	NSIP	0.834473775	1
NM_000095.2:2164	NM_000095	1311	ENSG00000105664	COMP	UIP	NSIP	0.834803066	1
NM_001040056.1:580	NM_001040056	5595	ENSG00000102882	MAPK3	Kontrolle	AFE	0.835545799	1
NM_002426.3:769	NM_002426	4321	ENSG00000262406	MMP12	UIP	NSIP	0.837363083	1
NM_006786.3:354	NM_006786	10911	ENSG00000049247	UTS2	UIP	Kontrolle	0.837622297	1
NM_004967.3:876	NM_004967	3381	ENSG00000029559	IBSP	NSIP	AFE	0.837675261	1
NM_032364.5:1166	NM_032364	85406	ENSG00000135392	DNAJC14	UIP	NSIP	0.837738546	1
NM_052846.1:3113	NM_052846	90187	ENSG00000183798	EMILIN3	UIP	Kontrolle	0.838065637	1
NM_007146.2:700	NM_007146	7716	ENSG00000136451	VEZF1	UIP	AFE	0.839420536	1
NM_001305.3:1242	NM_001305	1364	ENSG00000189143	CLDN4	UIP	AFE	0.839435789	1
NM_001032409.1:805	NM_001032409	4938	ENSG00000089127	OAS1	Kontrolle	AFE	0.839895271	1
NM_006914.3:1840	NM_006914	6096	ENSG00000198963	RORB	UIP	NSIP	0.840163229	1
NM_004571.3:3655	NM_004571	5316	ENSG00000160199	PKNOX1	NSIP	Kontrolle	0.840296891	1
NM_017617.3:735	NM_017617	4851	ENSG00000148400	NOTCH1	UIP	AFE	0.840386299	1
NM_022361.4:980	NM_022361	64208	ENSG00000132429	POPCD3	UIP	NSIP	0.840726418	1
NM_001001392.1:429	NM_001001392	960	ENSG00000026508	CD44	UIP	NSIP	0.840744987	1
NM_021220.2:676	NM_021220	58495	ENSG00000125850	OVOL2	NSIP	Kontrolle	0.840951542	1
NM_001723.4:1870	NM_001723	667	ENSG00000151914	DST	NSIP	AFE	0.841280838	1
NM_001267.2:810	NM_001267	1101	ENSG00000136457	CHAD	NSIP	Kontrolle	0.84128179	1
NM_004322.3:963	NM_004322	572	ENSG00000002330	BAD	UIP	NSIP	0.842238044	1
NM_002206.1:1170	NM_002206	3679	ENSG00000135424	ITGA7	UIP	AFE	0.84248024	1
NM_001331.2:146	NM_001331	1500	ENSG00000198561	CTNND1	NSIP	Kontrolle	0.842538694	1
NM_004846.3:670	NM_004846	9470	ENSG00000135930	EIF4E2	NSIP	AFE	0.842590112	1
NM_001999.3:9850	NM_001999	2201	ENSG00000138829	FBN2	NSIP	AFE	0.842674566	1
NM_000557.2:155	NM_000557	8200	ENSG00000125965	GDF5	NSIP	AFE	0.843034967	1
NM_001203.1:430	NM_001203	658	ENSG00000138696	BMPR1B	NSIP	Kontrolle	0.843455158	1
NM_018326.2:315	NM_018326	55303	ENSG00000133574	GIMAP4	UIP	AFE	0.843550307	1
NM_000266.2:505	NM_000266	4693	ENSG00000124479	NDP	UIP	NSIP	0.843732913	1
NM_005474.4:3160	NM_005474	10014	ENSG00000108840	HDAC5	Kontrolle	AFE	0.844224008	1
NM_006350.2:575	NM_006350	10468	ENSG00000134363	FST	UIP	AFE	0.844453387	1
NM_003095.2:225	NM_003095	6636	ENSG00000139343	SNRPF	Kontrolle	AFE	0.844571264	1
NM_022965.2:3170	NM_022965	2261	ENSG00000068078	FGFR3	NSIP	Kontrolle	0.844690195	1
NM_006914.3:1840	NM_006914	6096	ENSG00000198963	RORB	NSIP	Kontrolle	0.845788205	1
NM_000601.4:550	NM_000601	3082	ENSG00000019991	HGF	NSIP	AFE	0.845921901	1
NM_018488.2:1560	NM_018488	9496	ENSG00000121075	TBX4	NSIP	Kontrolle	0.84606851	1
NM_000640.2:400	NM_000640	3598	ENSG00000123496	IL13RA2	Kontrolle	AFE	0.846805172	1
NM_000395.2:492	NM_000395	1439	ENSG00000100368	CSF2RB	UIP	AFE	0.846885025	1
NM_173481.2:1845	NM_173481	126353	ENSG00000099812	MISP	UIP	NSIP	0.847019592	1
NM_005424.2:2610	NM_005424	7075	ENSG00000066056	TIE1	UIP	Kontrolle	0.84714594	1
NM_031479.3:1450	NM_031479	83729	ENSG00000139269	INHBE	UIP	NSIP	0.847512531	1
NM_000346.2:2135	NM_000346	6662	ENSG00000125398	SOX9	UIP	Kontrolle	0.847536843	1
NM_003467.2:1335	NM_003467	7852	ENSG00000121966	CXCR4	UIP	Kontrolle	0.847650935	1
NM_000038.3:6850	NM_000038	324	ENSG00000134982	APC	NSIP	Kontrolle	0.847957066	1
NM_000632.3:515	NM_000632	3684	ENSG00000169896	ITGAM	Kontrolle	AFE	0.848451615	1
NM_000577.3:480	NM_000577	3557	ENSG00000136689	IL1RN	NSIP	AFE	0.849167633	1
NM_014210.3:564	NM_014210	2123	ENSG00000126860	EV12A	NSIP	Kontrolle	0.849372657	1
NM_199168.3:69	NM_199168	6387	ENSG00000107562	CXCL12	UIP	AFE	0.849541018	1
NM_015962.4:1022	NM_015962	51077	ENSG00000119616	FCF1	UIP	Kontrolle	0.849601686	1
NM_012431.1:2184	NM_012431	9723	ENSG00000170381	SEMA3E	NSIP	AFE	0.849684057	1

NM_005251.2:1389	NM_005251	2303	ENSG00000176692	FOXC2	UIP	AFE	0.850148231	1
NM_024045.1:1185	NM_024045	79009	ENSG00000176625	DDX50	NSIP	AFE	0.851238395	1
NM_014256.3:1625	NM_014256	10331	ENSG00000179913	B3GNT3	Kontrolle	AFE	0.851355136	1
NM_005924.4:1184	NM_005924	4223	ENSG00000106511	MEOX2	Kontrolle	AFE	0.851504866	1
NM_002538.3:1975	NM_002538	100506658	ENSG00000197822	OCLN	NSIP	AFE	0.851817294	1
NM_001915.3:1065	NM_001915	1534	ENSG00000008283	CYB561	UIP	NSIP	0.852350219	1
NM_001753.3:434	NM_001753	857	ENSG00000105974	CAV1	UIP	AFE	0.852557179	1
NR_046324.1:194	NR_046324	1139	ENSG00000175344	CHRNA7	UIP	NSIP	0.853679594	1
NM_153609.2:2929	NM_153609	164656	ENSG00000187045	TMPRSS6	UIP	NSIP	0.85407186	1
NM_006500.2:2482	NM_006500	4162	ENSG00000076706	MCAM	UIP	AFE	0.8546813	1
NM_000615.5:1620	NM_000615	4684	ENSG00000149294	NCAM1	Kontrolle	AFE	0.854705573	1
NM_033305.2:8260	NM_033305	23230	ENSG00000197969	VPS13A	UIP	NSIP	0.854944068	1
NM_004184.3:1851	NM_004184	7453	ENSG00000140105	WARS	NSIP	Kontrolle	0.855177241	1
NM_014363.4:1475	NM_014363	26278	ENSG00000151835	SACS	UIP	NSIP	0.855330255	1
NM_003380.2:694	NM_003380	7431	ENSG00000026025	VIM	UIP	NSIP	0.855350658	1
NM_001565.1:40	NM_001565	3627	ENSG00000169245	CXCL10	UIP	NSIP	0.856219995	1
NM_139266.1:455	NM_139266	6772	ENSG00000115415	STAT1	UIP	NSIP	0.858303669	1
NM_173157.1:1575	NM_173157	3164	ENSG00000123358	NR4A1	UIP	NSIP	0.85870456	1
NM_004369.3:2782	NM_004369	1293	ENSG00000163359	COL6A3	UIP	AFE	0.858752028	1
NM_001143981.1:1120	NM_001143981	91851	ENSG00000101938	CHRDL1	NSIP	AFE	0.858783755	1
NM_000477.5:855	NM_000477	213	ENSG00000163631	ALB	UIP	NSIP	0.859011903	1
NM_000189.4:6880	NM_000189	3099	ENSG00000159399	HK2	UIP	NSIP	0.860697266	1
NM_001143981.1:1120	NM_001143981	91851	ENSG00000101938	CHRDL1	UIP	NSIP	0.861044203	1
NM_001620.2:14454	NM_001620	79026	ENSG00000124942	AHNAK	UIP	Kontrolle	0.861540094	1
NM_002954.5:650	NM_002954	6233	ENSG00000143947	RPS27A	UIP	NSIP	0.862230506	1
NM_022454.3:1374	NM_022454	64321	ENSG00000164736	SOX17	NSIP	Kontrolle	0.862593288	1
NM_006786.3:354	NM_006786	10911	ENSG00000049247	UTS2	UIP	NSIP	0.86303662	1
NM_181825.2:442	NM_181825	4771	ENSG00000186575	NF2	UIP	AFE	0.864273363	1
NM_001105250.1:2286	NM_001105250	9369	ENSG00000021645	NRXN3	NSIP	Kontrolle	0.864471619	1
NM_016232.4:700	NM_016232	9173	ENSG00000115602	IL1RL1	UIP	AFE	0.865143896	1
NM_016167.3:335	NM_016167	51406	ENSG00000225921	NOL7	UIP	NSIP	0.865184631	1
NM_031476.3:2575	NM_031476	83716	ENSG00000103196	CRISPLD2	UIP	NSIP	0.86519292	1
NM_005232.3:2075	NM_005232	2041	ENSG00000146904	EPHA1	NSIP	Kontrolle	0.865723538	1
NM_004517.2:983	NM_004517	3611	ENSG00000166333	ILK	NSIP	Kontrolle	0.865862219	1
NM_005650.1:925	NM_005650	6942	ENSG00000100207	TCF20	NSIP	Kontrolle	0.866257267	1
NM_007146.2:700	NM_007146	7716	ENSG00000136451	VEZF1	UIP	NSIP	0.866479222	1
NM_000682.4:2885	NM_000682	151	ENSG00000274286	ADRA2B	UIP	NSIP	0.866530805	1
NM_024422.3:2200	NM_024422	1824	ENSG00000134755	DSC2	NSIP	Kontrolle	0.866796486	1
NM_006516.2:2500	NM_006516	6513	ENSG00000117394	SLC2A1	NSIP	AFE	0.867014595	1
NM_001119.4:622	NM_001119	118	ENSG00000087274	ADD1	UIP	NSIP	0.867271546	1
NM_000267.2:1035	NM_000267	4763	ENSG00000196712	NF1	UIP	NSIP	0.867336326	1
NM_032642.2:1745	NM_032642	81029	ENSG00000111186	WNT5B	Kontrolle	AFE	0.868356845	1
NM_006802.2:2060	NM_006802	10946	ENSG00000183431	SF3A3	UIP	AFE	0.868782065	1
NM_006846.3:2595	NM_006846	11005	ENSG00000133710	SPINK5	UIP	Kontrolle	0.868893876	1
NM_002010.2:1565	NM_002010	2254	ENSG00000102678	FGF9	NSIP	AFE	0.869288399	1
NM_003064.2:330	NM_003064	6590	ENSG00000124107	SLPI	UIP	Kontrolle	0.869682841	1
NM_000594.2:1010	NM_000594	7124	ENSG00000232810	TNF	NSIP	AFE	0.86990354	1
NM_032470.3:1621	NM_032470	7148	ENSG00000168477	TNXB	UIP	NSIP	0.870196403	1
NM_003650.3:525	NM_003650	8530	ENSG00000077984	CST7	Kontrolle	AFE	0.870203734	1
NM_003183.4:1595	NM_003183	6868	ENSG00000151694	ADAM17	Kontrolle	AFE	0.870623197	1
NM_005360.4:888	NM_005360	4094	ENSG00000178573	MAF	NSIP	AFE	0.870720048	1
NM_000603.4:1456	NM_000603	4846	ENSG00000164867	NOS3	UIP	AFE	0.871167176	1
NM_199121.2:3664	NM_199121	64856	ENSG00000179403	VWA1	NSIP	AFE	0.871349693	1
NM_003200.3:858	NM_003200	6929	ENSG00000071564	TCF3	UIP	NSIP	0.871447807	1
NM_004517.2:983	NM_004517	3611	ENSG00000166333	ILK	UIP	NSIP	0.872633509	1
NM_002023.3:2050	NM_002023	2331	ENSG00000122176	FMOD	UIP	Kontrolle	0.872785814	1
NM_006869.2:570	NM_006869	11033	ENSG00000105963	ADAP1	UIP	Kontrolle	0.873580312	1
NM_003183.4:1595	NM_003183	6868	ENSG00000151694	ADAM17	UIP	AFE	0.873606642	1
NM_021101.3:410	NM_021101	9076	ENSG00000163347	CLDN1	UIP	AFE	0.874075646	1
NM_015399.3:469	NM_015399	25855	ENSG00000174744	BRMS1	NSIP	Kontrolle	0.874611706	1
NM_001167580.1:2154	NM_001167580	9899	ENSG00000185518	SV2B	NSIP	AFE	0.874735721	1
NM_001977.3:2940	NM_001977	2028	ENSG00000138792	ENPEP	NSIP	AFE	0.874805816	1
NM_006914.3:1840	NM_006914	6096	ENSG00000198963	RORB	NSIP	AFE	0.87510179	1
NM_004530.2:2360	NM_004530	4313	ENSG00000087245	MMP2	UIP	NSIP	0.875291557	1
NM_003177.3:1685	NM_003177	6850	ENSG00000165025	SYK	UIP	NSIP	0.875783844	1
NM_003621.2:2350	NM_003621	8495	ENSG00000166387	PPFIBP2	UIP	Kontrolle	0.875794892	1
NM_014225.3:1440	NM_014225	5518	ENSG00000105568	PPP2R1A	NSIP	Kontrolle	0.876490942	1
NM_002231.3:1211	NM_002231	3732	ENSG00000085117	CD82	UIP	NSIP	0.877930758	1
NM_016142.2:1000	NM_016142	51144	ENSG00000149084	HSD17B12	UIP	NSIP	0.878128237	1
NM_184041.2:1455	NM_184041	226	ENSG00000149925	ALDOA	UIP	Kontrolle	0.878571242	1
NM_015429.3:4081	NM_015429	25890	ENSG00000154175	ABI3BP	UIP	Kontrolle	0.879166507	1
NM_018046.3:35	NM_018046	55109	ENSG00000164252	AGGF1	UIP	NSIP	0.880026144	1

NM_005682.4:1145	NM_005682	9289	ENSG00000205336	GPR56	Kontrolle	AFE	0.880423427	1
NM_004684.4:2265	NM_004684	8404	ENSG00000152583	SPARCL1	UIP	AFE	0.880498284	1
NM_000212.2:4485	NM_000212	3690	ENSG00000259207	ITGB3	NSIP	AFE	0.880506351	1
NM_004441.3:1855	NM_004441	2047	ENSG00000154928	EPHB1	UIP	AFE	0.880577855	1
NM_000177.4:1075	NM_000177	2934	ENSG00000148180	GSN	UIP	AFE	0.880743232	1
NM_001033081.2:568	NM_001033081	4610	ENSG00000116990	MYCL	UIP	NSIP	0.880880078	1
NM_005780.2:460	NM_005780	10186	ENSG00000183722	LHFP	UIP	AFE	0.881893887	1
NM_001664.2:1230	NM_001664	387	ENSG00000067560	RHOA	UIP	NSIP	0.882422861	1
NM_005682.4:1145	NM_005682	9289	ENSG00000205336	GPR56	NSIP	AFE	0.882469016	1
NM_001010855.3:1112	NM_001010855	146850	ENSG00000276231	PIK3R6	Kontrolle	AFE	0.883464142	1
NM_000698.2:735	NM_000698	240	ENSG00000012779	ALOX5	Kontrolle	AFE	0.884478825	1
NM_025130.3:2267	NM_025130	80201	ENSG00000156510	HKDC1	NSIP	Kontrolle	0.884521575	1
NM_001017970.2:2420	NM_001017970	161291	ENSG00000182107	TMEM30B	UIP	NSIP	0.884695012	1
NM_002160.3:1215	NM_002160	3371	ENSG00000041982	TNC	UIP	NSIP	0.884721676	1
NM_021073.2:1570	NM_021073	653	ENSG00000112175	BMP5	UIP	NSIP	0.88484225	1
NM_002661.2:525	NM_002661	5336	ENSG00000197943	PLCG2	UIP	AFE	0.885223134	1
NM_004282.3:785	NM_004282	9532	ENSG00000112208	BAG2	NSIP	AFE	0.885502279	1
NM_012082.3:1850	NM_012082	23414	ENSG00000169946	ZFPM2	UIP	NSIP	0.88601439	1
NM_001432.2:290	NM_001432	2069	ENSG00000124882	EREG	UIP	NSIP	0.886919063	1
NM_182471.1:2105	NM_182471	5315	ENSG00000067225	PKM	UIP	AFE	0.887678709	1
NM_001040113.1:920	NM_001040113	4629	ENSG00000133392	MYH11	NSIP	Kontrolle	0.888912341	1
NM_030582.3:4490	NM_030582	80781	ENSG00000182871	COL18A1	NSIP	AFE	0.889491202	1
NM_002438.2:2693	NM_002438	4360	ENSG00000260314	MRC1	UIP	NSIP	0.890345563	1
NM_014795.3:549	NM_014795	9839	ENSG00000169554	ZEB2	UIP	NSIP	0.891007039	1
NM_001127491.1:1103	NM_001127491	3689	ENSG00000160255	ITGB2	NSIP	Kontrolle	0.891646768	1
NM_004184.3:1851	NM_004184	7453	ENSG00000140105	WARS	NSIP	AFE	0.891649204	1
NM_015715.3:2415	NM_015715	50487	ENSG00000100078	PLA2G3	UIP	NSIP	0.891926387	1
NM_000325.5:1381	NM_000325	5308	ENSG00000164093	PITX2	NSIP	Kontrolle	0.892540195	1
NM_005359.3:1370	NM_005359	4089	ENSG00000141646	SMAD4	UIP	AFE	0.892565744	1
NM_001038.4:2780	NM_001038	6337	ENSG00000111319	SCNN1A	UIP	AFE	0.892688006	1
NM_022454.3:1374	NM_022454	64321	ENSG00000164736	SOX17	Kontrolle	AFE	0.892841998	1
NM_001142685.1:2100	NM_001142685	9743	ENSG00000134909	ARHGAP32	Kontrolle	AFE	0.89354889	1
NM_002880.3:1444	NM_002880	5894	ENSG00000132155	RAF1	NSIP	Kontrolle	0.893735913	1
NM_004846.3:670	NM_004846	9470	ENSG00000135930	EIF4E2	UIP	NSIP	0.894373764	1
NM_004342.6:3862	NM_004342	800	ENSG00000122786	CALD1	NSIP	Kontrolle	0.894657989	1
NM_001098424.1:1460	NM_001098424	1739	ENSG00000075711	DLG1	UIP	AFE	0.895176385	1
NM_003862.1:850	NM_003862	8817	ENSG00000156427	FGF18	UIP	AFE	0.895473341	1
NM_002019.4:530	NM_002019	2321	ENSG00000102755	FLT1	UIP	NSIP	0.89590454	1
NM_004538.4:1070	NM_004538	4675	ENSG00000186310	NAP1L3	UIP	Kontrolle	0.896169286	1
NM_000665.3:1057	NM_000665	43	ENSG00000087085	ACHE	Kontrolle	AFE	0.896182991	1
NM_053276.3:604	NM_053276	5212	ENSG00000205221	VIT	NSIP	AFE	0.896316506	1
NM_003333.3:288	NM_003333	7311	ENSG00000221983	UBA52	UIP	Kontrolle	0.897514443	1
NM_004967.3:876	NM_004967	3381	ENSG00000029559	IBSP	UIP	Kontrolle	0.898307916	1
NM_005558.3:1860	NM_005558	3898	ENSG00000159166	LAD1	NSIP	Kontrolle	0.899206998	1
NM_000459.3:1894	NM_000459	7010	ENSG00000120156	TEK	UIP	AFE	0.899523316	1
NM_012120.2:1895	NM_012120	23607	ENSG00000198087	CD2AP	UIP	Kontrolle	0.899544862	1
NM_001017970.2:2420	NM_001017970	161291	ENSG00000182107	TMEM30B	UIP	AFE	0.899779176	1
NM_014159.6:1386	NM_014159	29072	ENSG00000181555	SETD2	NSIP	Kontrolle	0.900302134	1
NM_002205.2:925	NM_002205	3678	ENSG00000161638	ITGA5	Kontrolle	AFE	0.900620448	1
NM_020770.2:1112	NM_020770	57530	ENSG00000143375	CGN	NSIP	AFE	0.900782638	1
NM_001712.3:2455	NM_001712	634	ENSG00000079385	CEACAM1	NSIP	AFE	0.901648938	1
NM_022078.2:1685	NM_022078	63906	ENSG00000198746	GPATCH3	UIP	NSIP	0.901871267	1
NM_001911.2:160	NM_001911	1511	ENSG00000100448	CTSG	Kontrolle	AFE	0.901879669	1
NM_005954.2:165	NM_005954	4504	ENSG00000087250	MT3	UIP	NSIP	0.903123935	1
NM_032449.2:4182	NM_032449	200014	ENSG00000154222	CC2D1B	UIP	NSIP	0.903130935	1
NM_002404.1:370	NM_002404	4239	ENSG00000166482	MFAP4	UIP	NSIP	0.903950704	1
NM_001848.2:3665	NM_001848	1291	ENSG00000142156	COL6A1	UIP	NSIP	0.904479333	1
NM_002837.3:2625	NM_002837	5787	ENSG00000127329	PTPRB	NSIP	AFE	0.905316122	1
NM_000474.3:393	NM_000474	7291	ENSG00000122691	TWIST1	UIP	NSIP	0.905425858	1
NM_004244.4:1630	NM_004244	9332	ENSG00000177575	CD163	NSIP	Kontrolle	0.905792709	1
NM_004982.2:880	NM_004982	3764	ENSG00000121361	KCNJ8	NSIP	Kontrolle	0.906162736	1
NM_000546.2:1330	NM_000546	7157	ENSG00000141510	TP53	NSIP	AFE	0.906445088	1
NM_020997.2:1405	NM_020997	10637	ENSG00000243709	LEFTY1	UIP	NSIP	0.906947233	1
NM_004994.2:1530	NM_004994	4318	ENSG00000100985	MMP9	NSIP	Kontrolle	0.906965422	1
NM_001270407.1:840	NM_001270407	58494	ENSG00000154721	JAM2	NSIP	Kontrolle	0.906989157	1
NM_001040056.1:580	NM_001040056	5595	ENSG00000102882	MAPK3	UIP	NSIP	0.907465583	1
NM_000442.3:1365	NM_000442	5175	ENSG00000261371	PECAM1	UIP	NSIP	0.90830466	1
NM_005041.3:2120	NM_005041	5551	ENSG00000180644	PRF1	NSIP	Kontrolle	0.909618993	1
NM_006516.2:2500	NM_006516	6513	ENSG00000117394	SLC2A1	UIP	NSIP	0.909869612	1
NM_000619.2:970	NM_000619	3458	ENSG00000111537	IFNG	UIP	NSIP	0.910401162	1
NM_002345.3:1285	NM_002345	4060	ENSG00000139329	LUM	UIP	NSIP	0.911081589	1
NM_001837.2:980	NM_001837	1232	ENSG00000183625	CCR3	UIP	Kontrolle	0.911411751	1

NM_000090.3:180	NM_000090	1281	ENSG00000168542	COL3A1	UIP	NSIP	0.911463906	1
NM_000889.1:1278	NM_000889	3695	ENSG00000139626	ITGB7	UIP	AFE	0.911471237	1
NM_014059.2:765	NM_014059	28984	ENSG00000102760	RGCC	NSIP	AFE	0.911513979	1
NM_006852.2:2335	NM_006852	11011	ENSG00000146872	TLK2	NSIP	Kontrolle	0.911795486	1
NM_001615.3:921	NM_001615	72	ENSG00000163017	ACTG2	NSIP	Kontrolle	0.91212285	1
NM_006350.2:575	NM_006350	10468	ENSG00000134363	FST	NSIP	AFE	0.912140385	1
NM_002115.1:495	NM_002115	3101	ENSG00000160883	HK3	UIP	NSIP	0.912402701	1
NM_017423.2:910	NM_017423	51809	ENSG00000109586	GALNT7	UIP	Kontrolle	0.91297904	1
NM_000450.2:1505	NM_000450	6401	ENSG00000007908	SELE	Kontrolle	AFE	0.913908346	1
NM_002404.1:370	NM_002404	4239	ENSG00000166482	MFAP4	UIP	AFE	0.914369509	1
NM_014256.3:1625	NM_014256	10331	ENSG00000179913	B3GNT3	NSIP	Kontrolle	0.914479073	1
NM_001504.1:80	NM_001504	2833	ENSG00000186810	CXCR3	UIP	NSIP	0.914980322	1
NM_000389.2:1975	NM_000389	1026	ENSG00000124762	CDKN1A	NSIP	Kontrolle	0.915231142	1
NM_001012331.1:1365	NM_001012331	4914	ENSG00000198400	NTRK1	UIP	NSIP	0.915571891	1
NM_005266.5:1992	NM_005266	2702	ENSG00000265107	GJA5	Kontrolle	AFE	0.915981746	1
NM_001271814.1:90	NM_001271814	26279	ENSG00000112715	PLA2G2D	NSIP	Kontrolle	0.916473624	1
NM_001024847.1:1760	NM_001024847	7048	ENSG00000163513	TGFBR2	UIP	NSIP	0.916901005	1
NM_001306.3:606	NM_001306	1365	ENSG00000165215	CLDN3	UIP	NSIP	0.916913792	1
NM_001202.3:395	NM_001202	652	ENSG00000125378	BMP4	NSIP	AFE	0.916935165	1
NM_014569.3:3688	NM_014569	23660	ENSG00000196652	ZKSCAN5	UIP	NSIP	0.917154307	1
NM_004995.2:1470	NM_004995	4323	ENSG00000157227	MMP14	UIP	NSIP	0.917463331	1
NM_212482.1:1776	NM_212482	2335	ENSG00000115414	FN1	UIP	NSIP	0.917470671	1
NM_017637.5:1800	NM_017637	54796	ENSG00000173068	BNC2	UIP	NSIP	0.918123184	1
NM_031476.3:2575	NM_031476	83716	ENSG00000103196	CRISPLD2	NSIP	Kontrolle	0.918217069	1
NM_005558.3:1860	NM_005558	3898	ENSG00000159166	LAD1	NSIP	AFE	0.918414261	1
NM_032642.2:1745	NM_032642	81029	ENSG00000111866	WNT5B	NSIP	AFE	0.919243419	1
NM_000064.2:4396	NM_000064	718	ENSG00000125730	C3	UIP	NSIP	0.919519532	1
NM_001105251.2:2292	NM_001105251	9765	ENSG00000039319	ZFYVE16	NSIP	Kontrolle	0.919782713	1
NM_198477.1:440	NM_198477	284340	ENSG00000189377	CXCL17	UIP	Kontrolle	0.919869093	1
NM_153831.2:965	NM_153831	5747	ENSG00000169398	PTK2	UIP	NSIP	0.919870249	1
NM_000551.2:1280	NM_000551	7428	ENSG00000134086	VHL	UIP	AFE	0.920034707	1
NM_005854.2:282	NM_005854	10266	ENSG00000131477	RAMP2	NSIP	Kontrolle	0.920555293	1
NM_001079874.1:352	NM_001079874	10451	ENSG00000134215	VAV3	UIP	Kontrolle	0.92063718	1
NM_001305.3:1242	NM_001305	1364	ENSG00000189143	CLDN4	NSIP	AFE	0.920717296	1
NM_006896.3:1605	NM_006896	3204	ENSG00000122592	HOXA7	UIP	Kontrolle	0.921025896	1
NM_001256741.1:1962	NM_001256741	25904	ENSG00000182973	CNOT10	UIP	NSIP	0.921118902	1
NM_016639.1:575	NM_016639	51330	ENSG00000006327	TNFRSF12A	NSIP	AFE	0.921463728	1
NM_005559.2:5230	NM_005559	284217	ENSG00000101680	LAMA1	UIP	Kontrolle	0.921649038	1
NM_022097.3:1078	NM_022097	63928	ENSG00000166869	CHP2	NSIP	Kontrolle	0.922266437	1
NM_003212.2:1567	NM_003212	6997	ENSG00000241186	TDGF1	UIP	NSIP	0.922555908	1
NM_002214.2:2609	NM_002214	3696	ENSG00000105855	ITGB8	NSIP	AFE	0.922595849	1
NR_003573.1:1013	NR_003573	304		ANXA2P2	UIP	NSIP	0.922696546	1
NM_005230.2:905	NM_005230	2004	ENSG00000111145	ELK3	NSIP	AFE	0.923858911	1
NM_015293.1:7755	NM_015293	23345	ENSG00000131018	SYNE1	UIP	NSIP	0.924517179	1
NM_014795.3:549	NM_014795	9839	ENSG00000169554	ZEB2	NSIP	Kontrolle	0.924618846	1
NR_036430.1:65	NR_036430			SRGN	NSIP	NSIP	0.925940955	1
NM_017637.5:1800	NM_017637	54796	ENSG00000173068	BNC2	UIP	AFE	0.927056205	1
NM_012395.2:3645	NM_012395	5218	ENSG00000058091	CDK14	NSIP	Kontrolle	0.927117118	1
NM_005727.2:115	NM_005727	10103	ENSG00000117472	TSPAN1	NSIP	AFE	0.92767286	1
NM_002593.3:1258	NM_002593	5118	ENSG00000106333	PCOLCE	UIP	NSIP	0.929140601	1
NM_001199140.1:3564	NM_001199140	83607	ENSG00000144233	AMMECR1L	UIP	NSIP	0.929329435	1
NM_004850.3:3140	NM_004850	9475	ENSG00000134318	ROCK2	Kontrolle	AFE	0.929743226	1
NM_001523.2:859	NM_001523	3036	ENSG00000105509	HAS1	NSIP	Kontrolle	0.929830611	1
NM_000477.5:855	NM_000477	213	ENSG00000163631	ALB	NSIP	AFE	0.929870686	1
NM_032569.3:1470	NM_032569	84656	ENSG00000140632	GLYR1	Kontrolle	AFE	0.930083402	1
NM_024915.3:3690	NM_024915	79977	ENSG00000083307	GRHL2	UIP	Kontrolle	0.930265961	1
NM_000072.3:707	NM_000072	948	ENSG00000135218	CD36	UIP	AFE	0.930756596	1
NM_002305.3:60	NM_002305	3956	ENSG00000100097	LGALS1	UIP	NSIP	0.932058595	1
NM_014363.4:1475	NM_014363	26278	ENSG00000151835	SACS	NSIP	AFE	0.932100499	1
NM_001546.2:588	NM_001546	3400	ENSG00000172201	ID4	NSIP	Kontrolle	0.932118881	1
NM_178190.2:334	NM_178190	93974	ENSG00000130770	ATPIF1	UIP	NSIP	0.932452278	1
NM_184041.2:1455	NM_184041	226	ENSG00000149925	ALDOA	NSIP	Kontrolle	0.932461634	1
NM_012279.2:2260	NM_012279	23567	ENSG00000113761	ZNF346	NSIP	Kontrolle	0.932732113	1
NM_001307.3:175	NM_001307	1366	ENSG00000181885	CLDN7	UIP	Kontrolle	0.933008244	1
NM_000619.2:970	NM_000619	3458	ENSG00000111537	IFNG	UIP	AFE	0.933116893	1
NM_002205.2:925	NM_002205	3678	ENSG00000161638	ITGA5	UIP	NSIP	0.933128902	1
NM_003873.5:370	NM_003873	8829	ENSG00000099250	NRP1	NSIP	AFE	0.933497216	1
NM_002203.2:475	NM_002203	3673	ENSG00000164171	ITGA2	UIP	Kontrolle	0.934478895	1
NM_005041.3:2120	NM_005041	5551	ENSG00000180644	PRF1	UIP	NSIP	0.934517346	1
NM_024045.1:1185	NM_024045	79009	ENSG00000107625	DDX50	NSIP	Kontrolle	0.934580979	1
NM_002192.2:490	NM_002192	3624	ENSG00000122641	INHBA	UIP	Kontrolle	0.934719134	1
NM_033666.2:2000	NM_033666	3688	ENSG00000150093	ITGB1	NSIP	Kontrolle	0.934845822	1



