**Table 1. – Top 25 Proteins differentially expressed between mice treated with AVF or sham procedure**

|  |  |  |  |
| --- | --- | --- | --- |
| Accession number | Alternative ID | T-test (p<0.05) | Fold-change (AVF/sham) |
| 1. BAK\_MOUSE | Bak1 | 0.009 | INF |
| 1. CD109\_MOUSE | Cd109 | 0.0039 | INF |
| 1. HG2A\_MOUSE | Cd74 | 0.009 | INF |
| 1. CD97\_MOUSE | Cd97 | 0.0086 | INF |
| 1. CTBL1\_MOUSE | Ctnnbl1 | 0.0015 | INF |
| 1. PYRG1\_MOUSE | Ctps1 | 0.0086 | INF |
| 1. DAPK3\_MOUSE | Dapk3 | 0.0017 | INF |
| 1. DCLK1\_MOUSE | Dclk1 | 0.0007 | INF |
| 1. ELN\_MOUSE | Eln | 0.00033 | INF |
| 1. FMR1\_MOUSE | Fmr1 | 0.0015 | INF |
| 1. FND3B\_MOUSE | Fndc3b | 0.0019 | INF |
| 1. GXLT2\_MOUSE | Gxylt2 | 0.009 | INF |
| 1. HNRL1\_MOUSE | Hnrnpul1 | 0.0039 | INF |
| 1. LOXL1\_MOUSE | Loxl1 | 0.00015 | INF |
| 1. P3H3\_MOUSE | P3h3 | 0.00019 | INF |
| 1. PDXD1\_MOUSE | Pdxdc1 | 0.0086 | INF |
| 1. PLOD2\_MOUSE | Plod2 | 0.00031 | INF |
| 1. PLS3\_MOUSE | Plscr3 | 0.0086 | INF |
| 1. P5CR1\_MOUSE | Pycr1 | 0.0017 | INF |
| 1. S12A4\_MOUSE | Slc12a4 | 0.0055 | INF |
| 1. SLIT3\_MOUSE | Slit3 | 0.00018 | INF |
| 1. TAOK3\_MOUSE | Taok3 | 0.009 | INF |
| 1. TM214\_MOUSE | Tmem214 | 0.006 | INF |
| 1. TENA\_MOUSE | Tnc | 0.0014 | INF |
| 1. TXD12\_MOUSE | Txndc12 | 0.0004 | INF |

**Supplementary Table 1. – Proteins differentially expressed between mice treated with AVF or sham procedure**

|  |  |  |  |
| --- | --- | --- | --- |
| Accession number | Alternative ID | T-test (p<0.05) | Fold-change (AVF/sham) |
| 1. GCP60\_MOUSE | Acbd3 | 0.00015 | INF |
| 1. ACSL5\_MOUSE | Acsl5 | 0.043 | 0.4 |
| 1. AEBP1\_MOUSE | Aebp1 | 0.00054 | 2.1 |
| 1. AGFG1\_MOUSE | Agfg1 | 0.013 | INF |
| 1. AGRIN\_MOUSE | Agrn | 0.024 | 5 |
| 1. AKA12\_MOUSE | Akap12 | 0.04 | 2.4 |
| 1. HEM2\_MOUSE | Alad | 0.0082 | 0 |
| 1. AL9A1\_MOUSE | Aldh9a1 | 0.023 | 0.2 |
| 1. ANK1\_MOUSE | Ank1 | 0.00068 | 0.5 |
| 1. AP3M1\_MOUSE | Ap3m1 | 0.049 | 5.1 |
| 1. AP3S1\_MOUSE | Ap3s1 | 0.013 | INF |
| 1. API5\_MOUSE | Api5 | 0.035 | 2.9 |
| 1. APOC4\_MOUSE | Apoc4 | 0.024 | 0 |
| 1. APT\_MOUSE | Aprt | 0.017 | 7.1 |
| 1. AQP1\_MOUSE | Aqp1 | 0.005 | 0.4 |
| 1. ARFG3\_MOUSE | Arfgap3 | 0.009 | 8.1 |
| 1. ARHG1\_MOUSE | Arhgef1 | 0.014 | INF |
| 1. ARL3\_MOUSE | Arl3 | 0.0058 | 2.1 |
| 1. ARPC5\_MOUSE | Arpc5 | 0.029 | 4.7 |
| 1. NAR4\_MOUSE | Art4 | 0.012 | 5.4 |
| 1. AT2A3\_MOUSE | Atp2a3 | 0.045 | 0.4 |
| 1. B4GT1\_MOUSE | B4galt1 | 0.022 | INF |
| 1. BAG6\_MOUSE | Bag6 | 0.024 | 3.2 |
| 1. BAK\_MOUSE | Bak1 | 0.009 | INF |
| 1. BCLF1\_MOUSE | Bclaf1 | 0.015 | 6.3 |
| 1. BICD2\_MOUSE | Bicd2 | 0.014 | INF |
| 1. BUB3\_MOUSE | Bub3 | 0.016 | 6.1 |
| 1. BZW1\_MOUSE | Bzw1 | 0.022 | 5 |
| 1. CO5\_MOUSE | C5 | 0.048 | 0.5 |
| 1. CALU\_MOUSE | Calu | 0.0037 | 2 |
| 1. ICAL\_MOUSE | Cast | 0.031 | 3.9 |
| 1. CBX5\_MOUSE | Cbx5 | 0.022 | INF |
| 1. CC124\_MOUSE | Ccdc124 | 0.013 | INF |
| 1. CCD47\_MOUSE | Ccdc47 | 0.03 | 2.8 |
