

Table S2. Focus genes and top functions resulting from the network analysis, per network, at 7 days post-SCI.

| No. | Up-regulated genes in network | Down-regulated genes in network | IPKB genes not in data set | Score | Focus genes | Top functions |
|-----|--|--|---|-------|-------------|--|
| 1 | CDC20, ELN , ENO1, FABP5, FTS, GREM1, HMGB2*, IGF2R, KRT8, KRT19*, LOX , LYZ, OCLN*, SLC7A1, TGFB1, TGFB3, TPM1, TRPC1 | ANP32A, CALD1, CUGBP2, DDR1, EIF4H, JAG2, PACS1, PDPK1, PGCP, PSMD1, SLC5A5 | Ctbp, Fgfr, p70 S6k, Pla2, PP2A, RTK | 49 | 29 | Embryonic Development, Tissue Morphology, Dermatological Diseases and Conditions |
| 2 | A2M, AIF1, APOE, GHR , HK2, IGFBP2*, IL1B, MMP8, PLAT, S100A8 , S100A9 , TIMP1*, UGCG | AGTR1B, APBB1, CYB5R3, DBP* , ENPP2*, FAM105B, IFNGR1, IGFBP3* , KCNH2, LDLR, NR1D1, NR1D2, NR4A3, PPP1R12A, PRLR | Fibrin, Igfbp, IL1, Jak, Mmp, Pdgf, Stat | 47 | 28 | Hematological System Development and Function, Tissue Morphology, Cellular Movement |
| 3 | ADCYAP1, AURKB, CCNB1, CD74* , CEBPB, CEBPD , DUSP6, HLA-DRA, MCM6, RB1, SDC1, TOP2A* | ACAT1, CYP11B1, ID2, IL4 , ITGA1, KCNC2, LDB3, NR2F1, PRDM2 , RALBP1, S100G, SMC1A | 14-3-3, Cyclin B, Cyclin E, E2f, Histone h3, MHC Class II, P38 MAPK, PEPCK, Pka, Rb, RNA polymerase II | 37 | 24 | Cellular Growth and Proliferation, Skeletal and Muscular System Development and Function, Cell Cycle |
| 4 | BAX*, CA2, CORO1A, FCGR2A*, FDPS, FN1*, KALRN, KLRD1, PTPN6, SERPINE1 , SPP1, STAT1, STMN1, TAP1, TFRC | ACHE, ACTB, AGTR1, CAP2, GOT2, THRB , WIPF3 | Actin, Caspase, Cbp/p300, F Actin, Gi-coupled receptor, Hsp70, Jnk, Mapk, MHC Class I, Pak, Rac, Tgf beta, Tnf receptor, | 33 | 22 | Cell Death, Organismal Injury and Abnormalities, Immunological Disease |
| 5 | HCK, IGF1 , PTPN11, RASGRP1, SLC2A1, SYK, THY1 | ATP2A1, ATP2B1, CHRM2, GNAO1, GNAS, GNAZ, GNB5, IRS2, ITPR1, PDE4B, PLCL1, PLN | Adenylate Cyclase, CD3, G alpha, G alphas, G-protein beta, G-protein gamma, Hdac, Irs, Pde, PI3K, Rap1, Ras, SERCA, Sos, TCR, Vav | 27 | 19 | Cell Signaling, Molecular Transport, Vitamin and Mineral Metabolism |
| 6 | FLT1, HMOX1, MFGE8, SERPINB5 | CENTA1, CYP3A4, GABBR2, GRIN1, GRIN2B, GRIN2C, GRIN2D, GRM7, HD (includes EG:3064), MAG (includes EG:4099), MAP2K5, NEFL (includes EG:4747), NEFM, PLA2G2A , PPAP2B | Akt, Ap1, Calcineurin protein(s), Calmodulin, CaMKII, Cpla2, Creb, Ets, Fgf, GRIN, Hsp90, NMDA Receptor, Pkc(s), PLC gamma, Rsk, Vegf | 27 | 19 | Neurological Disease, Organismal Injury and Abnormalities, Respiratory Disease |

[#] Only those networks are depicted that received the highest scores in IPA and that contained relevant genes.

* Gene is represented in the microarray set with multiple identifiers.

Bold: Gene was analyzed and discussed in more detail