NM_057179.2:482	NM_057179	117581	ENSG00000233608	TWIST2	NSIP	AFE	0.935154641	1
NM_031219.2:616	NM_031219	81932	ENSG00000119431	HDHD3	UIP	NSIP	0.936134332	1
NM_005009.2:820	NM_005009	4833	ENSG00000103202	NME4	UIP	Kontrolle	0.936861438	1
NM_000072.3:707	NM_000072	948	ENSG00000135218	CD36	UIP	NSIP	0.93817744	1
NM_024422.3:2200	NM_024422	1824	ENSG00000134755	DSC2	NSIP	AFE	0.938360203	1
NM_001299.4:496	NM_001299	1264	ENSG00000130176	CNN1	UIP	NSIP	0.93859433	1
NM_001220488.1:210	NM_001220488	1012	ENSG00000140945	CDH13	NSIP	AFE	0.938771681	1
NM_203339.2:1376	NM_203339			CLU	NSIP	AFE	0.939174368	1
NM_005900.2:1850	NM_005900	4086	ENSG00000170365	SMAD1	UIP	AFE	0.940223231	1
NM_139266.1:455	NM_139266	6772	ENSG00000115415	STAT1	UIP	Kontrolle	0.940534071	1
NM_001702.1:3640	NM_001702	575	ENSG00000181790	BAI1	UIP	NSIP	0.941184029	1
NM_000077.3:975	NM_000077	1029	ENSG00000147889	CDKN2A	Kontrolle	AFE	0.941338532	1
NM_002052.3:2140	NM_002052	2626	ENSG00000136574	GATA4	UIP	Kontrolle	0.941898243	1
NM_006914.3:1840	NM_006914	6096	ENSG00000198963	RORB	Kontrolle	AFE	0.94221905	1
NM_014428.1:1925	NM_014428	27134	ENSG00000105289	TJP3	NSIP	Kontrolle	0.942517014	1
NM_002115.1:495	NM_002115	3101	ENSG00000160883	HK3	NSIP	Kontrolle	0.942705428	1
NM_005855.2:200	NM_005855	10267	ENSG00000132329	RAMP1	UIP	AFE	0.942888502	1
NM_003028.2:3200	NM_003028	6461	ENSG00000107338	SHB	UIP	Kontrolle	0.943198748	1
NM_000906.2:3490	NM_000906	4881	ENSG00000169418	NPR1	NSIP	Kontrolle	0.943658681	1
NM_002852.3:1152	NM_002852	5806	ENSG00000163661	PTX3	NSIP	AFE	0.943685023	1
NM_001001557.2:1908	NM_001001557	392255	ENSG00000156466	GDF6	UIP	Kontrolle	0.94374091	1
NM_006121.2:690	NM_006121	3848	ENSG00000167768	KRT1	UIP	Kontrolle	0.943969558	1
NM_005232.3:2075	NM_005232	2041	ENSG00000146904	EPHA1	UIP	NSIP	0.944365221	1
NM_024756.2:3040	NM_024756	79812	ENSG00000173269	MMRN2	UIP	Kontrolle	0.944471915	1
NM_005490.2:412	NM_005490	10045	ENSG00000125731	SH2D3A	UIP	NSIP	0.945174458	1
NM_184041.2:1455	NM_184041	226	ENSG00000149925	ALDOA	UIP	NSIP	0.94556197	1
NM_001305.3:1242	NM_001305	1364	ENSG00000189143	CLDN4	UIP	NSIP	0.945891932	1
NM_004985.3:327	NM_004985	3845	ENSG00000133703	KRAS	Kontrolle	AFE	0.94612787	1
NM_003131.2:4040	NM_003131	6722	ENSG00000112658	SRF	NSIP	Kontrolle	0.946877318	1
NM_001647.3:613	NM_001647	347	ENSG00000189058	APOD	UIP	AFE	0.948151328	1
NM_002739.3:445	NM_002739	5582	ENSG00000126583	PRKCG	NSIP	AFE	0.948368486	1
NM_001166133.1:526	NM_001166133	80144	ENSG00000138759	FRAS1	UIP	AFE	0.948541451	1
NM_001546.2:588	NM_001546	3400	ENSG00000172201	ID4	NSIP	AFE	0.948659779	1
NM_014586.1:1280	NM_014586	30811	ENSG00000142149	HUNK	UIP	AFE	0.948919794	1
NM_022045.4:1792	NM_022045	27085	ENSG00000172167	MTBP	UIP	Kontrolle	0.949050869	1
NM_016274.4:475	NM_016274	51177	ENSG00000023902	PLEKHO1	UIP	NSIP	0.94935679	1
NM_031902.3:390	NM_031902	64969	ENSG00000144029	MRP55	UIP	AFE	0.949463407	1
NM_001204857.1:330	NM_001204857	6921	ENSG00000154582	TCEB1	NSIP	AFE	0.950015032	1
NM_024545.3:3090	NM_024545	79595	ENSG00000136715	SAP130	NSIP	Kontrolle	0.950586929	1
NM_000095.2:2164	NM_000095	1311	ENSG00000105664	COMP	NSIP	AFE	0.950994507	1
NM_002670.2:3261	NM_002670	5357	ENSG00000120756	PLS1	UIP	AFE	0.951076895	1
NM_000900.2:305	NM_000900	4256	ENSG00000111341	MGP	UIP	NSIP	0.951187065	1
XM_005269604.1:379	XM_005269604			ZCCHC24	UIP	NSIP	0.951337547	1
NM_148979.2:800	NM_148979	1512	ENSG00000103811	CTSH	Kontrolle	AFE	0.95156531	1
NM_000576.2:840	NM_000576	3553	ENSG00000125538	IL1B	UIP	AFE	0.951738246	1
NM_001773.2:2050	NM_001773	947	ENSG00000174059	CD34	NSIP	AFE	0.95213102	1
NM_001077693.3:168	NM_001077693	641700	ENSG00000249751	ECSCR	UIP	AFE	0.952434841	1
NM_001159597.1:216	NM_001159597	26751	ENSG00000035115	SH3YL1	UIP	NSIP	0.952808896	1
NM_017680.3:175	NM_017680	54829	ENSG00000106819	ASPN	UIP	NSIP	0.953370105	1
NM_000304.2:1644	NM_000304	5376	ENSG00000109099	PMP22	NSIP	Kontrolle	0.953585197	1
NM_003238.2:1125	NM_003238	7042	ENSG00000092969	TGFB2	NSIP	AFE	0.954503535	1
NM_001100431.1:160	NM_001100431	11326	ENSG00000155659	VSIG4	UIP	NSIP	0.954567133	1
NM_015429.3:4081	NM_015429	25890	ENSG00000154175	ABI3BP	UIP	NSIP	0.954643892	1
NM_005795.3:1585	NM_005795	10203	ENSG00000064989	CALCRL	UIP	AFE	0.954755094	1
NM_002467.3:1610	NM_002467	4609	ENSG00000136997	MYC	NSIP	Kontrolle	0.955416092	1
NM_004538.4:1070	NM_004538	4675	ENSG00000186310	NAP1L3	NSIP	AFE	0.956067748	1
NM_005406.1:2660	NM_005406	6093	ENSG00000067900	ROCK1	NSIP	AFE	0.956127457	1
NM_005560.3:787	NM_005560	3911	ENSG00000130702	LAMA5	UIP	NSIP	0.956460875	1
NM_006361.5:1220	NM_006361	10481	ENSG00000159184	HOXB13	UIP	Kontrolle	0.956479493	1
NM_001270837.1:1042	NM_001270837	1397	ENSG00000182809	CRIP2	UIP	NSIP	0.957088543	1
NM_001119.4:622	NM_001119	118	ENSG00000087274	ADD1	Kontrolle	AFE	0.957728806	1
NM_004867.4:988	NM_004867	9452	ENSG00000078596	ITM2A	NSIP	Kontrolle	0.959157666	1
NM_017957.2:2532	NM_017957	55040	ENSG00000049283	EPN3	NSIP	Kontrolle	0.960220569	1
NM_014256.3:1625	NM_014256	10331	ENSG00000179913	B3GNT3	NSIP	AFE	0.960619706	1
NM_005682.4:1145	NM_005682	9289	ENSG00000205336	GPR56	NSIP	Kontrolle	0.960836998	1
NM_212535.1:1750	NM_212535	5579	ENSG00000166501	PRKCB	Kontrolle	AFE	0.960982317	1
NM_002115.1:495	NM_002115	3101	ENSG00000160883	HK3	UIP	Kontrolle	0.96101387	1
NM_001114309.1:460	NM_001114309	1999	ENSG00000163435	ELF3	UIP	AFE	0.961273943	1
NM_015429.3:4081	NM_015429	25890	ENSG00000154175	ABI3BP	NSIP	Kontrolle	0.961648612	1
NM_017637.5:1800	NM_017637	54796	ENSG00000173068	BNC2	NSIP	AFE	0.96167091	1
NM_172174.1:1685	NM_172174	3600	ENSG00000164136	IL15	NSIP	AFE	0.96191741	1
NM_006218.2:2445	NM_006218	5290	ENSG00000121879	PIK3CA	NSIP	AFE	0.962098917	1

NM_001256741.1:1962	NM_001256741	25904	ENSG00000182973	CNOT10	Kontrolle	AFE	0.962233219	1
NM_018238.3:816	NM_018238	55750	ENSG00000006530	AGK	NSIP	AFE	0.962360538	1
NM_001915.3:1065	NM_001915	1534	ENSG00000008283	CYB561	Kontrolle	AFE	0.96277949	1
NM_001015002.1:1065	NM_001015002	3993	ENSG000000073350	LLGL2	NSIP	Kontrolle	0.962808519	1
NM_016639.1:575	NM_016639	51330	ENSG00000006327	TNFRSF12A	UIP	Kontrolle	0.964002622	1
NM_000029.3:1711	NM_000029	183	ENSG00000135744	AGT	UIP	NSIP	0.964133068	1
NM_002318.2:40	NM_002318	4017	ENSG00000134013	LOXL2	UIP	Kontrolle	0.96491379	1
NM_003392.3:475	NM_003392	7474	ENSG00000114251	WNT5A	UIP	AFE	0.965215066	1
NM_005611.3:1310	NM_005611	5934	ENSG00000103479	RBL2	UIP	NSIP	0.965347612	1
NM_001190848.1:795	NM_001190848	4850	ENSG00000080802	CNOT4	NSIP	Kontrolle	0.966048857	1
NM_000618.3:491	NM_000618	3479	ENSG00000017427	IGF1	UIP	NSIP	0.966299613	1
NM_002305.3:60	NM_002305	3956	ENSG00000100097	LGALS1	NSIP	Kontrolle	0.966515593	1
NM_001449.4:1032	NM_001449	2273	ENSG00000022267	FHL1	UIP	NSIP	0.966531755	1
NM_005556.3:1425	NM_005556	3855	ENSG00000135480	KRT7	UIP	NSIP	0.966557811	1
NM_001100431.1:160	NM_001100431	11326	ENSG00000155659	VSIG4	Kontrolle	AFE	0.96665642	1
NM_002607.5:1276	NM_002607	5154	ENSG00000197461	PDGFA	NSIP	AFE	0.966947301	1
NM_022454.3:1374	NM_022454	64321	ENSG00000164736	SOX17	UIP	NSIP	0.967254893	1
NM_000641.2:1145	NM_000641	3589	ENSG00000095752	IL11	Kontrolle	AFE	0.967259001	1
NM_001032367.1:1315	NM_001032367	6692	ENSG00000166145	SPINT1	UIP	Kontrolle	0.967605285	1
NM_012243.1:605	NM_012243	23443	ENSG00000117620	SLC35A3	UIP	NSIP	0.968021917	1
NM_004799.2:2135	NM_004799	9372	ENSG00000157077	ZFYVE9	UIP	NSIP	0.968162055	1
NM_005975.2:1715	NM_005975	5753	ENSG00000101213	PTK6	NSIP	Kontrolle	0.969170275	1
NM_153609.2:2929	NM_153609	164656	ENSG00000187045	TMPPRSS6	UIP	Kontrolle	0.96922046	1
NM_003010.2:2830	NM_003010	6416	ENSG00000065559	MAP2K4	UIP	NSIP	0.969669843	1
NM_004850.3:3140	NM_004850	9475	ENSG00000134318	ROCK2	UIP	Kontrolle	0.9701545	1
NM_000072.3:707	NM_000072	948	ENSG00000135218	CD36	NSIP	AFE	0.970407023	1
NM_173481.2:1845	NM_173481	126353	ENSG00000099812	MISP	NSIP	Kontrolle	0.97207387	1
NM_002421.2:700	NM_002421	4312	ENSG00000196611	MMP1	NSIP	AFE	0.973651159	1
NM_173214.1:3290	NM_173214	10725	ENSG00000102908	NFAT5	NSIP	AFE	0.973657278	1
NM_153292.1:546	NM_153292	4843	ENSG00000007171	NOS2	Kontrolle	AFE	0.974526929	1
NM_033395.1:3775	NM_033395	85459	ENSG00000166004	CEP295	UIP	NSIP	0.975087696	1
NM_003028.2:3200	NM_003028	6461	ENSG00000107338	SHB	UIP	AFE	0.975136337	1
NM_133459.3:310	NM_133459	147372	ENSG00000183287	CCBE1	UIP	NSIP	0.975839524	1
NM_001127217.2:1152	NM_001127217	4093	ENSG00000120693	SMAD9	UIP	NSIP	0.975868114	1
NM_001338.3:1937	NM_001338	1525	ENSG00000154639	CXADR	NSIP	AFE	0.976151908	1
NR_024115.1:2175	NR_024115		GIMAP6	UIP	NSIP		0.976521495	1
NM_144503.1:3650	NM_144503	50848	ENSG00000158769	F11R	UIP	NSIP	0.976660459	1
NM_181501.1:1875	NM_181501	3672	ENSG00000213949	ITGA1	Kontrolle	AFE	0.977029516	1
NM_001024847.1:1760	NM_001024847	7048	ENSG00000163513	TGFBR2	Kontrolle	AFE	0.977176746	1
NM_001128204.1:3004	NM_001128204	23213	ENSG00000130753	SULF1	UIP	NSIP	0.977350092	1
NM_005529.5:2715	NM_005529	3339	ENSG00000142798	HSPG2	UIP	NSIP	0.97772585	1
NM_006096.2:565	NM_006096	10397	ENSG00000104419	NDRG1	NSIP	Kontrolle	0.978087703	1
NM_173157.1:1575	NM_173157	3164	ENSG00000123358	NR4A1	Kontrolle	AFE	0.978101034	1
NM_000122.1:1950	NM_000122	2071	ENSG00000163161	ERCC3	UIP	NSIP	0.978245732	1
NM_003761.3:260	NM_003761	8673	ENSG00000118640	VAMP8	UIP	AFE	0.978508099	1
NM_001150.1:2670	NM_001150	290	ENSG00000166825	ANPEP	UIP	Kontrolle	0.978510814	1
NM_003573.2:3644	NM_003573	8425	ENSG00000090006	LTBP4	UIP	NSIP	0.978545671	1
NM_020848.2:7395	NM_020848	57608	ENSG00000165757	KIAA1462	UIP	NSIP	0.978815479	1
NM_000603.4:1456	NM_000603	4846	ENSG00000164867	NOS3	Kontrolle	AFE	0.979080705	1
NM_012098.2:540	NM_012098	23452	ENSG00000136859	ANGPTL2	UIP	NSIP	0.979230006	1
NM_032642.2:1745	NM_032642	81029	ENSG00000111186	WNT5B	NSIP	Kontrolle	0.979254598	1
NM_001165928.2:965	NM_001165928	1605	ENSG00000173402	DAG1	NSIP	Kontrolle	0.97933107	1
NM_001228.4:301	NM_001228	841	ENSG00000064012	CASP8	NSIP	AFE	0.979657245	1
NM_000660.3:1260	NM_000660	7040	ENSG00000105329	TGFB1	UIP	NSIP	0.979920856	1
NM_002256.3:125	NM_002256	3814	ENSG00000170498	KISS1	UIP	Kontrolle	0.979952452	1
NM_001079874.1:352	NM_001079874	10451	ENSG00000134215	VAV3	NSIP	AFE	0.980003942	1
NM_021935.3:827	NM_021935	60675	ENSG00000163421	PROK2	NSIP	AFE	0.980217235	1
NM_004567.2:400	NM_004567	5210	ENSG00000114268	PFKFB4	Kontrolle	AFE	0.980511853	1
NM_002404.1:370	NM_002404	4239	ENSG00000166482	MFAP4	NSIP	AFE	0.980639119	1
NM_020733.1:1890	NM_020733	57493	ENSG00000173706	HEG1	Kontrolle	AFE	0.980694041	1
NM_181504.2:1105	NM_181504	5295	ENSG00000145675	PIK3R1	NSIP	AFE	0.980747551	1
NM_000042.2:582	NM_000042	350	ENSG00000091583	APOH	NSIP	AFE	0.980827424	1
NM_001253845.1:610	NM_001253845	79924	ENSG00000128165	ADM2	Kontrolle	AFE	0.981458859	1
NM_001272046.1:3148	NM_001272046	340706	ENSG00000165816	VWA2	NSIP	AFE	0.981708501	1
NM_000581.2:745	NM_000581	2876	ENSG00000233276	GPX1	NSIP	Kontrolle	0.981823962	1
NM_003028.2:3200	NM_003028	6461	ENSG00000107338	SHB	Kontrolle	AFE	0.982336183	1
NM_022740.4:10305	NM_022740	28996	ENSG00000064393	HIPK2	UIP	NSIP	0.982469537	1
NM_001565.1:40	NM_001565	3627	ENSG00000169245	CXCL10	Kontrolle	AFE	0.982674666	1
NM_001142633.1:3335	NM_001142633	23533	ENSG00000141506	PIK3R5	UIP	AFE	0.982726567	1
NM_001039802.1:390	NM_001039802	998	ENSG00000070831	CDC42	Kontrolle	AFE	0.982968644	1
NM_001988.2:5525	NM_001988	2125	ENSG00000167880	EVPL	NSIP	Kontrolle	0.983329862	1
NM_182692.1:340	NM_182692	6733	ENSG00000135250	SRPK2	UIP	NSIP	0.983835946	1

NM_001017970.2:2420	NM_001017970	161291	ENSG00000182107	TMEM30B	NSIP	AFE	0.983950129	1
NM_152852.2:146	NM_152852	64231	ENSG00000110077	MS4A6A	UIP	NSIP	0.983975818	1
NM_003068.3:740	NM_003068	6591	ENSG00000019549	SNAI2	UIP	NSIP	0.984623545	1
NM_004850.3:3140	NM_004850	9475	ENSG00000134318	ROCK2	UIP	AFE	0.984869645	1
NM_022454.3:1374	NM_022454	64321	ENSG00000164736	SOX17	NSIP	AFE	0.986136282	1
NM_001253845.1:610	NM_001253845	79924	ENSG00000128165	ADM2	UIP	NSIP	0.987053857	1
NM_001546.2:588	NM_001546	3400	ENSG00000172201	ID4	Kontrolle	AFE	0.987249972	1
NM_002165.2:345	NM_002165	3397	ENSG00000125968	ID1	UIP	AFE	0.9874648	1
NM_022454.3:1374	NM_022454	64321	ENSG00000164736	SOX17	UIP	AFE	0.987742117	1
NM_207361.4:9170	NM_207361	341640	ENSG00000150893	FREM2	NSIP	AFE	0.987800748	1
NM_000266.2:505	NM_000266	4693	ENSG00000124479	NDP	Kontrolle	AFE	0.988001612	1
NM_004985.3:327	NM_004985	3845	ENSG00000133703	KRAS	UIP	NSIP	0.988240354	1
NM_000038.3:6850	NM_000038	324	ENSG00000134982	APC	UIP	NSIP	0.988471042	1
NM_002133.2:781	NM_002133	3162	ENSG00000100292	HMOX1	Kontrolle	AFE	0.988627765	1
NM_020672.1:460	NM_020672	57402	ENSG00000189334	S100A14	NSIP	AFE	0.989421863	1
NM_000557.2:155	NM_000557	8200	ENSG00000125965	GDF5	UIP	Kontrolle	0.989878329	1
NM_002253.2:1420	NM_002253	3791	ENSG00000128052	KDR	UIP	AFE	0.990063329	1
NM_001167580.1:2154	NM_001167580	9899	ENSG00000185518	SV2B	NSIP	Kontrolle	0.990135682	1
NM_021253.3:3140	NM_021253	56658	ENSG00000204599	TRIM39	NSIP	AFE	0.990519612	1
NM_001963.4:1022	NM_001963	1950	ENSG00000138798	EGF	UIP	NSIP	0.990893617	1
NM_020126.3:2443	NM_020126	56848	ENSG00000063176	SPHK2	Kontrolle	AFE	0.991306455	1
NM_006682.2:250	NM_006682	10875	ENSG00000127951	FGL2	UIP	NSIP	0.991430639	1
NM_001953.3:719	NM_001953	1890	ENSG00000025708	TYMP	UIP	NSIP	0.992259217	1
NM_005163.2:1772	NM_005163	207	ENSG00000142208	AKT1	UIP	NSIP	0.992378106	1
NM_004345.3:220	NM_004345	820	ENSG00000164047	CAMP	UIP	NSIP	0.992644791	1
NM_014909.4:552	NM_014909	22846	ENSG00000071246	VASH1	UIP	NSIP	0.992710757	1
NM_001159597.1:216	NM_001159597	26751	ENSG00000035115	SH3YL1	Kontrolle	AFE	0.992869843	1
NM_004095.3:363	NM_004095	1978	ENSG00000187840	EIF4EBP1	Kontrolle	AFE	0.99319557	1
NM_000888.3:1090	NM_000888	3694	ENSG00000115221	ITGB6	UIP	Kontrolle	0.994565814	1
NM_005215.1:3100	NM_005215	1630	ENSG00000187323	DCC	UIP	NSIP	0.994588698	1
NM_001731.2:775	NM_001731	694	ENSG00000133639	BTG1	UIP	NSIP	0.994629979	1
NM_003371.3:2699	NM_003371	7410	ENSG00000160293	VAV2	Kontrolle	AFE	0.994877892	1
NM_003810.2:115	NM_003810	8743	ENSG00000121858	TNFSF10	NSIP	AFE	0.995065404	1
NM_002425.1:88	NM_002425	4319	ENSG00000166670	MMP10	UIP	NSIP	0.996124885	1
NM_001146289.1:860	NM_001146289	64175	ENSG00000117385	P3H1	UIP	Kontrolle	0.996639703	1
NM_198576.2:2750	NM_198576	375790	ENSG00000188157	AGRN	UIP	NSIP	0.996896681	1
NM_015850.2:1335	NM_015850	2260	ENSG00000077782	FGFR1	UIP	NSIP	0.997186224	1
NM_002020.1:955	NM_002020	2324	ENSG00000037280	FLT4	UIP	AFE	0.997388572	1
NM_001920.3:420	NM_001920	1634	ENSG00000011465	DCN	NSIP	Kontrolle	0.997810451	1
NM_178310.1:820	NM_178310	333929	ENSG00000185669	SNAI3	UIP	NSIP	0.997854711	1
NM_001142443.1:925	NM_001142443	80153	ENSG00000179151	EDC3	UIP	NSIP	0.998133555	1
NM_177438.2:5060	NM_177438	23405	ENSG00000100697	DICER1	NSIP	AFE	0.998350441	1
NM_005902.3:4220	NM_005902	4088	ENSG00000166949	SMAD3	UIP	NSIP	0.999983533	1

<b>IPA function name</b>	<b>p-value</b>	<b>Synonym used in paper</b>
Migration of epithelial cells	0.002246462	
Secondary neoplasm of digestive system	0.00225483	
Lung tumor	0.003399216	
Growth of malignant tumor	0.003888594	
Cell movement of epithelial cells	0.004171281	Epithelial cell migration
Cell movement of fibroblasts	0.004171281	Fibroblast migration
Cell movement of connective tissue cells	0.00482795	
Proliferation of fibroblast cell lines	0.00482795	
Cell movement of carcinoma cell lines	0.00552302	
Binding of DNA	0.006817216	
Interaction of DNA	0.006817216	
Tumorigenesis of tissue	0.006978563	
Hematopoiesis of mononuclear leukocytes	0.007060663	
Necrosis of muscle	0.007060663	
Neovascularization of organ	0.007844417	
Cell death of muscle cells	0.008124545	
Neovascularization	0.008124545	
Vascularization	0.008124545	
Epithelial neoplasm	0.008414677	
Synthesis of DNA	0.008414677	
Cell movement of epithelial cell lines	0.008613832	
Expansion of cells	0.00871517	
Differentiation of mononuclear leukocytes	0.009035341	Macrophage differentiation
Malignant solid tumor	0.0091017	
Migration of connective tissue cells	0.009262956	
Benign lesion	0.00968258	
Proliferation of muscle cells	0.00968258	
Binding of epithelial cells	0.010157614	
Development of benign tumor	0.01063229	
Cell movement of tumor cells	0.010722808	
Cell proliferation of fibroblasts	0.010757375	
Invasion of carcinoma cell lines	0.010947766	
Migration of carcinoma cell lines	0.010947766	
Respiratory system tumor	0.010947766	
Adhesion of connective tissue cells	0.011089886	
Vascularization of eye	0.011141527	
Neovascularization of eye	0.011206873	
Growth of embryo	0.011951475	
Migration of neutrophils	0.011951475	
Migration of tumor cells	0.011951475	
Benign Tumors	0.012021571	
Proliferation of tumor cells	0.012021571	
Sensory system development	0.013123729	
Cardiogenesis	0.013649649	
Binding of connective tissue cells	0.013691529	
Lymphopoiesis	0.014495484	
Migration of cancer cells	0.014752035	
Vascularization of absolute anatomical region	0.014752035	
Cell movement of fibroblast cell lines	0.015640451	

Epithelial-mesenchymal transition	0.015640451
Apoptosis of breast cancer cell lines	0.016389554
Cell death of breast cancer cell lines	0.016389554
Growth of blood vessel	0.016389554 Neovascularization
Growth of organism	0.016389554
Tumorigenesis of epithelial neoplasm	0.016679627
Apoptosis of muscle cells	0.017581015
Cell movement of dermal cells	0.019994847
Movement of vascular endothelial cells	0.020060455 Endothelial cell migration
Adhesion of tumor cell lines	0.021448399
Cell movement of cancer cells	0.021448399
Differentiation of muscle	0.022084804
Formation of actin filaments	0.022084804
Cell movement of muscle cells	0.022214334
Nonhematologic malignant neoplasm	0.022214334
Extracranial solid tumor	0.023278295
Cell movement of embryonic cell lines	0.024109575
Formation of filaments	0.024109575
Secondary tumor	0.024109575
Abdominal neoplasm	0.02468019
Cell proliferation of tumor cell lines	0.024970542
Migration of muscle cells	0.024970542
Aggregation of cells	0.025412487
Proliferation of connective tissue cells	0.025412487
Advanced malignant tumor	0.026013938
Advanced stage tumor	0.026013938
Neoplasia of tumor cells	0.026161014
Interaction of tumor cell lines	0.026785809
Neoplasia of epithelial cells	0.026785809
Proliferation of liver cells	0.026785809
Growth of lesion	0.02873304
Growth of tumor	0.02873304
Proliferation of neuronal cells	0.029759113
Migration of smooth muscle cells	0.030463438
Pelvic tumor	0.030576693
Formation of blood vessel	0.031118424
Genitourinary tumor	0.031367332
Cell transformation	0.031922492
Invasion of tumor cell lines	0.031922492
Metastatic solid tumor	0.031922492
Cell movement of breast cancer cell lines	0.03210972
Development of sensory organ	0.03210972
Genital tumor	0.032878277
Cell movement of smooth muscle cells	0.034243141
Cell movement of kidney cell lines	0.03444398
Outgrowth of cells	0.03444398
Binding of tumor cell lines	0.035465982
Growth of liver	0.035465982
Quantity of granulocytes	0.035465982
Lymphocyte homeostasis	0.03804423

Quantity of blood cells	0.03804423	
Apoptosis of connective tissue cells	0.039402811	
Development of genitourinary system	0.039402811	
Migration of tumor cell lines	0.039402811	
Cancer of secretory structure	0.040497077	
Formation of lymphoid tissue	0.042129334	
Cell survival	0.042267251	
Cell viability	0.042267251	
Cell movement of prostate cancer cell lines	0.044551426	
Fibrogenesis	0.044551426	
Non-hematological solid tumor	0.044551426	
Tubulation of epithelial tissue	0.044551426	
Proliferation of smooth muscle cells	0.046959041	
Morphogenesis of cardiovascular system	0.048010058	
Migration of vascular smooth muscle cells	0.048921228	
Vasculogenesis	0.048921228	
Proliferation of hematopoietic cells	0.048983554	
Skin lesion	0.050372792	
T cell migration	0.050372792	
Transmigration of cells	0.050372792	
Inflammation of organ	0.051264323	Inflammation
Growth of connective tissue	0.051564992	
Formation of vessel	0.054991052	
Homeostasis of blood cells	0.057288858	
Homeostasis of leukocytes	0.057288858	
Lung cancer	0.057288858	
Formation of eye	0.057962837	
Differentiation of connective tissue cells	0.060032722	
Formation of muscle	0.060032722	
Non-melanoma solid tumor	0.060032722	
Tubulation of cells	0.061008269	
Primary solid tumor	0.061875876	
Accumulation of phagocytes	0.06364809	
Advanced malignant solid tumor	0.06364809	
Visceral metastasis	0.06364809	
Microtubule dynamics	0.064396882	
Hereditary connective tissue disorder	0.064515725	
Carcinoma	0.064774576	
Invasion of tumor cells	0.066616212	
Cell spreading	0.066696531	
Cellular infiltration	0.066696531	
Organization of cytoplasm	0.066696531	
Proliferation of lymphatic system cells	0.069078301	
Quantity of myeloid cells	0.069078301	
Quantity of T lymphocytes	0.069078301	
T cell development	0.069078301	
T cell homeostasis	0.069078301	
Cell viability of tumor cell lines	0.070713215	
Growth of embryonic tissue	0.070713215	
Quantity of lymphatic system cells	0.070713215	

Apoptosis	0.072811378
Connective or soft tissue tumor	0.072811378
Binding of protein binding site	0.074534645
Organization of cytoskeleton	0.074534645
Cancer of head	0.075325837
Development of body trunk	0.075853808
Cell death of tumor cell lines	0.076746196
Growth of smooth muscle	0.0781045
Mammary tumor	0.0781045
Differentiation of epithelial cells	0.079279189
Migration of cells	0.079486845
Angiogenesis	0.079953042
Development of vasculature	0.079953042
Growth of skin	0.082325364
Migration of breast cancer cell lines	0.083201978
Head and neck cancer	0.084460158
Invasion of breast cancer cell lines	0.085265249
Cell movement of vascular smooth muscle cells	0.087283268
Differentiation of nervous system	0.087283268
Leukopoiesis	0.091463722
Apoptosis of epithelial cells	0.094729942
Cell cycle progression	0.094729942
Cell movement of tumor cell lines	0.094729942
Migration of vascular endothelial cells	0.094729942
Malignant neoplasm of large intestine	0.096746131
Extraadrenal retroperitoneal tumor	0.096971968
Inflammation of absolute anatomical region	0.096971968
Proliferation of epithelial cells	0.096971968
Gastrointestinal tract cancer	0.097407947
Cell death of connective tissue cells	0.098112801
Head and neck tumor	0.098112801
Lymphoreticular neoplasm	0.098112801
Proliferation of cancer cells	0.098112801
Development of urinary tract	0.100050189
Proliferation of mononuclear leukocytes	0.101822788
Migration of granulocytes	0.103414939
Mature lymphocytic neoplasm	0.104554713
Necrosis of epithelial tissue	0.107736142
Invasion of tumor	0.109003611
Progression of tumor	0.109003611
Synthesis of lipid	0.109003611
Neoplasia of tumor cell lines	0.112896191
G1 phase	0.113137719
Necrosis	0.113558336
Advanced lung cancer	0.11969517
Cell viability of blood cells	0.11969517
Pulmonary metastasis	0.11969517
Progression of malignant tumor	0.12022458
Apoptosis of tumor cell lines	0.121103332
Gastrointestinal carcinoma	0.124363715

Plasma cell dyscrasia	0.124869621
Differentiation of epithelial tissue	0.128124598
Apoptosis of tumor cells	0.129907103
Migration of mononuclear leukocytes	0.129907103
Cell proliferation of carcinoma cell lines	0.130203902
Cell movement of T lymphocytes	0.134546158
Connective tissue tumor	0.134546158
Development of carcinoma	0.136846608
Colorectal cancer	0.138217163
Differentiation of muscle cells	0.139350877
Neuronal cell death	0.139350877
Cell proliferation of colorectal cancer cell lines	0.140168182
Lymphohematopoietic neoplasia	0.140168182
Quantity of phagocytes	0.140168182
Invasion of tissue	0.142362285
Advanced extracranial solid tumor	0.14264897
Cell movement	0.144327174
Cell proliferation of breast cancer cell lines	0.144327174
Development of genital tumor	0.145002058
Squamous-cell carcinoma	0.14911303
Incidence of tumor	0.149481178
Central nervous system cancer	0.152205949
Colony formation of cells	0.153097477
Non-traumatic arthropathy	0.155069754
Breast or pancreatic cancer	0.157489142
Migration of lymphatic system cells	0.157559326
Cellular infiltration by leukocytes	0.164142957
Primary tumor	0.164433663
Squamous cell tumor	0.1650401
Cell movement of lymphoid cells	0.166074028
Migration of myeloid cells	0.166074028
Survival of organism	0.166074028
Cell death of endothelial cells	0.169013315
Cellular infiltration by myeloid cells	0.172004624
Invasion of cells	0.172004624
Lymphocyte migration	0.172004624
Angiogenesis of tumor	0.174989928
Growth of vessel	0.181299968
Neoplasia of cells	0.181299968
Nervous system neoplasm	0.181299968
Chemotaxis	0.182363308
Proliferation of lymphocytes	0.182363308
Migration of endothelial cells	0.184508734
Quantity of lymphocytes	0.184508734
Pelvic cancer	0.190956269
Branching of epithelial tissue	0.191097643
Lymphatic system tumor	0.191097643
Adhesion of blood cells	0.195620456
Binding of blood cells	0.195620456
Homing of cells	0.197921846



Development of digestive system	0.200266138
Cell movement of lymphocytes	0.202606171
Interphase	0.202606171
Lymphohematopoietic cancer	0.202606171
Quantity of lymphoid cells	0.202606171
Differentiation of bone cells	0.208617789
Proliferation of blood cells	0.208617789
Angiogenesis of lesion	0.214153111
Adhesion of immune cells	0.219891754
Development of head	0.219891754
Inflammation of body cavity	0.219891754
Accumulation of myeloid cells	0.221808677
Binding of leukocytes	0.223783542
Frequency of tumor	0.22907995
Digestive organ tumor	0.235877083
Phosphorylation of protein	0.235877083
Apoptosis of endothelial cells	0.239698198
Vascular lesion	0.239698198
Adenocarcinoma	0.240051791
Male genital neoplasm	0.249724569
Edema	0.250082376
Prostatic tumor	0.261697836
Cell death of epithelial cells	0.262060133
Development of malignant tumor	0.262060133
Cell movement of endothelial cells	0.263597138
Cell movement of macrophages	0.263597138
Malignant neoplasm of male genital organ	0.264535002
Central nervous system solid tumor	0.268262453
Central nervous system tumor	0.268262453
Cell movement of endothelial cell lines	0.271418446
Head and neck carcinoma	0.276301615
Cell death of tumor	0.277842255
Cell death of tumor cells	0.277842255
Necrosis of tumor	0.277842255
Sprouting	0.277842255
Cell movement of lymphatic system cells	0.28111095
Differentiation of tumor cell lines	0.28111095
Binding of endothelial cells	0.296302535
Cell death of cancer cells	0.296302535
Differentiation of bone	0.296302535
Malignant connective or soft tissue neoplasm	0.296302535
Diabetes mellitus	0.29685989
Cellular infiltration by phagocytes	0.308683562
Development of body axis	0.312315092
Primary neoplasm	0.315202763
Rheumatic Disease	0.317466518
Cell movement of mononuclear leukocytes	0.31784265
Cellular infiltration by mononuclear leukocytes	0.31784265
Interaction of endothelial cells	0.31784265
Synthesis of nitric oxide	0.31784265

Inflammation of joint	0.323468038
Cellular homeostasis	0.331123733
Fibrosis	0.331123733
Hematopoietic neoplasm	0.331123733
Cell-cell contact	0.342948346
Formation of cellular protrusions	0.342948346
Transmigration of leukocytes	0.342948346
Differentiation of osteoblasts	0.344076764
Activation of myeloid cells	0.346982986
Assembly of cells	0.346982986
Papillary carcinoma	0.355200467
Genital tract cancer	0.355898901
Inflammatory response	0.359373941
Attachment of cells	0.36383129
Growth of epithelial tissue	0.365734378
Development of connective tissue cells	0.372207385
Production of reactive oxygen species	0.372207385
Activation of leukocytes	0.401607232
Cell movement of antigen presenting cells	0.401607232
Bleeding	0.413523499
Quantity of mononuclear leukocytes	0.413523499
Recruitment of cells	0.413523499
Proliferation of immune cells	0.413751524
Invasive cancer	0.414554975
Non-small cell lung carcinoma	0.420430417
Gonadal tumor	0.421049366
Breast or colorectal cancer	0.423310586
Cell death of blood cells	0.423310586
Proliferation of endothelial cells	0.423310586
Permeability of vascular system	0.430802615
Adhesion of extracellular matrix	0.431712018
Female genital neoplasm	0.442546449
Ovarian tumor	0.442546449
Tumorigenesis of reproductive tract	0.442546449
Chemotaxis of myeloid cells	0.443585151
Development of neuroepithelial tumor	0.451725876
Cell-cell adhesion	0.452307964
Activation of cells	0.459425824
Lymphoid cancer	0.459425824
Morbidity or mortality	0.459425824
Synthesis of reactive oxygen species	0.459425824
B-cell neoplasm	0.469566089
Activation of blood cells	0.470299306
Cancer of tumor cell lines	0.470299306
Metastasis of tumor cell lines	0.470299306
Endothelial cell development	0.484253766
Hematologic cancer	0.484253766
Metabolism of reactive oxygen species	0.484253766
Organismal death	0.484253766
Adhesion of vascular endothelial cells	0.504488353

Development of endothelial tissue	0.504488353
Occlusion of blood vessel	0.515321204
Accumulation of blood cells	0.519457251
Glioma	0.519457251
Migration of phagocytes	0.522503913
Lymphoma	0.524451202
Breast or ovarian carcinoma	0.528302945
Quantity of leukocytes	0.528650947
Recruitment of blood cells	0.528650947
Activation of phagocytes	0.547529367
Cell movement of neutrophils	0.567081945
Development of cardiovascular tissue	0.567081945
Binding of vascular endothelial cells	0.580503384
Cell death of immune cells	0.580503384
Branching of cells	0.587332757
Cell proliferation of vascular endothelial cells	0.587332757
Hematologic cancer of cells	0.587332757
Recruitment of phagocytes	0.587332757
Intestinal tumor	0.600038764
Development of epithelial tissue	0.611874508
Accumulation of leukocytes	0.614255053
Metastasis of cells	0.614255053
Cell surface receptor linked signal transduction	0.616304341
Abnormality of heart ventricle	0.619672572
Binding of extracellular matrix	0.621482412
Glioblastoma	0.62491499
Glioma cancer	0.62491499
Malignant astrocytoma	0.62491499
Hypertrophy	0.628974965
Cell movement of granulocytes	0.641180388
Formation of skin	0.644940966
Recruitment of leukocytes	0.644940966
Ovarian cancer	0.675514039
Rheumatoid arthritis	0.684558693
Hepatocellular carcinoma	0.687525989
T-cell malignant neoplasm	0.687525989
Transcription of RNA	0.687791867
Lymphocytic neoplasm	0.691825825
Large intestine neoplasm	0.699189838
Cancer of cells	0.699964859
Female genital tract cancer	0.712792724
Leukocyte migration	0.716531311
Recruitment of myeloid cells	0.727909027
Expression of RNA	0.73779183
Neoplasia of leukocytes	0.73779183
Glucose metabolism disorder	0.747339116
Abdominal cancer	0.750849755
Apoptosis of lymphatic system cells	0.750849755
Cell movement of blood cells	0.750849755
Lymphoproliferative disorder	0.750849755

Recruitment of granulocytes	0.750849755
Lung carcinoma	0.777461026
Adhesion of endothelial cells	0.777663017
Digestive system cancer	0.777663017
Function of blood cells	0.777663017
Gastrointestinal tumor	0.777663017
Colorectal tumor	0.778398198
Respiratory system development	0.780281776
Chronic inflammatory disorder	0.780482204
Formation of lung	0.793196712
B cell cancer	0.795692971
Binding of myeloid cells	0.796068393
Colony formation of tumor cell lines	0.796068393
Invasion of malignant tumor	0.803435209
Abdominal carcinoma	0.805433797
Breast cancer	0.805433797
Lymphocytic cancer	0.805433797
Transcription	0.805433797
Accumulation of cells	0.815930329
Chemotaxis of phagocytes	0.834196286
Breast or ovarian cancer	0.84896044
Maturation of cells	0.84896044
Systemic autoimmune syndrome	0.853660843
Chemotaxis of blood cells	0.853939666
Chemotaxis of leukocytes	0.853939666
Hepatobiliary system cancer	0.853939666
Non-Hodgkin lymphoma	0.86007098
Upper gastrointestinal tract tumor	0.863462478
Apoptosis of blood cells	0.884434326
Cell death of lymphatic system cells	0.884434326
Cell movement of myeloid cells	0.884434326
Colony formation	0.884434326
Malignant genitourinary solid tumor	0.884434326
Adhesion of myeloid cells	0.894839317
Cell movement of leukocytes	0.910676771
Cell movement of phagocytes	0.910676771
Astrocytoma	0.929891274
Binding of professional phagocytic cells	0.932230256
Homing of blood cells	0.932230256
Quantity of cells	0.932230256
Quantity of connective tissue	0.932230256
Homing of leukocytes	0.94872948
Apoptosis of leukocytes	0.959890875
Migration of antigen presenting cells	0.959890875
Wound	0.976737291
Upper gastrointestinal tract cancer	0.989185365
T-cell non-Hodgkin lymphoma	0.98979732
Cell movement of monocytes	0.994169113

