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| **Table S15. List of upstream regulators which is specifically identified in gene co-expression modules in B cells of primary Sjögren's syndrome.** | | | | |
| Upstream Regulator | Molecule Type | p-value of overlap | module | Target molecules in dataset |
| H. carbonum toxin | biologic drug | 0.0104 | brown | ATP2A3 |
| pasireotide | biologic drug | 0.0418 | yellow | BMPR2 |
| romidepsin | biologic drug | 0.0418 | brown | RHOB,TNFRSF10B |
| 16,16-dimethylprostaglandin E2 | chemical - endogenous mammalian | 0.0361 | brown | CD44 |
| 8,9-epoxyeicosatrienoic acid | chemical - endogenous mammalian | 0.0461 | brown | CD44 |
| arachidic acid | chemical - endogenous mammalian | 0.0411 | brown | XBP1 |
| Ca2+ | chemical - endogenous mammalian | 0.0364 | turquoise | ABCB1,AHR,CCND2,CD19,CD80,CD86,CDK4,CEBPB,CEBPD,CSRP1,CXCL8,CXCR4,CYP1B1,E2F2,FABP5,FOSL2,HBEGF,HSPA5,ICOSLG/LOC102723996,IL1B,IL6R,IRS2,ITPR1,KCNG1,MYB,NR1D1,PEBP1,PTGS2,PTTG1,RUNX2,S100A8,S100A9,TIMP2,TLR4,TNF,TSHR,VDR,VEGFA |
| corticosterone | chemical - endogenous mammalian | 0.0407 | turquoise | ANXA1,ATP1A1,ATP1B1,CAV1,CDK4,CRH,FKBP5,GLUL,GZMB,HSPA5,IDE,ITGB1,KLF9,NR3C1,PTGS2,TLR2,TNF,WNT7B,XBP1 |
| creatine | chemical - endogenous mammalian | 0.0433 | turquoise | CXCL2,GATM,TLR2,TLR4,TTN |
| Cu2+ | chemical - endogenous mammalian | 0.0448 | blue | SP1 |
| enterolactone | chemical - endogenous mammalian | 0.0154 | turquoise | ESR1,ESR2,IL1RN,MKI67 |
| glucosylceramide | chemical - endogenous mammalian | 0.0448 | blue | PCYT1A |
| hexanoic acid | chemical - endogenous mammalian | 0.0104 | brown | ATP2A3 |
| isovaleric acid | chemical - endogenous mammalian | 0.00523 | brown | ATP2A3 |
| lacto-N-fucopentaose III | chemical - endogenous mammalian | 0.031 | brown | IGHG1 |
| pentanoic acid | chemical - endogenous mammalian | 0.0208 | brown | ATP2A3 |
| phenylpropanoic acid | chemical - endogenous mammalian | 0.00523 | brown | ATP2A3 |
| sphingomyelin | chemical - endogenous mammalian | 0.0476 | yellow | ELOVL5 |
| testosterone | chemical - endogenous mammalian | 0.0474 | turquoise | ACSL1,ALDOA,ANXA1,ATP1B1,CAMK4,CAV1,CCNC,CDK4,COX5A,CYP51A1,ELOC,ESR1,ESR2,FAM89B,FAS,FOSL2,FOXO1,GADD45A,GGT1,GRIA1,GUSB,HSP90AB1,IL1B,IRS2,ITGB1,KISS1R,LGALS1,MGST1,PDIA4,PRKCB,PRKCE,PSMA1,PSMA2,PTGS2,PXN,RARG,RPS11,SERPINA5,SYT11,TARP,TBXAS1,TGFB2,TGFBR2,TLR4,TOP2A,TUBB3,VCAN,YWHAE |
| tridecanoic acid | chemical - endogenous mammalian | 0.0461 | brown | PTEN |
| (6)-gingerol | chemical - endogenous non-mammalian | 0.0359 | yellow | CDK6 |
| 3',4',7-trihydroxyisoflavone | chemical - endogenous non-mammalian | 0.0255 | turquoise | CDK4,ESR1,ESR2 |
| boldine | chemical - endogenous non-mammalian | 0.00653 | blue | NCF1 |