| 1. CD109\_MOUSE | Cd109 | 0.0039 | INF |
| 1. HG2A\_MOUSE | Cd74 | 0.009 | INF |
| 1. CD97\_MOUSE | Cd97 | 0.0086 | INF |
| 1. CDC5L\_MOUSE | Cdc5l | 0.012 | 7 |
| 1. CENPV\_MOUSE | Cenpv | 0.036 | 0.4 |
| 1. CES1D\_MOUSE | Ces1d | 0.013 | 0.4 |
| 1. CES1F\_MOUSE | Ces1f | 0.044 | 0.3 |
| 1. CKAP4\_MOUSE | Ckap4 | 0.0011 | 2.1 |
| 1. CLCC1\_MOUSE | Clcc1 | 0.014 | INF |
| 1. TETN\_MOUSE | Clec3b | 0.0037 | 4.7 |
| 1. CNBP\_MOUSE | Cnbp | 0.015 | 2.2 |
| 1. COBL1\_MOUSE | Cobll1 | 0.013 | INF |
| 1. COCA1\_MOUSE | Col12a1 | 0.0027 | 22 |
| 1. COIA1\_MOUSE | Col18a1 | 0.0089 | 2.1 |
| 1. CO4A2\_MOUSE | Col4a2 | 0.0063 | 2.2 |
| 1. GT251\_MOUSE | Colgalt1 | 0.007 | 3.5 |
| 1. COPE\_MOUSE | Cope | 0.00076 | 3.4 |
| 1. COPG1\_MOUSE | Copg1 | 0.011 | 2.4 |
| 1. CBPQ\_MOUSE | Cpq | 0.042 | 5 |
| 1. CPXM2\_MOUSE | Cpxm2 | 0.012 | 7.1 |
| 1. CRTAP\_MOUSE | Crtap | < 0.00010 | INF |
| 1. CSRP2\_MOUSE | Csrp2 | 0.0058 | 4 |
| 1. CTBP2\_MOUSE | Ctbp2 | 0.014 | INF |
| 1. CTHR1\_MOUSE | Cthrc1 | 0.014 | INF |
| 1. CTBL1\_MOUSE | Ctnnbl1 | 0.0015 | INF |
| 1. PYRG1\_MOUSE | Ctps1 | 0.0086 | INF |
| 1. CATC\_MOUSE | Ctsc | 0.036 | 7 |
| 1. CATH\_MOUSE | Ctsh | 0.013 | INF |
| 1. CATZ\_MOUSE | Ctsz | 0.0069 | 2.2 |
| 1. CUL5\_MOUSE | Cul5 | 0.05 | 5.1 |
| 1. CP20A\_MOUSE | Cyp20a1 | 0.032 | 3.2 |
| 1. DAPK3\_MOUSE | Dapk3 | 0.0017 | INF |
| 1. DREB\_MOUSE | Dbn1 | 0.00094 | 12 |
| 1. DCLK1\_MOUSE | Dclk1 | 0.0007 | INF |
| 1. DDX58\_MOUSE | Ddx58 | 0.022 | INF |
| 1. DEK\_MOUSE | Dek | 0.00043 | 4 |
| 1. DHDH\_MOUSE | Dhdh | 0.0078 | 0.2 |
| 1. DJC10\_MOUSE | Dnajc10 | 0.044 | INF |
| 1. DNJC3\_MOUSE | Dnajc3 | 0.034 | 4.3 |
| 1. ECM1\_MOUSE | Ecm1 | 0.014 | 3.6 |
| 1. FBLN4\_MOUSE | Efemp2 | 0.0037 | 8.8 |
| 1. U5S1\_MOUSE | Eftud2 | 0.035 | 3 |
| 1. ELN\_MOUSE | Eln | 0.00033 | INF |
| 1. EMD\_MOUSE | Emd | < 0.00010 | INF |
| 1. EMIL1\_MOUSE | Emilin1 | 0.012 | 6.3 |
| 1. ENOB\_MOUSE | Eno3 | 0.049 | 0.4 |
| 1. 41\_MOUSE | Epb41 | 0.016 | 0.4 |
| 1. EPB42\_MOUSE | Epb42 | 0.0011 | 0.3 |
| 1. RB6I2\_MOUSE | Erc1 | 0.014 | INF |
| 1. EXOC7\_MOUSE | Exoc7 | 0.022 | INF |
| 1. NXP20\_MOUSE | Fam114a1 | 0.018 | INF |
| 1. FBLI1\_MOUSE | Fblim1 | 0.00024 | 11 |
| 1. FBLN2\_MOUSE | Fbln2 | 0.0067 | 25 |
| 1. FBN1\_MOUSE | Fbn1 | 0.033 | 12 |
| 1. FGL1\_MOUSE | Fgl1 | 0.0073 | 10 |
| 1. FHL2\_MOUSE | Fhl2 | 0.031 | 9 |
| 1. FKB10\_MOUSE | Fkbp10 | 0.00054 | 13 |
| 1. FKB11\_MOUSE | Fkbp11 | 0.023 | INF |
| 1. FKBP7\_MOUSE | Fkbp7 | 0.0011 | 12 |
| 1. FKBP9\_MOUSE | Fkbp9 | 0.00046 | 5.3 |
| 1. FMOD\_MOUSE | Fmod | 0.04 | 2.7 |
| 1. FMR1\_MOUSE | Fmr1 | 0.0015 | INF |
| 1. FND3B\_MOUSE | Fndc3b | 0.0019 | INF |
| 1. FSTL1\_MOUSE | Fstl1 | 0.0075 | 6 |
| 1. G3BP1\_MOUSE | G3bp1 | 0.0078 | 2.8 |
| 1. GCN1\_MOUSE | Gcn1 | 0.038 | 2.8 |
| 1. BGAL\_MOUSE | Glb1 | 0.01 | 6.2 |
| 1. GSLG1\_MOUSE | Glg1 | 0.02 | 3 |
| 1. GMPPB\_MOUSE | Gmppb | < 0.00010 | INF |
| 1. GBG12\_MOUSE | Gng12 | 0.0058 | 2.1 |
| 1. GNPAT\_MOUSE | Gnpat | 0.013 | 0.3 |