Gene	S01	S02	S05	S06	S07	S08	S13	S14	S17	S18	S19	S20	S25	S26	S29	S30	S31	S32
AAMP	0.228793	0.265275	0.469602	0.531585	0.133354	-1.392672	0.325953	-0.024385	0.436328	0.241167	0.696809	0.644191	0.505587	0.523545	0.796003	0.146909	0.289774	0.954243
ABI3BP	0.411037	0.2944	-1.740319	0.113539	-0.351674	-0.675856	-0.352489	-0.26961	0.727682	0.660078	0.732611	0.156138	0.94534	0.653677	-0.088855	0.456434	0.425423	-0.06813
ACHE	0.41698	1.018185	4.705324	-0.333347	0.179599	1.207737	-0.089327	0.23608	0.308222	0.64087	0.362811	-0.945533	-0.514541	-0.171396	-0.510453	0.242429	1.290367	
ACTG2	0.732222	-0.398162	-1.725935	0.320882	-0.291337	-0.382492	0.562206	0.931508	0.389012	0.817726	1.113037	0.550929	-0.390048	0.83369	0.686983	-0.147334	1.743949	0.402495
ACVR1	0.688757	0.283642	-2.510693	-0.06437	0.096476	-1.404838	0.866181	0.736101	0.525203	-0.008755	-0.391986	0.937253	0.908541	-0.370263	0.571463	0.173937	-0.641941	
ACVR1C	-1.735118	-1.4057	2.148173	-1.672906	-0.510003	2.490589	-0.951887	-1.154507	-1.967042	-0.832392	-1.334783	-0.20723	-0.467919	-1.367148	-0.640566	-0.652567	-0.437521	-0.417738
ADIRL1	-1.76447	-1.686284	0.109562	-0.483146	-0.743288	-1.926119	-0.206355	-1.198465	0.201077	-0.77363	-1.292474	-2.633607	-0.165556	-0.553082	-1.820707	0.302517	-0.520291	1.296373
ADAM15	-0.014867	-0.69936	1.692346	0.302856	0.668892	-0.744999	-0.11066	0.400008	0.76063	0.2522	1.33501	0.873141	0.986664	0.441787	1.197431	-0.467006	0.37577	1.974086
ADAM17	0.164491	-0.270902	0.618325	0.77125	0.063044	-0.510186	-0.406694	-0.454435	-0.398511	0.314234	0.17402	0.838734	0.361085	0.267262	-0.139852	-0.695248	1.227232	
ADAM28	1.107492	1.506744	0.803784	0.184338	1.364883	-1.064367	1.338391	1.376424	1.038331	1.116124	0.650661	1.645454	1.654244	0.184906	0.89585	0.823425	1.809133	1.089855
ADAM8	0.307345	1.603497	0.45367	-0.945177	0.407937	-1.295836	0.938573	0.730477	-0.250612	0.240032	0.688127	0.937444	0.422541	-0.080013	0.459527	-0.762108	1.199181	1.091977
ADAM9	0.680629	0.3824	-1.264746	0.457671	-0.108976	-1.576799	0.612474	0.065019	0.933197	0.53869	0.519655	-0.338611	0.774878	0.601804	-0.198706	0.830678	0.016606	-0.243604
ADAMTS1	-0.872451	0.513268	-2.114885	0.707693	-1.501759	-2.061532	-0.368254	-1.55896	1.34439	-1.53238	0.636579	0.699506	0.207919	1.103222	0.238393	-0.215398	-1.608687	0.080262
ADAMTS2	0.51222	0.543009	1.073582	-0.211444	0.068744	1.223717	0.680115	0.662094	0.944246	0.397238	-0.056081	-0.754357	0.946069	-0.064669	-1.102641	0.726159	-0.428173	-1.10691
ADAMTS8	-0.348479	-0.763102	-0.688166	0.221213	-1.351395	-1.892366	-0.382626	-1.973071	-0.896491	-0.235228	0.083692	-0.765856	-2.548676	0.975462	-0.329096	-1.226479	-0.068644	-0.733143
ADAP1	-0.534062	-0.093037	0.380196	-0.629755	0.366007	-0.294249	-0.426942	-0.318509	0.044042	-0.54052	0.000271	-0.33236	0.105488	-0.401031	-0.249797	-0.744294	-0.381206	0.451267
ADD1	0.068246	-0.331405	-4.137841	-0.417694	-0.648355	-0.201789	-0.31111	0.08316	-0.170585	-0.041046	-0.802911	-1.092462	0.374533	0.204945	-1.201019	0.579745	-0.072175	-1.47703
ADM2	-0.308078	0.046086	0.618325	-1.222299	0.546987	0.2029475	0.733465	0.09196	-0.978373	0.812531	-1.023221	0.634275	-0.180809	-0.487003	-0.101047	-1.576025	1.532821	0.429708
ADRA2B	-0.473586	-1.324741	0.699004	-0.470269	0.279908	1.64109	0.248244	0.039911	-0.57998	-0.026326	0.1332	0.188498	2.395649	0.434952	0.453766	-0.391035	0.978338	0.71464
AEBP1	1.975466	0.964367	1.1697	1.205543	0.153963	-0.632034	3.205937	1.977142	1.467974	2.352064	0.741974	0.852631	2.314493	2.619382	-0.005123	0.963554	0.805162	0.362398
AGGF1	0.103509	-0.327174	1.521914	0.220209	0.334892	-0.262821	0.328745	0.251656	-0.104097	0.303666	0.5593	0.3627	-0.077104	0.222726	0.418418	-0.097076	0.311446	0.921984
AGK	-0.284156	-0.196756	1.109428	-0.894116	0.064527	1.209423	-0.36636	-0.321794	-0.875355	-0.709329	-0.888037	-0.568091	-0.577762	-0.910186	0.057458	-0.192113	-0.718615	
AGR2	0.072628	1.095158	-0.481487	-0.341149	1.394715	-0.555428	-0.12171	-1.520116	-1.039945	-1.920489	-0.015027	0.30032	-0.20501	0.225845	1.005809	-0.052221	0.016322	0.057039
AGRN	0.442612	0.159243	3.00154	0.93892	1.079896	0.200481	0.912581	0.571918	0.92165	0.207239	1.394942	0.597656	0.627472	1.122501	0.97101	0.682245	2.360787	
AGT	2.517145	0.405463	1.680476	1.292356	1.070054	-0.673101	2.420214	2.86965	0.637211	2.327186	1.968756	1.819468	3.758867	2.709476	1.224803	1.076134	2.190434	2.002485
AHNAK	-0.303474	-0.472814	-1.546743	0.097441	-0.302246	-1.576679	-0.107593	-0.045341	-0.081005	-0.236513	0.85095	0.390031	0.528262	0.01979	0.36346	0.22045	-0.07789	1.230949
AKAP12	0.385167	0.638742	-0.067214	0.76396	-1.018734	-0.989277	-0.072439	0.40727	-0.057711	0.171755	0.04674	-0.019007	1.714571	1.130303	-0.249793	0.096663	0.270741	-0.832669
AKAP2	-0.094808	-0.587654	-1.562327	-0.560376	-1.373594	-0.950255	-0.946794	-0.918796	-0.490997	-0.74729	-1.237461	-0.271418	-0.339091	0.041682	-1.577531	-0.089073	-0.388465	-2.520426
AKT1	0.288008	0.10497	-2.972227	0.362187	-0.192463	-1.128096	0.287951	0.067734	0.667344	0.199879	0.144063	-0.152883	0.525755	0.528923	0.017227	0.203623	-0.027365	-0.237835
AKT2	0.37658	0.443923	1.855728	0.442454	0.305421	-0.798561	0.526954	0.5433	0.562367	0.55468	0.517358	0.548099	0.675514	0.58863	0.425103	0.51388	0.525291	-1.137608
AKT3	-0.069697	-0.458544	-2.101069	-0.370974	-0.596874	-0.90484	-0.171926	0.186669	-0.25927	0.257691	-1.093542	-0.669141	0.607628	0.511505	-0.946731	0.247688	0.219266	-0.328044
ALB	-0.177707	-0.166365	3.316541	-0.385893	-0.62061	-0.465879	-0.351407	-0.843534	0.101355	-0.11876	0.895647	0.280203	0.910169	0.480853	-0.498282	0.947913	0.461149	1.933818
ALDOA	0.487152	0.365749	-0.960759	-0.023647	0.28487	-1.51298	0.765124	1.047971	0.184553	0.392414	0.343159	-0.104794	0.655454	0.431851	0.427251	0.10475	0.547116	0.358385
ALOX5	0.585194	-0.090183	0.144389	-0.104038	0.692974	-1.166688	-0.048331	0.031701	0.288231	-0.634515	0.04221	-0.588469	-0.116865	-0.190479	-0.746875	0.319906	-0.478114	-0.028815
AMH	-0.833019	-1.373834	6.898268	-1.507773	-0.266366	0.900835	-0.956679	-1.748366	-0.903789	-0.833218	-0.915893	-1.447059	-0.409701	-0.158946	-0.89056	0.249532	-0.343623	0.126284
AMMECR1	-0.011004	-0.62974	1.504188	-0.359747	0.118377	1.006406	-0.479493	-0.273957	-0.31492	-1.79322	-0.515159	-0.563881	0.361022	-0.349684	-0.68364	-0.694746	-1.20042	-0.890988
ANG	-0.172502	-1.469211	1.051455	-0.471944	-0.086379	0.572347	-0.574674	-0.291478	-0.934788	0.674577	-0.646782	-0.36092	-0.387099	0.03066	-0.574143	-0.841805	-0.227908	0.216738
ANGPT1	0.339558	-0.221779	-0.357325	1.136952	-0.359888	-0.273093	-0.243212	-0.700433	2.252628	1.106231	1.031722	-0.056748	-0.593344	0.550936	1.66524	1.895354	-0.30009	0.887431
ANGPT2	0.292331	1.140016	2.12444	-0.294777	0.198177	1.396062	-0.57339	-1.190212	-0.265783	1.188336	-0.631674	-1.00084	2.171642	-0.485316	-0.462042	0.688697	0.81045	-1.04625
ANGPTL2	2.061527	1.569982	3.733648	1.227585	1.27738	1.150402	3.002627	1.653891	1.898517	2.643872	2.82667	1.652099	3.059028	2.134263	1.993469	0.672895	1.975942	3.198343
ANGPTL4	2.896516	3.63093	-0.48984	2.943322	-2.41105	-0.324043	1.562104	-0.04738	0.43403	1.285027	0.196137	-0.209459	3.696098	2.094679	1.842002	0.920317	1.435156	-1.032901
ANPEP	-0.221553	-0.556801	1.691222	-1.375434	1.125326	-0.358098	0.707444	0.67779	-0.243756	-0.798452	-0.074198	-0.431573	1.247156	-0.029381	-0.161395	-1.407828	-0.052182	-1.054851
ANXA2P2	0.115985	0.240311	1.474846	0.748189	0.915493	-0.967817	0.671064	0.220106	0.565141	0.101	1.650453	0.781654	0.499947	0.234026	1.188444	0.097258	-0.099945	0.210717
APIM2	-0.422563	-0.296988	0.401834	-0.433745	0.748949	-0.923174	0.014942	-0.074875	-1.161586	-0.560265	-0.552743	-0.386988	-0.962719	0.454745	-0.353572	-0.340012	-0.662323	0.042362
APC	-0.550453	-0.96037	1.946257	-0.995117	0.209693	0.567209	-0.369532	-0.549068	-0.177179	0.017434	-0.397935	-0.925365	0.273238	0.004927	-0.905934	-0.424495	0.127465	-0.163846
APD	0.299787	1.46826	0.179832	0.491818	0.622816	-0.601839	-1.294683	-0.827453	-0.877199	1.208606	0.066013	1.127665	2.598481	1.733288	0.702537	-0.139199	0.925931	0.951349
APOE																		

CEACAM5	-1.529509	-1.864343	2.379776	-1.548218	3.769354	1.120918	-2.375635	-0.925247	-1.92541	-3.126643	0.973049	-2.22216	-1.41362	0.78117	1.671575	-0.031921	-0.090952	2.11985
CEACAM6	-1.034772	-0.545725	-2.825085	-0.989932	0.812692	-1.243203	-1.171514	-0.121591	-1.509117	-1.46896	-0.466267	-1.33324	-0.993442	0.070171	-0.58012	-0.373362	-0.358434	-0.662534
CEP170	0.583303	0.460064	-1.541168	0.198468	0.153949	-1.461785	0.407325	0.241961	0.434932	0.315817	0.098349	-0.323435	0.84764	0.38667	-0.236107	0.333658	0.1024	-0.255996
CEP295	-0.351308	-0.364734	0.699886	-0.128789	-0.0889	0.104839	-0.459701	0.192563	-0.32579	0.191618	-0.726221	-0.755065	-0.306501	0.025009	-1.007304	-0.083608	-0.035921	-1.203908
CGP	-1.047775	-0.903668	2.56013	-1.274755	-0.63047	-0.485325	-1.210388	-0.408184	-0.343439	-1.592563	0.35074	-0.985222	-0.724252	-1.058747	0.15624	-0.598281	-1.027782	-0.489117
CFN	-1.062951	-0.953634	0.87339	-0.639731	-0.356836	-1.066875	-0.614705	-0.963305	-1.098028	-1.28771	0.045876	-0.253904	-0.67866	0.698179	-0.16462	-1.708727	-1.38404	0.922474
CHAD	-2.50893	-1.627565	5.222357	-1.884214	1.758249	2.451274	-0.211012	-1.912662	-1.671908	-1.684107	-1.83705	1.305873	2.244828	-2.841401	2.825406	-1.126819	0.957379	1.771413
CHD4	0.3345	0.240944	-1.44176	-0.482791	-0.255652	-0.682637	-0.04587	0.417837	-0.088999	0.058855	-0.289206	-0.554892	0.242447	0.144616	-0.270224	0.395333	0.115733	-0.679737
CH3L1	2.58261	0.568861	2.296452	1.817765	1.196571	-0.069544	3.225439	0.779554	-1.291134	0.871827	0.406365	1.583601	1.809364	1.948973	0.494685	-0.767322	0.086198	1.323556
CHP1	-0.186384	-0.374614	6.130577	0.685913	0.339232	-0.580803	0.160304	-0.385486	-0.014444	-0.168321	1.145263	0.295103	-0.059813	0.039694	0.794101	-0.453013	-0.228198	2.662794
CHP2	-1.160517	-0.748637	3.400846	-0.835271	0.573612	2.466807	-1.739856	-1.454375	-1.266911	-0.298219	0.124341	-0.203759	-1.285635	-0.836941	0.425798	-0.925963	-0.116677	1.442746
CHRDL1	0.337028	0.329164	-1.346519	1.216812	-0.488837	-0.822646	0.581892	0.301828	0.106313	0.145778	0.65284	1.141671	-0.454793	0.846786	0.277935	0.668069	0.816523	1.126155
CHRNA7	-1.093948	-0.691529	5.413374	-1.239494	1.201245	1.425545	-1.013517	-1.037864	-1.349206	-0.131487	-1.055251	0.060455	-0.847098	-1.157396	0.482906	-0.410805	0.159541	1.898989
CHB1	0.339566	0.840403	-0.471626	-0.000765	0.591824	-0.714172	0.221698	0.313708	0.08962	0.012909	0.320622	0.478323	0.146196	0.367097	0.605058	0.252191	0.078218	0.347882
CKMT1A	-1.715523	-0.488675	6.203392	-1.15421	1.724036	1.938519	-0.477726	-0.821754	-2.184487	-0.379294	0.2449	-0.155192	-0.618249	-2.169555	0.562161	-0.580505	1.608969	3.475563
CLDN1	2.359881	1.870925	0.612904	1.418264	1.900397	0.544729	2.779891	1.337628	-0.459906	1.883466	2.071109	2.121373	0.541133	1.416776	2.240081	0.518756	2.254476	1.818938
CLDN3	-0.902553	-0.389495	5.143245	-0.339148	0.597639	0.090219	-0.36033	0.546092	-1.030661	-0.105202	0.463225	0.830949	-1.173522	0.855009	1.502696	-0.624278	0.080257	0.893355
CLDN4	-0.98983	0.182421	1.452947	0.060326	-0.264511	-1.2916	-0.272235	-0.080345	-1.069563	-1.24462	0.086027	0.537486	-1.065107	0.82408	0.682825	-0.954263	-0.855431	0.951651
CLDN7	-0.505636	-0.24008	1.676942	0.520614	0.378546	-0.941367	-0.417529	-0.596856	-0.717795	-1.029212	0.383543	-0.108334	-0.95745	0.379599	0.577906	-0.327938	-0.865271	0.961621
CLEC2B	0.330453	1.435632	0.315786	-0.254837	-0.24157	-0.766432	0.094894	-0.061901	0.655109	0.244818	0.122022	-0.321751	0.731427	-0.245652	-0.119528	0.228427	-0.250328	0.49805
CLEC3B	-1.326398	-1.930381	2.183684	-0.131772	-0.246842	-0.943709	-1.650357	-0.460716	-0.416851	-0.228465	0.702279	-1.179626	1.290592	0.096713	-0.765444	0.288288	-0.787351	0.297637
CLIC4	-0.015254	-0.365917	-2.542364	0.426509	-0.890551	-1.451577	0.490943	0.544092	0.496581	-0.249322	-0.231761	-0.139799	0.227656	0.235861	-0.336839	0.897119	-0.437111	-0.877199
CLU	0.729062	1.185021	-1.364524	1.289758	1.057547	-0.916458	1.449139	0.757527	1.381217	1.377861	1.847431	2.229039	0.008871	1.136347	1.170455	1.55177	2.07519	1.919979
CMA1	3.230316	2.900264	4.36169	-0.044351	3.622884	0.908578	1.735562	1.76281	3.733462	2.462327	2.915261	2.797722	1.67521	0.626404	2.576614	0.935346	4.340125	2.420092
CNN1	1.109455	0.374642	1.10447	2.621023	0.51709	-0.052306	1.660545	1.260764	2.124707	2.366348	2.060233	2.171386	0.862208	2.329893	2.170055	0.38465	1.839913	2.647005
CNOT10	-0.139802	0.353793	0.721121	0.17125	-0.095518	0.633308	-0.166731	0.129845	0.088455	-1.89448	-0.128103	-0.118756	-0.107379	-0.096514	-0.107179	-0.003343	-0.058428	0.335439
CNOT4	-0.15687	-0.125263	0.294868	-0.409567	-0.047233	-0.01018	-0.123039	0.126933	0.122896	0.335297	-0.465799	-0.46076	0.527878	0.324853	-0.525142	0.13967	0.280189	-0.835871
COL1A1	2.096704	1.033407	2.449116	1.118011	1.364309	0.722355	1.265656	1.766963	1.699595	1.965595	1.288701	0.924989	2.563141	1.283709	0.750911	1.726798	2.316739	4.809588
COL1A2	4.846601	4.117765	1.889633	3.012426	3.478872	2.271323	5.147797	4.001828	3.800155	3.783737	4.834503	3.566888	6.132195	3.976119	3.67711	2.467033	2.438819	4.881835
COL3A1	2.932742	2.224446	3.311023	2.003739	1.582178	2.900229	3.53284	2.581997	2.748059	2.575155	3.393637	2.204613	4.450069	2.504848	2.350665	1.711341	1.52808	3.249738
COL3A2	3.730687	3.280113	0.056071	2.565705	2.121777	0.738917	3.746944	3.422071	3.501169	2.842856	3.83846	2.221682	4.356208	2.594605	2.647685	2.807826	1.78302	3.263662
COL4A1	1.623712	1.097467	1.824092	1.280261	-0.078421	-1.05425	1.180293	1.295991	2.89189	1.437165	1.637426	0.23249	2.636417	1.167604	1.077915	1.499971	0.019206	0.325153
COL4A2	1.116584	0.975832	2.936881	1.945894	-0.215513	-1.604964	1.082766	1.129195	2.483739	1.134591	2.145811	0.714712	1.923063	0.895584	1.469234	1.348484	-0.025496	2.075271
COL4A6	1.370975	1.021014	1.81686	0.995781	0.480613	0.079954	0.531769	0.376677	1.087703	1.170263	2.042856	2.151012	-0.454583	0.867654	1.319586	-0.094911	2.735034	2.194364
COL5A1	2.435214	2.018874	0.62859	1.009715	1.049364	0.112784	2.839184	2.503176	1.978348	2.059904	1.312046	0.11975	3.380929	2.212647	0.642837	1.876639	0.938013	2.97071
COL5A2	1.756817	1.571396	1.96759	1.620172	0.559947	0.33689	2.968769	1.877557	2.051794	1.584874	1.953005	0.865633	3.210211	1.929267	0.809790	0.700694	0.528358	1.524905
COL6A1	1.523848	0.730482	-0.933622	1.134595	0.423178	-0.911212	1.32711	1.417061	0.405096	1.066631	0.579555	-0.323201	2.459624	0.819597	-0.216549	0.672455	1.162123	-0.10866
COL6A2	1.603577	0.924474	-0.120353	0.596663	0.174085	-0.711442	1.386232	1.433746	0.811785	1.185012	1.140029	0.322087	2.66434	1.15491	0.255936	0.412359	1.134305	0.379115
COL6A3	2.497617	2.32556	-0.620208	2.282374	1.338872	0.45834	2.17678	2.146929	2.447874	1.855931	3.331706	2.389084	2.571937	1.177492	2.34243	1.825793	1.639355	3.189597
COL7A1	0.802871	0.25904	5.852623	0.501029	2.741935	1.765775	2.42523	1.423495	0.867555	1.883106	2.933129	2.561743	0.801986	1.603695	2.128226	0.46692	2.59386	2.364009
COMP	2.1165	0.132451	7.380919	3.83571	3.299957	2.982382	0.616317	3.982219	1.147609	3.662868	3.909786	3.322638	5.528677	4.452644	3.421195	2.310081	2.63941	4.430943
CREBBP	-0.126412	-0.08825	1.618085	-0.233368	-0.149736	-0.946575	0.086943	0.010792	0.102332	0.208527	-0.172868	-0.541129	0.803338	0.48766	-0.681119	-0.355087	-0.014915	-0.609935
CRIP2	-0.182122	-0.446621	1.802243	0.566992	0.431596	-0.281816	0.278939	0.586539	1.14097	0.67168	1.701428	0.744003	0.654502	0.509322	1.127766	0.019086	0.644733	1.9493
CRISPLD2	0.580096	0.733	-1.882758	1.799591	-0.453878	-0.481447	0.881173	-0.059480	0.834629	-0.306732	0.614426	0.729334	2.010549	1.653007	0.447193	-0.537141	0.108733	-0.432278
CSF2RB	0.536183	0.298491	3.256901	-0.688167	-0.017584	0.657163	0.014548	0.048694	0.132656	0.028369	0.123888	-0.782228	-0.02519	-0.424493	-0.154505	0.490327	0.69443	-0.127933
CSG4	-0.690897	-1.394495	2.499149	0.46373	-0.885951	-0.999271	-0.543453	-1.041339	0.688136	-0.628575	-0.09749	-1.191596	0.465968	0.220412	0.079902	-0.040751	-0.317297	-0.255759
CSP7	-0.635127	1.53515	1.669078	-0.803576	-0.959072	-1.139978	-0.402911	-1.258842	-0.806767	-0.987608	-0.094614	0.070305	-0.306569	-0.776514	-0.263591	-0.877779	-0.417809	0.039265
CTNNB1	0.381407	0.262637	-0.065875	0.349048	-0.054687	-1.308249	0.341363	0.455132	0.174903	-0.214993	0.081015	-0.031491	0.794539	0.482566	-0.122949	0.535336	-0.100106	-0.884811
CTNND1	-0.315956	-0.366267	-0.473757	0.162119	0.073384	-0.986918	-0.206866	-0.267364	0.287071	-0.115017	0.698407	0.331429	-0.460845	-0.063339	0.203217	-0.552424	-0.56238	1.19274
CTSG	1.411786	0.722688	3.442634	-1.49684	2.026888	1.423174	-0.057964	-0.502785	2.435539	0.50653	1.979716	1.052559	-0.059423	-1.139108	1.508768	0.77187	2.477193	3.210214
CTSH	0.520524	-0.394	-0.779373	-0.378382	-0.445736	-1.45864	0.344445</											

EPH81	0.730164	0.763532	4.176049	0.425359	0.724325	-0.177528	0.751555	0.320829	1.010793	1.766491	0.958438	0.381468	0.881886	1.295814	1.066701	0.334668	1.16754	1.995558
EPH83	0.597992	0.33551	4.700309	0.351833	0.443356	1.087268	1.141527	0.853575	-0.124661	1.424768	1.100812	0.929533	-0.191641	0.204586	1.338042	0.917894	1.01972	1.707133
EPH84	-0.544954	-1.246339	3.020389	-0.109267	0.111962	-0.316592	-0.270992	0.011176	0.402436	-0.889947	0.374484	-0.091359	0.338372	0.373513	1.02948	-0.100128	0.230076	0.407533
EPN3	-1.804169	-1.977251	6.287708	-2.163421	1.735457	2.025506	-1.6059	-1.495362	-0.757987	-0.538599	0.118119	0.246864	-0.929287	-1.258201	0.469097	-0.669151	0.882502	0.950633
EP81L	-0.331791	0.259059	3.589114	-0.079114	1.83347	0.484357	0.703341	0.332931	0.300292	-0.018611	1.221384	1.322957	-0.242315	0.612592	1.427068	0.717777	0.888277	1.254049
ERB82	-0.19784	-0.234504	1.936512	-0.002772	0.547523	-0.100533	0.641809	0.10356	0.700854	0.408559	0.693283	0.644295	0.092675	0.949686	0.685808	-0.127262	0.478415	1.843336
ERBB2IP	0.277043	0.14571	-0.283225	-0.331245	0.257013	-0.399374	0.054943	0.366881	-0.014243	0.229377	-0.628116	-0.608962	0.487539	0.363803	-0.707675	0.307050	0.099056	-0.812611
ERB83	-0.940389	-0.769176	1.013291	-0.575128	0.256712	0.006164	-0.573549	0.020782	-0.807867	-1.195448	-0.510873	-1.166212	-1.351262	0.204163	-0.443981	-0.477160	0.650083	0.055192
ERC3C	-0.089052	-0.013637	1.756878	0.162763	0.601928	0.286487	0.183217	-0.011928	0.400323	0.695243	0.562588	0.476442	0.529828	0.36783	0.576749	-0.580657	0.442239	0.695968
EREG	0.091769	0.240614	-0.009834	-1.452402	-1.959058	-1.363411	-0.828607	-0.722097	0.041228	-0.720899	-1.286339	-0.893682	2.881114	0.352292	-0.804309	-1.851216	-1.833402	-0.527361
ERSMP1	0.062598	0.023588	-1.186825	-0.212969	0.762898	-0.826707	0.05889	0.260517	0.151417	0.377144	0.060232	-0.292555	-0.000477	0.250639	-0.417233	0.099898	0.115634	-0.506203
FRP1	-1.055095	-0.75284	0.885681	-0.599115	-0.003293	-0.198863	-0.740448	-0.280241	-1.181171	-0.987824	-0.3233	-0.241689	-1.828107	-0.148513	-0.172028	-0.846855	0.746666	
ETV4	-0.784332	-0.995889	4.471617	-0.984548	1.49523	2.103896	0.096746	0.181677	-0.781102	0.175813	0.039358	-1.03897	-0.443133	0.490988	-0.798246	-0.286744	1.387956	0.740298
EV12A	0.375304	1.023568	0.460332	-0.286546	-0.098821	0.057846	1.178401	0.608448	0.44708	-0.470058	-0.582375	-0.134009	0.365478	-0.598651	-0.134834	-0.239388	-0.230588	-0.246228
EVPL	-0.950939	-0.945955	2.547171	-0.416512	0.321299	-0.390156	-0.550869	-0.295976	0.70252	-0.580011	-0.084992	-0.545292	-1.534281	0.270992	-0.647129	-0.132197	-0.529435	0.508951
FL1R	-0.255054	-0.094884	-0.983711	-0.114094	-0.544665	-1.228764	-0.833735	-0.558161	-0.187743	-0.849886	-0.204933	-0.587677	-0.704407	-0.021825	0.013935	-0.070205	-0.723195	0.032195
F3	-0.239427	-0.138248	-1.50174	0.288236	-1.28681	-1.322351	0.023854	-0.879365	0.220233	-0.898957	-0.827349	-0.512505	0.445384	0.402465	-0.062823	-0.86901	-1.75035	-0.90436
FAM174B	-1.39747	-1.692544	0.124364	-0.63398	-0.482236	0.47369	-0.813709	-0.878414	-0.923241	-1.200306	-0.66382	-1.357003	-0.228066	-0.764269	-1.565015	-0.739962	-0.953035	
FAP	2.666227	2.487613	2.197842	0.997349	0.570546	1.853253	2.787004	1.177619	1.043155	1.47351	0.812108	0.25925	2.42425	1.574765	0.025262	0.455996	0.372197	0.076244
FASLG	-0.072755	1.974492	1.429714	-1.625831	0.251008	2.111761	-0.994781	-0.177579	-1.363573	0.23315	-0.731313	-0.394013	-0.934839	-2.107633	-1.577755	-0.518583	0.53368	0.751273
FBN1	1.205462	0.913653	-2.465197	1.411545	0.284712	-0.376304	0.823512	0.910506	1.020949	1.384958	1.490411	1.433096	1.304119	1.286674	0.711037	1.097746	1.223302	1.484968
FBNS	-0.264997	-1.195545	-1.734118	-0.311833	-1.359718	-2.041554	-0.484467	-0.653094	0.616047	0.364407	-1.291805	-1.479068	0.359449	0.748168	-1.537105	0.385329	-0.72038	-2.362659
FBN1	1.479405	1.003054	-0.516742	1.714048	0.501854	-0.262023	2.241081	1.606952	2.205773	1.777379	2.292194	1.842425	3.45039	1.857023	1.465801	0.714412	1.047592	1.714538
FBN2	-1.248859	-0.692589	3.649538	-2.323544	0.822305	2.589962	-0.321238	-1.175935	-0.848293	-1.695889	-0.785664	-1.116473	0.24846	-0.643052	-1.325509	-1.414236	-0.4599	0.013367
FBP1	0.735462	-1.067419	-1.844873	0.033666	1.088919	-0.510378	0.802808	0.020415	-0.551554	-1.301332	-0.4542	-1.365772	-0.803433	-0.274828	-0.665781	-0.450817	-0.579797	-0.117287
FCF1	-0.7472	-0.789328	2.295455	-1.18308	0.338529	1.446512	-0.675069	-0.610543	-0.759651	-0.252244	-0.77375	-0.946759	-0.455337	-0.41974	-0.715202	-0.9923	-0.118797	-0.441617
FERMT2	0.029743	-0.160413	-0.861354	0.681502	-1.062852	-1.449397	-0.316101	-0.456047	0.385048	-0.461855	0.486632	0.12036	0.106475	0.237467	0.09801	0.559908	-0.538748	0.260274
FG18	-0.411462	0.861971	2.232362	0.963824	-0.067359	0.386932	1.169663	0.944182	1.387714	0.669181	1.928891	0.282212	1.859772	1.417107	0.775207	0.71253	1.599362	1.341377
FG2	0.801274	0.421584	-0.72078	0.259955	-1.072699	-1.603727	-0.118639	-0.274831	-0.379974	0.503742	-0.458865	-0.42354	0.160424	0.705753	-0.547952	-0.210787	0.181681	-1.206126
FGF9	-0.807057	-0.81303	2.413268	-1.507347	-0.137992	1.990743	0.143283	-0.36395	-2.161379	0.73542	-0.831528	-0.844597	-0.507678	-0.622885	-1.260033	-1.972434	-0.667191	-0.401096
FGFR1	0.811001	0.181396	-0.912354	0.759844	-1.601414	-0.182245	1.252753	0.629651	0.683202	0.960872	0.935837	0.472222	1.153584	1.087733	0.784535	0.3458	0.739363	0.826692
FGFR2	-0.96603	-0.829945	2.482121	-0.494236	1.381471	0.571284	-0.185827	-0.266647	-0.484441	-0.6528	0.005944	0.245958	-1.774675	-0.595589	-0.22453	0.065303	-0.141098	1.096311
FGFR3	-1.013508	-2.149799	1.665377	-1.037057	1.322319	0.361004	-0.897389	-0.668416	-0.536715	-1.174466	-0.19609	-0.088562	-1.740995	0.070268	0.130662	0.429837	0.400661	1.149339
FGFR4	-1.240501	-2.216471	2.536569	-0.706945	-1.17079	-0.794961	-2.430082	-2.931606	-1.070224	0.020634	0.688928	-1.502059	-3.94344	-1.000758	-1.12825	1.194908	-0.381813	0.485733
FLG2	0.471797	1.319937	0.105672	0.155972	0.084809	0.090896	-0.300491	0.703439	0.987077	-0.146877	0.896522	0.431521	1.380215	-0.519138	-0.04568	0.467504	0.284062	-0.27964
FLH1	-0.184866	-0.977027	-1.661639	0.584294	-0.786292	-0.794112	-1.03984	-0.301615	0.883883	0.362673	0.97674	0.290554	0.335501	0.354269	0.65788	0.360679	1.200395	
FLG	0.780013	-1.230919	-0.740688	-1.241397	-0.250341	-1.328484	-0.803373	-1.489535	-0.205257	0.907439	-1.700664	-1.996858	-2.317091	-0.093104	-2.881474	0.521652	-1.837518	-2.396065
FLH1	-0.465372	-0.495351	0.629112	-1.195168	-0.542879	-0.872562	-0.874419	-0.200216	-1.128556	-0.28372	-1.020049	-1.315694	-0.214107	-0.545308	-0.075454	0.279738	-0.312444	-1.451847
FLT1	-0.51068	0.186429	-1.527586	-0.721577	-1.061773	-0.328622	-2.445895	-1.031786	-1.004786	-1.332881	-1.282854	-1.608471	0.16483	-0.455518	-1.412867	-0.40961	-0.967106	-1.364933
FLT4	-0.282077	-0.728178	-0.186378	-0.076044	-0.099683	-1.161443	-1.147373	-0.620135	0.103667	0.934939	0.116344	-0.75269	0.047707	0.244214	-0.076929	-0.394542	0.154627	-0.736819
FM0D	1.198873	0.704207	-1.098782	0.348174	0.007489	-0.071537	1.45334	0.94921	1.882518	1.416653	0.042566	-0.313217	1.953393	1.359819	0.230898	0.641934	0.965269	-0.500831
FN1	1.380598	0.673951	-6.448029	0.927125	0.163941	-1.427726	1.999449	1.113313	1.538701	0.562436	0.952207	-0.393946	1.170697	0.102671	-0.044565	1.284777	1.649197	-0.8048
FOX2C	-0.668255	-0.734423	5.28013	0.335062	-0.22931	1.231408	1.244611	0.092334	0.225355	0.60908	0.560019	0.002158	0.203758	1.762236	0.703047	-1.134141	0.450439	1.07107
FOXA0	-0.691567	-0.527958	2.703987	-0.28148	-0.19709	-0.573926	0.049844	-1.48924	-0.074246	0.094559	0.164447	0.299819	0.331087	0.235402	0.110294	-0.762547	-0.012292	0.681036
FRA51	0.556474	-0.373655	1.110917	0.559792	-0.378282	0.293393	0.247056	-1.089896	0.146967	-0.062972	-1.039275	-1.202701	0.091554	-0.617631	0.313663	-0.706629	-0.062496	
FREM1	0.471725	0.646223	2.471893	0.080627	0.660626	1.756049	-0.93427	0.606025	1.065402	1.504215	1.78975	0.085545	0.492365	-0.418728	-0.388983	1.415174	1.027555	0.641344
FREM2	-1.217039	-2.400391	1.313296	-0.913363	0.639623	1.015096	-1.891536	-0.731586	-2.159204	-1.556524	-0.231846	-0.363301	-2.342158	-0.465059	-0.233716	-2.355441	-1.268357	-0.154626
FST	0.513672	0.17709	0.115676	2.265229	-0.982412	1.310535	0.310117	-0.39377	1.489883	0.153577	1.269159	1.400615	1.087407	0.800721	1.459562	0.436565	-0.219644	1.635624
FST1	0.972105	0.826763	-1.950373	1.563834	0.164503	-0.467809	1.667265	1.434724	1.861676	1.431253	1.77585	1.171163	0.265334	1.451725	1.404348	0.103972	0.422645	1.199692
FUT3	-1.229197	-0.767564	3.527181	-0.745887	1.439868	1.398837	-0.245433	-0.770983	-3.335591	-1.877861	-0.022342	-0.713954	-1.01728	-0.685944	0.127112	-0.731609	-0.217845	0.698162
FYD6	-0.446199	-0.507636	0.489844	-0.186773	-1.148691	-0.36304	-0.910208	-1.192898	0.987458	0.43								