| esculetin | chemical - endogenous non-mammalian | 0.0385 | blue | SP1 |
| flavokawain B | chemical - endogenous non-mammalian | 0.0448 | blue | SP1 |
| flavokawain B | chemical - endogenous non-mammalian | 0.0361 | brown | TNFRSF10B |
| isobutyric acid | chemical - endogenous non-mammalian | 0.00523 | brown | ATP2A3 |
| magnolol | chemical - endogenous non-mammalian | 0.0337 | turquoise | CLEC11A,CXCL8,PTGS2,TLR4,TNF |
| salinomycin | chemical - endogenous non-mammalian | 0.0418 | yellow | LEF1 |
| bisindolylmaleimide I | chemical - kinase inhibitor | 0.0373 | turquoise | AQP3,ARNT,BIRC3,CCND2,CD55,CXCL8,E2F2,HMOX1,HSP90AB1,HSPA5,MAPK1,PDCD4,PRKCD,PRKCE,PTGS2,PTTG1,SAMSN1,TNF,VEGFA |
| olomoucine | chemical - kinase inhibitor | 0.0258 | blue | PCYT1A |
| SP600125 | chemical - kinase inhibitor | 0.0118 | brown | ALOX5,CD2AP,CD44,CPM,TNFRSF10B |
| 2-amino-5-phosphonovaleric acid | chemical - other | 0.0457 | yellow | GADD45B,LHFPL2,TCHP |
| pepstatin | chemical - protease inhibitor | 0.0411 | brown | CD9 |
| (±)-2-hydroxyoleic acid | chemical drug | 0.0411 | brown | XBP1 |
| 3-deazaneplanocin | chemical drug | 0.0383 | turquoise | CEBPB,DUSP4,EZH2,FAS,FBXO32,IRF8,MAP3K14,SEL1L,SELENOS,TIMP3,TRIM14,USP53 |
| adaphostin | chemical drug | 0.0476 | yellow | CDK6 |
| androgen | chemical drug | 0.0441 | brown | CD44,PTEN,SOX4 |
| andrographolide | chemical drug | 0.0497 | turquoise | CNR1,GATA3,HMOX1,IL1B,PTGS2,TIMP1,TNF |
| bardoxolone | chemical drug | 0.0426 | turquoise | CEBPA,CEBPB,CFLAR,GCLC,HMOX1,HSPA9,MDH2,UBE2H |
| brimonidine | chemical drug | 0.0361 | brown | JUP |
| cantharidin | chemical drug | 0.0233 | turquoise | BAG3,MCL1,RXRA,TNF |
| chlorambucil | chemical drug | 0.031 | brown | TNFRSF10B |
| chlorambucil | chemical drug | 0.0359 | yellow | TNFRSF10A |
| curcuminoids | chemical drug | 0.0385 | blue | SP1 |
| entinostat | chemical drug | 0.047 | yellow | TNFRSF10A,TNFRSF19 |
| evofosfamide | chemical drug | 0.0418 | yellow | CDK6 |
| ezetimibe | chemical drug | 0.0376 | green | IDI1 |
| fluocinolone acetonide | chemical drug | 0.0272 | brown | BMP3,TMEM14A |
| GCS-100 | chemical drug | 0.0476 | yellow | CDK6 |
| gemfibrozil | chemical drug | 0.0383 | turquoise | ANXA7,CHEK1,CNP,FURIN,GADD45A,IL1B,LDLR,NAP1L1,PCSK5,PDCD4,RTN4,TNF |
| iberdomide | chemical drug | 0.00472 | grey | IKZF3 |
| ibuprofen | chemical drug | 0.0177 | brown | TNFRSF10B,TNFRSF21 |
| imidapril | chemical drug | 0.013 | blue | NCF1 |
| LGK-974 | chemical drug | 0.0359 | yellow | LEF1 |
| methapyrilene | chemical drug | 0.0168 | turquoise | ABAT,ACTG1,ALDOA,ANXA2,ANXA5,APOA2,CD36,CST3,DBI,GADD45A,GCLC,GSTM1,HMOX1,HSPA5,ITGB1,KYNU,PLCB1,PRKCB,RPS8,SERP1,SLC3A2,SULT1A1,TUBB |
| mifepristone | chemical drug | 0.0449 | brown | MME,RHOB,TNFRSF10B,XBP1 |
