

Additional File 5: ten sub-networks

No.	Molecules in Network	-Log (p-value)	Focus Molecules
1	Ap1, BCL2L14, CTBP2, CTNND1, ELF3, ERK, F2RL1, FLNB, GCLC, GIPC1, GLI2, HMG2, IL12, ITGA2, Jnk, KLF4, KLF5, KRT8, KRT18, KRT19, MST1R, MTF2, Nfat, P38 MAPK, PCM1, Pkc(s), PLXNB2, Raf, SFN, Smad, SMAD3, TXN, TXNRD1, VAV2, ZEB1	49	26
2	ALDH, ALDH3A1, ALDH3A2, ALDH3B1, ALP, AMFR, ARID1A, Cbp/p300, Ck2, Cyclin A, Cyclin E, E2f, E2F3, GRB7, HTATIP2, ID1, IFI16, JARID2, LPAR2, MSX2, NASP, NFkB, NOL3, NQO1, PLEKHA6, PPAP2C, PPARG, Proteasome, Rb, RNA polymerase II, SMARCC1, SQSTM1, TACSTD1, TOP2B, Ubiquitin	42	23
3	Akt, ANXA2, Calpain, CAPNS1, CCNO, CD9, CYP2J2, F12, FTH1, G6PD, hCG, Histone h3, IL1, Insulin, Integrin, IRF6, ITGB4, LAMC2, LDL, Mapk, Pdgf, PDGF BB, PI3K, PLEKHO1, PP2A, PTK6, S100A10, SDC1, SERPINB5, SLC6A2, STMN1, TGFA, TPD52L1, Vegf, WISP2	37	21
4	AP3D1, beta-estradiol, CLDN4, CLN3, CTPS, DSP, EXT2, FOXC2, FUBP1, GARS, GPRC5A, GSR, GTF2E1, GTF2F2, HMG2, HSPA4, HTATIP2, HTATSF1, KRT19, OGT, RDBP, RNA polymerase II, S100A6, SFRS10, SLC22A5, SNCG, SPR, STK16, SUPT5H, TPD52L1, TRIM24, TSKU, WISP2, WWC1, YWHAZ	28	17
5	CENTA1, CHMP1A, CLDN7, DCI, DSC1, DSC2, DSG1, DSG2, EGF, EHHADH, G6PD, GFPT1, GLI2, growth factor receptor, Histone h3, INS1, KRT8, LOC26010, MTUS1, MYO5A, MYO5B, MYO5C, Pka, PKP3, PLAGL1, RAB25, RAB11FIP2, SETMAR, SF3B2, SH2D3A, SMAD3, SOX6, STAMBP, TGIF1, USP8	28	17
6	ADAM9, ALCAM, ANXA7, ARID4B, ATP1B1, CAV2, CCNG2, CD40LG, COL6A1, EGFR, EVPL, FERMT1, FLJ20489, FLNB, FSCN1, GLI2, GULP1, HOXC10, ITGB1, ITGB6, ITGB7, ITGB8, KRT1, KRT8, LAMC2, LSR, MALL, MGAT3, SH2D3A, SH3BGR1, SLC3A2, SLC7A11, TGFB1, TPSAB1, WISP2	25	16

Additional File 5: ten sub-networks

7	12-hydroxyeicosatetraenoic acid, AGT, ANKRD2, ANXA3, ASL, ATP1B1, DCP2, EPB41L1, ETHE1, FN1, GJB3, HSD3B1, IL4, INPP1, ITGB8, LIG1, LTA4H, NAB2, NUP37, NUP85, PCNA, PERP (includes EG:64065), POLD2, POLD3, POLD4, POLDIP2, PSMC3, Ras, RHOD, SERPINB5, SON, TGFBR1, TNK1, TP53, TP53I3	25	16
8	ABCC3, ALDH3A1, BAAT, BAT2D1, CRAT, EXOSC5, GBE1, HNF4A, HOXA9, HOXB2, KIAA0649, KIF1B, LGALS3, LRSAM1, LSM3, LSM4, LSM5, MGAT4B, MGST1, MRPL49, PGD, PLEK2, PNPO, PPP1CA, PRR3, PTPRC, PTPRCAP, retinoic acid, SFPQ, SNRPA, SNRPD3, SNRPE, TRIM15, UGT1A9 (includes EG:54600), WDR77	21	14
9	ABCC1, AFTPH, ANXA3, AP1B1, AP1G2, ATP1B1, B2M, CGB, DBI, DGAT1, F2RL2, FOSL2, FSH, FSHB, FST, FUT3, GDE1, HFE, HPSE, HSD17B1, HSD3B1, LAD1, LLGL2, LZTFL1, MGST1, NQO1, PARD6A, PDXK, PRG2 (includes EG:5553), PRKCZ, RGS19, SMAD7, testosterone, TNF, ZNF107	19	13
10	3alpha-hydroxysteroid dehydrogenase (A-specific), ABLIM1, AGR2, AKR1C1, AKR1C2, AKR1C3, DYRK1B, EEF1A2, FA2H, GBE1, GCNT3, HNF1A, HNF4A, ME1, MTF2, NBR1, PAH, PCBD1, PHKB (includes EG:5257), RAI2, REST, SSTR1, T3-TR-RXR, TARS, TRAF2, trans-(β)-3,5-cyclohexadiene-1,2-diol, Trans-1,2-dihydrobenzene-1,2-diol dehydrogenase, UBQLN4, UCHL5, UGT1A9 (includes EG:54600), USP48	18	12