IL6	1.605982	3.493661	-0.026135	-1.396553	-3.062282	-5.871566	-0.493065	-2.350841	-2.748339	-1.935767	-1.12679	-1.444673	4.47033	1.765825	-2.171108	-2.45248	-3.092095	-2.713587
ILK	0.137228	-0.086529	-2.197574	0.136503	-0.056011	-1.308294	0.609257	0.078777	0.730445	0.354099	0.051225	-0.353695	0.03282	0.248804	0.200744	0.276068	0.44037	0.230087
INHBA	1.395816	0.863483	3.090444	0.062914	0.865148	-0.739224	2.016857	0.437268	0.469081	1.000241	0.402042	0.568297	0.865965	1.818668	-0.222333	0.292844	-1.214981	0.36681
INHBE	-1.529733	-3.217389	4.542591	-1.848344	-0.157061	3.102974	-1.653393	-2.338165	-1.870562	-1.396879	-1.691377	-1.419561	-0.691377	-1.419561	-1.646875	-1.546718	-0.923299	0.592909
IRF6	-1.039746	-0.43677	0.701824	-0.647949	0.629872	0.361303	-1.271036	-0.935696	-1.302967	-1.582203	0.201104	0.669689	-1.829378	-0.347936	0.734045	-0.548363	-0.499837	0.992638
ISL1	-3.071797	-2.797421	4.074527	-0.205984	1.23662	2.781941	-6.625211	-4.503159	-3.830268	-2.446539	-2.924443	-3.653416	-1.90146	-3.300763	-2.04445	-0.033461	-0.499837	0.992638
ISLR	1.647577	1.199976	2.160157	0.994066	0.850093	0.618507	2.775433	2.391051	1.555867	2.234984	2.227549	1.710224	2.583859	1.439946	1.459128	0.869531	1.133587	1.794633
ITGA1	-0.09184	-0.253468	-3.594412	0.417905	-1.071914	-2.478104	-0.3233	0.167038	0.331036	0.286802	-0.290973	-1.090335	0.028356	0.430365	-0.985566	1.214642	-0.572061	-1.378014
ITGA11	3.511816	2.127917	0.872416	2.08696	1.850679	0.103801	6.354812	4.132672	2.738638	3.291908	2.048038	4.705571	5.002408	1.75129	1.704806	1.64692	2.342718	0.912829
ITGA12	0.857221	1.511302	-1.628722	0.941141	0.073359	-1.063913	0.957119	0.950129	0.355052	0.692113	0.414295	0.175062	0.17665	0.186602	0.571134	0.943645	0.263929	0.278249
ITGA3	-0.56624	-0.572459	0.552301	-0.540495	-0.431275	-1.127217	-0.468702	-0.475853	0.070998	-0.345017	-0.491543	-1.463604	-0.882881	0.142333	-1.128003	-0.295967	-0.617386	-1.18537
ITGA5	0.180212	-0.109621	-3.614217	0.336061	-0.994122	-2.223633	-0.655383	-0.182803	-0.327777	-0.916392	-0.257484	-0.295098	0.388854	0.097531	-0.076054	-0.083045	-0.540318	-0.715757
ITGA6	0.310537	-0.839493	-1.084235	-0.415065	-0.281718	-0.507074	-0.733083	-0.27057	-0.198682	0.092535	-0.125523	0.391713	-0.096523	-0.800421	0.08186	0.093577	0.28839	-0.322124
ITGA7	0.681741	0.900017	4.912763	1.094213	1.54322	0.666463	1.077261	1.322685	1.191289	2.324626	1.610724	1.727572	3.144937	1.936164	1.913325	0.016099	2.33257	2.121774
ITGA8	0.274302	-0.728726	-0.76687	-0.102523	-0.359639	0.015126	-1.549724	-0.416466	0.427264	0.208892	-0.039843	-0.749739	-2.463998	0.309826	-0.704685	0.261802	0.532257	-0.532325
ITGA9	0.202782	0.132681	-1.451793	1.33889	0.038997	0.472615	1.107945	1.112244	1.629762	1.693238	0.934667	0.707822	0.369521	1.211287	0.875723	1.128289	0.54699	0.760033
ITGAM	-0.002222	-0.193544	1.151335	-0.459169	0.620538	-0.00312	0.559422	0.368791	0.173623	-0.424873	-0.032061	-0.781212	0.316853	-0.724684	-0.856134	-0.766219	-0.129284	-0.503088
ITGB1	0.482629	0.203561	-2.630161	0.852148	-0.340419	-1.26492	1.108866	0.574833	0.863522	0.435129	0.415262	0.021867	0.616458	0.739382	-0.118828	0.318037	-0.112511	-0.210927
ITGB1BP1	-1.333272	-0.776172	1.596735	-1.546272	0.027174	1.429957	-1.155003	-1.843448	-1.015526	0.434699	-1.92593	-0.071184	-0.967755	-0.895624	-1.7097	-1.603003	0.357399	-2.008254
ITGB2	0.135929	0.888776	0.609496	-0.398904	1.029151	-1.74069	0.636293	-0.100527	0.476817	-0.259494	-0.401619	0.076818	0.13201	-0.794508	0.0858	-0.31164	-0.552291	0.164272
ITGB3	0.072724	-0.031879	2.049124	0.254845	0.14172	0.82483	1.019931	0.460697	0.271242	0.67998	0.66339	0.203144	1.4554	1.212216	0.489114	0.331124	0.55226	0.349759
ITGB4	-0.410769	0.190421	4.179377	0.131981	1.834058	0.457723	0.712925	0.810855	-0.985251	1.425864	1.817578	2.107067	1.425909	1.245235	1.840232	-0.070442	1.832236	2.767559
ITGB6	0.89722	1.284106	-0.149317	0.103091	-0.050393	-0.648745	1.166528	1.216644	-0.222892	0.314767	0.903486	-0.36933	-1.03691	1.945539	0.060554	0.885211	-0.438362	0.618409
ITGB7	0.764871	2.890505	-0.374206	-0.269286	1.006959	-0.962248	0.827485	1.525461	0.303812	1.078372	1.303486	1.477376	0.707498	-0.754012	1.11309	1.166882	1.863159	1.680519
ITGB8	1.307579	-0.046236	1.861746	1.040971	1.457327	1.317171	0.612298	0.575368	-0.152186	0.812424	0.713974	0.44123	-0.111039	0.809825	0.274551	-0.004582	0.919212	0.809797
ITM2A	-0.106072	0.461942	-2.083868	0.433715	-0.438731	-1.722284	-1.137107	0.163616	0.273207	0.115024	0.028123	-0.046572	0.453653	-0.663444	0.245812	0.85486	-0.165694	-0.229714
JAG1	0.406468	-0.22573	-1.465407	-0.034767	-0.38575	-1.970987	-0.744579	0.07312	0.441745	0.231657	0.090978	-0.317005	0.982538	0.150115	-0.464478	0.540492	-0.085317	-0.489394
JAM2	-0.675937	-1.237202	-0.041176	-0.526652	0.60797	0.257323	-0.846275	-0.118789	-0.296043	0.663301	0.764384	0.016812	0.984624	0.263885	-0.157243	0.165697	0.577997	0.719151
JUN	0.102431	-0.145545	0.338922	0.395852	-0.640432	-0.35128	0.623319	1.28077	0.934741	0.415297	0.236668	-0.0132	0.631577	0.715049	-0.13776	0.723906	-0.099809	1.801998
JUN3	-0.745139	0.412019	-1.717978	-0.930713	-0.373143	-3.17803	-1.915574	-0.504303	-0.741231	-2.742464	-1.623132	-0.757621	0.243393	-0.693272	-0.754206	-2.786982	-1.265814	-0.180988
KCNJ8	-0.489216	-0.254979	0.106912	-0.203206	-0.765587	0.539931	-0.873173	0.029993	0.041192	-0.13898	-0.127282	0.018467	0.242433	-0.70461	7.47E-05	0.272872	-0.274549	0.065484
KDR	-0.651159	-1.358426	0.225707	-0.835468	-1.094942	-1.180339	-0.821758	-0.380687	-0.14069	-0.450605	-0.829035	-1.076821	-1.606352	-0.744822	-1.782392	0.253749	-0.654083	-1.168408
KIAA1462	-0.701562	-0.63266	-0.168304	-0.340783	-0.692541	-0.854457	-0.006607	-0.69595	0.272874	-0.97501	0.304831	-0.046746	-0.284036	0.104499	-0.369521	-0.136319	-0.881272	0.502341
KISS1	-1.729127	-1.738711	3.773342	-1.910234	1.196086	2.852346	-2.004789	-2.859486	-2.789837	-1.77372	-0.200662	-2.417168	-1.182521	-2.142517	-2.234127	-1.553467	-0.155292	0.400205
KLK3	-1.413327	-1.460879	5.180457	-2.062086	1.069769	2.132307	-1.215058	-1.966991	-1.39419	-2.010461	-1.587901	-1.994946	-0.506203	-1.05733	-1.492894	-0.153242	0.547457	0.90043
KRAS	-0.273387	-0.102968	0.224813	-0.778264	0.027563	0.132402	-0.232578	-0.336363	-0.29004	-2.11712	-0.425757	-0.626437	0.574608	0.299573	-0.573543	-0.457172	-0.201142	-0.937797
KRT11	0.360808	0.211862	-1.841595	-0.445444	0.266376	-1.419068	-0.068552	0.416926	-0.160623	0.451807	-0.599774	-0.576129	0.037978	0.264914	-0.6755	0.543091	0.564324	-1.05246
KRT1	-2.395899	-1.568982	0.21346	-1.544585	-0.215872	2.080875	-1.934596	-1.589757	-1.123781	-1.631337	-1.263045	-1.424977	-1.088058	-0.809289	-0.349457	-1.635277	-0.080295	0.869594
KRT14	0.141371	0.861373	3.480341	0.659261	6.792382	-0.195165	2.339639	0.362086	1.227622	-0.388649	0.948002	3.656613	0.79386	1.330017	4.456384	0.379531	2.120559	3.298489
KRT19	-0.613122	0.571019	2.189987	0.361088	1.810352	-0.905438	-0.247729	-0.036534	-1.133914	-0.990611	1.13204	0.952282	-0.805081	0.077578	1.203849	-0.184388	-0.048222	1.856679
KRT7	-0.64699	0.191794	0.673258	0.387094	0.423167	-0.874142	0.742869	0.252777	-1.118531	-0.237552	0.437395	-0.112119	-0.753627	1.324945	0.093883	-0.57338	-0.727958	0.169799
LAD1	0.379683	0.296355	2.601957	1.959151	1.362016	0.589416	0.345778	1.801052	-1.784617	-0.732256	0.698261	-0.214992	-0.770013	0.612799	1.27382	-0.939865	1.009819	1.750773
LAMA1	1.536838	0.467591	1.617074	0.721994	0.865789	-1.251077	1.775422	1.221285	0.53428	0.877367	0.156931	0.223031	1.952961	1.46675	0.359627	1.427769	0.257092	-1.048381
LAMA3	-1.00207	-1.628758	0.273422	-0.613868	-1.735249	-0.970711	-1.934058	-1.613699	-0.900975	-1.367942	-1.251191	-1.79504	-0.748277	-0.155055	-1.24683	-0.504482	-1.907246	-1.313875
LAMA4	1.174492	0.224251	1.510311	0.023278	0.37855	0.060349	0.942369	0.284083	1.18301	0.206989	1.4576	-0.016011	1.046222	0.318404	0.42635	0.98698	1.567396	1.532895
LAMA5	-0.654698	-0.722355	2.126077	1.136694	0.557943	-0.609371	-0.433181	-0.125661	0.181803	0.263782	0.538091	0.435302	0.46619	0.41331	0.327781	-0.310851	0.497544	1.14186
LAMB3	0.190204	-0.117288	-0.021199	-0.34044	-0.048887	-1.568764	-0.195384	-0.030318	-1.021744	-0.600418	-0.018798	-0.313645	-1.175118	-0.217619	-0.717459	-0.375534	-0.622832	-0.835139
LAMC1	0.408337	-0.323641	-1.065115	0.14091	-0.653722	-1.048474	-0.029589	-0.236575	0.356541	0.594315	0.414495	-0.38497	1.193681	0.616827	-0.403132	-0.22532	0.191537	-0.424407
LAMC2	-0.084713	0.25383	-0.105428	-0.190577	-0.197467	-0.196754	0.603438	0.364271	-0.579748	-0.524942	0.212708	-0.151431	-0.948901	0.611214	-0.24239	0.408663	-0.77106	-0.425618
LDHA	0.486567	0.883791	-0.358225	0.042904	-0.315428	-0.041399	0.643545	0.055347	-0.570459	-0.09059	-0.587217	-1.129298	1.301174	0.750818	-0.377157	-0.074536	0.098509	-1.594313
LEF1	-1.787761	-1.808841	2.995994	-2.259329	-0.093121	0.371115	-1.589493	-1.721113	-1.06408	-1.952888	-1.585366	-2.549359	-1.0525					



NFI	0.412786	0.363327	-1.90523	0.71597	0.228008	-1.287954	0.41911	0.460653	0.724694	0.590352	0.806192	0.725648	0.329535	0.737178	0.756121	0.567048	0.365451	1.184807
NFAT5	0.192806	0.392719	2.043333	-0.552187	0.282797	0.50869	-0.068838	0.10565	0.016964	0.013062	-0.526108	-0.446887	0.231321	0.093791	-0.642881	-0.032825	0.236935	-0.483962
NFATC2	1.112201	1.680699	1.134011	-0.616589	0.081413	0.284022	0.029319	0.469092	0.287765	0.472269	0.21031	0.161629	2.492014	0.72174	1.040193	0.185804	0.706726	1.039407
NFKB1	0.399981	0.439704	-0.692099	0.022874	-0.609845	0.091827	-0.411337	-0.051033	-0.286707	-0.421538	-0.144176	-0.712684	0.30792	-0.041143	-0.009253	0.541807	-0.370903	-0.574911
NID2	2.347366	1.727499	-1.276148	1.038226	0.548252	-0.791781	1.313014	1.060102	1.753064	1.871671	1.6089	-0.088876	2.431834	0.977919	0.762764	1.570971	1.03922	1.623734
NME1	0.860251	0.572436	0.409641	0.727203	0.770194	0.561955	0.682688	0.533226	1.036906	0.901718	0.596933	-0.019087	0.582433	0.139945	0.456863	-0.11808	0.634622	-0.21831
NME4	0.640988	0.02178	2.455646	-0.575651	0.028169	0.573455	0.564526	0.009337	-0.079803	0.796771	-0.560544	-0.655981	-0.063629	0.520092	-0.434466	0.672459	0.557165	-0.0529
NODAL	-3.605451	-2.193572	6.46251	-3.602134	1.040239	2.27815	-2.028671	-1.761806	-2.711845	-1.743154	-2.472597	-2.634529	-1.380072	-2.111951	-2.07803	-1.429791	0.060772	0.311472
NOL7	0.290956	0.039055	-2.765569	-0.001776	-0.441865	-1.231711	-0.060273	0.148775	0.016879	-0.330868	-0.420926	-0.433708	0.236693	0.225373	-0.571969	0.476375	-0.078736	-1.104848
NO52	0.074769	0.032931	2.413739	0.835516	-0.959983	-1.846729	-0.11928	-0.326034	0.663521	0.483439	0.521898	-1.217343	-0.770241	1.175952	0.034302	0.232978	-0.688746	-0.029787
NO53	0.17777	-1.099061	3.431851	0.305146	0.001822	0.086991	-0.888174	-0.133863	-0.695337	0.219954	-0.125282	0.293316	1.251723	0.768056	-0.125247	-0.903728	0.931046	-0.675759
NOTCH1	-0.434636	-0.483539	2.752531	-0.547546	-0.284156	-1.919456	-0.893341	-0.250031	-0.440174	0.068846	-0.147978	-0.571507	0.023046	-0.157736	-0.251123	-0.453423	0.024241	-0.191629
NOX5	-1.498783	-2.157293	3.747077	-1.602381	0.686143	2.440806	-0.859942	-1.599996	-1.325609	-0.858878	-0.773353	-1.897811	-1.145854	-1.227675	-0.982858	-1.80855	0.480205	0.534164
NPRI	-1.269103	-1.963018	0.948305	0.131382	-0.971838	-1.061317	-0.97227	-0.716584	-0.080041	-0.63813	0.051734	-0.69272	0.277347	0.560826	0.070984	-0.329409	-1.090514	0.935347
NP3C1	0.122865	0.666991	-1.828184	-0.233944	-0.058321	-0.184017	-0.205436	-0.027576	0.056089	0.053534	0.272522	0.12516	0.167452	-0.32619	0.165372	0.233243	0.01455	0.55102
NR4A1	-0.760685	1.165824	-1.119321	-1.122047	-0.923759	-0.386482	-0.470124	-2.676862	-1.368021	-2.915535	-0.40282	0.263104	1.883946	0.982583	-0.300159	-1.320385	-3.426962	-1.418335
NR4A3	1.060997	2.032933	1.009256	-0.923117	-0.969587	-0.277684	0.428317	-1.748762	-0.867475	-2.101934	-0.986112	-0.202112	2.445674	1.239816	-0.586159	-2.538197	-0.373722	-0.551519
NR4A5	-1.090457	-0.684833	1.14026	0.438687	0.143987	1.667101	-0.9453	-0.04511	0.911925	-0.884831	-0.335149	-1.348218	-1.074915	-0.724069	-0.978717	0.890072	-0.618271	-1.13043
NRCAM	0.711355	0.639293	0.890248	0.22671	0.134484	-0.658241	0.613683	-0.124408	0.582233	1.021258	0.928519	-0.044757	1.015644	0.374773	0.253453	0.450536	0.694653	0.748213
NR2P	0.539107	0.345795	-1.940277	-0.318413	0.99745	-0.786059	0.656631	0.305165	0.54002	0.914394	0.130471	-0.108419	0.245148	0.329731	0.060428	-0.253623	0.994679	0.210148
NRXN1	-2.544396	-2.264967	3.780266	-3.204404	0.621094	2.311491	-1.736075	-2.442326	-2.091363	-2.345064	-2.600576	-1.914511	-1.525125	-1.025805	-1.621046	-1.124811	0.27559	-0.711014
NRXN3	-0.366892	-0.893085	2.575899	-0.492561	0.371335	1.000658	0.873467	-0.897451	-0.862323	0.002365	-0.170091	-0.352343	-1.296995	0.805471	-0.981199	-0.869304	0.56147	-0.561524
NTRK1	-0.399067	0.10208	6.295758	1.78944	1.038625	1.604626	-0.43346	-0.05769	0.062933	0.552498	1.296986	0.661122	1.339078	1.164335	0.586568	0.187788	1.332258	2.556498
NUBP1	0.221355	0.306208	-1.194563	-0.167645	-0.208882	-2.169628	0.292009	0.325256	0.182075	-0.269137	-0.383605	-0.413832	0.237898	0.362066	-0.16961	0.843201	0.038686	-0.750564
OAS1	0.249792	-0.013489	1.410616	-0.286135	0.36125	0.019033	0.449881	-0.240881	1.64268	-0.064927	-0.272221	-0.97819	0.453144	-0.644478	-0.839053	0.398794	-0.706369	0.056588
OCLN	-0.874656	-1.200509	-0.628335	-1.160845	-1.21499	-0.556607	-1.464884	-0.599749	-0.96731	-1.929641	-1.390267	-1.967237	-1.537209	-0.181624	-1.60797	0.024097	-1.296101	-1.294254
OGN	0.853284	0.746397	0.454496	1.535119	0.952186	1.021065	1.657449	1.224516	1.846743	1.281671	2.458643	1.859617	2.461502	1.614301	1.252219	1.542031	1.517661	1.921672
OLFML2B	1.600935	1.002206	3.49939	0.51431	0.263474	0.703511	1.84023	1.256663	1.437957	1.651246	1.007355	0.627576	2.791389	1.242469	0.232463	0.533243	0.978605	1.18137
OVH1	-1.590191	-0.775658	1.936997	1.179386	0.654706	0.522016	-0.976885	-0.125058	-0.772534	-1.183221	0.216619	1.131502	-1.625672	0.080977	0.839088	-0.393112	0.161293	1.066815
P3H2	1.152457	0.821675	0.007227	0.400854	0.374262	-0.80478	1.046592	1.146988	0.931097	0.881202	0.270455	-0.270218	1.59169	0.692272	-0.157923	0.788478	0.610861	-1.86865
P3H2	-0.028127	-1.220785	-2.417077	-0.68972	-2.340417	-2.448726	-1.098347	-1.287405	-1.329946	-1.086394	-1.201729	-2.705767	-1.005526	-0.374093	-0.213613	-0.780412	-1.752397	-2.275641
PCOLCE	1.400947	1.371877	0.650472	1.351814	0.534598	0.060886	1.927382	1.383489	1.555238	1.517792	2.284932	1.199686	2.77124	1.154887	1.513673	0.971919	0.217329	2.524144
PDGL3	-0.464692	-0.021104	0.595576	0.380673	0.233466	-0.206502	0.401595	-0.434487	0.415493	-0.045004	1.094289	0.607249	0.689826	0.329926	0.732241	-0.273735	-0.07787	1.446693
PDGFA	0.668716	0.305765	2.350039	0.417314	-0.298723	-0.720184	0.696017	0.184818	0.788284	0.845324	-0.05479	-0.294259	1.328138	1.479504	1.080299	1.180136	-0.15478	-0.096939
PDGFC	0.609624	-0.118978	-1.843964	-0.758153	-0.194511	0.689984	1.260548	0.2666	-0.7838	-0.076329	-0.486263	-0.798585	0.502978	1.070534	-0.8846	-0.538504	-0.18541	-0.459671
PDGFRB	0.629201	0.205447	-0.830795	-0.549759	-0.662467	-1.129682	0.5795	0.083163	0.95116	0.654565	-0.09598	-0.502854	1.326465	0.739651	-0.506237	1.391953	0.320344	-0.295793
PKD1	1.620678	0.78802	-1.772156	-0.43943	0.600548	-0.908502	0.419339	2.11409	1.505051	1.585267	0.087476	1.190286	0.798751	0.11934	0.818935	0.690848	2.668093	-0.63072
PPDN	0.595552	0.310961	-1.328989	-0.154081	-0.831698	-0.294561	1.179651	-0.017256	-0.367929	-0.382062	-0.938316	-0.506899	0.913953	0.812121	-0.771058	-0.624089	-0.55197	-0.431478
PEBP4	-0.538398	-0.781766	-2.830865	-0.672376	-1.022062	-0.3951781	-0.657388	-0.591568	-0.548308	-1.798898	-0.642484	-2.929452	-1.910015	0.313972	-1.569845	-0.772423	-0.260143	-1.204002
PECAM1	-0.32868	-1.380498	-5.35274	-0.382445	-0.767408	-2.488525	-1.605024	-0.626769	0.336077	-0.559806	-0.870686	-1.310868	0.293772	-0.418243	-1.35062	0.361025	-0.520043	-1.638567
PKFB1	-1.641812	-1.136824	3.352509	-0.205353	1.02854	1.529447	-1.765472	-1.213205	-1.748207	-1.101443	-1.155321	-1.397872	-0.86004	-0.769801	-0.926764	-0.861129	0.875152	1.461524
PKFB4	0.216678	-0.405712	1.212356	-0.406189	0.366393	-2.140321	0.020087	0.296635	0.647038	-0.407806	0.541613	-0.202813	-0.115673	-0.047251	-0.299448	-0.043163	0.061383	0.354692
PKG1	0.274868	0.428745	1.430238	0.408553	0.289715	-1.122411	0.405718	-0.151228	0.314719	-0.033768	0.78255	0.165579	0.585059	0.099697	0.491538	-0.398982	-0.091401	0.841224
PK3CA	-0.270517	-1.59051	-0.214683	1.172577	-0.216103	0.026971	1.010447	-0.080678	0.430876	-0.093366	0.273842	0.532463	0.527496	0.39302	0.518089	-0.24451	0.065074	0.547898
PK3CD	-0.087331	1.165054	2.165366	-1.573252	0.003148	-0.324584	-1.06388	0.501138	-0.594872	0.311745	-0.97621	-0.548892	1.164011	-0.705928	-0.478105	-0.746056	-0.551071	-0.531047
PK3CG	0.602898	0.940961	0.816705	-0.645293	0.401114	0.699787	0.199955	0.64575	0.207842	0.354891	0.267726	0.632783	0.358206	-0.682549	0.375064	0.259116	0.577018	0.269156
PK3R1	-0.621331	0.456711	0.424534	-0.287065	1.427334	-0.70919	0.924252	-0.057807	0.809794	0.941729	1.113399	1.009147	1.247554	0.621247	0.43162	0.139292	0.141306	1.603305
PK3R2	0.803398	0.458505	3.580073	0.402934	0.743346	0.119282	1.221365	0.620082	1.048018	1.07318	1.518282	1.10001	0.761526	0.882729	1.256973	0.041713	0.67999	0.202028
PK3R5	-0.13816	1.180048	0.3452	-0.379018	0.769765	0.303901	-0.290614	-0.574232	1.16573	-0.817198	0.041728	-0.017609	1.103504	-0.096728	-0.055611	-0.812524	-0.446938	1.033038
PK3R6	0.023193	0.407327	5.579393	0.145155	1.193372	1.504281	0.518443	0.258263	0.706379	0.215639	1.255583	1.16404	-0.122684	-0.705699	0.231546	-1.49071	1.13515	0.042965
PTX2	-1.988372	-1.658955	6.430971	-2.762662	1.78423	2.356191	-0.127139											

RBL2	0.044038	0.464126	-1.677946	-0.537093	0.035795	-0.454598	-0.365475	0.287722	-0.221006	0.220146	-0.732058	-0.440426	0.119389	-0.139848	-0.40788	0.03087	0.155754	-1.06836
RBM47	0.220545	-0.29254	-0.469909	-0.683999	-0.215514	-0.423789	-0.522215	-0.607717	-0.996803	-1.588127	-0.876998	-0.97579	-0.473125	-0.380229	-1.125496	-0.497157	-0.876558	-0.669016
RBPJ	0.173431	0.225265	0.475857	-0.515402	0.23047	0.845313	0.169216	-0.039263	-0.390362	-0.426536	-0.484149	-0.671459	0.57553	0.180419	-0.93012	0.086764	-0.01227	-0.476449
RELN	0.870851	0.748394	-0.112108	0.894632	0.537706	-0.120265	0.489895	0.923443	1.701263	2.522728	0.89679	0.149895	1.155608	0.391572	0.866776	1.121799	1.90355	0.737148
RGCC	-0.737581	-0.764457	-0.300155	0.580826	-1.472551	-2.601264	-0.59615	-2.052082	0.348822	-0.652184	-1.109727	-1.527531	-0.04805	0.356891	-0.814417	0.203537	-2.19953	-0.923131
RHOA	0.01017	-0.080622	-2.349096	0.22443	-0.133118	-1.36639	0.417856	0.140143	0.349793	0.216079	0.418388	-0.142876	-0.145482	-0.09503	0.332339	-0.146778	-0.310195	-0.291322
ROBO4	-0.129317	-0.910949	-2.291981	0.206806	-0.676591	-1.96106	-1.757373	-1.100727	0.888737	-0.201977	-0.57926	-1.695423	-0.521374	-0.225987	-0.929611	1.355215	-0.833482	-1.206578
ROCK1	-0.222675	0.197801	-0.584415	0.389602	-0.010001	-0.38734	0.227599	0.163936	0.516457	0.090929	0.57734	0.608308	0.319075	0.396727	0.553557	0.175616	0.065659	1.138029
ROCK2	-0.247803	-0.378501	-0.955165	0.674569	-0.291412	-1.245477	-0.041813	-0.296953	0.448356	0.052574	0.54637	0.43448	0.520659	0.554084	0.263636	0.332534	0.090425	0.536444
RORA	-0.255246	0.361344	0.682706	1.053126	-0.568121	-0.399409	0.231003	-0.485759	0.570585	0.405325	0.278128	0.690528	1.475301	0.866066	0.426972	-0.089405	0.032576	0.721728
RORB	-0.119847	-0.07429	2.945558	-0.406036	-0.332138	0.093175	0.969487	-1.02514	-1.422638	0.258771	-0.861462	-1.335338	-0.634008	0.651187	-1.63682	-0.703179	0.367005	0.181013
RP527A	0.33822	0.541031	-1.089799	0.42426	-0.317747	-1.041562	0.422323	0.321817	0.311772	0.442978	0.64667	0.898661	0.67722	0.649091	1.223058	0.255572	0.379895	1.129295
RP56KB1	-0.131347	0.014862	-0.108674	-0.26403	-0.04255	-0.164126	-0.098309	-0.090916	-0.054295	-0.004553	-0.153448	0.029631	0.541453	0.260197	0.046321	-0.166994	0.065681	-0.158634
RP56KB2	0.092045	-0.04068	2.853706	0.150568	0.227039	-1.201647	0.445383	0.365995	0.301427	0.578557	0.888403	0.830307	0.06339	0.392413	0.993862	-0.010759	0.484483	1.094916
RRAS	-0.573828	-0.485786	0.054648	-0.072057	-0.871615	-1.930542	0.281971	-0.323366	0.366252	0.705253	0.272808	-0.787938	-0.035982	0.432902	-0.39595	-0.298633	-0.307596	-0.051297
RTN4	0.282932	-0.256914	-1.31993	-0.113554	-0.572346	-1.151918	0.03647	-0.043071	0.061288	-0.409504	-0.638795	-0.947677	0.203043	0.294726	-0.829191	0.384317	-0.356878	-1.40148
RUNX1	1.634338	1.687181	-1.346558	0.904469	0.689289	-0.876386	1.611073	1.231071	0.52381	0.909607	1.312397	1.01072	1.199622	1.289714	1.088615	0.607509	0.645305	1.046395
RUNX1T1	-0.424943	-0.978238	2.399903	-0.871428	0.736405	0.72823	-0.069319	0.293875	-0.043539	1.599292	-0.611011	-1.121448	0.531699	0.251384	-1.555497	0.527495	0.970538	0.167323
S100A14	-0.652332	-1.174824	0.967706	-1.315159	0.592332	-0.133329	-1.028179	-0.377654	-1.357364	-1.413619	-0.504434	-1.273194	-1.165521	-0.114163	-0.682907	-0.745161	-0.4838	0.638692
S100P7	-2.115706	-3.381898	4.659975	-3.790461	0.826821	2.787655	-2.66951	-3.32102	-2.974713	-2.93148	-3.660924	-4.08589	-1.701666	-3.119705	-3.628927	-2.618118	0.170208	-0.180247
S1PR1	-1.167048	-0.90387	-0.161204	-0.039129	-0.90913	-0.71494	-1.774276	-1.218469	0.070625	-0.853001	0.326861	-0.208886	-0.238338	-0.455411	0.332424	0.034048	-1.307211	0.065121
SAMS1N	0.327504	1.645268	0.22771	-0.506714	-0.443071	-0.452095	-0.022551	-1.29057	0.468371	-0.748194	-0.315268	0.013505	1.616518	0.237851	0.31686	-0.251101	-0.087949	-0.414361
SAP130	0.107933	0.040604	0.242014	-0.294336	-0.114553	-1.151456	0.239667	0.453535	0.191642	0.429293	-0.3107	-0.276476	0.763517	0.547611	-0.450698	-0.045975	0.235005	-0.716085
SCG2	-0.323234	-0.08128	3.238128	0.580547	0.81025	2.219774	1.723031	0.68547	-0.166594	-0.197902	-0.19038	-0.568041	1.252087	0.848338	-0.743346	-0.732537	0.398677	0.476754
SCN11A	-1.365531	-1.326609	-0.200429	-0.553959	-0.143812	-1.469473	-0.785369	-0.435647	-1.586613	-1.672371	-0.847075	-0.78518	-0.813112	0.143115	-0.167668	-1.619684	-1.402928	0.115715
SDCA	0.32686	0.267778	-2.162738	0.557042	-0.771538	-1.219739	-0.130563	-0.793075	-1.296181	-1.267391	0.17912	0.624634	-1.546027	0.403322	-0.099012	-0.508283	-1.118151	0.280632
SELE	-0.670404	0.269408	1.634619	1.860845	-0.857748	1.461614	-2.576472	-0.866965	-2.1156	0.330414	-1.004456	-0.301318	3.981561	0.49837	-1.716804	-1.014118	-1.080843	-0.715798
SEMA3E	-1.002607	-1.331809	0.443278	-1.10147	-1.053414	0.782723	-1.919816	-1.359475	-1.292865	-2.230805	-2.003152	-1.307103	-3.02081	0.449194	-2.0438	-1.246011	-2.013872	-2.492101
SERPIN1	0.74724	0.550869	0.307447	0.242077	0.571728	-0.068498	0.2231	0.522175	0.668305	0.166378	0.476859	0.287511	0.760616	0.386028	0.549498	0.976566	-1.17205	-0.427523
SERPINC	1.293381	0.75842	-0.447056	0.463781	0.386836	-1.263981	0.385931	0.86844	-2.004835	-0.486514	-0.397005	-1.658762	0.352123	1.073421	-0.092086	0.205125	-0.143704	-0.085426
SERPINF1	2.406803	2.607643	-0.160609	0.257122	-2.444389	-2.47206	1.512573	-0.07136	1.317111	-1.546081	0.07166	0.801517	3.477008	1.876004	1.793723	0.432947	-2.924005	0.04697
SERPINF2	2.147889	2.073926	-2.345373	1.29988	0.8966	-0.561447	2.469481	0.270952	0.156168	2.255094	1.924081	2.160036	3.328395	2.227996	1.399629	1.205562	1.97585	1.672915
SERPINF3	0.517641	0.29319	-2.593294	0.38796	-0.74239	-2.277354	0.666474	-0.009161	0.368044	0.37129	0.250357	0.099083	0.56283	0.696607	-0.626694	0.369891	-0.081314	-0.375098
SERPINH1	1.422835	1.172253	-0.097235	0.970287	0.080116	-0.780915	1.613201	1.243135	1.531809	1.212062	1.296263	0.002018	1.91598	0.726474	0.756645	0.946399	1.194217	0.102478
SET	0.066348	-0.050103	-1.494058	-0.117787	-0.390264	0.125892	0.080021	-0.291698	-0.046338	0.161939	-0.041818	-0.283403	-0.152131	0.210669	1.199829	-0.50947	0.005967	-0.231104
SETD2	-0.047656	0.048558	-0.430102	-0.032699	0.096623	-0.176811	-0.037773	0.1892	0.034368	0.30186	-0.234783	-0.194143	0.19239	0.314043	-0.095706	0.13642	0.29054	-0.267393
SFRP1	0.588706	0.064151	2.464177	0.189925	0.915155	1.827352	1.654337	1.611568	-0.102670	2.429177	0.723004	0.456374	3.818284	2.744487	-0.668304	-1.538197	0.295518	1.129357
SFRP2	4.243817	2.523894	1.589221	2.703711	1.310594	1.811954	2.524725	4.12295	1.888465	3.905664	0.014971	3.872544	5.856787	2.95817	2.77077	0.893689	3.71099	3.585289
SH2B3	0.738592	-0.08931	0.569368	-0.56044	-0.644889	-0.320156	-0.102017	-0.095641	-0.080816	-0.04501	-0.978683	-1.398111	0.894772	-0.510329	-1.220124	-0.33942	0.081421	-1.250126
SH2D3A	-0.164233	-0.633448	2.497656	-0.845945	0.485043	0.064226	-0.47136	-0.28982	-1.741257	-0.316886	-0.733334	-0.575132	-0.823175	0.327614	-0.189904	-0.207664	0.152901	-0.460443
SH3YL1	0.011867	-0.634285	3.706496	0.579314	0.396127	0.283378	0.357477	0.018054	0.302952	0.576592	1.350023	1.016646	-0.286088	0.520798	1.437535	-0.475115	0.259052	2.567825
SHB	-0.314211	-0.940806	2.754111	-0.751466	0.558726	1.048322	-0.297781	-0.985632	-1.192799	-0.273576	-1.087456	-0.704504	1.755686	0.717087	-1.268004	-1.605119	0.337767	-0.323287
SIRT1	-0.479241	-0.345811	0.497159	-0.685595	-0.595485	0.189875	-0.482606	-0.209198	-0.507632	-0.360117	-1.080515	-0.686763	0.457041	-0.153054	-1.067039	-0.232196	-0.261372	-1.237268
SKP1	0.219136	0.306998	-1.682417	0.544428	0.000685	-0.761495	0.259176	0.295073	0.496651	0.320793	0.581007	0.369805	0.471244	0.506418	0.355991	0.440125	0.242434	0.101863
SLC12A6	-0.285787	-0.801325	0.513581	-0.239945	0.094545	0.217035	-0.663464	0.151024	-0.856495	-0.289319	-1.147998	-1.333895	-0.043616	-0.3013	-1.653195	-0.297122	-0.440248	-0.156916
SLC2A1	0.221371	0.970884	3.108962	0.112796	0.416667	1.85492	0.762941	-0.207839	-0.093313	-0.4381	0.44014	0.448132	0.615126	0.161849	1.156635	-0.259667	0.509909	0.343507
SLC35A3	0.068593	0.492418	-3.569717	0.048277	-0.067245	-1.72166	-0.293772	0.409609	0.344983	-0.472922	-0.004919	-0.095265	-0.184735	0.008314	0.050846	1.02472	-0.016189	-0.469989
SLC37A1	-0.474179	-0.788385	1.643949	-1.147073	0.348019	1.159308	-0.731856	-0.695434	-0.737756	-0.965174	-0.865533	-1.099901	-1.061641	-0.747373	-1.274663	-1.08279	-0.040581	-0.392153
SLC44A4	0.08155	0.995553	3.642913	0.310006	1.608628	0.069506	0.25394	0.715738	0.669717	-0.545896	2.54698	3.341979	-0.614175	0.768764	3.508004	-0.303095	1.327669	5.121838
SLIT2	-0.100001	-0.883795	-2.804384	-0.682167	-2.163938	-2.956327	-0.702592	-1.044894	0.325882	-2.45711	-0.88887	-0.236662	-1.110043	-0.168726	-1.771438	1.955337	-1.68517	-2.386616
SLP1	-1.384934	-1.136426	0.080412	-0.312171	0.801448	-1.966653	-1.802287	-1.842521	-1.701275	-2.25008	-0.09626	1.1678						