| nicorandil | chemical drug | 0.0448 | blue | NCF1 |
| pectin | chemical drug | 0.00653 | blue | SMAD3 |
| pectin | chemical drug | 0.00608 | yellow | SMAD3 |
| pevonedistat | chemical drug | 0.0461 | brown | TNFRSF10B |
| pitavastatin | chemical drug | 0.0413 | green | IDI1 |
| pivalyloxymethyl butyrate | chemical drug | 0.00523 | brown | ATP2A3 |
| S-18886 | chemical drug | 0.0258 | blue | NCF1 |
| salsalate | chemical drug | 0.0194 | blue | NCF1 |
| sapanisertib | chemical drug | 0.0141 | grey | RPS3A |
| silibinin | chemical drug | 0.037 | brown | CD44,TNFRSF10B |
| silibinin | chemical drug | 0.0383 | turquoise | BIRC5,CCNC,CD38,CDK4,CXCL8,FLT1,MCL1,PLAUR,PTGS2,TIMP2,VEGFA,VIM |
| sodium arsenite | chemical drug | 0.0412 | yellow | CDK6,GADD45B |
| tamoxifen | chemical drug | 0.0116 | turquoise | AHNAK,ANG,AQP9,ATP5F1B,BID,BIRC5,CAV1,CCNA2,CD36,CFLAR,CXCL8,CXCR4,EPHA4,ESR1,ESR2,ETV4,FLOT1,GAPDH,HSP90AB1,HSP90B1,IER3,IGFBP4,IL1RN,LDLR,MDM2,MIF,MKI67,NFATC4,NRCAM,PTGS2,RBL2,SLC5A3,SLC9A3R1,SMAD3,TGFBR2,TLR4,TNF,TXN,TYMP,VDR,VEGFA,WIPI1 |
| tempol | chemical drug | 0.0195 | blue | NCF1,SP1 |
| terbutaline | chemical drug | 0.0461 | brown | IGHG1 |
| tranilast | chemical drug | 0.0462 | grey | TXNIP |
| triptolide | chemical drug | 0.0452 | turquoise | BID,BIRC5,CXCL8,FAS,MCL1,MKI67,PTGS2,TLR2,TLR4,TNF,UACA |
| 2-morpholin-4-yl-6-thianthren-1-yl-pyran-4-one | chemical reagent | 0.031 | brown | TNFRSF10B |
| 4-hexylresorcinol | chemical reagent | 0.013 | blue | SP1 |
| CCX771 | chemical reagent | 0.0411 | brown | CD44 |
| CpG ODN 2216 | chemical reagent | 0.0393 | turquoise | CD38,CD69,CD80,CD86,IL1B,TNF |
| DETA-NONOate | chemical reagent | 0.0307 | turquoise | BIRC3,CAV1,CCL3,CXCL8,FAS,HMOX1,PTGS2,S100A8,TIMP1,TNF,TXNIP |
| matrine | chemical reagent | 0.00653 | blue | SP1 |
| TO-901317 | chemical reagent | 0.0177 | turquoise | ABCG1,ACSL1,AGPAT3,ALAS1,CDK4,COX17,ELOVL5,ENO1,FABP5,FMO5,GPI,HSD17B8,IGFBP4,IL1B,LDLR,LGALS3,MCM6,MGLL,MID1IP1,NR1D1,PFKFB3,PSMA5,PSMA7,PSMB2,PTGS2,SIGMAR1,SMAD3,TIMP1,TIMP3,TKT,TLR4,TNF,TSHR,VEGFA |
| arsenite | chemical toxicant | 0.0285 | turquoise | ABCB1,AHR,ARL6IP5,CAV1,CXCL8,CYP1B1,FZD1,GADD45A,GCLC,HMOX1,HSPA9,IER3,MCL1,MDM2,PLCB1,PTGS2,RNH1,TGFB2,VEGFA |
| atrazine | chemical toxicant | 0.0408 | turquoise | CLEC11A,NR3C1,PTGS2 |
| benzo(a)pyrene | chemical toxicant | 0.0324 | turquoise | ABCB1,AGTPBP1,AHR,ANXA1,ARL6IP5,BIRC5,BRAF,C14orf119,CDK2AP2,CYP1B1,ECT2,FGF9,FZD1,GCLC,GNAQ,GSTM1,HMOX1,IER3,IL1B,ITPR1,LIMK2,MDM2,PGD,PLCB1,PTGS2,SERPINA1,SLC1A4,TGFB2,TKT,TNFAIP2,UBL7,VEGFA,ZWINT |
| butylhydroxybutylnitrosamine | chemical toxicant | 0.0476 | yellow | FHIT |
| capsazepine | chemical toxicant | 0.0411 | brown | TNFRSF10B |
| capsazepine | chemical toxicant | 0.0476 | yellow | TNFRSF10A |