| 1. GNS\_MOUSE | Gns | 0.011 | 7 |
| 1. GORS2\_MOUSE | Gorasp2 | 0.049 | 2.6 |
| 1. GPC6\_MOUSE | Gpc6 | 0.037 | 2.1 |
| 1. GPX7\_MOUSE | Gpx7 | 0.0016 | 22 |
| 1. GPX8\_MOUSE | Gpx8 | 0.023 | INF |
| 1. GXLT2\_MOUSE | Gxylt2 | 0.009 | INF |
| 1. HB2A\_MOUSE | H2-Ab1 | 0.014 | 5.3 |
| 1. HABP2\_MOUSE | Habp2 | 0.024 | 0 |
| 1. VIGLN\_MOUSE | Hdlbp | 0.00012 | 4 |
| 1. HEXA\_MOUSE | Hexa | 0.03 | 4.8 |
| 1. HEXB\_MOUSE | Hexb | 0.045 | 3.4 |
| 1. HMGB2\_MOUSE | Hmgb2 | 0.0045 | 2.8 |
| 1. HMOX2\_MOUSE | Hmox2 | 0.042 | 2 |
| 1. ROA1\_MOUSE | Hnrnpa1 | 0.003 | 2.7 |
| 1. HNRL1\_MOUSE | Hnrnpul1 | 0.0039 | INF |
| 1. HSPB8\_MOUSE | Hspb8 | 0.042 | 5 |
| 1. IAH1\_MOUSE | Iah1 | 0.013 | INF |
| 1. ICAM1\_MOUSE | Icam1 | 0.009 | 8.1 |
| 1. IBP7\_MOUSE | Igfbp7 | 0.00021 | 4.3 |
| 1. IKIP\_MOUSE | Ikbip | 0.0019 | 4.6 |
| 1. ISLR\_MOUSE | Islr | 0.028 | 2.9 |
| 1. ITA5\_MOUSE | Itga5 | 0.0048 | 4.7 |
| 1. ITA7\_MOUSE | Itga7 | 0.042 | 0.5 |
| 1. ITAV\_MOUSE | Itgav | 0.012 | 5.4 |
| 1. ITB5\_MOUSE | Itgb5 | 0.024 | 13 |
| 1. IVD\_MOUSE | Ivd | 0.00065 | 0.4 |
| 1. KCD12\_MOUSE | Kctd12 | 0.021 | 2.1 |
| 1. FUBP2\_MOUSE | Khsrp | 0.047 | 2.1 |
| 1. K1C14\_MOUSE | Krt14 | 0.048 | 0.2 |
| 1. K1C19\_MOUSE | Krt19 | 0.05 | 0.08 |
| 1. K22E\_MOUSE | Krt2 | 0.032 | 0.1 |
| 1. K1C42\_MOUSE | Krt42 | 0.03 | 0 |
| 1. PLSL\_MOUSE | Lcp1 | 0.022 | 3.9 |
| 1. LEG1\_MOUSE | Lgals1 | < 0.00010 | 2.2 |
| 1. LEG3\_MOUSE | Lgals3 | 0.022 | 5.2 |
| 1. LGMN\_MOUSE | Lgmn | 0.031 | 2.5 |
| 1. LIMA1\_MOUSE | Lima1 | 0.015 | 3.5 |
| 1. LICH\_MOUSE | Lipa | < 0.00010 | INF |
| 1. LMAN1\_MOUSE | Lman1 | 0.033 | 3 |
| 1. LYOX\_MOUSE | Lox | 0.039 | INF |
| 1. LOXL1\_MOUSE | Loxl1 | 0.00015 | INF |
| 1. LRP1\_MOUSE | Lrp1 | 0.017 | 2.4 |
| 1. LTBP2\_MOUSE | Ltbp2 | 0.025 | INF |
| 1. LTBP4\_MOUSE | Ltbp4 | 0.00021 | 3.9 |
| 1. MACF1\_MOUSE | Macf1 | 0.0073 | 4.4 |
| 1. MA2A1\_MOUSE | Man2a1 | 0.00042 | 5 |
| 1. MA2B1\_MOUSE | Man2b1 | 0.048 | 7.3 |
| 1. MANF\_MOUSE | Manf | 0.0052 | 3.6 |
| 1. MARC2\_MOUSE | Marc2 | 0.03 | 0.5 |
| 1. MGDP1\_MOUSE | Mdp1 | 0.0059 | 8 |
| 1. MFGM\_MOUSE | Mfge8 | 0.0057 | 6.5 |
| 1. MGP\_MOUSE | Mgp | 0.044 | INF |
| 1. TGO1\_MOUSE | Mia3 | 0.034 | 8.8 |
| 1. MMP2\_MOUSE | Mmp2 | 0.044 | INF |
| 1. MMRN2\_MOUSE | Mmrn2 | 0.0059 | 4.5 |
| 1. EM55\_MOUSE | Mpp1 | 0.042 | 0.5 |
| 1. MPRIP\_MOUSE | Mprip | 0.032 | 8.1 |
| 1. MRC2\_MOUSE | Mrc2 | 0.0019 | 36 |
| 1. MUTA\_MOUSE | Mut | 0.043 | 0.2 |
| 1. MXRA7\_MOUSE | Mxra7 | 0.0021 | 8.2 |
| 1. MBB1A\_MOUSE | Mybbp1a | 0.039 | 2.7 |
| 1. MYO1D\_MOUSE | Myo1d | 0.0017 | 4 |
| 1. MYOF\_MOUSE | Myof | 0.0062 | 2.7 |
| 1. NICA\_MOUSE | Ncstn | 0.039 | 11 |
| 1. NEST\_MOUSE | Nes | 0.012 | 13 |
| 1. NFIX\_MOUSE | Nfix | 0.022 | INF |
| 1. NFU1\_MOUSE | Nfu1 | 0.0052 | 2.5 |
| 1. NUMA1\_MOUSE | Numa1 | 0.0082 | 3.1 |
| 1. NU107\_MOUSE | Nup107 | 0.013 | INF |
| 1. NUP62\_MOUSE | Nup62 | 0.0087 | 8.1 |
| 1. OAT\_MOUSE | Oat | 0.043 | 2 |