THB54	1.037113	1.136402	3.086576	1.328233	1.219814	1.616185	2.13852	4.346833	0.391853	2.176944	2.62504	1.687667	8.866229	3.17871	2.438435	-0.562161	2.419788	2.75111
THY1	3.716933	2.85419	2.929895	2.637109	2.631375	1.242317	4.67579	4.171223	4.273117	4.132725	3.109904	2.149352	5.560525	3.284399	2.501548	3.058432	2.978303	2.211746
TI E1	-0.949283	-1.422558	2.038026	-0.259704	-0.158497	-0.758571	-1.426351	-0.419067	0.482923	0.494627	0.463841	-0.111878	0.596896	-0.093719	-0.156699	0.271518	-0.127415	0.409519
TIMP1	2.153483	2.035845	-3.888516	1.346152	-0.236703	-2.142558	2.579245	2.377735	1.664739	0.973571	0.133969	-0.159177	2.200261	1.072668	0.271127	1.00246	0.530922	-0.841106
TIMP2	1.169038	0.461394	-1.186294	0.908886	0.63047	-0.724109	1.946647	1.073648	1.20041	1.601954	1.340648	1.134098	1.96184	1.8696	0.724214	0.584355	0.853132	1.44291
TIMP4	-1.501418	-1.92604	2.170975	-0.769118	-0.391781	1.353451	-0.757182	-1.416765	-0.929741	0.074575	-0.670592	-0.124504	1.438691	0.596153	-0.724383	-1.124125	0.175405	0.850306
TJP2	-0.363544	-0.640282	0.135891	-0.243817	-0.508479	-0.658259	-0.663489	-0.666524	0.123084	-0.26335	-0.396075	-0.973045	-0.490179	0.292228	-0.854423	0.199228	-0.490796	-0.369697
TJP3	-1.29897	-0.532807	2.476261	-0.147372	0.965643	0.643399	-1.056758	-0.830797	-0.805604	-1.186919	0.134168	0.755911	-1.839126	-0.186214	0.700895	-1.313832	0.355909	1.916616
TLR4	-0.189181	0.052774	-1.571235	-0.128124	0.00792	-0.491853	0.322333	-0.312046	0.106784	-0.236783	0.226608	-0.387057	0.493056	-0.079009	-0.166822	-0.142334	-0.454838	0.112618
TMCG	0.447106	0.714989	-3.999026	-0.253291	0.703026	-1.239903	0.121695	0.648253	-0.034999	0.4289	0.281613	0.257765	-0.169807	-0.024925	0.681278	0.086946	-0.542899	-0.016288
TMEM100	-4.277707	-4.251809	-3.111204	-0.697067	-1.12306	-2.652854	-3.898269	-2.031314	0.566814	-2.314069	-0.672955	-3.45278	-3.173194	-1.518916	-2.149977	0.323981	-3.521812	-3.18663
TMEM308	-0.241311	-0.552749	0.357854	-0.285583	-0.651118	0.077033	-0.32665	-0.395346	-0.104754	-0.397573	-0.469811	-0.018212	-0.811569	0.453145	-0.130977	-0.434619	-0.351768	-0.299797
TMPSR52	-0.208558	-0.960456	0.029644	-0.415772	-1.189158	-0.105477	-0.870659	0.221431	-1.341059	-1.431261	-1.61738	-2.251252	-1.227993	0.799352	-1.547733	-0.73457	-1.485036	-1.726592
TMPSR4	0.477627	1.982616	0.980095	0.791284	0.504696	0.948446	2.661395	2.015646	0.727376	1.570537	3.657787	3.119087	-0.005946	1.26587	3.931047	1.653287	3.45562	4.047531
TMPSR56	-1.422601	-0.332649	6.209151	-0.571286	1.271999	2.185722	0.154179	-1.716459	-1.528995	-1.882231	-0.459671	-0.036641	-0.47733	0.485937	-0.065673	0.338022	0.183833	1.095773
TNC	2.102249	2.538184	0.339431	1.091241	0.948402	0.455088	2.135555	1.97071	2.196543	1.398219	2.558781	1.461326	3.12767	2.149449	2.092909	1.855601	1.425249	1.758852
TNF	-0.620911	-0.703796	0.330813	-1.947299	-0.641041	1.223639	-1.261362	-1.672568	-1.807032	-0.860367	-1.830818	-0.147788	-0.677858	-2.251532	-1.230898	-1.582042	0.142549	-0.825003
TNFRSF12A	1.109168	0.657887	2.798492	0.685232	-0.258373	-0.054472	0.599373	-0.9957	-0.808235	-0.390757	0.49955	-0.109431	-0.080634	0.947924	0.973309	-0.627853	-0.85243	0.894867
TNFRSF1A	0.575368	0.329716	-0.507126	0.720965	-0.391385	-1.127554	0.455333	-0.104425	0.277935	0.143298	0.270901	-0.03958	0.888241	0.571219	0.150582	-0.080082	-0.049967	0.118404
TNFSF10	-0.656119	-0.017341	-1.537437	-1.659133	-0.228349	-0.101935	-0.922161	-0.518969	-0.256918	-0.295912	-0.011502	-0.706413	-1.1616235	-1.174603	-0.101885	-0.726704	0.063015	
TNFSF12	0.253578	0.19275	-3.955448	0.357899	0.172772	-1.045991	0.689887	0.36592	0.807945	0.594469	0.993656	0.645034	0.738532	0.737502	0.608319	0.238166	0.387877	1.115148
TNFSF13	0.68899	0.594244	6.05498	0.680608	1.191247	0.168258	0.869137	0.267866	0.582595	1.454501	1.826505	0.553322	-0.254249	-0.215931	0.868295	-0.180539	-0.135948	2.768832
TNMD	-2.150738	-4.645749	2.843583	-2.299424	0.128824	2.432781	-2.689436	-2.67525	-2.579061	-1.873403	-1.728377	-2.179816	1.235105	-2.104697	-2.092802	-2.390116	-0.637414	-0.623366
TNN	-2.510644	-3.449261	3.502415	-1.550395	0.418422	2.512958	-1.355444	-1.337376	-0.245609	-2.320771	-0.821396	-1.082864	-1.093868	-1.645174	-1.709229	-1.77859	0.318941	-0.359255
TNS1	-0.676134	-0.979597	-2.665814	-0.558705	-0.734943	-1.513305	-0.326336	-0.361164	-0.160566	0.064537	-0.173117	-0.377378	-0.196698	0.453274	-0.665358	-0.264284	-0.052191	-0.873114
TNXB	0.620563	-0.336909	4.261754	0.641659	0.101933	0.674649	0.520646	0.765226	0.935506	1.316089	2.691117	1.123577	1.786098	1.158617	1.832079	0.545761	1.484914	3.82126
TM111	-0.893281	-0.780181	-1.050736	-0.488688	-0.221175	0.296126	-0.842289	-0.320995	-1.049214	-1.112371	-0.927311	-0.635344	-1.692823	-1.076518	-1.069176	-0.451546	-0.620042	0.008238
TP5	0.250154	0.245641	1.539513	0.143734	0.569355	0.128882	0.403012	0.431527	0.141727	0.306112	-0.002973	-0.452938	0.651951	0.132031	-0.226947	0.400188	0.658126	0.125134
TPM2	0.465099	0.009297	3.939177	1.426695	0.134237	-0.513192	1.699245	0.442957	1.058124	1.467267	1.862873	1.623578	1.102716	1.668579	1.787686	0.087538	1.211188	2.889591
TPSB2	0.147572	0.47879	0.832721	0.975819	-0.05925	0.090918	-1.358815	1.178379	0.895746	0.540442	1.470888	0.820038	-0.394827	-0.762746	0.007701	1.707546	1.263543	0.894854
TPSD1	-2.397031	-1.818042	5.282726	1.358358	0.932284	1.285292	-0.71877	1.592115	1.555538	-0.063843	1.247229	1.586491	-1.140721	-2.736421	-0.45774	2.452542	-0.394669	2.966508
TRIM39	-0.727445	-0.52154	0.461584	-0.853604	-0.137698	1.203369	-0.612003	-0.541194	-0.970105	-0.456315	-1.012153	-0.718837	-0.517077	-0.187238	-0.7473	-0.524188	-0.131888	-0.496815
TSPAN1	0.771392	2.204256	-2.17504	0.846859	2.344778	-0.295957	0.216753	0.637442	0.716899	-0.536235	2.199507	2.826353	-1.276559	0.164601	1.318698	0.198591	1.683813	3.084645
TWST1	1.816429	0.725808	8.403326	0.969323	1.585838	2.57234	2.477432	0.693842	1.648107	-1.153143	3.283285	2.456047	4.792966	2.21029	2.940136	1.589124	1.792488	3.578666
TWST2	0.047656	-0.293464	3.075984	-0.002893	-0.454351	-0.358513	0.340921	-0.725599	-0.792976	-0.042984	-0.290719	-1.282726	0.890074	1.036977	-0.235638	-0.447222	-0.016448	0.272366
TXNP1	-1.044118	-0.44323	3.323181	1.230249	1.059086	-0.979623	0.754501	0.600869	1.833769	0.673976	1.673417	1.833557	0.896831	0.619122	1.943457	1.007033	0.238342	1.784477
TYMP	1.123318	1.550616	1.708279	-0.060151	0.677166	-0.3198	0.972778	0.335137	1.080913	0.485696	1.068976	0.665195	1.129397	0.203942	0.547904	-0.575762	0.256039	0.816132
UBA52	0.455574	0.275895	-1.020047	0.174988	-0.099505	-1.124596	0.538312	0.414952	0.20555	0.443049	1.122075	0.280832	0.729188	0.575057	0.648446	0.393869	0.4261	0.18279
USP39	0.026519	-0.163099	-1.282483	-0.033173	-0.492622	0.517745	-0.347897	-0.115336	-0.504849	-0.750594	-0.726098	-0.541011	-0.665183	-0.432807	-0.450176	0.208331	-0.335539	-0.588506
UTS2	-1.424848	-1.729176	3.590232	-2.775168	-0.75131	2.961201	-1.942787	-0.384287	-1.196823	-1.86372	-0.963113	-1.781091	-1.029134	-2.132982	-0.59656	0.456068	-0.77212	0.1329
VAMP8	0.102071	0.2549	-0.7058	0.104494	0.389737	-1.222876	-0.090524	-0.103151	0.096763	-0.555596	0.481803	0.019951	-0.320053	-0.196353	0.112702	-0.407004	-0.571246	0.499468
VASH1	0.465763	0.031506	2.588391	-0.325917	0.79113	0.397424	0.27055	0.273714	0.52895	0.599688	0.56196	0.006051	0.568346	0.001054	0.244103	0.577546	0.507599	1.275566
VAV2	0.152274	-0.37936	2.555207	-0.530969	-0.089163	0.008985	-0.055546	-0.149299	0.265685	0.565363	0.390211	-0.608436	-0.007891	0.404883	-0.471121	0.006006	0.291441	-0.289681
VAV3	-0.02091	-0.14745	-0.805322	-0.522065	0.452611	-1.436433	-0.603632	0.103223	0.295511	-0.15075	0.410026	-0.034306	-0.032371	-0.031882	0.378829	1.0053	0.14664	0.262119
VCAM1	2.821734	3.47809	0.499435	1.533847	0.02499	1.172658	3.157783	1.830741	1.738569	2.096011	1.043109	0.431685	2.625131	1.451472	1.862257	1.103643	0.769312	0.348694
VCAN	1.425667	1.042556	-1.527794	1.108371	-0.009892	-1.236763	2.230933	1.590443	1.12838	0.941959	1.003056	0.156165	1.599506	1.058847	0.620015	1.218646	0.528816	0.276607
VEGFA	0.238574	1.227708	-0.944737	-0.996649	-0.848613	-1.775111	-0.858427	-0.91522	-0.437996	-1.015232	-0.766815	-1.596578	1.452603	0.081583	-1.545153	-0.164336	-0.833576	-1.41741
VEGFB	0.768169	0.123318	0.881071	-0.288184	0.358263	-0.202552	1.024552	0.357916	0.287662	0.824382	-0.058784	-0.007508	1.254039	1.128339	-0.334984	-0.201319	0.619094	-0.258393
VEGFC	0.560194	0.09338	0.333061	-0.684416	-0.934239	-0.115376	-0.222678	-0.915502	0.93606	-0.018081	-0.358481	-1.864368	-0.250609	-0.649912	-1.317147	-0.102682	-0.390137	-1.163905
VEZF1	-0.511888	-0.664138	0.957414	-0.462111	-0.298524	0.115387	-0.454012	-0.266983	-0.605226	-0.582953	-0.565447	-0.560775	-0.288053	0.014461	-0.593677	-0.424101	-0.271072	-0.414126
VHL	0.150176	0.309438	-0.905133	0.139047	0.267634	0.103059	0											

	Observation 1	Observation 2	Observation 3	Observation 4	Observation 5	Observation 6
Diseases and Bio Functions						
Organismal death	-2.594	-0.554	-1.826	-0.206	-7.079	-7.905
Morbidity or mortality	-2.534	-0.488	-1.775	-0.364	-6.972	-7.899
Cell movement of connective tissue cells	4.171	2.523	1.838	2.833	4.55	3.247
Cell survival	3.054	2.337	1.567	0.314	6.139	4.441
Adhesion of connective tissue cells	3.308	2.652	2.317	2.139	3.847	3.13
Invasion of tumor cell lines	3.322	1.673	1.802	1.355	3.913	5.046
Cell movement of fibroblasts	3.774	2.002	1.739	2.666	3.249	3.309
Cell viability	2.693	2.229	1.328	0.228	5.896	4.169
Cell viability of tumor cell lines	2.325	1.46	1.485	0.377	5.843	4.943
Migration of connective tissue cells	3.488	2.185	1.373	2.503	3.314	2.967
Cell movement of fibroblast cell lines	3.787	2.974	1.859	1.577	2.294	2.692
Formation of cellular protrusions	3.175	2.686	1.025	1.729	2.954	3.546
Invasion of breast cancer cell lines	1.764	0.863	1.828	1.82	4.227	4.535
Bleeding	-1.67	1.179	-1.92	-1.699	-4.228	-4.152
Invasion of cells	2.798	1.393	0.86	1.038	4.472	4.1
Cell movement of epithelial cells	3.202	3.065	1.352	0.818	2.89	2.401
Binding of connective tissue cells	2.914	1.524	1.598	1.658	3.041	2.975
Migration of epithelial cells	3.166	2.631	1.909	1.654	2.396	1.807
Cell movement of breast cancer cell lines	2.67	1.908	0.953	1.083	4.375	2.248
Cell movement of dermal cells	3.253	2.079	1.379	0.971	2.976	2.446
Cell spreading	3.181	1.666	0.301	0.911	3.893	2.997
Cell movement of carcinoma cell lines	3.181	1.213	0.945	1.27	3.382	2.753
Epithelial-mesenchymal transition	2.147	1.036	2.319	1.076	3.83	2.265
Apoptosis of breast cancer cell lines	-1.864	-1.035	-1.867	-2.286	-2.481	-2.939
Aggregation of cells	1.93	2.194	1.672	1.379	2.883	2.25
Invasion of tumor cells	2.344	2.103	1.556	0.461	2.964	2.818
Microtubule dynamics	3.129	1.711	0.472	1.315	2.424	2.913
Survival of organism	2.057	1.928	1.006	-0.935	3.087	2.698
Cell viability of blood cells	2.127	2.475	2.056	1.681	3.332	-0.017
Formation of filaments	2.777	1.806	1.1	0.722	3.066	2.177
Migration of tumor cells	2.281	2.527	1.335	0.591	2.522	2.361
Cardiogenesis	2.298	2.091	1.16	0.745	2.34	2.857
Apoptosis	-1.74	0.821	-0.21	-1.238	-3.093	-4.352
Cell death of breast cancer cell lines	-1.659	-0.934	-1.503	-1.804	-2.698	-2.812
Outgrowth of cells	2.34	2.077	0.72	-0.077	2.897	3.292
Gastrointestinal carcinoma	-0.579	-1.003	-2.336	-1.489	-2.919	-2.919
Hereditary connective tissue disorder	-2.327	-1.953	-1.891	-2.264	-1.953	-0.707
Cell-cell contact	1.436	2.549	1.34	0.91	1.78	3.036
Migration of breast cancer cell lines	2.435	1.652	0.493	0.765	4.102	1.573
Cell movement of kidney cell lines	2.083	1.561	1.762	1.136	2.925	1.537
Homing of cells	2.32	2.614	0.556	0.239	3.69	1.573
Development of head	2.27	0.607	0.542	1.692	3.444	2.436
Apoptosis of connective tissue cells	-3.082	-1.317	-1.516	-1.236	-0.663	-3.068
Chemotaxis	2.519	2.816	0.363	0.198	3.538	1.368
Invasion of carcinoma cell lines	3.271	1.845	0.053	1.107	2.16	2.303
Migration of tumor cell lines	2.368	0.836	0.452	0.085	4.476	2.516
Organization of cytoplasm	3.458	1.558	0.291	0.827	2.059	2.505
Migration of cancer cells	1.864	2.12	1.104	0.49	2.504	2.427
Organization of cytoskeleton	3.405	1.501	0.232	0.888	2.004	2.45
Development of body axis	2.159	0.504	0.439	1.583	3.327	2.324
Cell movement of embryonic cell lines	2.389	1.787	0.916	0.801	2.254	2.171
Cell movement of tumor cells	1.786	2.079	1.187	0.594	2.242	2.34
Migration of cells	1.981	0.779	0.428	0.981	3.421	2.623
Development of body trunk	2.521	1.634	-0.764	0.715	2.452	2.038
Differentiation of nervous system	0.823	0.563	2.523	1.174	2.18	2.705
Vascularization	2.221	0.658	0.74	0.646	3.053	2.626
Inflammation of organ	-2.174	-1.081	-0.603	1.029	-2.912	-2.115
Growth of blood vessel	2.645	1.102	0.961	0.006	2.376	2.811
Fibrogenesis	2.578	1.553	0.716	0.297	2.916	1.822
Cell movement of tumor cell lines	1.925	0.683	-0.219	-0.354	3.984	2.676
Development of genitourinary system	2.166	1.474	-0.124	1.018	2.406	2.585
Invasion of tumor	2.068	1.559	1.199	0.391	2.304	2.22
Attachment of cells	2.085	1.306	0.363	0.363	3.005	2.613
Necrosis	-1.95	1.337	0.349	-0.651	-2.198	-3.235
Non-traumatic arthropathy	-1.795	-0.637	-1.023	-3.34	-1.409	-1.506

Formation of actin filaments	2.114	1.563	0.68	0.471	2.77	2.021
Proliferation of neuronal cells	1.815	2.048	0.396	-0.212	2.349	2.779
Vascularization of eye	2.624	1.05	0.47	1.169	2.381	1.786
Cell movement	1.895	0.462	0.049	0.774	3.38	2.913
Vasculogenesis	1.326	-0.913	0.694	0.862	3.136	2.517
Cell movement of mononuclear leukocytes	2.165	2.35	1.156	1.089	1.749	-0.873
Binding of blood cells	1.571	2.456	1.393	0.038	3.848	0.059
Formation of muscle	1.261	1.133	1.561	0.562	2.079	2.721
Cell death of tumor cell lines	-1.866	0.408	-0.47	-0.977	-2.722	-2.84
Sensory system development	1.054	1.576	1.092	1.614	2.328	1.616
Migration of antigen presenting cells	2.236	3.008	1.334	0.829	1.659	0.148
Migration of phagocytes	2.887	2.896	0.752	0.238	2.368	-0.03
Transmigration of cells	2.671	0.643	1.533	1.416	2.658	0.208
Neoplasia of cells	2.991	1.652	-0.669	0.386	1.204	2.098
Cell proliferation of breast cancer cell lines	0.42	1.21	0.642	1.048	2.414	3.181
Phosphorylation of protein	1.894	1.299	0.705	-0.298	2.923	1.761
Migration of mononuclear leukocytes	2.167	2.117	0.916	0.748	2.039	-0.828
Cell movement of antigen presenting cells	2.149	2.58	0.996	0.962	2.008	0.066
Apoptosis of tumor cell lines	-1.366	0.066	-0.589	-1.292	-2.676	-2.769
Neovascularization of eye	2.34	1.01	0.134	0.784	2.393	2.08
Cell death of connective tissue cells	-2.596	-1.648	-0.694	-0.754	-0.817	-2.206
Adhesion of blood cells	1.568	2.151	1.055	-0.253	3.551	-0.114
Neoplasia of tumor cell lines	2.393	0.831	-0.945	-0.552	1.432	2.446
Neovascularization of organ	2.231	0.933	0.314	0.65	2.377	2.071
Cell movement of lymphatic system cells	1.814	2.408	0.969	0.892	1.931	-0.529
Advanced stage tumor	2.317	1.457	0.478	0.734	2.041	1.51
Advanced malignant tumor	2.317	1.457	0.478	0.734	2.041	1.51
Secondary tumor	2.371	1.512	0.42	0.791	1.98	1.45
Cell movement of muscle cells	0.592	2.356	1.108	-0.561	2.111	1.77
G1 phase	1.06	1.982	-0.756	-1.028	2.538	1.126
Cell movement of lymphocytes	1.582	2.194	1.114	1.039	1.628	-0.874
Migration of carcinoma cell lines	2.631	0.898	0.552	0.388	2.206	1.748
Diabetes mellitus	-1.718	0.407	-2.369	-2.327	-0.742	-0.847
Migration of lymphatic system cells	2.028	2.399	0.679	0.462	2.137	-0.7
Squamous cell tumor	2.494	1.907	0.397	2.606	-0.29	0.649
Formation of blood vessel	1.097	0.933	0.129	-1.416	2.767	1.947
Sprouting	2.425	1.43	-0.412	-0.342	1.13	2.526
Neovascularization	1.789	1.012	0.366	0.705	2.364	1.991
Differentiation of muscle	1.828	1.956	0.62	0.662	1.196	1.961
Cell movement of vascular smooth muscle cells	0.473	1.811	0.271	-1.453	2.533	1.675
Formation of vessel	0.816	1.156	-0.619	-1.38	2.498	1.738
Proliferation of muscle cells	1.609	1.392	1.018	0.538	2.181	1.462
Lymphocyte migration	1.71	2.088	0.844	0.625	1.862	-1.07
Interaction of DNA	1.373	0.955	1.079	0.287	2.511	1.958
Differentiation of tumor cell lines	1.766	1.575	0.314	-0.185	1.8	2.508
Cell movement of lymphoid cells	1.51	2.119	1.043	0.968	1.693	-0.803
Cell movement of cancer cells	1.562	1.598	0.997	0.302	1.851	1.815
Activation of myeloid cells	-0.662	1.312	-1.121	-1.613	1.966	-1.376
Binding of leukocytes	1.214	1.903	0.905	-0.559	3.134	-0.312
Angiogenesis	1.364	-0.301	0.336	0.769	2.882	2.346
Activation of phagocytes	-0.899	0.857	-1.62	-1.753	1.721	-1.102
Development of vasculature	1.342	-0.321	0.313	0.744	2.902	2.321
Differentiation of bone	1.374	-1.123	-0.212	1.559	1.597	2.076
Cell movement of epithelial cell lines	1.848	0.879	0.915	1.001	1.894	1.37
Differentiation of bone cells	1.591	-0.917	-0.371	1.578	1.473	1.954
Adhesion of immune cells	1.387	1.721	0.9	-0.659	2.921	-0.246
Cell movement of leukocytes	1.708	1.559	0.608	1.221	2.103	-0.631
Binding of epithelial cells	1.144	1.144	1.192	0.682	1.87	1.795
Leukocyte migration	1.629	1.871	0.759	0.836	2.346	-0.381
Metastatic solid tumor	0.519	1.619	1.565	0.196	2.462	1.383
Cell movement of blood cells	1.536	1.814	0.76	0.817	2.438	-0.365
Quantity of lymphatic system cells	1.441	1.448	0.718	1.213	1.846	1.055
Advanced malignant solid tumor	0.416	1.51	1.657	0.094	2.55	1.476
Differentiation of osteoblasts	1.163	-1.201	-0.677	0.537	1.358	2.721
Neoplasia of epithelial cells	1.552	1.802	0.527	2.092	0.218	1.434
Cancer of cells	3.109	2.039	0.635	1.351	0.037	0.446
Migration of neutrophils	2.213	1.772	0.544	0.015	2.714	0.35

Migration of myeloid cells	1.925	1.634	0.443	-0.73	2.694	-0.156
Transcription of RNA	0.932	-0.091	-0.396	-0.554	3.056	2.534
Binding of DNA	1.272	0.853	0.978	0.182	2.415	1.86
Cell movement of smooth muscle cells	0.192	2.314	0.819	-0.883	1.961	1.381
Progression of tumor	2.112	2.705	0.572	-0.06	1.697	0.378
Activation of leukocytes	0.732	2.619	-1.242	-0.117	1.423	-1.37
Activation of blood cells	0.507	2.338	-1.199	-0.585	1.328	-1.542
Metabolism of reactive oxygen species	1.533	2.069	-0.015	-0.912	2.476	-0.49
Inflammation of absolute anatomical region	-1.746	-1.115	-0.973	0.297	-2.492	-0.865
Synthesis of reactive oxygen species	1.54	2.078	-0.04	-0.844	2.39	-0.584
Recruitment of leukocytes	0.261	2.35	0.409	-1.03	2.055	-1.358
Recruitment of blood cells	0.304	2.438	0.375	-1.085	2.169	-1.082
Colony formation of cells	-0.257	-0.624	-1.564	-1.394	1.583	2.03
Vascularization of absolute anatomical region	2.263	0.822	0.111	0.535	2.31	1.354
Cell proliferation of tumor cell lines	0.967	1.137	-0.602	-0.675	1.977	2.021
Cell movement of T lymphocytes	1.596	2.051	0.911	0.626	1.656	-0.5
Differentiation of mononuclear leukocytes	2.526	1.291	0.899	0.44	1.725	0.44
Lymphoreticular neoplasm	1.569	1.484	1.461	1.889	0.103	0.783
Visceral metastasis	0.204	1.653	1.949	0.201	2.384	0.824
Squamous-cell carcinoma	2.222	1.618	0.064	2.337	-0.298	0.668
Colony formation of tumor cell lines	0.543	0.465	-0.752	-0.585	2.187	2.643
Cell proliferation of fibroblasts	1.532	-0.121	0.49	0.094	2.473	2.445
Recruitment of myeloid cells	-0.298	2.05	0.084	-1.591	1.699	-1.408
Differentiation of epithelial tissue	1.399	1.27	-0.216	-0.907	1.623	1.7
Migration of granulocytes	1.787	1.126	0.664	-0.724	2.657	0.157
Advanced lung cancer	0.102	1.315	1.973	0.423	2.439	0.849
Pulmonary metastasis	0.102	1.315	1.973	0.423	2.439	0.849
Branching of cells	2.256	1.199	-0.082	0.102	0.949	2.509
Adhesion of vascular endothelial cells	0.75	1.233	-0.714	-0.769	3.303	-0.297
Inflammation of body cavity	-2.09	-1.214	-1.692	-0.007	-1.687	-0.366
Cell proliferation of carcinoma cell lines	0.104	-0.262	-0.641	-1.135	1.994	2.872
Synthesis of lipid	0.846	1.381	-0.015	-0.489	2.408	1.855
Formation of lymphoid tissue	1.989	1.482	-0.683	0.37	1.228	1.228
Colony formation	-0.432	-0.743	-1.514	-1.364	1.35	1.566
Adhesion of myeloid cells	-0.319	1.041	-0.894	-1.317	1.681	-1.706
Recruitment of cells	0.351	2.245	0.374	-1.221	2.547	-0.197
Male genital neoplasm	-0.12	1.668	1.896	1.115	1.081	1.033
Hematopoiesis of mononuclear leukocytes	2.5	1.249	0.852	0.388	1.53	0.387
Binding of myeloid cells	-0.23	0.567	-1.082	-1.228	1.303	-2.437
Genitourinary tumor	0.725	1.093	0.76	1.28	1.246	1.719
Neuronal cell death	0.276	1.073	-1.166	-0.916	-1.921	-1.471
T cell migration	1.799	1.923	0.654	0.365	1.608	-0.454
Proliferation of cancer cells	0.659	1.664	-0.732	-0.783	1.285	1.673
Transmigration of leukocytes	1.355	0.289	1.297	0.948	1.612	-1.237
Advanced extracranial solid tumor	0.224	1.397	1.859	0.127	2.309	0.772
Progression of malignant tumor	2.388	2.241	0.551	0.845	0.11	0.551
Adhesion of endothelial cells	0.889	1.516	-0.285	-0.365	3.381	-0.243
Production of reactive oxygen species	0.837	1.755	-0.549	-0.709	1.595	-1.231
Homing of leukocytes	0.804	2.457	0.346	-0.062	2.415	-0.584
Chemotaxis of myeloid cells	0.316	1.522	-0.881	-1.057	1.411	-1.464
Cancer of secretory structure	1.47	1.231	0.507	-0.178	1.655	1.607
Migration of vascular smooth muscle cells	0.275	1.481	0.185	-1.195	2.22	1.278
Synthesis of DNA	0.947	-0.341	-2.035	-1.845	0.661	0.763
Cell death of endothelial cells	-1.316	1.233	1.655	0.181	-0.615	-1.58
Binding of professional phagocytic cells	-0.379	0.178	-1.538	-1.567	0.486	-2.43
Function of blood cells	0.581	1.857	0.725	-0.907	2.001	-0.475
Migration of muscle cells	-0.015	1.96	0.892	-0.66	1.803	1.189
Cell movement of macrophages	1.964	2.173	-0.052	0.719	1.418	0.188
T-cell malignant neoplasm	-0.48	-1.275	-1.137	-1.095	-1.173	-1.352
Homing of blood cells	0.69	2.338	0.447	0.042	2.505	-0.477
Proliferation of liver cells	0.592	1.662	0.631	0.086	1.322	2.185
Transcription	0.364	-0.24	-0.425	-0.298	2.794	2.348
Astrocytoma	-1.121	-1.666	-1.121	-0.575	-0.939	1.024
Prostatic tumor	-0.262	1.548	1.78	0.99	0.955	0.907
Recruitment of phagocytes	-0.205	1.781	0.01	-1.469	1.824	-1.151
Primary tumor	-1.067	1.067	1.067	-1.067	1.067	1.067
Development of urinary tract	1.905	1.148	-0.084	0.304	0.954	2.003

Chemotaxis of leukocytes	0.693	2.398	0.219	-0.205	2.133	-0.728
Cell movement of phagocytes	1.694	1.603	-0.16	0.242	2.051	-0.624
Chemotaxis of blood cells	0.69	2.395	0.217	-0.208	2.131	-0.731
Expansion of cells	1.379	1.427	-0.667	-0.395	1.399	1.104
Migration of smooth muscle cells	-0.12	1.867	0.792	-0.768	1.709	1.091
Migration of endothelial cells	1.447	-0.136	-0.332	-0.469	2.245	1.717
Apoptosis of endothelial cells	-1.414	1.046	1.532	0.175	-0.692	-1.486
Occlusion of blood vessel	-0.727	1.854	-0.959	0.554	0.805	-1.43
Cellular homeostasis	1.272	1.743	0.548	-0.027	2.115	-0.507
Necrosis of muscle	-1.719	0.141	-0.305	-0.272	-1.838	-1.932
Quantity of connective tissue	-0.878	0.609	-0.622	-1.102	2.041	0.918
Neoplasia of tumor cells	-0.621	-0.573	-1.625	-0.621	-1.672	-1.051
Cellular infiltration	0.827	1.241	0.212	1.961	1.242	-0.679
Development of connective tissue cells	0.556	-0.887	-2.009	-1.249	1.02	0.44
Growth of organism	0.671	0.713	0.111	0.613	2.071	1.932
Growth of connective tissue	0.037	-1.215	-0.26	-0.642	2.515	1.436
Quantity of lymphocytes	1.002	1.31	0.484	0.935	1.498	0.847
Cellular infiltration by leukocytes	0.815	1.053	0.536	1.973	0.743	-0.956
Cell movement of endothelial cells	1.254	-0.231	-0.283	-0.748	2.13	1.421
Growth of vessel	1.956	0.112	0.247	0.014	1.575	2.158
Quantity of lymphoid cells	1.092	1.398	0.388	0.836	1.585	0.749
Adhesion of tumor cell lines	0.366	0.916	0.029	-0.084	2	2.644
Intestinal tumor	0.073	1.178	-0.969	0.773	-1.07	-1.954
Abdominal neoplasm	1.598	2.146	0.577	0.942	0.746	0
Growth of liver	0.504	1.587	0.544	-0.009	1.243	2.117
Recruitment of granulocytes	-0.097	1.631	-0.129	-1.588	0.604	-1.951
Growth of malignant tumor	1.192	0.624	-0.26	-0.599	1.12	2.197
Glioma cancer	-1.06	-1.722	-1.06	-0.397	-1.06	0.662
Glioblastoma	-1.06	-1.722	-1.06	-0.397	-1.06	0.662
Malignant astrocytoma	-1.06	-1.722	-1.06	-0.397	-1.06	0.662
Differentiation of muscle cells	1.658	1.791	0.349	-0.008	0.77	1.383
Hepatocellular carcinoma	0.143	0.255	-1.467	-1.168	-1.532	-1.37
Chemotaxis of phagocytes	0.858	2.176	0.141	0.163	1.941	-0.655
Proliferation of connective tissue cells	0.214	-1.036	-0.562	-0.966	2.142	1.01
Proliferation of tumor cells	1.563	1.564	-0.734	-0.023	0.955	1.078
Invasive cancer	-0.465	-0.465	-2.362	-0.887	-1.624	0.097
Cell movement of prostate cancer cell lines	-0.055	-0.759	-1.141	-1.938	1.058	0.921
Cell movement of monocytes	1.673	1.415	-0.217	0.048	1.382	-1.137
Cell transformation	0.026	0.281	-0.789	-0.426	2.329	1.998
Formation of eye	1.192	0.551	-0.026	1.12	1.834	1.101
Synthesis of nitric oxide	0.267	0.853	-1.259	-1.463	1.631	0.337
Apoptosis of tumor cells	-2.362	-1.228	0.549	0.298	-0.84	-0.504
Lymphopoiesis	2.228	1.186	0.594	-0.115	1.475	0.162
Edema	-0.146	0.597	-0.116	0.699	-2.964	-1.208
Development of cardiovascular tissue	-0.032	-1.99	-1.496	-0.736	0.878	0.593
Invasion of malignant tumor	1.532	0.479	-0.077	0.051	2.046	1.532
Benign lesion	1.918	0.78	-0.125	1.161	1.295	0.406
Secondary neoplasm of digestive system	0.484	1.591	1.176	0.623	1.176	0.623
Proliferation of endothelial cells	-0.25	-2.068	-1.66	-0.841	0.243	0.59
Cell movement of endothelial cell lines	0.551	1.115	-0.745	-1.769	1.2	0.27
Proliferation of epithelial cells	1.559	0.796	-0.609	-0.545	1.388	0.748
Mammary tumor	0.482	0.525	0.243	0.744	1.651	2
Cell movement of neutrophils	0.689	1.448	-0.88	-0.042	1.771	-0.815
Proliferation of lymphatic system cells	0.782	2.127	0.161	-0.125	1.521	0.92
Cell death of blood cells	0.224	2.339	1.665	0.106	0.88	0.412
Inflammatory response	0.709	2.332	-0.086	0.203	1.8	-0.491
Development of endothelial tissue	0.002	-1.962	-1.535	-0.658	0.846	0.561
Cell cycle progression	-0.095	-0.506	-1.631	-0.881	0.647	1.791
Binding of vascular endothelial cells	0.564	0.838	-0.806	-0.357	2.378	-0.585
Leukopoiesis	2.114	1.089	0.459	0.348	0.975	-0.527
Cell death of muscle cells	-1.617	0.267	-0.184	-0.151	-1.578	-1.672
Apoptosis of epithelial cells	-2.006	0.505	0.271	-1.368	-0.292	-1.019
Plasma cell dyscrasia	-0.106	1.165	-0.689	-1.96	1.165	0.371
Tumorigenesis of tissue	1.917	0.328	0.156	1.025	-0.041	1.964
Chronic inflammatory disorder	-0.861	-1.113	-0.987	-1.189	-0.861	0.418
Quantity of phagocytes	-0.652	-0.8	-1.108	-1.284	-1.073	-0.509
Cell death of immune cells	-0.2	2.087	1.621	-0.01	1.137	0.37