| carbonyl cyanide m-chlorophenyl hydrazone | chemical toxicant | 0.0371 | yellow | DUSP5,TM6SF1 |
| emetine | chemical toxicant | 0.0208 | brown | PTEN |
| malondialdehyde | chemical toxicant | 0.0322 | blue | SP1 |
| myxothiazol | chemical toxicant | 0.0164 | grey | TXNIP |
| prodigiosin | chemical toxicant | 0.0461 | brown | TNFRSF10B |
| zearalenone | chemical toxicant | 0.0189 | turquoise | ESR1,ESR2,IL1B,TLR4,TNF |
| Bcl9-Cbp/p300-Ctnnb1-Lef/Tcf | complex | 0.0461 | brown | CD44 |
| Integrin | complex | 0.0452 | turquoise | AHR,ESR1,TGFB2,VEGFA |
| Laminin (complex) | complex | 0.0365 | turquoise | BIRC3,ETS2,ID2,ITGB1,PTGS2,PXN,RUNX2,TGFB2,VIM |
| NADPH oxidase | complex | 0.00895 | blue | NCF1,TBXA2R |
| CXCL16 | cytokine | 0.0255 | turquoise | CD38,CXCL8,TNF |
| FAM3B | cytokine | 0.0317 | turquoise | CAV1,DAPK2,IER3,IGFBP4,LDHA,LGALS1 |
| ADCY7 | enzyme | 0.0233 | turquoise | IRAK1,IRAK2,TLR4,TNF |
| APC | enzyme | 0.0225 | brown | APCDD1,CD44,PTEN |
| BLVRA | enzyme | 0.031 | brown | TNFRSF10B |
| CNOT6L | enzyme | 0.0411 | brown | PTEN |
| DNMT3B | enzyme | 0.0175 | turquoise | BEX5,BIK,CAMK4,CBX5,CCL5,CD36,CNR1,CYP1B1,EMILIN2,ESR1,FBXL16,GRK3,HDAC9,LINC00674,MGST1,MYL6,NFATC3,PLA2G16,PLP2,POLD4,PRKCB,PRUNE2,RASSF1,RPL13,RPP25,SEC62,SH2D1A,SLC30A1,SLC8A1,TIMP3 |
| FBXW7 | enzyme | 0.0399 | turquoise | ATP5F1A,BIRC5,CD36,DTX1,HSPA8,HSPE1,MTHFD2,NOTCH4,NR3C1,RUNX2,TLR4 |
| GNB5 | enzyme | 0.031 | brown | TNFRSF10B |
| HAS1 | enzyme | 0.031 | brown | CD44 |
| HAS2 | enzyme | 0.0411 | brown | CD44 |
| HINT1 | enzyme | 0.0476 | yellow | ELOVL5 |
| Hmga2 | enzyme | 0.0476 | yellow | IL15 |
| ICMT | enzyme | 0.0174 | blue | AEBP1,RCN2 |
| ICMT | enzyme | 0.0152 | yellow | LARGE1,RCN2 |
| KHSRP | enzyme | 0.0255 | turquoise | IL1B,LDLR,RPL3 |
| LYZ | enzyme | 0.0142 | turquoise | IL1B,LYZ |
| MFN2 | enzyme | 0.0361 | brown | XBP1 |
| NRAS | enzyme | 0.0382 | turquoise | BUB3,CCL5,CD48,CD86,CDC6,CLEC11A,CX3CR1,DUSP6,FCER2,HOMER3,IGHM,IL13RA1,IL1RN,JCHAIN,KCTD12,KIF2C,LGALS1,LIMK1,LSP1,MCL1,MKI67,PCBD2,PERP,PTGS2,TULP4,UBE2C,VEGFA,WEE1,YIF1A |
| P4HA1 | enzyme | 0.00653 | blue | AGO2 |
| P4HA1 | enzyme | 0.00608 | yellow | AGO2 |
| PJA1 | enzyme | 0.00653 | blue | SPTBN1 |
| RAB11A | enzyme | 0.00653 | blue | SLC2A5 |
| RAB11A | enzyme | 0.00608 | yellow | SLC2A5 |
| RDH10 | enzyme | 0.0418 | yellow | LEF1 |
| REV1 | enzyme | 0.0361 | brown | TNFRSF10B |
| RNASE1 | enzyme | 0.0317 | turquoise | CCL3,CCL5,FCER2,IL16,IL7,TNF |
| SND1 | enzyme | 0.0348 | turquoise | APOBEC3G,CDC6,IGHE,KYNU,NR2F1,PTGS2,QPCT |
| SUZ12 | enzyme | 0.0483 | yellow | CTNNA1,RBMS1,SMARCA4 |
| TAZ | enzyme | 0.0418 | brown | AHNAK2,CD44 |
| TCIRG1 | enzyme | 0.0411 | brown | CD44 |
| TXN2 | enzyme | 0.0258 | blue | NCF1 |
| TXNRD1 | enzyme | 0.0476 | yellow | TNFRSF10A |
