**Table S1**

Primers list:

|  |  |  |
| --- | --- | --- |
| Gene description  | Gene symbol | Taqman Assay-on-Demand TM ID |
| Glyceraldehyde 3-phosphate dehydrogenase | GAPDH | Hs99999905\_m1 |
| 18[S](http://en.wikipedia.org/wiki/Svedberg) ribosomal RNA  | 18S rRNA | Hs99999901\_s1 |
| Insulin | Insulin1 | Mm01259683\_g1  |
|  glucagon | Glc | Mm00801714\_m1 |
| pancreatic and duodenal homeobox 1 | Pdx1 | Mm00435565\_m1 |
| NK6 homeobox 1 | Nkx6-1 | Mm00454962\_m1 |
| Glucose transporter type 2 | Glut2 | Mm00446224\_m1 |
| V-maf musculoaponeurotic fibrosarcoma oncogene homolog A | Mafa | Mm00845209\_s1  |
| Proprotein convertase subtilisin/kexin type 1 | Pc1/3 | Mm00479023\_m1 |
|  Glucokinase | GCK | Mm00439129\_m1 |
| Integrin-beta1 chain | Itgb1 |  Mm01253227\_m1 |
|  vascular endothelial growth factor A | Vegfa |  Mm01281447\_m1 |
| CD34 | CD34 | Hs00156373\_m1 |
| Angiopoietin-2 | ANGPT2 | Hs00237017\_m1 |
| Angiotensin converting enzyme | ACE | Hs00174179\_m1 |
| B-cell CLL/lymphoma 2 | BCL2 | Hs00236808\_s1 |
| Collagen IV alpha1 chain  | COL4A1 | Hs01007469\_m1 |
| Collagen IV alpha2 chain | COL4A2 | Hs01098873\_m1 |
| early growth response  | EGR1 | Hs00152928\_m1 |
| Ectonucleoside triphosphate diphosphohydrolase 1 | CD39 | Hs00169946\_m1 |
| EGF-containing fibulin-like extracellular matrix protein 1 | EFEMP1 | Hs00244575\_m1 |
| EPH receptor A7 | EPHA7 | Hs00177891\_m1 |
| EPH receptor A1 | EPHA1 | Hs00178313\_m1 |
| Fibroblasts growth factor 2 | FGF2 | Hs00266645\_m1 |
| Fibronectin | FN1 | Hs00167309\_m1 |
| fms-related tyrosine kinase 1 | FLT1  | Hs00176573\_m1 |
| gelsolin | GSN | Hs00609276\_m1 |
| GPR116 | GPR116 | Hs00391810\_m1 |
| homeobox transcription factor | HLX | Hs00172035\_m1 |
| Insulin-like growth factor 2 | IGF2 | Hs00277496\_s1 |
| Integrin-alpha1 chain | ITGA1 | Hs00235030\_m1 |
| Integrin-alpha2 chain | ITGA2 | Hs00158148\_m1 |
| Integrin-alpha3 chain | ITGA3 | Hs00233707\_m1 |
| Kinase Insert Domain-containing Receptor | KDR | Hs00176676\_m1 |
| Laminin-alpha1 chain | LAMA1 | Hs00300550\_m1 |
| Laminin-alpha4 chain | LAMA4 | Hs00158588\_m1 |
| Laminin-alpha5 chain | LAMA5 | Hs00245699\_m1 |
| Laminin-beta1 chain | LAMB1 | Hs00158620\_m1 |
| Laminin-gamma1 chain | LAMC1 | Hs00370385\_m1 |
| lysyl oxidase | LOX | Hs00184700\_m1 |
| pim-1 oncogene | PIM-1 | Hs01065498\_m1 |
| Placental Growth Factor | PGF | Hs01119262\_m1 |
| Platelet-derived growth factor | PDGFB | Hs00234042\_m1 |
| Platelet-endothelial cell adhesion molecule1  | PECAM1 | Hs00169777\_m1 |
| regulator of G-protein signaling 5 | RGS5 | Hs00186212\_m1 |
| Thrombomodulin | THBD | Hs00264920\_s1 |
| vascular cell adhesion molecule 1 | CMG-1 | Hs00365486\_m1 |
| Vascular endothelial growth factor | VEGFA | Hs00900054\_m1 |
| Von Willebrand Factor | VWF | Hs00169795\_m1 |
| Vasodilation-stimulated phosphoprotein | VASP | Hs00163444\_m1 |