Abnormality of heart ventricle	-0.009	0.597	1.762	1.967	0.131	-0.942
Maturation of cells	0.149	1.519	-1.312	-1.71	0.611	-0.096
Permeability of vascular system	0.047	1.825	-0.604	-1.053	1.337	-0.479
Head and neck carcinoma	-0.437	-0.437	-1.63	-1.153	-0.517	-1.153
Expression of RNA	0.168	-0.162	-0.409	-0.028	2.58	1.969
Development of sensory organ	1.043	0.415	-0.148	0.704	2.299	0.707
Inflammation of joint	1.195	1.374	-0.359	-0.82	-0.947	-0.599
Breast or pancreatic cancer	0.941	-0.846	-0.499	-0.617	0.799	1.571
Binding of endothelial cells	0.577	0.793	-0.739	-0.115	2.333	-0.684
Gastrointestinal tract cancer	-0.13	-0.375	-1.196	-0.482	-1.522	-1.522
Pelvic tumor	0.103	1.661	1.14	0.334	1.014	0.973
Assembly of cells	0.156	-1.922	-1.44	-0.324	0.741	0.631
Accumulation of blood cells	0.264	1.055	-0.885	-0.483	1.596	-0.927
Growth of epithelial tissue	0.477	-1.559	-1.116	-0.768	0.591	0.686
Development of epithelial tissue	0.075	-2.045	-1.503	-0.512	0.644	0.41
Apoptosis of leukocytes	-1.119	1.425	0.256	-2.029	-0.318	0.041
Interaction of tumor cell lines	0.094	0.491	-0.184	-0.444	1.966	2.007
Apoptosis of lymphatic system cells	-1.324	1.499	0.103	-1.702	-0.09	-0.445
Apoptosis of blood cells	-0.684	1.586	0.214	-1.944	-0.686	0.031
Endothelial cell development	-0.014	-1.97	-1.485	-0.498	0.712	0.465
Cell proliferation of vascular endothelial cells	-0.267	-1.21	-1.874	-1.164	0.229	0.395
Activation of cells	0.969	1.57	-0.446	-0.719	1.367	-0.052
Differentiation of epithelial cells	0.748	0.867	0.951	0.497	1.268	0.784
Interaction of endothelial cells	0.539	0.718	-0.662	-0.412	2.243	-0.526
Extracranial solid tumor	1.524	1.208	-0.21	0.895	0.59	0.641
Accumulation of cells	-0.253	0.681	-1.127	-0.738	1.142	-1.124
Proliferation of smooth muscle cells	1.047	0.938	0.533	-0.145	1.941	0.435
Proliferation of fibroblast cell lines	1.195	1.035	-0.009	0.03	1.379	1.387
Binding of tumor cell lines	0.009	0.388	-0.28	-0.536	1.885	1.916
Extraadrenal retroperitoneal tumor	1.313	1.071	0.632	0.381	0.373	1.236
Apoptosis of muscle cells	-1.352	0.557	-0.12	0.158	-1.499	-1.3
Proliferation of lymphocytes	0.719	2.651	0.114	-0.202	1.218	-0.062
Formation of skin	-0.117	1.313	-0.348	-1.2	1.053	0.927
Incidence of tumor	1.318	0.843	-1.01	0.517	0.362	0.878
Respiratory system development	0.895	0.525	-0.587	-0.587	1.266	1.019
Lymphoma	1.216	0.858	0.568	0.853	-0.722	-0.652
Genital tumor	-0.043	1.496	0.979	0.679	1.103	0.567
Growth of smooth muscle	1.085	0.977	0.572	-0.104	1.815	0.312
Tumorigenesis of epithelial neoplasm	1.461	0.374	-0.232	1.198	-0.03	1.558
Non-melanoma solid tumor	1.62	0.586	-1.083	0.345	0.075	1.136
Interphase	0.377	0.385	-0.72	-0.87	1.626	0.865
Glucose metabolism disorder	0.282	0.891	-1.161	-0.473	-1.295	-0.733
Cell movement of myeloid cells	1.251	0.797	-0.305	-0.116	1.975	-0.389
Lung carcinoma	-0.534	-1.208	-1.095	0.273	-1.385	-0.315
Rheumatic Disease	1.152	1.064	-0.354	-0.711	-0.953	-0.515
Adenocarcinoma	0.285	-1.397	-1.369	-0.59	0.013	1.094
Metastasis of tumor cell lines	2.182	1.028	0.04	-0.01	0.643	0.838
Cancer of tumor cell lines	2.182	1.028	0.04	-0.01	0.643	0.838
Cell movement of granulocytes	0.526	0.632	-0.237	-0.746	1.736	-0.845
Benign Tumors	1.604	0.609	-0.208	0.917	0.521	0.81
Tumorigenesis of reproductive tract	0.278	0.278	-1.67	-1.461	-0.278	-0.696
Female genital neoplasm	0.278	0.278	-1.67	-1.461	-0.278	-0.696
Growth of embryo	0.612	0.868	-0.182	-0.686	1.372	0.926
Proliferation of mononuclear leukocytes	0.548	2.461	0.171	-0.144	1.259	-0.039
Lung tumor	0.63	1.317	0.632	0.505	1.197	0.338
Nervous system neoplasm	0.474	0.441	-1.203	-0.972	0.777	0.751
Development of neuroepithelial tumor	-0.518	-0.45	-1.374	-1.023	0.249	0.998
Cell death of lymphatic system cells	-1.272	1.485	0.219	-1.417	0.112	-0.076
Systemic autoimmune syndrome	-0.412	0.142	-1.417	-1.287	-0.216	1.106
Necrosis of epithelial tissue	-0.868	0.861	1.018	-0.253	-0.518	-1.03
Non-hematological solid tumor	0.994	0.079	-1.426	-0.347	-0.486	1.197
Growth of tumor	1.074	-0.559	-0.169	-0.22	0.723	1.77
Epithelial neoplasm	1.747	0.112	-0.204	0.459	-0.312	1.657
Development of benign tumor	1.349	0.57	-0.244	1.281	0.341	0.699
Cellular infiltration by mononuclear leukocytes	1.264	1.242	0.899	0.817	0.089	0.163
Growth of skin	0.826	0.004	-1.845	-1.086	0.113	-0.584
Papillary carcinoma	-0.277	0.555	-1.387	-1.387	0.277	-0.555



Movement of vascular endothelial cells	1.202	0.757	0.054	-0.563	0.69	1.167
Malignant connective or soft tissue neoplasm	-0.434	-0.714	-1.881	-0.571	-0.101	0.728
Proliferation of hematopoietic cells	0.79	-0.099	-0.799	-0.813	0.148	1.765
Growth of lesion	1.019	-0.569	-0.212	-0.186	0.705	1.717
Migration of vascular endothelial cells	0.973	0.535	-0.185	-0.652	0.577	1.418
Vascular lesion	-1.48	0.574	-1.21	0.171	0.153	-0.731
Angiogenesis of tumor	0.589	0.315	-1.782	-1.054	0.465	0.11
Invasion of tissue	0.452	0.976	-0.738	0.35	1.459	-0.34
Female genital tract cancer	-0.074	-0.818	-0.669	-1.412	-0.669	-0.669
Hypertrophy	0.131	0.131	-1.462	-1.462	0.131	-0.984
Morphogenesis of cardiovascular system	0.748	1.209	0.096	0.096	1.823	-0.326
Accumulation of myeloid cells	0.569	1.063	-0.659	-0.131	1.401	-0.46
Metastasis of cells	2.106	1.261	0.085	0.207	0.069	0.549
Homeostasis of leukocytes	2.363	0.77	0.045	0.178	0.535	-0.383
Quantity of T lymphocytes	0.772	1.347	-0.487	0.226	1.286	0.132
Lymphohematopoietic neoplasia	1.164	1.586	0.249	0.708	-0.221	0.302
Development of genital tumor	0.437	1.391	0.596	0.119	1.073	0.596
Accumulation of leukocytes	-0.018	0.892	-0.795	-0.383	1.456	-0.636
Ovarian tumor	0.196	0.196	-1.617	-1.399	-0.167	-0.602
Cellular infiltration by phagocytes	0.159	0.937	-0.594	0.76	0.984	-0.739
Central nervous system tumor	0.606	0.594	-0.803	-0.661	0.744	0.761
Central nervous system solid tumor	0.606	0.594	-0.803	-0.661	0.744	0.761
Primary solid tumor	-0.555	0.555	0.555	-1.387	0.555	0.555
Tubulation of epithelial tissue	-0.097	-0.361	-0.653	-2.052	0.604	0.393
Carcinoma	1.413	-0.02	-0.619	0.329	-0.386	1.391
Lymphohematopoietic cancer	1.399	1.141	0.189	0.978	-0.117	0.319
Cell-cell adhesion	-0.594	1.196	0.314	-0.465	-1.424	0.106
Nonhematologic malignant neoplasm	0.979	-0.264	-1.116	-0.047	-0.338	1.351
Large intestine neoplasm	0.232	1.476	-0.592	0.431	-0.68	-0.68
Digestive system cancer	0.398	-0.216	-1.232	-0.754	-0.59	-0.859
Glioma	-0.285	-0.214	-1.187	-0.817	0.521	1.024
Homeostasis of blood cells	2.286	0.704	-0.016	0.117	0.471	-0.44
Formation of lung	0.75	0.359	-0.424	-0.033	1.141	1.271
Abdominal carcinoma	0.899	-0.163	-1.271	-0.514	-0.848	-0.237
Hepatobiliary system cancer	0.073	0.173	-0.874	-0.669	-0.743	-1.398
T-cell non-Hodgkin lymphoma	0.124	-0.571	-0.598	-0.547	-1.242	-0.839
Binding of extracellular matrix	1.32	0.329	-0.167	0.886	-0.167	-1.035
Lymphocyte homeostasis	2.219	0.601	-0.119	0.016	0.725	-0.208
Quantity of myeloid cells	-0.143	-1.212	-0.328	-1.082	-0.665	-0.438
Branching of epithelial tissue	1.994	-0.028	-0.958	0.053	0.309	0.52
Angiogenesis of lesion	0.718	0.255	-1.615	-0.672	0.367	0.222
Quantity of granulocytes	0.243	-1.588	-0.638	-0.928	-0.432	0.005
Cell surface receptor linked signal transduction	0.239	0.239	1.912	0.239	0.956	0.239
Tubulation of cells	0.038	-0.018	-0.013	-1.087	1.073	1.591
Differentiation of connective tissue cells	1.18	-0.528	-0.157	-0.028	0.836	1.09
Gonadal tumor	0.408	0.408	-1.355	-0.758	-0.029	-0.825
Hematologic cancer of cells	0.915	0.548	0.281	0.566	-0.572	-0.886
Hematopoietic neoplasm	0.957	1.388	-0.159	0.514	-0.64	-0.105
Malignant solid tumor	1.114	0.594	-0.643	0.116	0.55	0.689
Colorectal tumor	0.123	1.383	-0.711	0.325	-0.577	-0.577
T cell homeostasis	2.165	0.502	-0.056	0.084	0.804	-0.081
Frequency of tumor	0.785	0.337	-1.258	0.582	-0.165	0.544
Skin lesion	0.971	0.916	-0.206	1.02	0.082	0.46
T cell development	2.162	0.493	-0.035	0.074	0.828	-0.06
Pelvic cancer	0.341	1.061	1.164	0.052	0.379	0.64
Development of digestive system	1.72	0.127	-0.637	0.701	0.127	0.318
Hematologic cancer	1.198	0.924	-0.01	1.057	-0.334	-0.101
Quantity of cells	0.143	0.023	-0.71	-0.134	1.279	1.298
Breast or ovarian carcinoma	-0.498	-1.287	0.234	-0.16	-0.292	1.09
Cell death of epithelial cells	-0.645	0.117	-0.301	-1.113	-0.483	-0.88
Cell death of tumor	-1.678	-0.13	0.849	0.267	0.138	0.468
Wound	0.847	0.172	-1.154	-0.417	-0.074	0.847
Rheumatoid arthritis	-0.288	0.332	-0.908	-1.527	-0.288	0.155
Accumulation of phagocytes	-0.037	0.425	-0.412	-0.004	1.548	1.043
Upper gastrointestinal tract tumor	0.699	0.177	-0.672	-0.934	-0.09	-0.873
Adhesion of extracellular matrix	0.563	-0.115	-0.115	0.495	-0.658	-1.472
Upper gastrointestinal tract cancer	-0.095	-0.854	-0.664	-1.234	0.475	-0.095

Neoplasia of leukocytes	0.676	0.578	-0.048	-0.032	-0.754	-1.304
Lymphocytic neoplasm	0.829	0.481	-0.152	0.113	-0.617	-1.174
Gastrointestinal tumor	-0.079	0.823	-0.705	0.254	-0.335	-1.166
Proliferation of immune cells	0.039	1.733	0.053	-0.412	0.744	-0.375
Respiratory system tumor	0.419	1.098	0.42	0.294	0.979	0.129
Digestive organ tumor	1.109	0.892	-0.51	-0.11	0.104	-0.614
Binding of protein binding site	0.851	0.505	-0.119	-1.011	0.832	-0.021
Lung cancer	0.055	0.399	0.703	0.62	1.072	0.461
Fibrosis	-0.384	-1.391	-0.221	0.406	-0.353	0.551
Cell death of cancer cells	-0.959	-0.027	0.557	0.322	0.623	0.808
Primary neoplasm	-0.067	1.156	1.278	0.422	-0.238	0.128
Lymphoproliferative disorder	0.784	0.438	-0.193	0.07	-0.656	-1.126
Development of carcinoma	0.818	0.103	-0.201	0.781	-0.193	1.087
Lymphocytic cancer	0.71	0.359	-0.028	0.239	-0.748	-1.058
Lymphoid cancer	1.132	0.804	0.13	0.145	-0.307	-0.597
Cell death of tumor cells	-1.577	-0.02	0.743	0.158	0.249	0.36
Necrosis of tumor	-1.577	-0.02	0.743	0.158	0.249	0.36
Connective or soft tissue tumor	0.183	0.184	-1.533	-0.624	0.081	0.498
Colorectal cancer	-0.308	0.098	-0.641	-0.234	-1.291	-0.478
Breast or ovarian cancer	-0.648	-1.498	-0.122	-0.292	-0.202	0.274
Proliferation of blood cells	0.251	1.506	-0.008	-0.234	0.783	0.236
Malignant neoplasm of large intestine	-0.103	0.296	-0.428	-0.03	-1.465	-0.668
Quantity of mononuclear leukocytes	0.354	0.797	-0.068	0.601	0.923	0.247
Breast or colorectal cancer	-0.713	-0.856	-0.346	0.085	-0.872	0.104
Malignant neoplasm of male genital organ	0.164	1.419	0.685	0.316	0.242	0.095
Connective tissue tumor	-0.065	-0.142	-1.492	-0.598	-0.068	0.55
Cell proliferation of colorectal cancer cell lines	0.367	-0.259	-0.681	-1.281	0.314	-0.012
Growth of embryonic tissue	0.218	-0.097	-0.749	-0.688	0.712	0.446
Cellular infiltration by myeloid cells	0.362	0.568	-0.017	0.37	1.015	-0.566
Lymphatic system tumor	1.249	0.905	0.003	0.036	-0.199	-0.467
Head and neck tumor	0.184	0.007	-0.715	-0.579	-0.411	-0.897
Non-small cell lung carcinoma	0.131	-1.077	-0.594	0.131	-0.594	0.131
Head and neck cancer	0.051	-0.255	-0.643	-1.102	-0.031	-0.541
Abdominal cancer	1.138	0.68	-0.291	0.219	-0.227	-0.068
Development of malignant tumor	0.527	0.394	-0.814	0.388	0.042	0.433
Breast cancer	-0.555	-1.095	-0.262	-0.082	-0.346	0.158
Ovarian cancer	0.152	-0.762	-0.152	-1.067	-0.152	-0.152
Malignant genitourinary solid tumor	-0.35	-0.235	0.833	0.452	-0.115	0.434
Mature lymphocytic neoplasm	0.614	0.136	-0.426	-0.699	0.136	0.324
Genital tract cancer	-0.043	0.71	0.818	0.065	0.407	0.271
Non-Hodgkin lymphoma	0.646	-0.24	-0.221	0.002	-0.884	-0.304
B cell cancer	0.182	-0.145	0.113	0.829	-0.533	0.437
Cancer of head	0.34	-0.068	-0.204	-0.816	-0.476	-0.068
B-cell neoplasm	0.369	0.048	-0.079	0.623	-0.333	0.238
Central nervous system cancer	0.608	0.191	0.191	-0.017	-0.225	0.441
Quantity of leukocytes	0.403	-0.281	-0.686	-0.026	0.159	-0.059
Quantity of blood cells	-0.022	-0.432	-0.37	-0.129	0.108	0.002
Papillary adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Metastatic intestinal tumor	N/A	N/A	N/A	N/A	N/A	N/A
Advanced gastrointestinal tumor	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of head	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of heart ventricle	N/A	N/A	N/A	N/A	N/A	N/A
Female genital tract serous carcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Advanced colorectal cancer	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of tumor cell lines	N/A	N/A	N/A	N/A	N/A	N/A
Serous adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of abdomen	N/A	N/A	N/A	N/A	N/A	N/A
Healing of wound	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of blood vessel	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of heart	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of muscle cells	N/A	N/A	N/A	N/A	N/A	N/A
Uterine tumor	N/A	N/A	N/A	N/A	N/A	N/A
Healing of lesion	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of digestive system	N/A	N/A	N/A	N/A	N/A	N/A
Serous neoplasm	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of vessel	N/A	N/A	N/A	N/A	N/A	N/A
Endometriosis	N/A	N/A	N/A	N/A	N/A	N/A

Female genital tract adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Head and neck adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Organization of extracellular matrix	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of bone	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of muscle	N/A	N/A	N/A	N/A	N/A	N/A
Differentiated thyroid cancer	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of vasculature	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of heart	N/A	N/A	N/A	N/A	N/A	N/A
Mature T-cell or NK-cell neoplasm	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of cardiovascular system	N/A	N/A	N/A	N/A	N/A	N/A
Uterine serous papillary cancer	N/A	N/A	N/A	N/A	N/A	N/A
Thyroid gland nonmedullary carcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Hypertrophy of heart	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of respiratory system	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of tumor	N/A	N/A	N/A	N/A	N/A	N/A
Enlargement of cells	N/A	N/A	N/A	N/A	N/A	N/A
Enlargement of heart	N/A	N/A	N/A	N/A	N/A	N/A
Visceromegaly	N/A	N/A	N/A	N/A	N/A	N/A
Benign pelvic disease	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of vasculature	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of blood vessel	N/A	N/A	N/A	N/A	N/A	N/A
Size of lesion	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of body cavity	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of body cavity	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of head	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of lesion	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of thoracic cavity	N/A	N/A	N/A	N/A	N/A	N/A
Advanced colorectal tumor	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of cardiovascular system	N/A	N/A	N/A	N/A	N/A	N/A
Secondary neoplasm of large intestine	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of digestive system	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of nervous system	N/A	N/A	N/A	N/A	N/A	N/A
Mature T-cell neoplasm	N/A	N/A	N/A	N/A	N/A	N/A

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Diseases and Bio Functions	Observation 1	Observation 2	Observation 3	Observation 4	Observation 5	Observation 6
Apoptosis of connective tissue cells	0.986	-2.377	-3.026	-1.525	-1.502	-3.614
Morbidity or mortality	-2.58	0.141	-3.777	-2.31	0.622	-3.385
Bleeding	0.322	-1.205	-4.273	-2.866	-0.579	-3.31
Organismal death	-2.498	0.152	-3.755	-2.174	0.662	-3.271
Growth of skin	0.635	-1.903	-2.393	-1.561	-1.988	-2.96
Formation of cellular protrusions	-0.328	1.847	2.899	2.374	0.328	3.56
Cell death of connective tissue cells	1.142	-2.322	-2.075	-0.651	-1.585	-2.983
Activation of blood cells	3.204	-3.043	-0.454	-0.778	-2.255	-0.871
Activation of myeloid cells	2.67	-2.459	-0.722	-1.057	-1.874	-1.702
Aggregation of cells	-2.19	1.728	2.581	1.419	0.237	2.192
Proliferation of endothelial cells	1.19	-1.583	-2.379	-0.502	-2.148	-2.522
Activation of phagocytes	2.257	-2.151	-0.586	-1.274	-2.496	-1.426
Growth of epithelial tissue	1.951	-1.454	-1.56	-0.472	-1.784	-2.923
Development of head	-0.629	1.425	2.994	2.729	-0.382	1.927
Inflammation of absolute anatomical region	-0.995	-2.014	-2.558	-1.398	-1.487	-1.493
Edema	-1.304	0.451	-3.535	-0.951	1.259	-2.152
Formation of actin filaments	1.422	1.688	1.412	1.941	-1.711	1.47
Development of body axis	-0.525	1.317	2.879	2.615	-0.48	1.817
Endothelial cell development	1.342	-1.633	-1.937	-0.461	-1.963	-2.232
Development of epithelial tissue	1.991	-1.648	-2	-0.282	-1.481	-2.15
Activation of leukocytes	3.667	-2.765	-0.293	-0.171	-2.021	-0.614
Assembly of cells	1.366	-1.723	-1.888	-0.423	-1.915	-2.045
Vascular lesion	1.16	-2.833	-1.922	-1.435	-1.3	-0.659
Permeability of vascular system	1.724	-1.663	-1.971	-0.328	-1.65	-1.897
Vascularization of absolute anatomical region	1.973	-1.805	-0.401	-0.438	-2.539	-2.031
Formation of filaments	0.934	1.709	1.476	1.994	-1.351	1.531
Inflammation of body cavity	-1.091	-1.34	-2.201	-1.13	-1.736	-1.398
Development of endothelial tissue	1.225	-1.546	-1.892	-0.332	-1.877	-2.013
Lung carcinoma	1.471	-2.493	-2.493	-0.344	-0.266	-1.741
Expression of RNA	2.836	-0.662	1.585	1.752	-0.935	1.03
Diabetes mellitus	1.057	-2.421	-1.739	-1.425	-1.425	-0.648
Invasive cancer	-0.465	-0.641	-2.362	-1.624	-1.255	-2.362
Cell-cell contact	1.363	1.533	1.574	1.267	1.301	1.66
Cell movement of connective tissue cells	0.347	0.708	1.612	2.74	0.516	2.766
Sprouting	1.223	1.081	1.521	1.707	-0.692	2.448
Cell spreading	-1.493	1.392	1.832	1.25	0.03	2.654
Adhesion of connective tissue cells	0.289	1.663	1.691	2.37	0.902	1.691
Development of cardiovascular tissue	1.141	-1.461	-1.852	-0.296	-1.791	-2.018
Cell movement of dermal cells	-0.148	1.408	3.008	1.216	0.455	2.324
Cell movement of embryonic cell lines	-1.429	0.712	1.909	2.088	-0.015	2.376
Microtubule dynamics	-0.262	0.989	1.583	1.175	-0.947	3.553
Inflammation of organ	-0.576	-1.908	-2.79	-0.829	-1.13	-1.204
Chemotaxis of myeloid cells	3.914	-2.208	-0.327	-0.506	-1.457	-0.023
Proliferation of connective tissue cells	1.406	-1.113	-0.727	-1.12	-3.054	-0.975
Cellular infiltration by phagocytes	2.167	-2.495	-1.737	0.062	-0.701	-1.218
Cell surface receptor linked signal transduction	0.478	0.956	-1.912	1.912	-1.195	-1.912
Development of neuroepithelial tumor	0.576	-1.934	-1.465	0.768	-1.273	-2.276
Apoptosis of tumor cell lines	1.651	-2.292	-1.464	-0.31	-1.11	-1.433
Transcription	2.745	-0.507	1.628	1.799	-0.909	0.66
Metabolism of reactive oxygen species	2.413	-1.734	0.931	-0.049	-1.951	1.064
Head and neck carcinoma	-0.278	-1.153	-1.63	-2.107	-0.676	-2.266
Synthesis of reactive oxygen species	2.327	-1.763	0.908	-0.074	-1.959	1.042
Plasma cell dyscrasia	0.106	-1.96	-1.96	-1.96	0.106	-1.96
Cell movement of granulocytes	2.728	-2.562	0.394	-0.272	-1.662	-0.427
Recruitment of granulocytes	2.006	-2.597	0.246	-0.849	-1.659	-0.62
Central nervous system tumor	1.118	-2.109	-1.611	0.542	-0.795	-1.791
Central nervous system solid tumor	1.118	-2.109	-1.611	0.542	-0.795	-1.791
Non-hematological solid tumor	1.427	-1.669	-1.06	-1.117	-1.415	-1.274
Cell movement of neutrophils	2.359	-2.916	0.683	0.502	-1.302	0.2
Migration of antigen presenting cells	2.302	0.035	0.732	0.9	1.872	2.103
Nervous system neoplasm	1.006	-1.916	-1.757	-0.18	-1.164	-1.902
Binding of professional phagocytic cells	1.001	-2.651	-1.188	-0.343	-1.733	-0.981
Mature lymphocytic neoplasm	-0.614	-1.449	-2.199	-0.699	1.449	-1.449
Organization of cytoskeleton	-0.201	0.636	1.721	0.895	-0.957	3.406
Binding of myeloid cells	1.335	-2.622	-0.85	-0.687	-1.727	-0.573
Migration of connective tissue cells	0.07	0.722	1.391	2.446	0.484	2.676
Hepatocellular carcinoma	1.035	-1.58	-1.688	-1.623	-0.175	-1.688
Recruitment of myeloid cells	2.186	-2.378	0.569	-0.701	-1.818	0.079
Organization of cytoplasm	-0.141	0.694	1.777	0.834	-0.895	3.34
Adenocarcinoma	0.368	-1.58	-1.955	-0.978	-0.741	-2.052
Activation of cells	2.549	-2.216	0.079	-0.19	-2.123	-0.493
Attachment of cells	-0.579	1.764	1.495	1.495	0.764	1.495
Growth of connective tissue	1.475	-1.21	-0.471	-0.869	-3.138	-0.423
Cell proliferation of tumor cell lines	-0.615	-2.272	0.273	-1.231	-1.861	-1.318
Cell death of tumor cell lines	1.469	-2.248	-1.366	-0.172	-0.685	-1.626
Adhesion of myeloid cells	1.666	-2.672	-0.809	-0.301	-1.811	-0.277
Necrosis	1.768	-2.612	-1.635	-0.135	0.055	-1.318
Transcription of RNA	3.027	0.166	1.379	1.708	-0.715	0.521
Migration of epithelial cells	1.276	1.123	2.144	1.438	0.538	0.884
Fibrogenesis	0.694	1.284	1.047	1.837	-1.587	0.931
Homing of cells	1.996	-0.922	1.199	1.211	-0.909	1.131
Glioma	0.865	-1.775	-0.997	0.782	-1.092	-1.851

Branching of cells	0.815	0.964	1.557	1.481	-0.482	2.052
Cell movement of leukocytes	1.847	-1.17	1.674	0.744	0.763	1.11
Production of reactive oxygen species	1.405	-1.768	0.574	-0.706	-1.892	0.949
Recruitment of leukocytes	2.369	-2.017	0.589	-0.492	-1.774	0.017
Lung cancer	0.919	-1.78	-1.417	-0.087	0.825	-2.226
Differentiation of bone cells	-0.633	-1.081	0.971	-0.246	-1.918	2.377
Neovascularization	1.652	-0.871	0.085	-0.654	-2.262	-1.671
Neovascularization of eye	1.518	-0.913	-0.179	-0.416	-2.493	-1.671
Recruitment of phagocytes	1.847	-2.118	0.76	-0.667	-1.555	0.171
Cellular infiltration by myeloid cells	1.584	-2.279	-1.404	-0.072	-0.695	-1.077
Differentiation of bone	-0.643	-1.117	1.125	-0.116	-1.753	2.355
Head and neck cancer	-0.541	-0.847	-2.46	-1.562	-0.258	-1.439
Cell proliferation of vascular endothelial cells	0.399	0.454	-2.097	-0.468	-2.32	-1.357
Recruitment of blood cells	2.1	-2.095	0.707	-0.396	-1.675	0.111
Differentiation of osteoblasts	-1.346	0.369	1.561	0.155	-1.212	2.425
Cell movement of fibroblasts	0.429	0.604	1.298	2.26	0.184	2.267
Invasion of breast cancer cell lines	-0.054	1.963	1.894	0.941	0.964	1.226
Non-traumatic arthropathy	0.605	-1.281	-1.12	-1.506	-1.409	-1.12
Apoptosis of breast cancer cell lines	0.728	-1.874	-1.333	-1.313	-1.435	-0.345
Apoptosis	1.096	-1.799	-1.645	-0.515	-0.533	-1.429
Survival of organism	0.9	3.05	1.568	0.88	0.396	0.208
Homing of blood cells	3.033	-1.652	0.85	0.435	-0.373	0.651
Hereditary connective tissue disorder	-0.253	-1.429	-1.33	-1.081	-1.367	-1.517
Cancer of head	-0.68	-1.02	-1.633	-1.02	0.975	-1.633
Cell movement of fibroblast cell lines	-0.303	1.793	0.847	2.042	-0.454	1.511
Cell movement of myeloid cells	2.966	-2.173	0.828	-0.079	-0.657	0.244
Migration of phagocytes	2.039	-0.934	0.98	0.566	0.83	1.57
T-cell malignant neoplasm	0.996	-1.812	-1.907	-0.557	-0.082	-1.549
Vascularization	1.785	-1.119	0.056	-0.821	-1.928	-1.193
Cell movement of epithelial cells	0.532	1.21	2.02	1.043	0.481	1.613
Occlusion of blood vessel	0.259	-2.408	-0.016	-1.301	-2.09	0.805
Invasion of tumor cells	0.994	0.957	1.979	1.045	0.702	1.176
Head and neck tumor	-0.278	-1.047	-2.165	-1.725	-0.468	-1.159
Leukocyte migration	1.584	-1.104	1.729	0.772	0.587	1.055
Proliferation of cancer cells	1.263	-1.013	-1.313	-0.355	-1.578	-1.295
Neovascularization of organ	1.441	-0.913	-0.197	-0.129	-2.548	-1.578
Non-small cell lung carcinoma	1.218	-2.164	-1.983	-0.231	0.111	-1.077
Formation of muscle	0.644	2.15	2.328	1.004	-0.066	0.58
Cell movement of phagocytes	2.919	-2.428	0.695	0.171	0.12	0.427
Cell movement of blood cells	1.606	-1.238	1.625	0.747	0.407	1.082
Cell viability of tumor cell lines	-0.439	0.213	2.44	1.043	0.871	1.694
Cell movement of carcinoma cell lines	-1.699	0.909	1.492	1.212	-0.647	0.691
Cell movement of kidney cell lines	0.321	-0.007	1.577	1.978	-0.828	1.938
Homing of leukocytes	2.951	-1.557	0.956	0.333	-0.27	0.545
Cell survival	0.622	-0.307	1.999	1.367	0.466	1.825
Cell movement of breast cancer cell lines	1.068	-0.567	1.258	1.566	-0.402	1.72
Cell movement of tumor cell lines	1.527	-1.722	0.799	0.143	-1.486	0.866
Extracranial solid tumor	1.569	-0.837	-1.426	-0.647	-0.839	-1.217
Tubulation of epithelial tissue	-1.106	-0.595	-0.148	-1.123	-2.071	-1.468
Chemotaxis	2.039	-0.707	1.185	0.854	-0.751	0.945
Vascularization of eye	1.654	-1.109	-0.126	0.032	-2.352	-1.193
Chemotaxis of phagocytes	3.075	-1.574	0.542	0.587	-0.087	0.593
Frequency of tumor	1.402	-1.199	-1.86	-0.275	-0.691	-1.019
Synthesis of nitric oxide	1.845	-1.159	-0.359	-0.546	-2.259	-0.275
Accumulation of cells	1.137	-1.378	-0.253	-0.993	-1.947	0.721
Migration of tumor cells	2.403	0.997	1.686	-0.325	-0.116	0.886
Primary tumor	1.067	-1.067	-1.067	-1.067	1.067	-1.067
Cell-cell adhesion	-0.615	0.527	-0.718	-1.445	1.513	-1.58
Migration of tumor cell lines	1.66	-1.37	0.976	0.267	-1.362	0.691
Non-melanoma solid tumor	1.742	-1.276	-1.148	-0.206	-1.563	-0.354
Cell proliferation of carcinoma cell lines	0.76	-0.894	-1.105	-1.053	-1.013	-1.449
Gastrointestinal carcinoma	0.333	-1.066	-1.489	-1.818	-0.502	-1.066
Hepatobiliary system cancer	0.98	-1.847	-0.8	-1.232	0.102	-1.306
Tumorigenesis of reproductive tract	-0.348	-0.626	-1.601	-1.67	-0.974	-1.044
Female genital neoplasm	-0.348	-0.626	-1.601	-1.67	-0.974	-1.044
Differentiation of connective tissue cells	-0.317	-1.938	-0.248	-1.053	-2.267	0.431
Migration of cancer cells	2.567	1.136	1.277	-0.527	-0.054	0.669
Cell movement of mononuclear leukocytes	1.428	-0.235	1.954	0.875	0.224	1.485
Fibrosis	-1.932	-1.504	-0.911	0.17	-1.672	0
Cell death of breast cancer cell lines	0.843	-1.518	-1.074	-1.155	-1.05	-0.524
Chemotaxis of blood cells	3.17	-1.634	0.649	-0.024	-0.412	0.211
Chemotaxis of leukocytes	3.173	-1.637	0.646	-0.021	-0.41	0.209
Cell death of tumor cells	1.827	-0.453	-0.876	1.205	-0.035	-1.65
Necrosis of tumor	1.827	-0.453	-0.876	1.205	-0.035	-1.65
Respiratory system tumor	0.49	-1.32	-1.706	-0.45	0.065	-2.011
Ovarian tumor	-0.457	-0.529	-1.544	-1.617	-0.921	-0.964
Recruitment of cells	1.712	-1.614	0.831	-0.038	-1.735	0.074
T-cell non-Hodgkin lymphoma	0.436	-1.353	-1.997	-0.547	0.588	-1.058
Migration of smooth muscle cells	0.449	-0.581	-1.598	-0.242	-1.069	-2.017
Glucose metabolism disorder	0.856	-1.913	-0.965	-0.867	-1.076	-0.279
Cell movement of antigen presenting cells	2.911	-1.181	0.02	-0.133	1.075	0.584
Migration of muscle cells	0.362	-0.474	-1.673	-0.325	-1.166	-1.901
Sensory system development	-0.112	0.971	2.217	1.013	-0.014	1.574
Interaction of DNA	1.88	0.758	1.106	-0.126	-1.454	0.575

Cell viability	0.648	-0.398	1.918	1.043	0.325	1.548
Necrosis of muscle	-0.241	-1.564	-1.519	0.377	0.153	-1.988
Cell death of cancer cells	1.451	-0.776	-0.506	1.489	-0.063	-1.555
Cell movement of macrophages	3.287	-1.349	-0.263	-0.437	-0.032	0.466
Binding of protein binding site	1.819	-0.204	-0.601	-1.16	-1.67	-0.378
Cell movement of tumor cells	2.516	1.024	1.187	-0.475	0.059	0.568
Migration of breast cancer cell lines	1.259	-1.021	0.765	1.369	-0.626	0.784
Chronic inflammatory disorder	-0.292	-1.113	-0.591	-0.339	-2.122	1.351
Inflammatory response	2.435	-1.804	0.131	-0.129	-0.739	-0.523
Invasion of tissue	0.826	-1.179	-0.691	-0.474	-2.365	-0.221
Neuronal cell death	0.343	-2.563	-1.655	-0.273	-0.313	-0.593
Cell death of tumor	1.706	-0.34	-0.761	1.088	0.076	-1.75
Quantity of myeloid cells	2.361	0.621	-0.612	-0.98	0.758	-0.378
Epithelial neoplasm	1.371	-0.748	-0.946	-0.897	-0.643	-1.104
Outgrowth of cells	1.628	1.148	0.588	0.542	-1.014	0.777
Binding of connective tissue cells	-0.004	1.4	1.14	1.781	0.228	1.14
Binding of DNA	1.829	0.656	1.004	-0.233	-1.492	0.471
Inflammation of joint	0.94	-0.234	-1.643	-1.126	-0.615	-1.122
Colony formation	1.503	-1.524	-0.457	-1.004	-0.98	-0.194
Development of carcinoma	0.783	-1.398	-1.431	0.692	0.283	-1.069
Cell death of muscle cells	-0.315	-1.461	-1.415	0.507	0.065	-1.89
Cell movement of smooth muscle cells	0.363	-0.558	-1.629	-0.218	-1.126	-1.756
Cell movement of monocytes	2.086	-0.872	1.082	0.286	-0.055	1.267
Formation of lung	-0.75	0.359	0.75	1.271	0.685	1.793
Neoplasia of tumor cells	1.625	-1.099	-1.003	-0.908	0.287	-0.669
Apoptosis of tumor cells	1.195	-0.398	-1.215	1.398	0.071	-1.302
Invasion of cells	1.579	0.558	1.239	1.345	-0.338	0.516
Quantity of phagocytes	2.07	0.506	-1.14	-1.583	-0.111	0.135
Rheumatic Disease	0.85	-0.231	-1.615	-1.108	-0.605	-1.103
Progression of malignant tumor	0.771	-1.065	-1.065	-1.506	0.257	0.845
Invasion of tumor	0.764	0.35	1.727	0.484	0.95	1.23
Invasion of malignant tumor	0.95	0.034	1.618	0.351	1.019	1.532
Maturation of cells	0.526	-1.138	2.044	0.275	-1.031	0.476
Apoptosis of muscle cells	-0.131	-1.424	-1.785	0.569	-0.071	-1.507
Phosphorylation of protein	2.636	-0.961	0.524	0.774	-0.315	0.276
Apoptosis of endothelial cells	0.084	0.084	-1.196	-0.572	2.116	-1.422
Invasion of tumor cell lines	1.456	0.854	1.106	1.447	-0.024	0.585
Central nervous system cancer	0.302	-1.224	-1.612	-0.641	0.489	-1.196
Expansion of cells	0.303	-0.411	-1.24	-1.738	-1.105	-0.661
Quantity of lymphatic system cells	0.843	0.08	1.066	2.218	0.14	1.108
Cell death of endothelial cells	0.366	0.243	-1.138	-0.336	2.167	-1.195
Gonadal tumor	-0.586	-0.361	-1.288	-0.957	-1.071	-1.156
Non-Hodgkin lymphoma	0.211	-0.965	-2.015	0.002	0.984	-1.241
Cell transformation	0.922	-1.087	0.188	-0.165	-1.884	1.157
Cell movement of cancer cells	2.466	0.744	1.178	-0.414	-0.11	0.49
Cell proliferation of colorectal cancer cell lines	-0.923	-1.08	-0.631	-0.569	-2.034	-0.161
Development of connective tissue cells	0.038	-0.965	-1.228	-0.908	-1.872	-0.385
Accumulation of blood cells	0.995	-0.905	0.024	-0.937	-1.918	0.614
Formation of lymphoid tissue	1.408	-0.243	1.248	-0.407	-1.229	0.838
G1 phase	0.77	-1.164	0.718	0.127	-1.945	0.633
Cell cycle progression	0.547	-0.492	-0.314	-0.889	-1.026	-2.083
Development of vasculature	1.427	-0.897	0.203	-0.307	-0.898	-1.616
Proliferation of epithelial cells	1.299	-0.384	-0.336	-0.424	-1.531	-1.368
Accumulation of myeloid cells	0.709	-1.205	0	-0.941	-1.748	-0.724
Development of malignant tumor	0.908	-1.016	-1.828	0.398	0.166	-0.978
Lung tumor	0.288	-1.127	-1.518	-0.247	0.273	-1.826
Angiogenesis	1.407	-0.876	0.225	-0.286	-0.877	-1.596
Growth of malignant tumor	1.021	-0.722	-0.735	-0.889	-1.004	-0.849
Cell movement of endothelial cell lines	1.253	1.172	-1.231	0.079	-1.072	-0.352
Tumorigenesis of epithelial neoplasm	0.658	-1.177	-1.355	0.118	-0.62	-1.223
Migration of lymphatic system cells	1.026	-0.036	2.034	0.868	-0.046	1.085
Cell death of immune cells	1.533	-0.117	1.502	0.86	-0.742	-0.324
Female genital tract cancer	-0.818	-0.669	-0.669	-1.412	0.074	-1.412
Binding of blood cells	1.974	-0.966	0.398	0.558	-0.31	0.848
Interphase	0.128	-0.901	1.023	0.63	-1.528	-0.84
Metastasis of cells	0.937	0.249	0.549	0.287	1.745	1.26
Quantity of lymphocytes	0.7	-0.336	0.996	1.918	0.073	0.969
Metastasis of tumor cell lines	0.44	-0.138	0.998	0.377	1.516	1.521
Cancer of tumor cell lines	0.44	-0.138	0.998	0.377	1.516	1.521
Cell movement of lymphatic system cells	0.549	0	2.039	1.176	0.177	1.044
Vasculogenesis	1.035	-0.651	-0.073	0.11	-1.655	-1.46
Development of benign tumor	0.692	-1.153	-0.886	-0.449	-1.216	-0.582
Synthesis of DNA	-0.577	-0.716	-0.295	-0.535	-2.242	-0.61
Nonhematologic malignant neoplasm	0.68	-1.392	-0.919	-0.672	-0.551	-0.727
Incidence of tumor	1.3	-0.694	-1.583	-0.022	-0.258	-1.073
Cell movement of muscle cells	0.159	-0.446	-1.622	-0.078	-1.02	-1.572
Accumulation of leukocytes	0.892	-0.661	0.151	-1.165	-1.605	0.418
Cell proliferation of breast cancer cell lines	-0.729	0.845	1.011	1.11	0.313	-0.876
Proliferation of muscle cells	-1.034	0.912	0.918	-0.666	-0.403	0.937
Neoplasia of leukocytes	0.67	-0.55	-2.265	-0.854	0.284	-0.246
Quantity of lymphoid cells	0.791	-0.429	0.898	1.816	-0.022	0.87
Formation of vessel	0.84	1.06	0.142	-0.193	-1.469	-1.111
Binding of epithelial cells	-0.835	-0.02	1.686	-0.436	-1.255	0.568
Epithelial-mesenchymal transition	0.413	0.86	1.573	0.719	0.421	0.778