| ADCYAP1R1 | G-protein coupled receptor | 0.0359 | yellow | DUSP5 |
| C3AR1 | G-protein coupled receptor | 0.0115 | turquoise | CCL5,CD55,CD80,CD86,CXCL8,HSPA5,IL1B,TGFB2,TGFBR2,TNF |
| F2R | G-protein coupled receptor | 0.0428 | turquoise | CD55,CXCL8,DSP,ESR1,FLT1,HMOX1,IGFBP7,IL1B,LDHB,MIF,PLAUR,PTAFR,PTGS2,S100A4,TGFB2,VEGFA,VIM |
| GABBR2 | G-protein coupled receptor | 0.0408 | turquoise | GABBR1,GLUL,GRIA1 |
| RHO | G-protein coupled receptor | 0.0394 | brown | CD44,NT5E |
| ADRB | group | 0.045 | turquoise | ANXA5,ARG1,ATF5,BAK1,BNIP3L,CCNA2,CDK4,CFLAR,CLEC4D,CXCL2,CYP51A1,FAS,GADD45A,HMOX1,PKD1,PTGS2,RBL2,SLC8A1,SMC1A,SRM,SRXN1,WEE1,WNT7B |
| Alpha catenin | group | 0.0483 | turquoise | BIRC3,CXCL2,DIAPH1,ELK3,IGFBP4,IGFBP7,IL1B,ITGAM,LYN,LYZ,MMP11,PTGS2,S100A8,S100A9,STEAP4,TIMP1,TNF,TNFAIP2,VIM,ZYX |
| APC/APC2 | group | 0.0461 | brown | JUP |
| Cyclin A | group | 0.0385 | blue | PCYT1A |
| estrogen receptor | group | 0.0313 | brown | CD44,JUP,NT5E,XBP1 |
| estrogen receptor | group | 0.0444 | turquoise | ABCG1,AGO2,ANXA1,CAV1,CCND2,CD59,CD99,CNKSR1,CXCL8,CXCR4,DSP,GATA3,HBEGF,ITGB1,KISS1R,KLF10,LDLR,LYN,MAN1A1,NRIP1,NT5E,PDGFD,PLAUR,SAT1,SLC9A3R1,SMAD3,TGFB2,TGFBR2,TGFBR3,TIMP1,TIMP2,TIMP3,TLR4,VEGFA,VIM,XBP1 |
| IFN Beta | group | 0.033 | yellow | IL15,PLCG1,TRAF3IP2 |
| PDGF (family) | group | 0.0408 | turquoise | EEF1B2,P4HB,VIM |
| Pki | group | 0.0448 | blue | SP1 |
| Rb | group | 0.0288 | turquoise | BIRC5,CCNA2,CDC6,CDT1,E2F2,ECT2,EED,EZH2,GMNN,PA2G4,PCYT1A,TOP2A,TYMS |
| TEAD | group | 0.0361 | brown | CD44 |
| TGFBR | group | 0.0461 | brown | CD44 |
| TLR2/3/4/9 | group | 0.0154 | turquoise | CD58,CD80,CD86,FCGR2B |
| GDF2 | growth factor | 0.015 | yellow | BMPR2,GADD45B,YWHAH |
| PEX5L | ion channel | 0.0227 | green | IDI1 |
| BRAF | kinase | 0.0359 | brown | TNFRSF10B,XBP1 |
| CSNK2A2 | kinase | 0.0361 | brown | JUP |
| DCAF1 | kinase | 0.0417 | grey | TXNIP |
| DLG1 | kinase | 0.0361 | brown | PTEN |
| EIF2AK2 | kinase | 0.0192 | turquoise | ARG1,BIRC5,BRIP1,CEBPB,CEBPD,CFLAR,CXCL8,EGOT,FAS,GABBR1,IL1B,IRS2,PSMB10,REC8,SAMHD1,TNF,ZNF532 |
| FLT3 | kinase | 0.0426 | turquoise | BAK1,BIRC5,CCND2,CEBPB,LYZ,MCL1,TNF,XRCC6 |
| KDR | kinase | 0.0313 | turquoise | ANXA2,CD38,CREBBP,HAVCR2,HMOX1,MESD,NDC80,PTGS2,XBP1 |
| KHK | kinase | 0.00653 | blue | SLC2A5 |
| KHK | kinase | 0.00608 | yellow | SLC2A5 |
| MAGI2 | kinase | 0.0156 | brown | PTEN |
| PIK3CA | kinase | 0.0339 | turquoise | ATP1A1,BIRC5,CD14,CEBPB,CEBPD,EZH2,HSP90AB1,IRS2,ITGAM,ITGB1,TP63,VIM |
| PLK3 | kinase | 0.0208 | brown | PTEN |
| SGK1 | kinase | 0.00636 | yellow | CDK6,KCNQ5,SLC5A3 |
| TP53RK | kinase | 0.0255 | turquoise | CDKN2C,PSMA3,PSMB7 |
| TXK | kinase | 0.0233 | turquoise | IL2RB,TBX21,TNF,ZBTB16 |
