

**Supplemental Table 3**

<b>ID</b>	<b>Molecules in Network</b>	<b>Score</b>	<b>Focus Molecules</b>	<b>Top Functions</b>
<b>1</b>	Ccl9, CDKN2A, CRKL, CXCL9, DAB1, DAZ2, DDX4, DNMT3B, ERK, FAM3B, GAD1, GAS2, CX43, Histone h3, HMGA1, HOXA11, IFIT1B, ligp1/ligp1b, IL12 (complex), Interferon alpha, IRF7, KPNA2, LTB, MHC CLASS I (family), Ms4a4b (includes others), PIWIL2, PSMB9, RELN, RNA polymerase II, STAT1, TAP1, Tgtp1, UPP1, USP18, ZBP1	33	26	Infectious Disease, Gene Expression, Antigen Presentation
<b>2</b>	ABCB7, ACTB, B2M, CASP9, Ccl6, CCL21, CD274, CXCL9, EAF2, EBI3, ERO1L, FGL2, GBP4, Gbp4, Gbp8, GBP2 (includes EG:14469), IFIT1B, IFNB1, IFNG, IGF2BP1, Igtp, ligp1/ligp1b, IL5, IL27, IL7R, ISG15, NR3C1, OAS2, Oasl2, PCP4, SERINC3, SOCS1, STAT2, Tgtp1, TXN (includes EG:116484)	18	18	Cell-To-Cell Signaling and Interaction, Hematological System Development and Function, Tissue Morphology
<b>3</b>	ACTA1, BAZ1A, BCL2L1, BIRC5, CCND1, CHRNA7, CRABP1, CXCL3, CXCL10, CYP2F1, DKK2, ESR2, FABP4, GGT1, GNAQ, GTF2A1, HELLS, HMGCR, IKBKB, JAK2, LEP, Mapk, MAT2A, MYH3, Myhs, MYOD1, NFKBIE, RBBP4, SOCS3, STAT1, SUV39H2, TNF, TNN, TNNC2, YY1	15	16	Gene Expression, Cancer, Cardiac Necrosis/Cell Death
<b>4</b>	ARG2, ARL5B, CBX2, CDK2, DMRT1, DMRTC2, DUSP4, E2F1, E2F4, FGFR2, FOXL2, FSHB, ISL1, LHB, MPHOSPH9, NR1H3, NR5A1, OSBP2, PIN1, PPM1H, SMAD3, SOHLH1, STAR, STRA8, UTF1, ZFP36	13	13	Embryonic Development, Organ Development, Organismal Development
<b>5</b>	AK4, ARIH1, CCL17, CDK2, CEBPZ, CLGN, E330020D12Rik, ERK1/2, F2RL1, FBXW12, FIGLA, FOS, GLI2, HDAC2, Histone h3, Histone h4, IL13, IL1B, Jnk, JUN, KITLG, LDHC, MAPK14, P38 MAPK, RASA2, RB1, RNA polymerase II, SOCS3, SRF, Taf7I, TCOF1, TDRD1, TLR4, TNFSF11, UBA3	12	14	Gene Expression, Tissue Morphology, Cellular Development

<b>6</b>	ADAD1, BCL2, BCL2L1, CD8A, CHCHD2, CSF1, CSF1R, DNAH12, Fcer1, FDFT1, HMGCR, IFIT3, IgG1, Igm, IL4, IL21, IL27, ITGAV, ITGB3, KCNAB2, LCK, MT1E, NFATC1, PHB, PLCG2, POU2F2, RASGRF1, RHOA, RORA, S100A9, SATB1, SPATA19, VAV3, YBX2, ZBTB16	12	14	Cell-To-Cell Signaling and Interaction, Hematological System Development and Function, Cellular Growth and Proliferation
<b>7</b>	Akt, Alp, BCL2, BCL2L1, BRCA1, BRCA2, CASP3, CCND1, CDKN1A, CDKN2A, CNR1, CREBBP, DDX25, EP300, GATA1, HDAC1, HNF1A, HOXA10, HTT, KIF12, KRT14, MDM2, MEIS2, NFKBIA, PLCB1, RAD51, RAP1GAP, RB1, RNASE4, RUNX2, SLC7A2, STAT1, TP53, TTK, WDR5	11	13	Gene Expression, Cancer, Cellular Development
<b>8</b>	Actg2, ALDOB, CDH1, CNN1, DYNC2LI1, FHL1, FOXA1, FOXA2, GATA6, GLI1, GLI2, GRHL1, HDAC1, HDAC2, HHIP, HLTf, HNF1B, HNF4A, IKZF3, KRT8, KRT17, LRP5, Mi2, MYBPC1, MYOCD, NR1H4, NR5A2, ONECUT1, PAX2, RBBP4, RHPN2, SALL1, SALL4, SHH, SLC2A2	11	13	Gene Expression, Embryonic Development, Organismal Development
<b>9</b>	Akr1b7, Alp, APBB1, APP, AQP7, ATF2, BLNK, CAV1, CCND1, CCND2, CCND3, CEBPA, CEBPB, CTNNB1, DKK1, DTX2, EGFR, FABP4, FGF8, FKBP6, Histone h3, MAP4K1, MESP1, MSX1, MYC, MYOG, NDRG4, PHLDA2, PPAR, PPARG, PRKG2, PRSS8, RUNX2, Tex19.1, WNT3A	11	13	Cellular Development, Gene Expression, Cell Cycle
<b>10</b>	ARC, CAMK4, CEBPB, CREB1, Creb, Crem, DLG4, DUSP14, EGR4, FMR1, GABPA, IRS2, NXF1, NXF2/NXF2B, PAK1, PDXK, PIK3CB, PPARA, PPAR, PPARGC1A, SIK1	8	9	Neurological Disease, Organismal Injury and Abnormalities, Tissue Morphology