Cell movement of epithelial cell lines	0.229	-0.219	1.181	0.606	-0.876	1.647
Lymphocyte migration	1.201	0.06	1.757	0.556	-0.03	1.123
Cell viability of blood cells	0.205	-0.089	2.148	0.69	0.301	1.29
Upper gastrointestinal tract tumor	0.237	-0.672	-0.281	-1.788	0.808	-0.934
Papillary carcinoma	1.387	-0.555	-0.555	0.277	-1.387	-0.555
Lymphoreticular neoplasm	-0.114	0.143	-1.215	0.758	1.202	1.268
Quantity of connective tissue	1.674	-0.456	1.135	-0.005	-0.832	0.588
Cardiogenesis	-0.248	2.34	0.994	-0.29	0.124	0.683
Synthesis of lipid	1.754	-0.863	0.535	-0.26	-0.836	-0.431
Benign Tumors	0.947	-0.933	-0.658	-0.844	-1.201	-0.094
Lymphatic system tumor	0.72	-0.471	-2.012	-0.739	0.102	-0.63
Cancer of cells	0.986	0.293	-0.005	0.148	1.827	1.406
Formation of blood vessel	0.11	1.023	-0.45	-0.136	-1.512	-1.416
Quantity of mononuclear leukocytes	0.624	-0.568	0.66	1.418	-0.452	0.914
Breast or colorectal cancer	1.682	-0.723	-0.919	0.228	-0.511	0.569
Cell movement of vascular smooth muscle cells	-0.144	0.071	-1.36	0.521	-1.074	-1.432
Lymphocytic neoplasm	0.532	-0.66	-2.145	-0.718	0.183	-0.352
Breast or pancreatic cancer	-0.894	-0.682	0.207	-1.299	-0.969	-0.517
Colony formation of cells	1.171	-0.988	-0.411	-0.887	-0.769	-0.334
Astrocytoma	0.03	-1.339	-1.121	-0.575	-0.357	-1.121
Skin lesion	0.183	-1.878	-0.943	-0.554	-0.209	-0.747
Abdominal carcinoma	0.099	-0.973	-0.859	-1.115	0.258	-1.186
Cell movement of lymphocytes	0.745	-0.026	1.741	0.873	0.039	1.058
Neoplasia of epithelial cells	1.249	-1.465	-0.631	-0.018	0.267	-0.852
Lymphoid cancer	0.852	-0.347	-1.902	-0.636	0.211	-0.527
Cell death of blood cells	1.212	0.088	1.412	0.803	-0.428	-0.524
B cell cancer	-1.439	-0.141	-0.788	0.441	1.305	-0.335
Colorectal cancer	1.291	-0.505	-1.047	0.715	0.173	0.715
Breast cancer	1.035	-0.855	-0.622	-0.742	-0.862	-0.315
Lymphoproliferative disorder	0.488	-0.615	-2.092	-0.756	0.14	-0.31
Transmigration of leukocytes	1.38	-0.952	0.975	-0.391	0.007	0.685
Cell movement of prostate cancer cell lines	-0.485	-0.12	-0.89	-1.341	-1.375	-0.175
Migration of vascular smooth muscle cells	-0.117	-0.026	-1.345	0.448	-1.21	-1.232
Proliferation of blood cells	0.448	-1.919	-0.453	-0.121	-1.304	0.131
B-cell neoplasm	-1.222	-0.329	-0.964	0.243	1.091	-0.519
Proliferation of neuronal cells	1.16	0.338	0.896	-0.079	-1.143	0.731
Homeostasis of leukocytes	1.238	-1.39	0.734	0.243	-0.226	0.494
Leukopoiesis	0.686	-0.736	1.122	0.324	0.306	1.15
Cell proliferation of fibroblasts	0.089	0.62	0.51	0.123	-2.534	0.443
Differentiation of tumor cell lines	1.074	0.599	0.243	1.044	-0.36	0.998
Migration of myeloid cells	0.816	-0.948	1.105	-0.198	-0.526	0.715
Primary neoplasm	-0.605	0.3	0.422	-1.462	1.095	0.422
Migration of neutrophils	0.962	-1.359	0.925	0.095	-0.563	0.396
Carcinoma	0.772	-1.004	-1.089	-0.3	-0.167	-0.965
Cell movement of lymphoid cells	0.674	0.043	1.668	0.802	0.108	0.987
Tumorigenesis of tissue	1.048	-0.792	-0.852	-0.358	-0.588	-0.641
Migration of mononuclear leukocytes	1.148	-0.106	1.681	0.232	-0.161	0.951
Adhesion of blood cells	1.728	-0.905	0.068	0.269	-0.578	0.721
Binding of leukocytes	2.549	-0.989	0.032	-0.121	-0.38	0.19
Differentiation of nervous system	0.199	1.314	1.013	0.82	-0.081	0.828
Quantity of T lymphocytes	0.319	-1.55	-0.612	0.134	-1.41	0.223
Glioma cancer	0	-1.325	-1.06	-0.397	-0.397	-1.06
Glioblastoma	0	-1.325	-1.06	-0.397	-0.397	-1.06
Malignant astrocytoma	0	-1.325	-1.06	-0.397	-0.397	-1.06
Angiogenesis of tumor	-0.438	-1.201	-0.208	-1.122	-0.414	-0.849
Migration of cells	1.421	-1.291	0.502	0.632	-0.253	0.126
Respiratory system development	-1.266	0.154	0.525	0.648	0.463	1.142
Proliferation of tumor cells	0.707	-0.047	-0.648	-0.901	-1.109	-0.777
Apoptosis of lymphatic system cells	1.529	-0.098	-0.836	0.04	-0.771	-0.912
Systemic autoimmune syndrome	-0.389	-0.896	0.361	-0.356	-1.808	0.361
Adhesion of extracellular matrix	0.115	-0.658	-1.336	-0.699	-0.251	-1.106
Primary solid tumor	0.555	-0.555	-0.555	-1.387	0.555	-0.555
Development of digestive system	-0.446	-0.637	-1.146	0.701	-0.892	0.318
Cell movement	1.251	-1.573	0.353	0.598	-0.328	0.028
Lymphocytic cancer	0.411	-0.539	-2.037	-0.598	0.31	-0.23
Quantity of blood cells	2.941	-0.211	0.059	0.161	0.296	0.455
Proliferation of smooth muscle cells	-1.333	-0.037	0.568	-0.888	-0.665	0.61
Growth of smooth muscle	-1.371	0.004	0.607	-0.846	-0.623	0.649
Colorectal tumor	1.696	-0.263	-0.795	0.437	-0.235	0.661
Migration of granulocytes	1.24	-1.324	0.488	0.041	-0.738	-0.249
Accumulation of phagocytes	-0.59	-0.049	0.989	-0.45	-1.634	-0.366
Differentiation of mononuclear leukocytes	0.456	-0.217	0.949	0.709	0.648	1.098
Tubulation of cells	-1.277	-0.292	0.325	-0.098	-1.643	-0.435
Cellular infiltration by leukocytes	0.661	-1.232	-0.836	0.584	0.59	-0.165
Intestinal tumor	1.364	-0.282	-0.748	0.644	0.105	0.921
Digestive organ tumor	0.277	-0.902	-0.388	-1.599	0.016	-0.877
Proliferation of immune cells	0.414	-2.172	-0.398	0.053	-0.858	-0.16
Homeostasis of blood cells	1.109	-1.44	0.668	0.121	-0.285	0.431
Formation of skin	0.965	-0.688	-1.326	0.722	0.298	-0.034
Migration of endothelial cells	-0.665	-0.297	1.421	0.847	-0.606	0.183
Hematopoiesis of mononuclear leukocytes	0.521	-0.278	0.903	0.66	0.598	1.054
Cell death of epithelial cells	1.68	-0.621	0.266	-0.643	-0.784	-0.02
T cell migration	0.5	0.349	1.612	0.253	-0.123	1.142
Quantity of cells	1.612	-0.721	0.266	0.106	-0.469	0.8

Malignant neoplasm of large intestine	1.066	-0.296	-0.827	0.502	0.369	0.9
Lymphopoiesis	0.958	-0.643	1.024	0.16	0.501	0.627
Growth of lesion	0.418	-1.169	0.079	-0.769	-0.783	-0.679
Hematopoietic neoplasm	0.544	-0.88	-1.911	-0.099	-0.132	-0.324
Quantity of granulocytes	1.807	-0.539	-0.265	-0.838	0.189	-0.243
Advanced extracranial solid tumor	0.369	-0.183	0.19	0.228	1.315	-1.596
Differentiation of epithelial cells	1.477	-0.757	0.204	-0.101	-0.676	0.622
Cellular homeostasis	0.236	-0.657	1.193	1.095	-0.152	0.486
Development of urinary tract	-1.055	0.449	1.275	0.178	-0.236	0.595
Breast or ovarian cancer	0.512	-0.682	-0.462	-0.915	-0.689	-0.512
Lymphohematopoietic neoplasia	0.76	-0.656	-1.841	0.108	0.076	-0.312
Formation of eye	0.066	0.136	1.166	0.823	-0.615	0.937
Adhesion of immune cells	2.191	-0.71	-0.201	-0.073	-0.417	0.141
Extraadrenal retroperitoneal tumor	-1.291	0.141	0.442	-0.834	0.697	-0.326
Malignant neoplasm of male genital organ	0.828	0.021	-0.865	-0.57	0.87	-0.57
Growth of tumor	0.36	-1.078	0.134	-0.809	-0.704	-0.637
Cancer of secretory structure	-0.715	-0.21	0.125	-0.928	0.874	-0.848
Rheumatoid arthritis	-0.155	-1.527	0.775	0.155	-0.908	0.155
Benign lesion	1.071	-0.741	-0.368	-0.432	-0.962	-0.094
Proliferation of lymphatic system cells	0.097	-1.457	-0.362	0.513	-0.775	0.443
Visceral metastasis	0.28	-0.34	0.111	-0.174	1.199	-1.54
Progression of tumor	0.882	-1.301	-0.448	-0.293	0.448	0.25
Digestive system cancer	0.483	-1.242	-0.402	-1.042	-0.008	-0.425
Cell movement of T lymphocytes	0.863	0.144	1.302	0.167	-0.174	0.947
Large intestine neoplasm	1.565	-0.149	-0.674	0.321	-0.122	0.763
Male genital neoplasm	0.455	0.109	0.077	0.109	1.7	-1.122
Transmigration of cells	0.851	-0.926	1.11	-0.11	-0.021	0.542
Cell movement of endothelial cells	-0.449	-0.394	1.267	0.351	-0.704	-0.392
Cellular infiltration	0.305	-1.207	-1.2	0.257	0.114	-0.465
Advanced lung cancer	0.011	-0.059	0.327	0.286	1.491	-1.36
Pulmonary metastasis	0.011	-0.059	0.327	0.286	1.491	-1.36
Malignant solid tumor	1.089	-0.675	-1.008	-0.179	-0.55	-0.029
Apoptosis of leukocytes	1.196	-0.01	-0.58	0.061	-0.595	-1.067
Genital tract cancer	0.163	0.202	-0.618	-0.755	1	-0.755
Binding of tumor cell lines	-0.602	-0.138	-0.045	-1.082	-0.498	-1.098
Malignant connective or soft tissue neoplasm	0.835	0.02	-0.908	0.804	-0.865	-0.012
Squamous cell tumor	0.773	-0.833	-0.385	0.649	0.585	0.202
Upper gastrointestinal tract cancer	-0.095	-0.095	-0.095	-1.234	0.664	-1.234
Lymphoma	0.135	0.03	-1.703	-0.431	0.669	0.448
Development of sensory organ	-0.058	-0.033	0.996	0.752	-1.039	0.525
Quantity of leukocytes	2.001	-0.552	-0.039	0.237	0.171	0.402
Hypertrophy	0.131	-1.462	-0.267	-0.347	-0.825	0.37
Neoplasia of tumor cell lines	0.582	-0.861	0.699	-0.148	0.539	0.566
Proliferation of mononuclear leukocytes	-0.144	-1.92	-0.477	0.248	-0.441	0.139
Colony formation of tumor cell lines	0.863	-0.44	-0.425	0.811	0.153	-0.671
Adhesion of tumor cell lines	-0.105	0.833	0.614	-0.527	-0.455	-0.823
Lymphocyte homeostasis	1.092	-1.23	0.564	0.082	-0.048	0.337
Ovarian cancer	-0.762	-0.152	-0.152	-1.067	-0.152	-1.067
Neoplasia of cells	1.34	-0.25	0.007	-0.227	0.765	0.75
Invasion of carcinoma cell lines	0.059	-0.366	-0.368	0.592	-1.442	-0.506
T cell development	1.431	-1.167	0.287	0.235	0.005	0.205
T cell homeostasis	1.416	-1.184	0.297	0.213	0.016	0.184
Morphogenesis of cardiovascular system	0.556	-0.326	-0.518	-0.173	-1.209	-0.518
Prostatic tumor	0.612	-0.029	-0.061	-0.029	1.57	-0.984
Breast or ovarian carcinoma	0.142	-0.537	-0.358	-1.081	-0.423	-0.734
Cellular infiltration by mononuclear leukocytes	0.047	1.152	0.791	0.297	0.436	0.551
Proliferation of lymphocytes	-0.185	-1.965	-0.325	0.415	-0.257	0.121
Branching of epithelial tissue	0.867	0.014	-0.537	0.056	-0.996	0.769
Interaction of tumor cell lines	-0.689	-0.064	0.034	-1.004	-0.42	-1.02
Growth of blood vessel	0.263	1.089	0.11	1.483	-0.118	-0.139
Development of genital tumor	-0.358	0.596	-0.04	-0.358	0.835	-0.994
Hematologic cancer of cells	0.473	-0.222	-1.735	-0.281	0.369	0.094
Squamous-cell carcinoma	0.45	-1.202	-0.397	0.668	0.257	-0.138
Apoptosis of blood cells	0.8	0.158	-0.553	0.076	-0.207	-1.31
Migration of carcinoma cell lines	-1.087	0.257	0.477	0.29	-0.207	-0.766
Pelvic cancer	-0.248	0.182	-0.21	-0.341	1.36	-0.733
Angiogenesis of lesion	-0.076	-1.053	0.106	-0.97	-0.093	-0.771
Abnormality of heart ventricle	0.457	-0.103	0.504	0.196	1.25	0.522
Necrosis of epithelial tissue	1.493	0.148	0.113	-0.474	0.719	-0.055
Cell death of lymphatic system cells	1.468	0.322	-0.2	-0.051	-0.392	-0.565
Differentiation of muscle cells	-0.69	0.554	0.875	-0.275	0.287	0.313
Differentiation of epithelial tissue	0.533	-0.74	-0.211	-0.539	-0.759	-0.211
Growth of embryo	-0.542	0.176	-0.263	-0.216	-1.146	-0.647
Genitourinary tumor	1.396	0.705	0.088	0.435	0.093	-0.252
Pelvic tumor	-0.022	-0.042	-0.404	-0.418	0.939	-1.114
Growth of organism	-0.687	0.599	0.081	0.499	-0.529	0.513
Connective or soft tissue tumor	0.537	0.331	-0.579	0.328	-1.028	0.103
Lymphohematopoietic cancer	0.372	-0.205	-1.419	0.307	0.333	-0.255
Connective tissue tumor	0.657	0.382	-0.533	0.426	-0.687	0.153
Hematologic cancer	0.108	-0.428	-1.563	0.345	0.372	-0.022
Binding of vascular endothelial cells	0.223	-1.076	0.117	-0.105	-0.559	0.755
Genital tumor	0.081	0.06	-0.545	-0.312	0.577	-1.247
Gastrointestinal tract cancer	0.584	-0.176	-0.89	-0.421	0.212	0.538
Adhesion of endothelial cells	0.628	-1.029	0.284	-0.047	-0.182	0.65



Migration of vascular endothelial cells	-0.773	0.412	0.792	0.351	-0.077	-0.411
Binding of endothelial cells	0.398	-1.539	0.124	0.04	0.137	0.542
Advanced malignant solid tumor	0.181	-0.087	0.268	0.382	1.221	-0.637
Interaction of endothelial cells	0.28	-1.418	0.228	0.145	0.057	0.642
Proliferation of liver cells	0.383	0.903	-0.644	0.071	0.409	0.345
Gastrointestinal tumor	1.226	-0.29	-0.684	-0.19	0.282	-0.036
Advanced stage tumor	0.565	0.097	0.032	0.632	0.93	0.42
Advanced malignant tumor	0.565	0.097	0.032	0.632	0.93	0.42
Proliferation of hematopoietic cells	0.225	-0.555	-0.674	-0.359	-0.709	-0.15
Movement of vascular endothelial cells	-1.1	0.248	0.463	0.016	-0.164	-0.679
Development of genitourinary system	-0.108	-0.002	0.772	0.558	-1.131	0.062
Adhesion of vascular endothelial cells	-0.031	-0.706	0.3	-0.204	-0.747	0.597
Proliferation of fibroblast cell lines	-0.647	0.571	-0.068	0.191	0.524	0.502
Secondary tumor	0.506	0.039	-0.026	0.574	0.871	0.477
Growth of liver	0.249	0.819	-0.747	-0.067	0.323	0.254
Growth of embryonic tissue	0.038	-0.032	-0.32	-0.255	-1.115	-0.656
Metastatic solid tumor	0.081	-0.189	0.169	0.283	1.126	-0.54
Malignant genitourinary solid tumor	0.752	0.024	-0.39	-0.302	0.456	-0.464
Apoptosis of epithelial cells	0.855	0.362	-0.017	-0.381	-0.208	-0.425
Abdominal cancer	0.328	-0.559	-0.146	-0.262	0.791	0.136
Growth of vessel	0.095	0.621	0.098	0.741	-0.53	0.134
Differentiation of muscle	-0.329	0.58	0.855	-0.009	0.004	0.394
Mammary tumor	1.594	0.092	-0.135	0.119	-0.153	-0.03
Abdominal neoplasm	0.164	0.142	0.014	-0.759	0.536	-0.429
Secondary neoplasm of digestive system	-0.069	-0.484	0.623	-0.484	0.069	0.069
Binding of extracellular matrix	0.043	0.205	-0.415	-0.329	0.576	-0.205
Wound	-0.172	0.258	0.012	0.258	-0.356	-0.417
Development of body trunk	-0.096	0.058	0.122	0.053	-0.416	0.629
Function of blood cells	0.13	-0.235	0.73	0.005	-0.019	0.154
Papillary adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Metastatic intestinal tumor	N/A	N/A	N/A	N/A	N/A	N/A
Advanced gastrointestinal tumor	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of head	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of heart ventricle	N/A	N/A	N/A	N/A	N/A	N/A
Female genital tract serous carcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Advanced colorectal cancer	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of tumor cell lines	N/A	N/A	N/A	N/A	N/A	N/A
Serous adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of abdomen	N/A	N/A	N/A	N/A	N/A	N/A
Healing of wound	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of blood vessel	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of heart	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of muscle cells	N/A	N/A	N/A	N/A	N/A	N/A
Uterine tumor	N/A	N/A	N/A	N/A	N/A	N/A
Healing of lesion	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of digestive system	N/A	N/A	N/A	N/A	N/A	N/A
Serous neoplasm	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of vessel	N/A	N/A	N/A	N/A	N/A	N/A
Endometriosis	N/A	N/A	N/A	N/A	N/A	N/A
Female genital tract adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Head and neck adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Organization of extracellular matrix	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of bone	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of muscle	N/A	N/A	N/A	N/A	N/A	N/A
Differentiated thyroid cancer	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of vasculature	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of heart	N/A	N/A	N/A	N/A	N/A	N/A
Mature T-cell or NK-cell neoplasm	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of cardiovascular system	N/A	N/A	N/A	N/A	N/A	N/A
Uterine serous papillary cancer	N/A	N/A	N/A	N/A	N/A	N/A
Thyroid gland nonmedullary carcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Hypertrophy of heart	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of respiratory system	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of tumor	N/A	N/A	N/A	N/A	N/A	N/A
Enlargement of cells	N/A	N/A	N/A	N/A	N/A	N/A
Enlargement of heart	N/A	N/A	N/A	N/A	N/A	N/A
Visceromegaly	N/A	N/A	N/A	N/A	N/A	N/A
Benign pelvic disease	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of vasculature	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of blood vessel	N/A	N/A	N/A	N/A	N/A	N/A
Size of lesion	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of body cavity	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of body cavity	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of head	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of lesion	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of thoracic cavity	N/A	N/A	N/A	N/A	N/A	N/A
Advanced colorectal tumor	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of cardiovascular system	N/A	N/A	N/A	N/A	N/A	N/A
Secondary neoplasm of large intestine	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of digestive system	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of nervous system	N/A	N/A	N/A	N/A	N/A	N/A
Mature T-cell neoplasm	N/A	N/A	N/A	N/A	N/A	N/A

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Diseases and Bio Functions	Observation 1	Observation 2	Observation 3	Observation 4	Observation 5	Observation 6
Synthesis of DNA	-3.423	-2.507	-2.025	-2.841	-2.023	-3.585
Morbidity or mortality	-1.327	4.344	-2.238	0.636	-2.485	-2.635
Organismal death	-1.218	4.442	-2.218	0.71	-2.327	-2.656
Formation of cellular protrusions	1.122	-2.127	2.973	1.051	1.728	1.907
Invasion of tumor cell lines	1.29	-2.737	1.565	-0.839	1.872	2.202
Tubulation of epithelial tissue	-0.879	-2.897	-1.618	-2.165	-1.025	-1.543
Hereditary connective tissue disorder	-2.264	0.502	-1.429	-2.115	-1.891	-1.741
Cell movement of leukocytes	1.631	-2.269	1.784	-1.048	0.903	2.108
Proliferation of connective tissue cells	-1.838	-0.72	-1.369	-2.399	-1.863	-1.519
Leukocyte migration	1.134	-2.48	1.913	-1.041	1.072	2.046
Cell movement of blood cells	1.147	-2.529	1.846	-1.113	1.026	1.978
Migration of antigen presenting cells	1.738	-0.76	1.89	2.093	1.237	1.612
Invasion of cells	1.247	-3.04	1.137	-0.883	1.664	1.172
Bleeding	-0.147	3.042	-2.894	0.069	-1.702	-1.26
Cell movement of prostate cancer cell lines	-1.547	-2.093	-0.77	-1.475	-1.959	-1.245
Cell proliferation of fibroblasts	-1.852	-1.458	-0.746	-2.25	-0.603	-2.15
Non-hematological solid tumor	-1	-0.974	-1.544	-2.036	-1.629	-1.856
Growth of embryo	-1.933	-2.968	0.195	-1.342	-0.901	-1.517
Growth of organism	-1.881	-3.653	1.135	-0.614	-0.342	-1.159
Cell survival	-0.038	-4.423	1.457	-0.394	1.776	0.523
Growth of connective tissue	-1.063	-0.45	-1.404	-2.212	-1.608	-1.869
Invasive cancer	-1.624	-1.203	-1.255	-1.255	-0.887	-2.362
Binding of protein binding site	-0.377	0	-2.394	-2.735	-0.973	-1.992
Adhesion of connective tissue cells	1.292	-0.472	2.119	1.109	2.473	0.936
Cell viability	-0.023	-4.418	1.142	-0.562	1.523	0.624
Cell viability of tumor cell lines	-0.03	-4.605	1.824	0.328	1.385	0.097
Development of connective tissue cells	-2.159	-1.6	-0.76	-2.145	-0.771	-0.815
Hepatocellular carcinoma	-1.027	1.193	-0.803	-1.096	-1.786	-2.284
Cell proliferation of tumor cell lines	-0.241	-2.203	-0.979	-2.988	-0.412	-1.356
Migration of cells	0.667	-2.766	0.493	-2.239	0.807	1.17
Cell death of endothelial cells	0.258	1.199	0.828	3.075	-0.041	2.724
Cell spreading	-0.875	-4.13	1.266	-0.07	1.592	0.086
Formation of blood vessel	-1.223	-2.014	-0.933	-2.188	-0.31	-1.319
Cell movement of antigen presenting cells	3.098	-0.238	1.059	0.644	0.697	2.236
Permeability of vascular system	0.552	0.879	-3.223	0.458	0.655	-2.196
Invasion of breast cancer cell lines	0.349	-2.452	1.616	0.767	0.954	1.807
Proliferation of endothelial cells	-1.331	-0.491	-1.553	-3.002	-1.046	-0.466
Attachment of cells	-0.062	-2.242	1.212	1.457	1.141	1.74
Homing of cells	1.379	-2.498	0.843	-0.898	0.391	1.838
Cell movement	0.507	-2.854	0.153	-2.396	0.8	1.126
Cell cycle progression	-1.732	-0.564	-0.578	-2.08	-1.096	-1.764
Cell proliferation of vascular endothelial cells	-1.421	-0.986	-1.712	-1.763	-1.684	-0.225
Formation of lung	-0.098	-2.054	1.271	0.75	1.467	1.989
Chemotaxis of phagocytes	2.636	-0.323	1.079	0.057	0.575	2.956
Formation of vessel	-1.2	-2.158	-0.663	-2.096	-0.444	-1.021
Apoptosis of endothelial cells	0.031	0.956	0.729	3.069	-0.141	2.624
Apoptosis of muscle cells	1.298	1.474	-0.215	1.588	1.854	1.088
Homing of blood cells	2.348	-0.548	1.41	-0.251	0.379	2.576
Expansion of cells	-1.151	-1.981	-1.451	-0.48	-1.255	-1.123
Chemotaxis	1.192	-2.495	0.702	-1.09	0.203	1.707
Homing of leukocytes	2.259	-0.653	1.313	-0.357	0.281	2.488
Cell transformation	-1.193	-1.997	-0.497	-2.09	-0.265	-1.3
Growth of malignant tumor	-0.901	-0.845	-0.917	-1.368	-0.809	-2.494
Inflammatory response	1.993	-0.651	1.695	-0.616	0.497	1.842
Cell-cell contact	1.107	-0.212	1.76	0.994	2.187	1.023
Growth of embryonic tissue	-1.532	-2.229	0.509	-0.771	-1.181	-1.052
Binding of tumor cell lines	-1.664	-2.656	-0.16	-1.292	-1.48	0.017
Breast or pancreatic cancer	-1.557	-2.276	-0.405	0.254	-1.957	0.799
Interaction of tumor cell lines	-1.701	-2.739	-0.085	-1.211	-1.4	0.093
Primary solid tumor	-1.387	-1.387	-0.555	0.277	-1.387	-2.219
Adenocarcinoma	-1.544	-1.664	-0.352	-1.149	-1.341	-1.128
Necrosis of muscle	0.929	1.406	-0.095	1.842	1.577	1.321
Activation of leukocytes	1.702	0.983	1.092	-2.157	0.898	0.308
Chemotaxis of leukocytes	2.307	-0.536	1.227	-0.499	0.134	2.424
Chemotaxis of blood cells	2.303	-0.538	1.224	-0.502	0.131	2.42
Aggregation of cells	0.129	-2.944	1.278	0.562	1.517	-0.684
Movement of vascular endothelial cells	-1.582	-3.523	0.021	-1.475	-0.302	-0.164
Development of head	0.179	-2.466	1.449	0.559	2.248	0.129
Growth of skin	-0.665	0.379	-1.476	-1.588	-1.25	-1.661
Cell death of muscle cells	1.066	1.14	0.028	1.776	1.741	1.249
Development of body axis	0.279	-2.353	1.342	0.456	2.337	0.229
Development of cardiovascular tissue	-1.368	-0.667	-0.885	-2.717	-0.994	-0.267
Nonhematologic malignant neoplasm	-0.955	-1.346	-0.623	-1.565	-0.979	-1.414
Endothelial cell development	-1.303	-0.396	-1.012	-2.843	-0.929	-0.394
Migration of endothelial cells	-0.963	-2.987	0.573	-1.728	0.446	-0.179
Non-melanoma solid tumor	-0.363	-1.007	-0.987	-2.129	-0.941	-1.438
Cell movement of fibroblast cell lines	0.309	-1.411	1.81	-0.529	1.918	-0.885
Cell movement of phagocytes	1.699	-1.537	0.897	-0.714	0.244	1.763
Plasma cell dyscrasia	-1.96	-0.371	-0.689	-0.689	-1.165	-1.96
Cell death of tumor cell lines	0.74	3.243	-1.489	-0.149	0.065	1.135
Development of endothelial tissue	-1.292	-0.588	-0.922	-2.76	-0.917	-0.302
Cell proliferation of colorectal cancer cell lines	-1.007	0.021	-1.032	-2.101	-0.991	-1.556

Binding of professional phagocytic cells	-0.267	-0.879	-1.9	-0.92	-0.708	-1.989
Cell movement of connective tissue cells	0.484	-2.691	1.719	0.16	1.579	0.026
Papillary carcinoma	-1.387	0.555	-1.387	-1.387	-0.555	-1.387
Tubulation of cells	-0.013	-2.944	-0.731	-1.522	-0.285	-1.159
Apoptosis of tumor cells	0.801	2.261	-0.909	0.159	1.309	1.213
Assembly of cells	-1.259	-0.359	-0.971	-2.788	-0.888	-0.357
Migration of phagocytes	1.166	-2.284	1.302	0.515	0.633	0.709
Binding of DNA	-0.321	-1.101	-0.72	-2.626	-0.294	-1.474
Cell movement of mononuclear leukocytes	1.472	-1.7	1.636	-0.525	0.607	0.594
Glucose metabolism disorder	1.351	1.2	-1.076	-2.067	-0.392	-0.446
Growth of tumor	-0.348	-2.143	0.02	-1.724	-1.074	-1.194
Growth of lesion	-0.314	-2.099	-0.01	-1.769	-1.041	-1.261
Invasion of tumor cells	0.899	-1.261	1.286	0.789	1.286	0.957
Adhesion of tumor cell lines	-1.682	-2.784	0.068	-0.757	-1.161	0.013
Lymphopoiesis	-0.528	-1.989	0.517	-0.728	-2.042	-0.652
Cell movement of endothelial cells	-0.963	-2.906	0.42	-1.819	0.286	-0.025
Apoptosis of tumor cell lines	0.546	2.848	-1.997	-0.547	0.094	0.379
Cancer of secretory structure	-0.848	-2.022	0.587	1.113	-1.167	0.651
Apoptosis	0.195	3.04	-1.192	1.148	-0.494	0.311
Angiogenesis of tumor	-1.465	-1.738	-0.575	-0.79	-0.438	-1.362
Connective or soft tissue tumor	-0.948	-2.066	-0.199	-0.575	-1.652	-0.882
Invasion of tumor	0.639	-1.609	1.509	0.648	0.714	1.164
Epithelial neoplasm	-0.352	-0.574	-0.993	-2.073	-0.905	-1.385
Proliferation of tumor cells	-0.234	-1.183	-0.294	-0.878	-1.171	-2.483
Migration of vascular endothelial cells	-1.361	-3.064	0.106	-1.61	-0.014	0.087
Benign Tumors	-0.396	-0.992	-0.638	-1.621	-0.699	-1.843
Apoptosis of connective tissue cells	-0.56	1.986	-1.341	-1.046	-0.332	0.918
Morphogenesis of cardiovascular system	-0.365	-0.058	-1.209	-1.669	1.209	-1.669
Interaction of DNA	-0.261	-1.035	-0.685	-2.583	-0.187	-1.41
Cell movement of tumor cell lines	-0.073	-2.268	-0.152	-2.598	-0.42	0.642
Homeostasis of blood cells	-0.939	-1.416	0.414	-0.985	-1.294	-1.1
Chemotaxis of myeloid cells	2.016	0.561	0.269	-1.172	-0.156	1.953
Respiratory system development	-0.648	-2.501	0.648	0.154	0.834	1.328
Hematopoiesis of mononuclear leukocytes	-0.705	-2.027	0.459	-0.63	-1.501	-0.779
Invasion of carcinoma cell lines	-0.016	-2.399	-1.032	-1.658	0.819	0.161
Colony formation of cells	-1.188	-1.078	-1.061	-0.887	-1.078	-0.79
Differentiation of mononuclear leukocytes	-0.638	-2.217	0.511	-0.565	-1.422	-0.711
Necrosis of epithelial tissue	0.294	1.165	0.994	1.391	-0.431	1.761
Primary neoplasm	-1.095	-0.605	0.972	0.972	-1.462	-0.923
Extracranial solid tumor	0.15	-0.369	-1.184	-2.102	-0.816	-1.405
Cell movement of myeloid cells	1.211	-1.064	0.506	-1.614	0.269	1.354
Cell death of tumor cells	0.625	2.004	-0.546	0.331	0.861	1.632
Necrosis of tumor	0.625	2.004	-0.546	0.331	0.861	1.632
Malignant solid tumor	-0.718	-1.622	-0.209	-1.564	-1.181	-0.675
Organization of cytoskeleton	-0.458	-2.615	1.669	-0.504	0.107	0.6
Cell movement of fibroblasts	-0.105	-2.611	1.376	-0.458	0.854	-0.515
Hepatobiliary system cancer	-1.214	0.662	-0.051	-0.552	-1.65	-1.786
Proliferation of cancer cells	-0.716	-0.37	-0.651	-1.405	-0.59	-2.181
Abnormality of heart ventricle	1.641	-0.382	0.802	0.504	1.361	1.222
Migration of connective tissue cells	0.07	-2.182	1.999	-0.156	1.177	-0.298
Mature lymphocytic neoplasm	-1.449	-1.074	0.136	0.136	-0.886	-2.199
Proliferation of epithelial cells	-1.27	-0.264	0.126	-1.475	-1.15	-1.59
Advanced malignant solid tumor	-1.027	-2.369	0.953	0.752	-0.221	0.544
Cell viability of blood cells	1.031	-1.305	1.733	0.576	0.797	0.391
Synthesis of nitric oxide	0.242	-0.872	-0.467	-1.767	-0.763	-1.692
Growth of epithelial tissue	-1.023	-0.007	-0.524	-2.465	-1.244	-0.532
Homeostasis of leukocytes	-0.825	-1.305	0.478	-0.931	-1.242	-0.987
Leukopoiesis	-0.51	-2.243	1.029	-0.649	-0.981	-0.35
Cell death of tumor	0.512	1.882	-0.433	0.438	0.746	1.732
Necrosis	0.656	2.98	-0.575	0.728	0.146	0.653
Intestinal tumor	1.135	1.928	0.105	-1.073	0.349	-1.141
Vascularization of absolute anatomical region	0.29	-0.624	-1.846	-1.347	-0.475	-1.149
Binding of myeloid cells	0.192	-0.444	-1.685	-1.259	-0.509	-1.639
Activation of blood cells	1.255	0.901	0.872	-2.364	0.301	-0.028
Cell movement of lymphatic system cells	0.808	-1.79	1.618	-0.444	0.998	-0.053
Organization of cytoplasm	-0.517	-2.55	1.606	-0.444	0.048	0.539
Occlusion of blood vessel	0.251	-1.033	0.962	-1.808	-0.397	-1.249
Migration of tumor cell lines	0.009	-2.057	0.375	-2.492	-0.186	0.574
Cell movement of endothelial cell lines	-0.916	-1.189	-1.601	-0.731	0.233	-0.987
Cell death of breast cancer cell lines	-0.641	1.947	-1.274	-0.197	-0.959	0.622
Skin lesion	1.411	-0.293	-0.633	-1.22	0.824	-1.25
Apoptosis of breast cancer cell lines	-0.74	1.509	-1.441	-0.36	-0.891	0.659
Activation of cells	0.863	0.776	0.692	-2.416	0.488	0.341
Male genital neoplasm	0.684	-1.045	1.412	1.364	-0.275	0.732
Cell movement of embryonic cell lines	-0.831	-2.358	1.144	-0.169	-0.025	-0.969
Metastatic solid tumor	-0.931	-2.28	0.857	0.654	-0.324	0.445
Production of reactive oxygen species	0.228	-1.441	-0.121	-2.176	-1.042	0.481
Primary tumor	-1.067	-1.067	-0.152	-0.152	-1.067	-1.982
Cell movement of monocytes	1.802	-0.425	0.779	-0.699	0.419	1.358
Lymphocyte homeostasis	-0.656	-1.49	0.32	-0.765	-1.426	-0.821
Formation of actin filaments	-0.609	-1.287	0.312	-1.338	1.241	-0.655
Advanced lung cancer	-0.527	-1.957	1.009	0.865	-0.3	0.784
Pulmonary metastasis	-0.527	-1.957	1.009	0.865	-0.3	0.784
Malignant genitourinary solid tumor	-0.523	-0.412	0.988	1.166	-1.277	1.055