| ZAP70 | kinase | 0.0399 | turquoise | ALAS1,ANG,ANXA1,CD69,ETFA,FKBP5,ITPR1,QPCT,SEC14L1,SSR4,TFEC |
| THRB | ligand-dependent nuclear receptor | 0.0472 | turquoise | APOA2,ATP5MG,CCND2,CCR1,CDCA7L,CDK4,CEBPA,CFD,CSNK1A1,CXCL2,CXCR4,DAD1,FZD1,IGHM,IL7,KLF9,LDLR,LYZ,PAM,PGD,PTAFR,PTGS2,PTTG1,RUNX2,STAT5B,TGFBI,THRB,TLE2,TNF,TREM1,TSHR,YWHAE |
| miR-103-3p (and other miRNAs w/seed GCAGCAU) | mature microRNA | 0.00647 | yellow | AGO2,CDK6 |
| miR-129-5p | mature microRNA | 0.00194 | yellow | BMPR2,SOX4 |
| miR-140-5p (and other miRNAs w/seed AGUGGUU) | mature microRNA | 0.0476 | yellow | SMAD3 |
| miR-148a-3p (and other miRNAs w/seed CAGUGCA) | mature microRNA | 0.0359 | yellow | UBASH3B |
| miR-182-5p (and other miRNAs w/seed UUGGCAA) | mature microRNA | 0.0201 | yellow | CDK6,PIK3CA |
| miR-21-5p | mature microRNA | 0.000397 | yellow | BMPR2,CDK6,GLCCI1,SOCS5 |
| miR-216a-5p (miRNAs w/seed AAUCUCA) | mature microRNA | 0.00523 | brown | PTEN |
| miR-421-3p (and other miRNAs w/seed UCAACAG) | mature microRNA | 0.013 | blue | RBMXL1 |
| miR-421-3p (and other miRNAs w/seed UCAACAG) | mature microRNA | 0.0121 | yellow | RBMXL1 |
| miR-494-3p (miRNAs w/seed GAAACAU) | mature microRNA | 0.0361 | brown | PTEN |
| miR-515-5p (and other miRNAs w/seed UCUCCAA) | mature microRNA | 0.0258 | blue | PIK3C2B |
| miR-515-5p (and other miRNAs w/seed UCUCCAA) | mature microRNA | 0.0241 | yellow | PIK3C2B |
| miR-615-3p | mature microRNA | 0.00573 | green | LCOR |
| miR-873-5p | mature microRNA | 0.000268 | brown | CD44,PTEN |
| mir-122 | microRNA | 0.0264 | turquoise | ALDOA,BCL2L2,CACYBP,CSRP1,CUX1,FKBP1A,FOSL2,LAMC1,MAP4,MTHFD2,PKM,PTPN14,PXN,SERPINB6,VAV3,VIM,WARS |
| mir-181 | microRNA | 0.0313 | turquoise | CD163,CD69,DUSP6,EZH2,IRF8,MCL1,PBX3,PRKCD,RUNX2,TIMP3 |
| mir-182 | microRNA | 0.0344 | yellow | CDK6,PIK3CA |
| mir-183 | microRNA | 0.00638 | brown | JUP,PTEN |
| mir-184 | microRNA | 0.00653 | blue | AGO2 |
| mir-184 | microRNA | 0.00608 | yellow | AGO2 |
| mir-193 | microRNA | 0.00033 | brown | CD2AP,MYO1C,PTEN |
| mir-217 | microRNA | 0.0411 | brown | PTEN |
| mir-322 | microRNA | 0.0265 | green | SMURF2 |
| mir-33 | microRNA | 0.0317 | turquoise | ABCG1,CEBPA,CFD,CROT,FRS2,IRS2 |
| mir-3473 | microRNA | 0.0104 | brown | PTEN |
| mir-383 | microRNA | 0.013 | blue | RBMS1 |
| mir-383 | microRNA | 0.0121 | yellow | RBMS1 |
| mir-503 | microRNA | 0.0133 | green | SMURF2 |
| Mir218 | microRNA | 0.0476 | yellow | LEF1 |
| 2700046G09Rik | other | 0.00523 | brown | PTEN |
| ANK2 | other | 0.00653 | blue | SPTBN1 |
| Ank2 | other | 0.0194 | blue | SPTBN1 |
| ANKRD13C | other | 0.0258 | blue | TBXA2R |
| ANKRD13C | other | 0.0241 | yellow | TBXA2R |
| BAG1 | other | 0.048 | turquoise | FKBP5,GADD45A,MT2A,NR3C1,PTGS2,UAP1 |
| BGLT3 | other | 0.00523 | brown | PTEN |
