

Supplementary Table 3: Genetic networks affected by vFLIP K13 in HUVEC cells

S.No.	Genes in Ingenuity Network	Score	Focus Genes	Associated Pathways
1	↑BCL2A1, ↑BIRC3, ↑BIRC4BP, ↑CASP1, Caspase, ↑CCL2, Cpla2, ↑CSF2, ↑CSF3, ↑F2RL1, ↑IFI35, ↑IFITM1, Ige, ↑IL15, ↓IL33, ↑IL18R1, ↑LTB, Mek, Mek1/2, ↑MYLK, ↑NFKBIA, P38 MAPK, ↑PLA2G4A, ↑PLA2G4C, PLC, ↑PSMB9, ↓RGS4, ↑RIPK2, STAT5a/b, ↑TLR3, ↑TNFAIP3, ↑TNFRSF9, ↑TNFSF13B, ↑TNIP1, ↑TRAF1	51	27	Cell Death, Inflammatory Disease, Immunological Disease
2	C1q, ↑C1R, ↑C1S, ↑CCL20, ↑CLEC4E, ↑CTSS, ↑CXCL5, Cyclooxygenase, ↓DIRAS3, ↑EBI3, ↑HLA-B, ↑HLA-F, ↑HLA-G, ↓IGFBP5, Ikb, IKK, IL1, ↑IL6, ↑IL1A, ↑INDO, ↑INHBA, ↑LGALS3BP, MHC Class I, MHC Class II, MHC I- & alpha, Mmp, ↑MMP10, NF-kappaB, ↑SERPINB2, Tap, ↑TAP1, ↑TAPBP, TCR, ↑TFPI2, Tnf receptor	38	22	Cell Signaling, Immune Response, Cancer
3	Akt, ↓APLN, ↓BMX, C8, ↑CCL5, CD3, Creb, ↑CSF1, ↑CXCL2, ↑CXCL3, ↑CXCL10, ↑DARC, G alphas, Hsp27, ↑ICAM1, ↑IL8, ↑IL32, ↑IL7R, Integrin, ↑IRAK2, Jnk, ↑NBN, p70 S6k, Pdgf, PI3K, ↑PTGS2, Rac, ↑RAD50, Rap1, Ras, ↑SELE, Sod, Tgf beta, ↑VCAM1, Vegf	29	18	Cell-To-Cell Signaling and Interaction, Hematological System Development and Function, Immune Response
4	ADAM17, ADORA2B, ATPase, ↑CCL2, CCL7, CCR1, CCR2, CCR6, CD74, chondroitin sulfate, ↑CLEC4E, ↑CTSK, ↑CTSS, ↑CX3CL1, CX3CR1, ↑CXCL3, ↓DYSF, ↑GPRC5B, ↑HAPLN3, HEXB, ↑IFITM1, IFNG, IL15RA, ↑ISG20, ↓LDB2, ↑LY6E, ↑MX2, ↑RARRES1, SMARCA4, STAT4, TNFSF11, ↑UBD, Ubiquitin, ↑VCAM1, ↑ZC3H12C	29	18	Cell-To-Cell Signaling and Interaction, Hematological System Development and Function, Immune Response
5	ACAN, AFP, ALB, ANPEP, ATF4, ↑BST2, ↑BTN3A3, C3, C5, CAMP, CD3, ↑CD38, ↑CFB, ↑CXCL2, ↑CXCL3, CYP2E1, EREG, ↑GBP1, ↑GCH1, ↑IFIT3, ↑LAMP3, ↑LITAF, LPL, MTTP, ↑OAS3, POU2F1, PTX3, ↓RGS5, SLC10A1, ↑SLC7A2, TCF1, TNF, ↑TNFAIP2, ↑TNFAIP6, ↑WTAP	27	17	Inflammatory Disease, Cellular Function and Maintenance, Immune Response
6	AFP, ARG1, BUB1 (includes EG:699), ↓C13ORF15, Calpain, CAPN2, CCNB2, CD34, CDC2, CDKN3, ↑CXCL10, ↑FAM129A, ↑GBP4 (includes EG:115361), IER2, IL9, ↓IPO11, ↓ITGB4, ITGB7, ↑LAMB3, LAMB1-2, ↑LAMC2, LIMS1, ↓LTBP2, MYC, ↑PLA1A, PLP1, ↓POSTN, RAN, retinoic acid, ↓RNASE1 (includes EG:6035), ↑RSAD2, TGFB1, ↑TNFAIP2, VASP, ↓XLKD1	23	15	Cellular Movement, Dermatological Diseases and Conditions, Genetic Disorder
7	ADCYAP1, ↓ALDH1A1, ↓ANTXR1, ↑CCL2, CCR2, CEBPB, cholesterol, ↑CNKSR3, CTNNB1, ↓CXADR, ↑CXCL2, F2, HDC, HLA-DQB2, HNF4A, ↓HOP, HP, ↑HSD11B1, hydrogen peroxide, ITGA1, ↑LIPG, ↓MEST, ↑NCOA7, ORM2, ↓PDK4, PPBP, PRNP, progesterone, PROS1, ↑PSTPIP2, PTGER4, SAA2, SLC10A1, ↑SLC2A6, ↓TXNRD2	23	15	Immune Response, Cell-To-Cell Signaling and Interaction, Cellular Movement
8	AFP, betaestradiol, BTG2, ↓C10ORF116, CAV2, CCNB2, CCNC, ↑CD69, ↑CTSH, ↑CYB5A, dihydrotestosterone, ↓EMCN, ↓GPX3, HOXA5, HPGD, KLK3, ↑KYNU, ↓LHX6, ↓MALL, MKI67, NEUROG3, NFE2L2, ↑NKX31, NQO1, OXTR, ↑P2RX4, PHB, PRNP, ↑SEMA3C, ↑SLC25A37, SURB7, TP53, TRG@, ↑VCAM1, VCAN	21	14	Cancer, Gene Expression, Tissue Morphology