| 1. P3H1\_MOUSE | P3h1 | 0.013 | 18 |
| 1. P3H3\_MOUSE | P3h3 | 0.00019 | INF |
| 1. SC65\_MOUSE | P3h4 | 0.025 | INF |
| 1. P4HA1\_MOUSE | P4ha1 | 0.0011 | 5.5 |
| 1. P4HA2\_MOUSE | P4ha2 | 0.0018 | 18 |
| 1. PABP2\_MOUSE | Pabpn1 | 0.023 | INF |
| 1. PBX1\_MOUSE | Pbx1 | 0.014 | INF |
| 1. PCOC1\_MOUSE | Pcolce | 0.027 | 4.5 |
| 1. PCY1A\_MOUSE | Pcyt1a | 0.025 | INF |
| 1. PGFRB\_MOUSE | Pdgfrb | 0.002 | 3.2 |
| 1. PDLI4\_MOUSE | Pdlim4 | 0.018 | 3.1 |
| 1. PDLI5\_MOUSE | Pdlim5 | 0.033 | 2.3 |
| 1. PDS5B\_MOUSE | Pds5b | 0.013 | 9 |
| 1. PDXD1\_MOUSE | Pdxdc1 | 0.0086 | INF |
| 1. PICAL\_MOUSE | Picalm | 0.0023 | 2.4 |
| 1. PLBL1\_MOUSE | Plbd1 | < 0.00010 | INF |
| 1. PLCD1\_MOUSE | Plcd1 | 0.013 | INF |
| 1. PLD3\_MOUSE | Pld3 | < 0.00010 | INF |
| 1. PKHO2\_MOUSE | Plekho2 | 0.049 | 5.1 |
| 1. PLOD1\_MOUSE | Plod1 | 0.00042 | 15 |
| 1. PLOD2\_MOUSE | Plod2 | 0.00031 | INF |
| 1. PLOD3\_MOUSE | Plod3 | 0.015 | INF |
| 1. PLS3\_MOUSE | Plscr3 | 0.0086 | INF |
| 1. PLXB2\_MOUSE | Plxnb2 | 0.0026 | 10 |
| 1. PON1\_MOUSE | Pon1 | 0.036 | 0.4 |
| 1. PPIC\_MOUSE | Ppic | 0.014 | 2.7 |
| 1. PCP\_MOUSE | Prcp | 0.027 | 3.4 |
| 1. PRDX4\_MOUSE | Prdx4 | 0.047 | 2.4 |
| 1. PRRC1\_MOUSE | Prrc1 | 0.0023 | 9.6 |
| 1. PXL2A\_MOUSE | Prxl2a | 0.022 | 0.4 |
| 1. FPRP\_MOUSE | Ptgfrn | 0.011 | 4.2 |
| 1. PTGIS\_MOUSE | Ptgis | 0.0036 | 3.3 |
| 1. PXDN\_MOUSE | Pxdn | 0.037 | 3.2 |
| 1. ASC\_MOUSE | Pycard | 0.013 | INF |
| 1. P5CR1\_MOUSE | Pycr1 | 0.0017 | INF |
| 1. RAD21\_MOUSE | Rad21 | 0.025 | 3.3 |
| 1. RD23B\_MOUSE | Rad23b | 0.026 | 3.3 |
| 1. RALY\_MOUSE | Raly | 0.011 | 2.6 |
| 1. RAGP1\_MOUSE | Rangap1 | 0.026 | 3.7 |
| 1. RBBP4\_MOUSE | Rbbp4 | 0.026 | 2.5 |
| 1. RBM3\_MOUSE | Rbm3 | 0.043 | 2 |
| 1. RBM39\_MOUSE | Rbm39 | 0.023 | 7.1 |
| 1. RET1\_MOUSE | Rbp1 | 0.02 | 3.6 |
| 1. RCN1\_MOUSE | Rcn1 | 0.0059 | 3.8 |
| 1. RCN3\_MOUSE | Rcn3 | 0.0024 | 3.5 |
| 1. RFTN1\_MOUSE | Rftn1 | 0.031 | INF |
| 1. RHD\_MOUSE | Rhd | 0.0072 | 0 |
| 1. RS14\_MOUSE | Rps14 | 0.011 | 2 |
| 1. RRBP1\_MOUSE | Rrbp1 | 0.00063 | 2.2 |
| 1. RUVB2\_MOUSE | Ruvbl2 | 0.033 | 2.1 |
| 1. S100B\_MOUSE | S100b | 0.0063 | 0.3 |
| 1. SCFD1\_MOUSE | Scfd1 | 0.0094 | 3.9 |
| 1. RISC\_MOUSE | Scpep1 | 0.00029 | 4.5 |
| 1. SDF2L\_MOUSE | Sdf2l1 | 0.049 | 5.1 |
| 1. SEC13\_MOUSE | Sec13 | 0.0048 | 4.7 |
| 1. SC22B\_MOUSE | Sec22b | 0.0021 | 2 |
| 1. SC31A\_MOUSE | Sec31a | < 0.00010 | 2.8 |
| 1. SE1L1\_MOUSE | Sel1l | 0.032 | INF |
| 1. SBP1\_MOUSE | Selenbp1 | 0.028 | 0.5 |
| 1. SEPT5\_MOUSE | Sept-5 | 0.043 | 2.6 |
| 1. PEDF\_MOUSE | Serpinf1 | 0.0012 | 2.9 |
| 1. SERPH\_MOUSE | Serpinh1 | 0.0064 | 2 |
| 1. SF3A1\_MOUSE | Sf3a1 | 0.022 | 2.7 |
| 1. SF3A3\_MOUSE | Sf3a3 | 0.0029 | 2.8 |
| 1. SFRP1\_MOUSE | Sfrp1 | 0.013 | INF |
| 1. GLYM\_MOUSE | Shmt2 | 0.0087 | 12 |
| 1. S12A4\_MOUSE | Slc12a4 | 0.0055 | INF |
| 1. MOT1\_MOUSE | Slc16a1 | 0.0037 | 0.2 |
| 1. TXTP\_MOUSE | Slc25a1 | 0.015 | 0.5 |
| 1. 4F2\_MOUSE | Slc3a2 | 0.016 | 3 |