| BIRC5 | other | 0.0452 | turquoise | BIRC5,CD74,FCGR2B,IGHM,JCHAIN,LYZ,MCL1,MDM2,PTTG1,TP63,VIM |
| BRD1 | other | 0.00115 | blue | ZC3H15,ZNF226 |
| BRD1 | other | 0.001 | yellow | ZC3H15,ZNF226 |
| C9orf116 | other | 0.0259 | brown | PTEN |
| CARD14 | other | 0.0385 | blue | PIK3CA |
| CARD14 | other | 0.0359 | yellow | PIK3CA |
| CDH1 | other | 0.00613 | brown | CD44,JUP,PTEN |
| COL4A3 | other | 0.048 | turquoise | COL4A4,DDR1,LAMC1,PTGS2,TIMP1,TIMP2 |
| CTBP1-DT | other | 0.0194 | blue | SMAD3 |
| CTBP1-DT | other | 0.0181 | yellow | SMAD3 |
| CTR9 | other | 0.0393 | turquoise | HRASLS2,IGFBP4,RAB31,RASGRP1,TIAM1,USP53 |
| DANCR | other | 0.0233 | turquoise | RUNX2,TIMP2,TIMP3,VIM |
| DBH-AS1 | other | 0.0359 | yellow | CDK6 |
| DCN | other | 0.0422 | blue | SMAD3,TCHP |
| DCN | other | 0.0371 | yellow | SMAD3,TCHP |
| DDB1 | other | 0.0411 | brown | PTEN |
| DLC1 | other | 0.0418 | yellow | CDK6 |
| DMD | other | 0.0204 | turquoise | ABI2,ACTG1,APLP2,ARHGAP20,CAPN3,CLIP4,CNKSR1,CYFIP2,DDX50,FBXO32,GATM,HERC1,HSPA8,KCNN3,LRCH1,LYZ,MAP3K9,MAP7,MEF2C,MSI2,OBSCN,PKM,PSTPIP2,S100A10,SERPINA1,SH3GLB1,SLC9A7,ST3GAL6,TNRC6B,TPI1,TRIM44,UTRN,VIM,XK |
| DVL1 | other | 0.0359 | yellow | LEF1 |
| DVL2 | other | 0.0359 | yellow | LEF1 |
| EMILIN1 | other | 0.00523 | brown | PTEN |
| GRSF1 | other | 0.00653 | blue | AGO2 |
| GRSF1 | other | 0.00608 | yellow | AGO2 |
| HRG | other | 0.0195 | turquoise | CD74,CXCR4,FCGR3A/FCGR3B,ITGAX,TIMP1,TIMP3 |
| ITGB8 | other | 0.0194 | blue | SMAD3 |
| ITGB8 | other | 0.0181 | yellow | SMAD3 |
| KRT19 | other | 0.0259 | brown | PTEN |
| L1CAM | other | 0.0208 | green | IDI1 |
| LIMS2 | other | 0.0385 | blue | CTNNA1 |
| LIMS2 | other | 0.0359 | yellow | CTNNA1 |
| LOC100288798 | other | 0.031 | brown | CD9 |
| LY9 | other | 0.0255 | turquoise | CD19,CR2,ZBTB16 |
| MAPKAP1 | other | 0.0461 | brown | PTEN |
| MBNL1 | other | 0.0208 | brown | PTEN |
| MFAP2 | other | 0.031 | brown | CDC42EP3 |
| MRPL12 | other | 0.0322 | blue | SYPL1 |
| MSI2 | other | 0.0476 | yellow | SMAD3 |
| NDFIP2 | other | 0.0208 | brown | PTEN |
| NFASC | other | 0.0394 | grey | DYNLT3 |
| NPHS2 | other | 0.0156 | brown | CD2AP |
| NTNG2 | other | 0.00191 | green | LRRC4 |
| PTENP1 | other | 0.00523 | brown | PTEN |
| RAP1GAP | other | 0.0359 | yellow | CDK6 |
| RLN2 | other | 0.0332 | turquoise | CD36,TGFB2,TIMP1,VEGFA |
| RNU7-1 | other | 0.013 | blue | H3F3A/H3F3B |
| RNU7-1 | other | 0.0121 | yellow | H3F3A/H3F3B |
| RPL5 | other | 0.0208 | brown | PTEN |
| RPS11 | other | 0.0208 | brown | PTEN |
| RPS12 | other | 0.0208 | brown | PTEN |
| RPS15 | other | 0.0208 | brown | PTEN |
| RPS18 | other | 0.0208 | brown | PTEN |
| SAV1 | other | 0.0411 | brown | SOX4 |
| SAV1 | other | 0.0476 | yellow | SOX4 |