T-cell malignant neoplasm	-0.915	-0.576	-0.177	-0.44	-0.915	-2.385
Cell death of connective tissue cells	-0.506	1.463	-1.148	-0.939	-0.612	0.72
Interphase	-0.509	-0.736	0.063	-1.885	0.345	-1.847
Invasion of malignant tumor	1.164	-1.061	1.532	0.351	0.591	0.676
Upper gastrointestinal tract tumor	-1.265	-0.939	0.808	0.416	-1.788	-0.15
Vascularization	-0.032	-1.105	-1.283	-1.013	-0.92	-1.003
Cell movement of lymphocytes	0.809	-1.385	1.668	-0.606	0.68	-0.205
Respiratory system tumor	-0.661	-1.396	-0.146	-1.101	-0.969	-1.059
Differentiation of osteoblasts	-0.746	-0.677	1.119	-0.985	-0.869	-0.928
Neovascularization	0.129	-0.936	-1.181	-0.529	-1.089	-1.441
Formation of muscle	0.751	-1.493	0.487	-0.138	1.325	-1.104
Neovascularization of organ	0.042	-0.437	-1.316	-0.928	-0.712	-1.861
Transmigration of cells	0.253	-2.298	0.29	-0.748	1.239	0.463
Prostatic tumor	0.553	-0.907	1.279	1.23	-0.417	0.893
Migration of mononuclear leukocytes	0.818	-1.618	1.117	-0.934	0.168	-0.614
Vasculogenesis	-0.304	-2.444	0.185	-1.789	-0.201	0.336
Tumorigenesis of tissue	-0.192	-0.733	-0.885	-1.99	-0.365	-1.089
Breast or ovarian cancer	-1.651	-0.841	-0.009	0.104	-1.595	1.044
Expression of RNA	0.184	-0.47	0.774	-1.053	1.331	1.402
Diabetes mellitus	0.433	0.952	-1.739	-0.984	-0.596	-0.501
Differentiation of tumor cell lines	1	0.162	0.954	0.363	1.447	1.277
Cell movement of lymphoid cells	0.876	-1.451	1.595	-0.535	0.61	-0.135
Quantity of cells	0.511	-1.809	-0.068	-0.715	1.545	0.553
Gastrointestinal carcinoma	-0.972	0.333	-0.502	-0.925	-1.818	-0.643
Differentiation of muscle	0.087	-2.114	0.586	0.778	0.746	0.874
Cell proliferation of carcinoma cell lines	-0.365	-1.315	-0.958	-1.53	-0.262	-0.741
Advanced extracranial solid tumor	-0.869	-1.766	0.849	0.71	-0.338	0.632
Astrocytoma	-0.939	-0.515	0.188	0.515	-1.666	-1.339
Quantity of connective tissue	0.811	-2.029	0.783	0.156	1.218	0.141
Binding of epithelial cells	0.431	-2.748	0.545	-0.981	0.176	-0.251
Neovascularization of eye	0.391	-0.502	-1.307	-0.91	-0.382	-1.636
Differentiation of nervous system	0.459	-1.163	1.167	-0.166	0.455	1.714
Migration of lymphatic system cells	0.362	-1.445	1.336	-0.702	0.637	-0.639
Binding of connective tissue cells	0.558	-0.632	1.601	0.147	1.42	0.761
Non-small cell lung carcinoma	-0.533	-0.413	-0.433	-1.52	-0.775	-1.439
Benign lesion	-0.303	0.035	-0.921	-1.606	-0.799	-1.416
Cell movement of dermal cells	-0.393	-1.897	1.542	-0.895	0.178	0.137
Proliferation of hematopoietic cells	-0.988	-0.371	-0.359	-0.827	-0.857	-1.638
Colorectal tumor	0.884	1.444	-0.571	-1.243	0.101	-0.795
Epithelial-mesenchymal transition	-0.111	-1.395	1.653	-0.333	1.449	-0.091
Phosphorylation of protein	1.127	-0.711	0.257	-0.495	2.252	0.188
Migration of carcinoma cell lines	-0.168	-2.064	0.12	-0.861	-0.724	1.055
Quantity of T lymphocytes	0.056	-0.313	-1.013	-1.583	0.341	-1.684
Metabolism of reactive oxygen species	0.436	-0.741	0.38	-1.858	-0.627	0.944
Growth of blood vessel	-1.193	-1.998	0.691	-0.301	0.537	-0.263
Non-traumatic arthropathy	-0.637	0.605	-1.023	-0.154	-1.713	-0.83
Proliferation of muscle cells	-1.289	-1.529	0.76	-0.739	0.035	0.585
Carcinoma	-0.557	-0.903	-0.356	-1.676	-0.455	-0.989
Microtubule dynamics	-0.127	-1.967	1.666	-0.249	0.412	0.513
Synthesis of reactive oxygen species	0.508	-0.673	0.378	-1.866	-0.654	0.854
Transcription	-0.005	-0.479	0.887	-0.907	1.224	1.427
Activation of phagocytes	0.619	-0.314	-0.473	-2.303	-0.412	-0.791
Invasion of tissue	0.404	-1.496	-0.419	-2.083	0.083	-0.419
Advanced stage tumor	-0.613	-1.954	0.895	-0.369	0.314	0.738
Advanced malignant tumor	-0.613	-1.954	0.895	-0.369	0.314	0.738
Breast cancer	-1.522	-0.759	-0.142	-0.022	-1.462	0.975
Development of benign tumor	-0.031	-0.62	-0.646	-1.368	-0.312	-1.898
Vascularization of eye	0.79	-0.289	-1.432	-0.829	0.065	-1.454
Binding of blood cells	0.66	-2.018	0.562	-1.043	0.478	0.083
Connective tissue tumor	-0.658	-1.959	0.081	-0.231	-1.366	-0.539
Cell death of cancer cells	0.633	1.587	-0.125	-0.017	0.788	1.667
Gastrointestinal tumor	0.458	1.13	0.615	-0.964	-0.439	-1.206
Digestive organ tumor	-0.114	0.359	-0.104	-1.005	-1.41	-1.819
Colony formation	-0.676	-0.834	-0.935	-0.83	-1.202	-0.331
Development of epithelial tissue	-0.638	-0.686	-0.525	-2.187	-0.439	0.327
Inflammation of absolute anatomical region	-0.467	-0.34	-1.44	-1.19	-0.248	-1.116
Formation of filaments	-0.058	-1.464	0.784	-0.992	1.322	-0.168
Transcription of RNA	-0.082	-0.388	0.947	-0.985	1.212	1.169
Development of vasculature	-0.129	-2.065	0.075	-1.582	-0.035	0.896
Extraadrenal retroperitoneal tumor	-0.007	-1.714	1.387	0.593	-1.05	0.028
T cell development	-0.365	-1.216	0.413	-0.913	-1.114	-0.751
Migration of vascular smooth muscle cells	-1.571	-0.599	-0.908	-1.172	-0.139	-0.381
Cell proliferation of breast cancer cell lines	0.484	-1.082	0.929	0.966	1.057	-0.247
T cell homeostasis	-0.343	-1.223	0.391	-0.899	-1.131	-0.769
Formation of lymphoid tissue	0.043	-1.482	-0.293	-1.346	0.275	-1.307
Angiogenesis	-0.106	-2.089	0.097	-1.562	-0.012	0.878
Accumulation of cells	-0.197	0.358	0.12	-1.672	-0.876	-1.508
Differentiation of epithelial tissue	-0.997	-1.929	0.028	-0.014	-1.548	-0.204
Differentiation of muscle cells	-0.376	-1.819	0.347	0.848	0.581	0.748
Inflammation of body cavity	-0.467	-0.196	-1.377	-1.392	-0.492	-0.789
Central nervous system cancer	-0.225	-1.155	1.321	0.946	0.191	0.857
Tumorigenesis of epithelial neoplasm	-0.207	-0.249	-0.711	-1.897	-0.239	-1.392
Adhesion of myeloid cells	0.602	0.335	-1.381	-1.003	0.366	-1.005
Lung tumor	-0.638	-1.441	0.06	-0.906	-0.772	-0.864

Adhesion of extracellular matrix	-0.59	1.716	-0.156	-0.115	-0.997	-1.106
Visceral metastasis	-0.865	-1.897	0.673	0.313	-0.715	0.216
Lymphocyte migration	0.514	-1.068	1.397	-0.71	0.306	-0.651
Secondary tumor	-0.554	-1.893	0.836	-0.426	0.256	0.679
Quantity of lymphatic system cells	-0.041	-1.179	0.427	-0.348	2.199	-0.442
Cancer of cells	0.725	-0.434	1.433	0.629	0.537	0.849
Squamous-cell carcinoma	1.042	-0.356	0.948	-0.693	1.042	0.508
Chronic inflammatory disorder	-0.306	0.591	-1.366	-0.969	-0.292	-1.063
Metastasis of cells	0.111	-0.552	1.189	0.78	0.218	1.734
Synthesis of lipid	-0.153	-2.32	0.438	-0.883	-0.354	0.422
Development of body trunk	-0.284	-2.661	0.048	-0.183	1.223	0.136
Malignant connective or soft tissue neoplasm	-0.296	-1.819	-0.288	-0.403	-1.014	-0.713
Cell movement of kidney cell lines	1.337	-1.368	0.549	-0.443	0.751	-0.083
Cell movement of vascular smooth muscle cells	-1.596	-0.602	-0.788	-0.824	-0.237	-0.466
Systemic autoimmune syndrome	-0.766	0.393	-0.831	-1.138	-0.552	-0.831
Hypertrophy	-0.825	-0.21	-0.825	-0.825	-0.347	-1.462
Inflammation of organ	0.638	1.283	-1.044	-0.643	0.861	-0.02
Differentiation of connective tissue cells	-0.942	-0.68	0.352	-0.75	0.055	-1.708
Cell movement of carcinoma cell lines	-0.051	-2.236	0.236	-1.293	-0.068	0.601
Development of sensory organ	-0.731	-1.135	-0.411	-0.725	0.617	-0.859
Squamous cell tumor	1.348	-0.01	0.921	-0.337	1.012	0.829
Quantity of blood cells	1.321	-0.255	0.32	0.15	1.464	0.936
Cell movement of macrophages	1.744	0.949	0.061	-0.378	0.363	0.94
Cardiogenesis	0.062	-2.34	0.269	-0.29	0.745	0.683
Glioma cancer	-1.06	-0.662	0.265	0.662	-1.06	-0.662
Glioblastoma	-1.06	-0.662	0.265	0.662	-1.06	-0.662
Malignant astrocytoma	-1.06	-0.662	0.265	0.662	-1.06	-0.662
Cellular infiltration by leukocytes	0.699	0.581	0.61	-0.587	0.963	0.926
Branching of cells	-0.189	-0.02	1.153	0.623	1.288	1.069
Survival of organism	-0.391	0.744	0.386	0.938	0.371	1.51
Large intestine neoplasm	0.763	1.316	-0.453	-1.117	-0.011	-0.674
Quantity of granulocytes	0.984	-0.099	1.051	0.203	0.336	1.636
Cell movement of granulocytes	0.588	-0.381	0.318	-1.905	0.411	0.695
T-cell non-Hodgkin lymphoma	-0.346	-0.722	-0.057	0.185	-0.95	-1.997
Growth of vessel	-0.848	-1.233	0.353	-1.286	0.36	0.176
Cell movement of breast cancer cell lines	0.476	-0.966	0.964	-0.09	1.208	0.548
Binding of extracellular matrix	-0.601	1.63	0.167	-0.167	-0.973	-0.7
G1 phase	-0.044	-0.622	0.108	-1.945	0.042	-1.463
Head and neck carcinoma	-0.676	-0.755	-0.199	-0.676	-1.63	0.278
Gonadal tumor	-0.758	-0.122	-0.673	-0.673	-0.758	-1.222
Accumulation of blood cells	-0.067	0.567	0.234	-1.455	-0.87	-1.009
Adhesion of blood cells	0.525	-1.834	0.195	-1.178	0.382	-0.07
Proliferation of lymphatic system cells	0.446	-0.49	0.836	-0.512	0.69	-1.21
Pelvic tumor	0.209	-0.786	0.939	0.897	-0.627	0.71
Lymphoreticular neoplasm	0.651	-0.325	1.467	0.44	0.856	-0.42
Lung carcinoma	0.293	-0.148	-0.556	-1.626	-0.575	-0.951
Formation of skin	-0.487	0.944	0.692	0.575	0.68	0.764
Transmigration of leukocytes	0.498	-1.484	-0.1	-0.738	0.996	0.298
T cell migration	0.173	-1.325	1.199	-0.498	-0.225	-0.685
Non-Hodgkin lymphoma	-0.127	-0.919	0.321	0.403	-0.578	-1.757
Digestive system cancer	-0.501	-0.041	0.143	-0.713	-1.394	-1.292
Fibrogenesis	-0.09	-0.997	0.51	-1.192	1.122	0.157
Cell movement of cancer cells	0.418	0.161	-1.232	-0.841	0.527	-0.87
Colorectal cancer	0.986	1.02	0.58	-0.641	0.58	-0.234
Tumorigenesis of reproductive tract	-1.044	0.139	-0.557	-0.557	-1.044	-0.696
Female genital neoplasm	-1.044	0.139	-0.557	-0.557	-1.044	-0.696
Cell-cell adhesion	-0.465	-0.594	0.683	1.202	-0.615	0.475
Hematologic cancer	0.801	-0.043	1.097	-0.129	0.992	-0.967
Growth of smooth muscle	-1.139	-1.022	0.386	-0.509	-0.321	0.633
Breast or ovarian carcinoma	-1.673	-0.761	-0.029	-0.029	-1.476	0.037
Upper gastrointestinal tract cancer	-0.664	-1.234	0.664	0.095	-1.234	-0.095
Angiogenesis of lesion	-0.871	-1.334	-0.242	-0.457	-0.076	-1.003
Proliferation of smooth muscle cells	-1.264	-0.984	0.346	-0.632	-0.2	0.513
Migration of muscle cells	-0.891	-0.367	-0.873	-0.701	-0.513	-0.591
Accumulation of leukocytes	-0.134	0.268	0.585	-1.13	-1.097	-0.714
Cell movement of epithelial cells	0.119	-1.432	1.154	-0.793	0.314	0.113
Pelvic cancer	-0.21	-0.052	1.36	1.491	-0.603	0.182
Cellular infiltration by phagocytes	0.36	1.287	-0.547	-1.438	0.187	0.05
Sprouting	0.363	-0.593	0.654	0.056	1.261	0.913
Migration of epithelial cells	0.884	-0.42	1.088	-0.585	0.727	-0.134
Migration of myeloid cells	0.134	-2.123	0.115	-0.941	-0.037	-0.485
Frequency of tumor	-0.056	-0.032	-0.672	-1.857	0.081	-1.1
Recruitment of phagocytes	-0.348	-0.92	-0.051	-1.496	-0.67	-0.307
Cell death of blood cells	1.342	-0.082	0.46	0.144	0.094	1.664
Migration of neutrophils	-0.137	-1.373	-0.402	-0.739	-0.065	-1.06
Metastasis of tumor cell lines	-0.173	-0.972	1.149	0.173	0.002	1.297
Cancer of tumor cell lines	-0.173	-0.972	1.149	0.173	0.002	1.297
Branching of epithelial tissue	-0.663	-0.439	-0.491	-1.249	0.292	-0.617
Interaction of endothelial cells	-0.885	0.607	-0.285	-0.5	-0.527	-0.938
Adhesion of immune cells	0.371	-1.27	-0.556	-1.217	0.143	-0.178
Female genital tract cancer	-1.412	-0.074	0.074	0.074	-1.412	-0.669
Differentiation of bone	-0.763	-0.878	0.485	-0.48	-0.132	-0.97
Proliferation of immune cells	0.34	-0.293	0.696	-0.676	-0.071	-1.629
Wound	0.319	-0.54	0.626	-0.908	-0.417	0.871

Quantity of lymphocytes	0.299	-0.925	0.26	0.088	2.044	-0.064
Differentiation of bone cells	-0.754	-0.687	0.329	-0.64	-0.092	-1.132
Cancer of head	-0.204	-0.703	1.383	0.363	-0.204	0.748
Progression of tumor	0.367	-0.254	1.999	-0.483	0.057	0.444
Migration of smooth muscle cells	-1.001	-0.285	-0.774	-0.601	-0.432	-0.491
Migration of granulocytes	0.143	-1.48	-0.365	-0.682	0.465	-0.448
Neoplasia of tumor cell lines	-0.704	-1.235	0.29	-0.873	-0.041	0.411
Ovarian tumor	-0.964	0.051	-0.486	-0.486	-0.964	-0.602
Proliferation of blood cells	0.56	-0.174	0.329	-0.688	0.056	-1.74
Quantity of myeloid cells	0.368	-0.471	0.52	0.652	0.181	1.352
Maturation of cells	-0.554	-0.926	0.732	-0.786	0.128	0.374
Lymphohematopoietic cancer	0.52	-0.239	1.016	0.077	0.917	-0.713
B cell cancer	-0.141	-1.305	0.27	0.723	0.247	-0.788
Quantity of mononuclear leukocytes	0.032	-0.891	-0.059	-0.433	1.782	-0.261
Cellular homeostasis	0.735	-1.388	0.343	0.449	0.243	-0.298
Accumulation of phagocytes	-0.141	-1.245	0.36	-0.554	-0.822	-0.32
Development of digestive system	-0.382	-0.955	0.318	-0.701	0.255	-0.828
Development of genitourinary system	0.087	-1.352	-0.243	-0.372	1.295	0.077
Quantity of leukocytes	0.711	-0.446	-0.061	-0.08	1.535	0.579
Cell movement of epithelial cell lines	0.309	-1.569	-0.341	-0.851	-0.23	0.104
Proliferation of mononuclear leukocytes	0.17	-0.649	0.999	-0.263	0.114	-1.203
Abdominal carcinoma	-0.831	0.055	-0.108	-0.391	-1.153	-0.836
Activation of myeloid cells	0.957	-0.007	-0.312	-1.844	-0.032	-0.206
Lung cancer	-0.114	-1.539	0.252	-0.626	-0.513	-0.309
Migration of breast cancer cell lines	0.239	-0.614	0.789	0.19	1.011	0.504
Inflammation of joint	-0.507	1.271	-0.035	-0.044	-0.645	-0.84
Development of genital tumor	0.119	-0.835	0.835	1.312	0.119	0.119
Development of urinary tract	0.498	-0.764	-0.624	-0.43	0.178	0.832
Proliferation of neuronal cells	0.034	-0.955	0.71	-1.113	-0.213	-0.297
Edema	1.537	0.393	0.112	0.855	-0.378	-0.044
Quantity of lymphoid cells	0.203	-0.827	0.165	-0.007	1.94	-0.158
Sensory system development	0.02	-0.582	0.977	0.83	0.652	0.227
Migration of cancer cells	0.816	-0.152	-1.09	-0.617	-0.271	-0.31
Migration of tumor cells	1.028	-0.076	-0.989	-0.534	-0.202	-0.423
Cellular infiltration by myeloid cells	-0.015	1.027	0.144	-1.605	0.139	0.316
Recruitment of cells	-0.109	-1.121	0.367	-1.544	-0.015	0.086
Genital tract cancer	-0.208	-0.043	1	1.137	-0.618	0.202
Apoptosis of lymphatic system cells	0.074	0.744	-0.614	-0.592	-0.538	0.631
Proliferation of lymphocytes	0.112	-0.653	1.02	-0.077	0.272	-1.056
Secondary neoplasm of digestive system	-0.484	-0.623	0.069	-0.484	-0.484	-1.038
Rheumatic Disease	-0.563	1.272	-0.035	-0.044	-0.634	-0.634
Recruitment of myeloid cells	-0.128	-0.742	0.079	-1.613	-0.419	-0.2
Neoplasia of epithelial cells	0.89	-0.351	0.855	-0.543	0.301	0.238
Recruitment of blood cells	0.049	-0.835	0.624	-1.568	-0.065	0.034
Genital tumor	0.307	-0.921	0.577	0.536	-0.518	0.307
Malignant neoplasm of large intestine	0.767	0.8	0.767	-0.428	0.369	-0.03
Function of blood cells	0.197	0.979	1.209	0.101	-0.187	-0.451
Cell movement of tumor cells	0.926	-0.06	-1.212	-0.534	-0.182	-0.202
Binding of leukocytes	0.4	-1.07	-0.292	-1.155	-0.016	-0.175
Growth of liver	-0.711	-0.291	1.247	-0.079	-0.498	-0.267
Quantity of phagocytes	0.15	0.237	-0.961	0.27	-0.707	0.763
Cell movement of smooth muscle cells	-1.052	-0.355	-0.708	-0.315	-0.156	-0.467
Lymphatic system tumor	-0.626	-0.024	0.421	-0.173	-0.432	-1.37
Apoptosis of epithelial cells	-0.052	1.18	-0.062	0.532	0.092	1.116
B-cell neoplasm	-0.329	-1.091	0.075	0.519	0.052	-0.964
Binding of endothelial cells	-0.778	0.554	-0.208	-0.39	-0.231	-0.868
Gastrointestinal tract cancer	0.191	0.584	0.824	-0.706	-0.523	-0.176
Neoplasia of leukocytes	0.066	0.538	0.622	0.013	-0.509	-1.256
Lymphoma	0.03	0.128	1.149	0.377	-0.324	-0.995
Cell death of immune cells	1.151	-0.244	0.23	-0.027	0.016	1.331
Recruitment of leukocytes	0.108	-0.575	0.532	-1.514	0.197	-0.061
Abdominal neoplasm	0.392	0.228	0.486	-0.207	-0.85	-0.821
Lymphoproliferative disorder	-0.12	0.356	0.479	-0.133	-0.409	-1.408
Cell death of lymphatic system cells	0.334	0.701	-0.217	-0.246	-0.411	0.996
Apoptosis of leukocytes	-0.396	0.032	-0.613	-0.705	-0.577	0.574
Incidence of tumor	0.534	-0.014	-0.199	-1.304	0.38	-0.46
Head and neck tumor	-0.246	-0.526	0.195	-1.019	-0.826	-0.052
Lymphocytic neoplasm	-0.078	0.398	0.525	-0.091	-0.369	-1.374
Cell movement of T lymphocytes	0.43	-0.779	1.173	-0.004	-0.023	-0.42
Development of malignant tumor	-0.302	-0.471	0.107	-1.048	0.207	-0.694
Development of carcinoma	-0.468	-0.228	0.283	-1.163	-0.022	-0.647
Cell death of epithelial cells	-0.077	0.57	0.189	-0.829	-0.592	0.535
Fibrosis	-0.214	-1.153	-0.636	-0.111	0.098	-0.578
Head and neck cancer	-0.337	-0.354	0.252	-0.718	-0.643	0.48
Ovarian cancer	-1.067	0.152	-0.152	-0.152	-1.067	-0.152
Cell movement of muscle cells	-0.834	-0.552	-0.72	-0.202	-0.016	-0.366
Cellular infiltration	0.369	0.122	-0.201	-1.021	0.619	0.343
Hematologic cancer of cells	0.117	0.097	0.974	0.343	-0.18	-0.948
Apoptosis of blood cells	-0.212	0.193	-0.336	-0.46	-0.411	1.02
Cell movement of neutrophils	-0.081	-0.611	0.168	-1.39	0.158	0.217
Proliferation of liver cells	-0.566	-0.235	1.279	0.012	-0.355	-0.174
Proliferation of fibroblast cell lines	-0.299	-0.688	-0.326	-0.7	-0.174	-0.42
Mammary tumor	-0.317	0.011	0.912	-0.244	0.405	0.694
Recruitment of granulocytes	-0.013	-0.021	0.414	-1.55	-0.415	-0.142

Adhesion of vascular endothelial cells	-0.335	-0.832	-0.229	-0.469	0.132	-0.556
Binding of vascular endothelial cells	-0.279	0.113	-0.257	-0.566	0.094	-1.24
Neoplasia of cells	0.321	-0.316	0.56	-0.566	0.66	0.124
Lymphocytic cancer	0.047	0.276	0.654	0.034	-0.246	-1.259
Malignant neoplasm of male genital organ	0.021	0.164	0.87	1.018	-0.422	0.021
Hematopoietic neoplasm	0.404	-0.163	0.091	-0.319	0.484	-1.049
Progression of malignant tumor	-0.037	-0.257	0.698	-0.184	1.139	-0.184
Abdominal cancer	-0.018	-0.04	0.871	-0.036	-0.888	-0.627
Genitourinary tumor	0.616	-0.08	1.002	0.022	0.033	0.726
Lymphohematopoietic neoplasia	0.401	-0.154	0.294	-0.107	0.678	-0.821
Lymphoid cancer	-0.269	0.101	0.533	0.188	-0.308	-1.019
Breast or colorectal cancer	-0.202	0.062	0.35	-0.416	-0.441	0.926
Central nervous system tumor	-0.481	-0.236	0.494	0.378	0.465	0.335
Central nervous system solid tumor	-0.481	-0.236	0.494	0.378	0.465	0.335
Nervous system neoplasm	-1.183	-0.558	0.261	0.149	-0.114	0.064
Cellular infiltration by mononuclear leukocytes	0.169	-0.145	0.943	0.638	0.317	0.011
Outgrowth of cells	0.642	-0.427	0.232	-0.43	0.265	-0.05
Neoplasia of tumor cells	0.048	0.86	0.191	0.096	0.287	0.526
Differentiation of epithelial cells	-0.001	0.069	0.909	0.536	-0.453	-0.001
Accumulation of myeloid cells	0.608	-0.114	-0.076	-0.724	-0.109	-1.304
Cell surface receptor linked signal transduction	-0.478	0.478	0.239	0.239	0.239	0.239
Vascular lesion	-0.217	-0.053	0.017	-0.488	-0.894	-0.217
Development of neuroepithelial tumor	-0.766	0.191	-0.191	0.053	-0.044	-0.45
Glioma	-0.831	-0.046	0.047	0.303	-0.072	-0.215
Rheumatoid arthritis	0.332	-0.155	-0.288	0.155	-0.155	-0.288
Colony formation of tumor cell lines	0.188	-0.06	-0.236	-0.026	0.762	0.011
Neuronal cell death	0.01	0.605	0.04	-0.203	0.323	-0.081
Formation of eye	0.02	-0.392	-0.019	0.027	0.686	-0.111
Adhesion of endothelial cells	-0.228	0.134	0.012	-0.388	0.001	-0.022
Papillary adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Metastatic intestinal tumor	N/A	N/A	N/A	N/A	N/A	N/A
Advanced gastrointestinal tumor	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of head	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of heart ventricle	N/A	N/A	N/A	N/A	N/A	N/A
Female genital tract serous carcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Advanced colorectal cancer	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of tumor cell lines	N/A	N/A	N/A	N/A	N/A	N/A
Serous adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of abdomen	N/A	N/A	N/A	N/A	N/A	N/A
Healing of wound	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of blood vessel	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of heart	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of muscle cells	N/A	N/A	N/A	N/A	N/A	N/A
Uterine tumor	N/A	N/A	N/A	N/A	N/A	N/A
Healing of lesion	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of digestive system	N/A	N/A	N/A	N/A	N/A	N/A
Serous neoplasm	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of vessel	N/A	N/A	N/A	N/A	N/A	N/A
Endometriosis	N/A	N/A	N/A	N/A	N/A	N/A
Female genital tract adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Head and neck adenocarcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Organization of extracellular matrix	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of bone	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of muscle	N/A	N/A	N/A	N/A	N/A	N/A
Differentiated thyroid cancer	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of vasculature	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of heart	N/A	N/A	N/A	N/A	N/A	N/A
Mature T-cell or NK-cell neoplasm	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of cardiovascular system	N/A	N/A	N/A	N/A	N/A	N/A
Uterine serous papillary cancer	N/A	N/A	N/A	N/A	N/A	N/A
Thyroid gland nonmedullary carcinoma	N/A	N/A	N/A	N/A	N/A	N/A
Hypertrophy of heart	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of respiratory system	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of tumor	N/A	N/A	N/A	N/A	N/A	N/A
Enlargement of cells	N/A	N/A	N/A	N/A	N/A	N/A
Enlargement of heart	N/A	N/A	N/A	N/A	N/A	N/A
Visceromegaly	N/A	N/A	N/A	N/A	N/A	N/A
Benign pelvic disease	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of vasculature	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of blood vessel	N/A	N/A	N/A	N/A	N/A	N/A
Size of lesion	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of body cavity	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of body cavity	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of head	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of lesion	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of thoracic cavity	N/A	N/A	N/A	N/A	N/A	N/A
Advanced colorectal tumor	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal morphology of cardiovascular system	N/A	N/A	N/A	N/A	N/A	N/A
Secondary neoplasm of large intestine	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of digestive system	N/A	N/A	N/A	N/A	N/A	N/A
Morphology of nervous system	N/A	N/A	N/A	N/A	N/A	N/A
Mature T-cell neoplasm	N/A	N/A	N/A	N/A	N/A	N/A

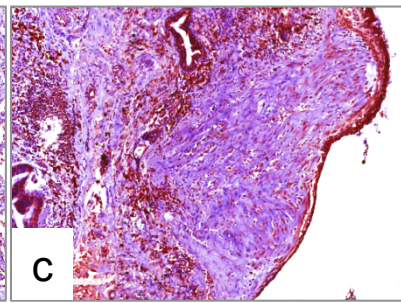
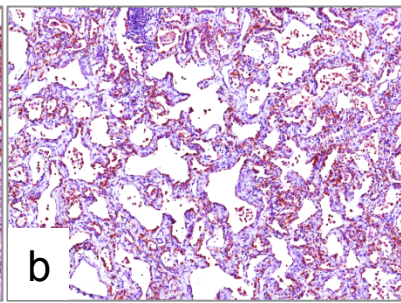
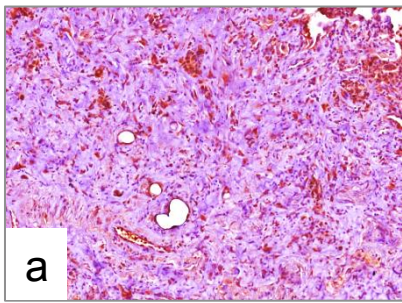


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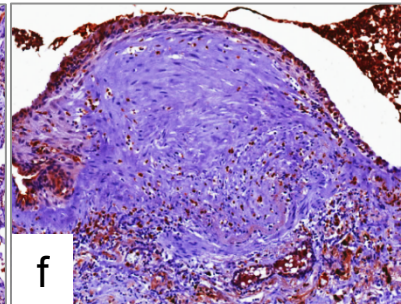
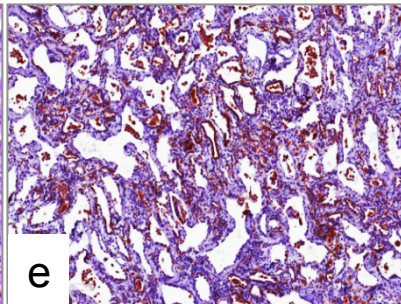
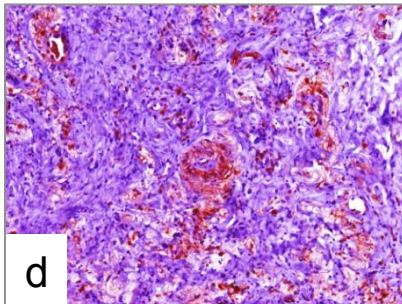
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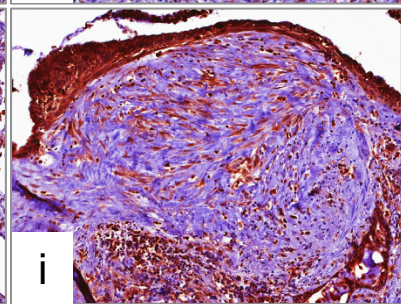
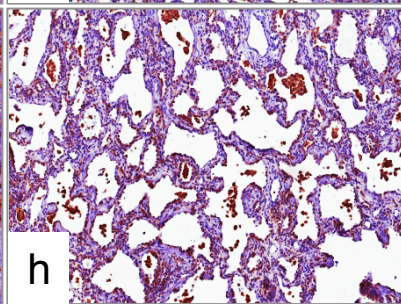
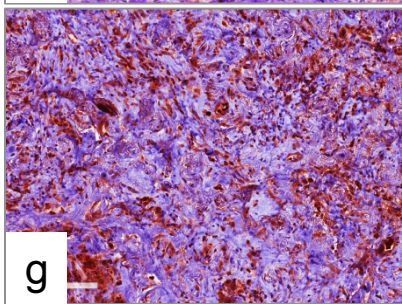
MMP 2



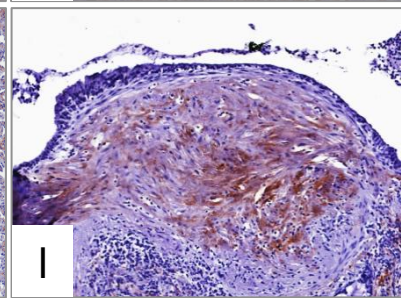
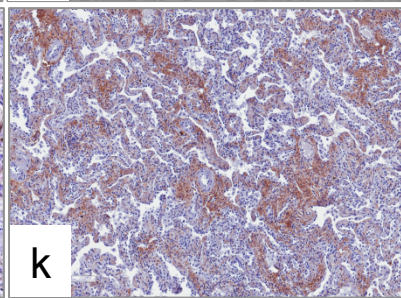
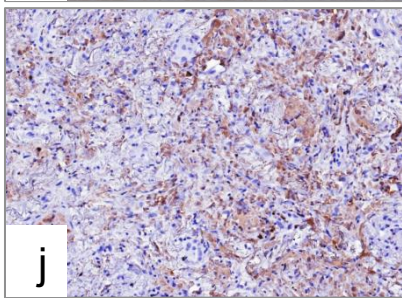
MMP 9



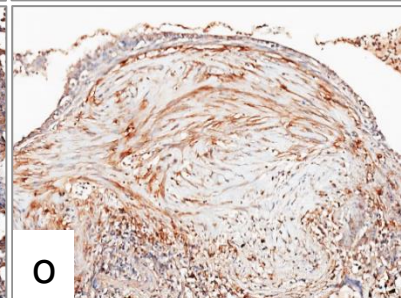
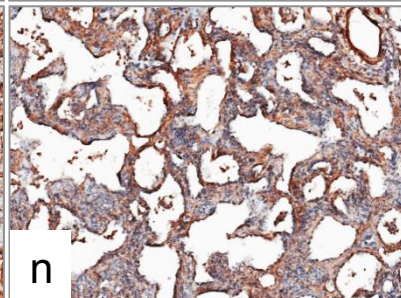
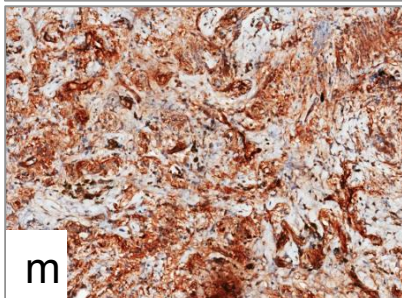
MMP 14



COL I



COL III



COL IV