| 1. LAT3\_MOUSE | Slc43a1 | 0.0015 | 0.1 |
| 1. B3AT\_MOUSE | Slc4a1 | 0.0064 | 0.5 |
| 1. SLIT3\_MOUSE | Slit3 | 0.00018 | INF |
| 1. RU17\_MOUSE | Snrnp70 | 0.013 | 9 |
| 1. RU2A\_MOUSE | Snrpa1 | 0.023 | 3.1 |
| 1. SNTB1\_MOUSE | Sntb1 | 0.0077 | 0.3 |
| 1. NH2L1\_MOUSE | Snu13 | 0.016 | 9.1 |
| 1. SNX18\_MOUSE | Snx18 | 0.00075 | 2 |
| 1. SNX4\_MOUSE | Snx4 | 0.022 | INF |
| 1. SNX5\_MOUSE | Snx5 | 0.02 | 2.2 |
| 1. VINEX\_MOUSE | Sorbs3 | 0.0078 | 7.2 |
| 1. SPRC\_MOUSE | Sparc | 0.0018 | 3 |
| 1. SSRP1\_MOUSE | Ssrp1 | 0.018 | 2.5 |
| 1. STAT1\_MOUSE | Stat1 | 0.048 | 3.7 |
| 1. STAU1\_MOUSE | Stau1 | 0.014 | INF |
| 1. STEA3\_MOUSE | Steap3 | 0.015 | 3.3 |
| 1. STRAP\_MOUSE | Strap | 0.028 | 2.9 |
| 1. STT3A\_MOUSE | Stt3a | 0.0092 | 2.5 |
| 1. SVIL\_MOUSE | Svil | < 0.00010 | INF |
| 1. SYNE2\_MOUSE | Syne2 | 0.022 | INF |
| 1. SYNPO\_MOUSE | Synpo | < 0.00010 | INF |
| 1. TAOK3\_MOUSE | Taok3 | 0.009 | INF |
| 1. TCEA1\_MOUSE | Tcea1 | 0.0046 | 5.2 |
| 1. TCOF\_MOUSE | Tcof1 | 0.013 | INF |
| 1. TR150\_MOUSE | Thrap3 | 0.002 | 3.2 |
| 1. TM109\_MOUSE | Tmem109 | 0.01 | 2.4 |
| 1. TM119\_MOUSE | Tmem119 | 0.0052 | 2.5 |
| 1. TM214\_MOUSE | Tmem214 | 0.006 | INF |
| 1. TMOD1\_MOUSE | Tmod1 | 0.016 | 0.3 |
| 1. TENA\_MOUSE | Tnc | 0.0014 | INF |
| 1. TOM34\_MOUSE | Tomm34 | 0.05 | 5.1 |
| 1. TOM40\_MOUSE | Tomm40 | 0.012 | 2.5 |
| 1. TPR\_MOUSE | Tpr | 0.00033 | 3.7 |
| 1. TIF1B\_MOUSE | Trim28 | 0.013 | 2.3 |
| 1. TXD12\_MOUSE | Txndc12 | 0.0004 | INF |
| 1. TXND5\_MOUSE | Txndc5 | 0.0033 | 2.1 |
| 1. UAP1L\_MOUSE | Uap1l1 | 0.021 | 4.7 |
| 1. UBA5\_MOUSE | Uba5 | 0.013 | INF |
| 1. UB2V2\_MOUSE | Ube2v2 | 0.0094 | 2.4 |
| 1. UBF1\_MOUSE | Ubtf | 0.023 | 4.3 |
| 1. UFL1\_MOUSE | Ufl1 | 0.022 | INF |
| 1. UGDH\_MOUSE | Ugdh | 0.011 | 9.5 |
| 1. RENT1\_MOUSE | Upf1 | 0.039 | 2.5 |
| 1. VRK1\_MOUSE | Vrk1 | 0.009 | INF |
| 1. VTI1B\_MOUSE | Vti1b | 0.022 | INF |
| 1. YBOX1\_MOUSE | Ybx1 | 0.0036 | 4.5 |
| * INF – infinity * Downregulation <1 | | | |

**Supplementary Table 2. – Proteins expressed exclusively in mice treated with AVF compared to mice treated with a sham procedure**

|  |  |  |  |
| --- | --- | --- | --- |
| Accession Number | Alternative ID | T-test (p<0.05) | Fold-change (AVF/sham) |
| 1. GCP60\_MOUSE | Acbd3 | 0.00015 | INF |
| 1. AGFG1\_MOUSE | Agfg1 | 0.013 | INF |
| 1. B4GT1\_MOUSE | B4galt1 | 0.022 | INF |
| 1. BICD2\_MOUSE | Bicd2 | 0.014 | INF |
| 1. CBX5\_MOUSE | Cbx5 | 0.022 | INF |
| 1. HG2A\_MOUSE | Cd74 | 0.009 | INF |
| 1. CD97\_MOUSE | Cd97 | 0.0086 | INF |
| 1. COBL1\_MOUSE | Cobll1 | 0.013 | INF |
| 1. CTBP2\_MOUSE | Ctbp2 | 0.014 | INF |
| 1. CTHR1\_MOUSE | Cthrc1 | 0.014 | INF |
| 1. PYRG1\_MOUSE | Ctps1 | 0.0086 | INF |
| 1. CATH\_MOUSE | Ctsh | 0.013 | INF |
| 1. DAPK3\_MOUSE | Dapk3 | 0.0017 | INF |
| 1. DCLK1\_MOUSE | Dclk1 | 0.0007 | INF |
| 1. ELN\_MOUSE | Eln | 0.00033 | INF |
| 1. EXOC7\_MOUSE | Exoc7 | 0.022 | INF |
| 1. NXP20\_MOUSE | Fam114a1 | 0.018 | INF |
| 1. FKB11\_MOUSE | Fkbp11 | 0.023 | INF |
| 1. FMR1\_MOUSE | Fmr1 | 0.0015 | INF |
| 1. FND3B\_MOUSE | Fndc3b | 0.0019 | INF |
| 1. GMPPB\_MOUSE | Gmppb | < 0.00010 | INF |
| 1. GPX8\_MOUSE | Gpx8 | 0.023 | INF |
| 1. GXLT2\_MOUSE | Gxylt2 | 0.009 | INF |
| 1. LICH\_MOUSE | Lipa | < 0.00010 | INF |
| 1. LYOX\_MOUSE | Lox | 0.039 | INF |
| 1. LOXL1\_MOUSE | Loxl1 | 0.00015 | INF |
| 1. LTBP2\_MOUSE | Ltbp2 | 0.025 | INF |
| 1. MGP\_MOUSE | Mgp | 0.044 | INF |
| 1. MMP2\_MOUSE | Mmp2 | 0.044 | INF |
| 1. NFIX\_MOUSE | Nfix | 0.022 | INF |
| 1. NU107\_MOUSE | Nup107 | 0.013 | INF |
| 1. P3H3\_MOUSE | P3h3 | 0.00019 | INF |
| 1. SC65\_MOUSE | P3h4 | 0.025 | INF |
| 1. PABP2\_MOUSE | Pabpn1 | 0.023 | INF |
| 1. PBX1\_MOUSE | Pbx1 | 0.014 | INF |
| 1. PDXD1\_MOUSE | Pdxdc1 | 0.0086 | INF |
| 1. PLBL1\_MOUSE | Plbd1 | < 0.00010 | INF |
| 1. PLD3\_MOUSE | Pld3 | < 0.00010 | INF |
| 1. PLOD2\_MOUSE | Plod2 | 0.00031 | INF |
| 1. PLOD3\_MOUSE | Plod3 | 0.015 | INF |
| 1. PLS3\_MOUSE | Plscr3 | 0.0086 | INF |
| 1. ASC\_MOUSE | Pycard | 0.013 | INF |
| 1. P5CR1\_MOUSE | Pycr1 | 0.0017 | INF |
| 1. RFTN1\_MOUSE | Rftn1 | 0.031 | INF |
| 1. SFRP1\_MOUSE | Sfrp1 | 0.013 | INF |
| 1. S12A4\_MOUSE | Slc12a4 | 0.0055 | INF |
| 1. SLIT3\_MOUSE | Slit3 | 0.00018 | INF |
| 1. SNX4\_MOUSE | Snx4 | 0.022 | INF |
| 1. STAU1\_MOUSE | Stau1 | 0.014 | INF |
| 1. SYNPO\_MOUSE | Synpo | < 0.00010 | INF |
| 1. TENA\_MOUSE | Tnc | 0.0014 | INF |
| 1. TXD12\_MOUSE | Txndc12 | 0.0004 | INF |
| 1. UBA5\_MOUSE | Uba5 | 0.013 | INF |
| 1. VTI1B\_MOUSE | Vti1b | 0.022 | INF |
| * INF – infinity | | | |

**Supplementary Table 3. – Antibodies for immunohistochemistry and western blot**

|  |  |  |
| --- | --- | --- |
| Antibody | Catalog number (Company) | Dilution |
| Ms anti- aSMA | Ab7817 (Abcam) | IF – 1:500 |
| Rb anti-collagen I | Ab34710 (Abcam) | IF – 1:200 |
| Rb anti-collagen III | Ab7778 (abcam) | IF – 1:200 |
| Goat anti-ephrinB2 | AF496 (R&D systems) | IF – 1:200 |
| Rb anti-ephB4 | PA5-86398 (Invitrogen) | IF – 1:200 |
| Rb anti-GAPDH | 21188 (CST) | WB – 1:1000 |
| Anti-mouse IgG HRP | 7076 (CST) | WB – 1:5000 |
| Anti-rabbit IgG HRP | 7074 (CST) | WB – 1:5000 |
| Anti-rabbit IgG HRP | 7077 (CST) | WB – 1:5000 |
| Rb anti-iNOS | Ab15323 (Abcam) | IF – 1:200 |
| Rb anti-CD206 | Ab64693 (Abcam) | IF – 1:200 |
| Goat anti-CD31 | AF3628 (R&D Systems) | IF – 1:200 |
| Rb anti-CD31 | 77699 (CST) | IF – 1:200 |
| Rb anti-TnC | Ab108930 (Abcam) | IF – 1:200; WB – 1:1000 |
| 649nm anti-Isolectin-B4 | DL-1208-.5 (Vector Laboratories) | IF – 1:200 |
| Goat anti-THBD | AF3894 (R&D Systems) | IF – 1:200 |
| Ms anti-THBD | MAB39471 (R&D Systems) | WB – 1:1000 |
| Rb anti-vWF | Ab6994 (Abcam) | IF – 1:200 |
| Rb anti-NF-kB | Ab16502 (Abcam) | IF – 1:200; WB – 1:1000 |
| Rat anti-CD68 | MCA-1957 (Bio-Rad) | IF – 1:200 |
| Rb anti-VCAM1 | Ab134047 (Abcam) | IF – 1:200 |
| Ms anti-TLR4 | SC-293072 (Santa Cruz) | WB – 1:1000 |
| Rb anti-phosphoNF-kB | Ab86299 (Abcam) | WB – 1:1000 |
| Rb anti-Tissue Factor | NBP2-67731 (NOVUS) | WB – 1:1000 |
| Goat anti-Mouse IgG, Alexa Fluor 488 | A-11001 (Invitrogen) | IF – 1:1000 |
| Goat anti-Rabbit IgG, Alexa Fluor 488 | A-11008 (Invitrogen) | IF – 1:1000 |
| Donkey anti-Rabbit IgG, Alexa Fluor 488 | A-21206 (Invitrogen) | IF – 1:1000 |
| Goat anti-Rat IgG, Alexa Fluor 488 | A-11006 (Invitrogen) | IF – 1:1000 |
| Donkey anti-Goat IgG, Alexa Fluor 488 | A-11055 (Invitrogen) | IF – 1:1000 |
| Goat anti-Mouse IgG, Alexa Fluor 594 | A-11005 (Invitrogen) | IF – 1:1000 |
| Goat anti-Rabbit IgG, Alexa Fluor 594 | A-11012 (Invitrogen) | IF – 1:1000 |
| Donkey anti-Rabbit IgG, Alexa Fluor 594 | A-21207 (Invitrogen) | IF – 1:1000 |
| Goat anti-Rat IgG, Alexa Fluor 594 | A-21203 (Invitrogen) | IF – 1:1000 |
| Donkey anti-Goat IgG, Alexa Fluor 594 | A-11058 (Invitrogen) | IF – 1:1000 |
| Goat anti-Mouse IgG, Alexa Fluor 647 | A-21235 (Invitrogen) | IF – 1:1000 |
| Goat anti-Rabbit IgG, Alexa Fluor 647 | A-21244 (Invitrogen) | IF – 1:1000 |
| Donkey anti-Rabbit IgG, Alexa Fluor 647 | A-78947 (Invitrogen) | IF – 1:1000 |
| Goat anti-Rat IgG, Alexa Fluor 647 | A-21247 (Invitrogen) | IF – 1:1000 |
| Donkey anti-Goat IgG, Alexa Fluor 647 | A-21447 (Invitrogen) | IF – 1:1000 |

**Supplementary Table 4. – RT-qPCR Primers**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Primer Name | Primer Sequence | GC content | Tm | Primer length (bp) | Product size (bp) |
| hTnC-Fwd | ATGTCCTCCTGACAGCCGAGAA | 54.55% | 68.2 | 22 | 101 |
| hTnC-Rev | AGTCACGGTGAGGTTTTCCAGC | 54.55% | 67.8 | 22 |  |
| hRELA-Fwd | TGAACCGAAACTCTGGCAGCTG | 54.55% | 68.1 | 22 | 135 |
| hRELA-Rev | CATCAGCTTGCGAAAAGGAGCC | 54.55% | 67.2 | 22 |  |
| hTLR4-Fwd | CCCTGAGGCATTTAGGCAGCTA | 54.55% | 67.2 | 22 | 126 |
| hTLR4-Rev | AGGTAGAGAGGTGGCTTAGGCT | 54.55% | 67.4 | 22 |  |
| hGAPDH-Fwd | GTCTCCTCTGACTTCAACAGCG | 54.55% | 65.6 | 22 | 131 |
| hGAPDH-Rev | ACCACCCTGTTGCTGTAGCCAA | 54.55% | 69.5 | 22 |  |
| hTnC#2-Fwd | ACCACGCTGAGGTTGATGTTCCA | 52.17% | 69.3 | 23 | 107 |
| hTnC#2-Rev | CTTCACAGCAGAAACTCCAATCC | 47.83% | 64.6 | 23 |  |
| hTHBD-Fwd | AACGACCTCTGCGAGCACTTCT | 54.55% | 68.9 | 22 | 130 |
| hTHBD-Rev | CCAGTATGCAGTCATCCACGTC | 54.55% | 65.8 | 22 |  |
| hEPCR-Fwd | GCTCAATGCCTACAACCGCACT | 54.55% | 68.4 | 22 | 130 |
| hEPCR-Rev | CGAAGTGTAGGAGCGGCTTGTT | 54.55% | 67.8 | 22 |  |
| hTF-Fwd | CAGAGTTCACACCTTACCTGGAG | 52.17% | 65.2 | 23 | 122 |
| hTF-Rev | GTTGTTCCTTCTGACTAAAGTCCG | 45.83% | 64.2 | 24 |  |
| mIL-1b-Fwd | TGGACCTTCCAGGATGAGGACA | 54.55% | 67.9 | 22 | 148 |
| mIL-1b-Rev | GTTCATCTCGGAGCCTGTAGTG | 54.55% | 65.3 | 22 |  |
| mTNFa-Fwd | GGTGCCTATGTCTCAGCCTCTT | 54.55% | 66.9 | 22 | 139 |
| mTNFa-Rev | GCCATAGAACTGATGAGAGGGAG | 52.17% | 64.9 | 23 |  |
| mIL-10-Fwd | CGGGAAGACAATAACTGCACCC | 54.55% | 66.3 | 22 | 130 |
| mIL-10-Rev | CGGTTAGCAGTATGTTGTCCAGC | 52.17% | 66.3 | 23 |  |
| mArg-Fwd | CATTGGCTTGCGAGACGTAGAC | 54.55% | 66.4 | 22 | 124 |
| mArg-Rev | GCTGAAGGTCTCTTCCATCACC | 54.55% | 65.6 | 22 |  |
| mGAPDH-Fwd | CATCACTGCCACCCAGAAGACTG | 56.52% | 68.0 | 23 | 153 |
| mGAPDH-Rev | ATGCCAGTGAGCTTCCCGTTCAG | 56.52% | 69.8 | 23 |  |
| mIRF4-Fwd | GAACGAGGAGAAGAGCGTCTTC | 54.55% | 65.3 | 22 | 147 |
| mIRF4-Rev | GTAGGAGGATCTGGCTTGTCGA | 54.55% | 66.3 | 22 |  |
| mTissue-Factor-Fwd | GCACCGAGCAATGGAAGAGTTTC | 52.17% | 67.0 | 23 | 135 |
| mTissue-Factor-Rev | CTTTCTGTCCCGCTCGGTTCTT | 54.55% | 67.6 | 22 |  |
| mTnC-Fwd | GAGACCTGACACGGAGTATGAG | 54.55% | 64.5 | 22 | 148 |
| mTnC-Rev | CTCCAAGGTGATGCTGTTGTCTG | 52.17% | 66.4 | 23 |  |
| mTLR4-Fwd | AGCTTCTCCAATTTTTCAGAACTTC | 36.00% | 63.1 | 25 | 99 |
| mTLR4-Rev | TGAGAGGTGGTGTAAGCCATGC | 54.55% | 67.5 | 22 |  |
| mRELA-Fwd | TCCTGTTCGAGTCTCCATGCAG | 54.55% | 66.9 | 22 | 133 |
| mRELA-Rev | GGTCTCATAGGTCCTTTTGCGC | 54.55% | 66.3 | 22 |  |
| hIL-10 Fwd | GCTGTCATCGATTTCTTCCC | 50.00% | 56.6 | 20 | 112 |
| hIL-10 Rev | TCAAACTCACTCATGGCTTTGT | 40.91% | 58.5 | 22 |  |
| hIL-1b Fwd | AGCTGATGGCCCTAAACAGA | 50.00% | 58.7 | 20 | 87 |
| hIL-1b Rev | TCGGAGATTCGTAGCTGGAT | 50.00% | 58.0 | 20 |  |
| hTNFa Fwd | TATCCTGGGGGACCCAATGT | 55.00% | 60.0 | 20 | 112 |
| hTNFa Rev | AAAGAAGGCACAGAGGCCAG | 55.00% | 60.3 | 20 |  |
| hIL-6 Fwd | AAAGAGGCACTGGCAGAAAA | 45.00% | 58.0 | 20 | 99 |
| hIL-6 Rev | TTTCACCAGGCAAGTCTCCT | 50.00% | 58.9 | 20 |  |
| hARG1 Fwd | GTGGAAACTTGCATGGACAAC | 47.60% | 58.3 | 21 | 76 |
| hARG1 Rev | AATCCTGGCACATCGGGAATC | 52.40% | 60.5 | 21 |  |
| hIRF4 Fwd | GGCCCAGCTTGTGAAAATGG | 55.00% | 60.0 | 20 | 110 |
| hIRF4 Rev | TCGGCAGACCTTATGCTTGG | 55.00% | 60.1 | 20 |  |

**Supplementary Table 5. – Antibodies for fluorescence activated cell sorting (FACS)**

|  |  |  |
| --- | --- | --- |
| Antibody-fluorophore (Clone) | Catalog number (Company) | Dilution |
| CD11b-BV510 (M1/70) | 101263 (Biolegend) | FACS – 1:400 |
| CD11b-FITC (M1/70) | 101205 (Biolegend) | FACS – 1:400 |
| CD11c-BUV395 (N418) | 744180 (BD Biosciences) | FACS – 1:400 |
| CD11c-PerCP/Cy5.5 (N418) | 117327 (Biolegend) | FACS – 1:400 |
| CD16/CD32 (2.4G2) | 553142 (BD Biosciences) | FACS – 1:400 |
| CD19-BV421 (1D3) | 562701 (BD Biosciences) | FACS – 1:400 |
| CD206-AF647 (MR5D3) | 565250 (BD Biosciences) | FACS – 1:200 |
| CD206-BV605 (C068C2) | 141721 (Biolegend) | FACS – 1:200 |
| CD3-PE (17A2) | 100205 (Biolegend) | FACS – 1:400 |
| CD3-AF700 (17A2) | 100215 (Biolegend) | FACS – 1:400 |
| CD4-BUV395 (RM4-5) | 740208 (BD Biosciences) | FACS – 1:400 |
| CD45-AF700 (30-F11) | 103128 (Biolegend) | FACS – 1:400 |
| CD80-PE (16-10A1) | 104707 (Biolegend) | FACS – 1:200 |
| CD86-PerCP/Cy5.5 (GL-1) | 105027 (Biolegend) | FACS – 1:200 |
| CD8a-APC (53-6.7) | 100711 (Biolegend) | FACS – 1:400 |
| CD8a-PE/Dazzle (53-6.7) | 100761 (Biolegend) | FACS – 1:400 |
| Ly6C-BUV737 (RB6-8C5) | 741712 (BD Biosciences) | FACS – 1:200 |
| Ly6C-BV605 (HK1.4) | 128035 (Biolegend) | FACS – 1:200 |