| Tcrd | other | 0.0359 | yellow | IL15 |
| TNRC6A | other | 0.0361 | brown | PTEN |
| TNRC6B | other | 0.00523 | brown | PTEN |
| TPM3 | other | 0.0461 | brown | TNFRSF10B |
| TRG | other | 0.0461 | brown | NT5E |
| TRG | other | 0.0154 | turquoise | CAV1,FCER1G,IL1B,NT5E |
| TRIM65 | other | 0.0208 | brown | PTEN |
| WLS | other | 0.00415 | yellow | BMPR2,LEF1 |
| ZNF652 | other | 0.0408 | turquoise | TGFB2,TGFBR2,VIM |
| CTSV | peptidase | 0.0361 | brown | CD2AP |
| MALT1 | peptidase | 0.0411 | brown | CD44 |
| MMP3 | peptidase | 0.0224 | grey | PAPOLA,THOC6 |
| OTUD3 | peptidase | 0.00523 | brown | PTEN |
| ZMPSTE24 | peptidase | 0.0293 | blue | GADD45B,SOCS5 |
| ZMPSTE24 | peptidase | 0.0257 | yellow | GADD45B,SOCS5 |
| DUSP5 | phosphatase | 0.0462 | grey | HIVEP3 |
| G6PC3 | phosphatase | 0.0322 | blue | NCF1 |
| PTP4A2 | phosphatase | 0.0208 | brown | PTEN |
| PTP4A3 | phosphatase | 0.0035 | brown | JUP,PTEN |
| AFF1 | transcription regulator | 0.031 | brown | PTEN |
| ATF5 | transcription regulator | 0.0164 | grey | TXNIP |
| ATF7 | transcription regulator | 0.0418 | yellow | DUSP5 |
| CTBP2 | transcription regulator | 0.0031 | brown | JUP,PTEN |
| DTX1 | transcription regulator | 0.0393 | turquoise | CEP55,DUSP6,HIGD1A,MCL1,TGFB2,VEGFA |
| EGR4 | transcription regulator | 0.0418 | yellow | MYBL1 |
| FOXL2 | transcription regulator | 0.0406 | brown | CPM,SOX4 |
| HDAC10 | transcription regulator | 0.0187 | grey | TXNIP |
| HIC1 | transcription regulator | 0.0406 | brown | ACKR3,AHNAK2 |
| HIC1 | transcription regulator | 0.00605 | green | SFXN3,TNFAIP8 |
| HOXC11 | transcription regulator | 0.0114 | green | PAWR |
| HOXD10 | transcription regulator | 0.0382 | brown | CD44,RHOB |
| HR | transcription regulator | 0.0281 | yellow | LEF1,PLCG1 |
| KHDRBS1 | transcription regulator | 0.0361 | brown | CD44 |
| KLF1 | transcription regulator | 0.0365 | turquoise | BCL11A,BSG,CD55,CDKN2C,E2F2,EPB42,KCNN4,SLC3A2,TFRC |
| KMT2D | transcription regulator | 0.0153 | brown | ADGRA3,IKZF2,NT5E,RIMKLB |
| LHX6 | transcription regulator | 0.0359 | yellow | LEF1 |
| MAX | transcription regulator | 0.0172 | turquoise | CBX5,CCND2,CDK4,DLEU2,DUSP7,E2F2,EED,EZH2,FBXO32,GADD45A,HMGA1,ID2,JARID2,KLF10,MTHFD1,TXNIP,UBE2C |
| NCOA1 | transcription regulator | 0.0263 | green | CHD9,PAWR |
| PBX3 | transcription regulator | 0.0394 | green | CHD9 |
| PCGF2 | transcription regulator | 0.0201 | yellow | CDK6,SMAD3 |
| PPRC1 | transcription regulator | 0.0269 | yellow | DUSP5,TM6SF1 |
| PROP1 | transcription regulator | 0.031 | brown | TLE3 |
| RBFOX2 | transcription regulator | 0.0361 | brown | PTEN |
| SIM1 | transcription regulator | 0.0106 | turquoise | ABCG1,ANG,CCR1,CD86,COPZ2,CPXM2,CRH,CXCR5,ELL2,FCGR2A,FNBP1,GLUL,GZMH,ICMT,IGFBP4,IL6R,LRRFIP1,MDM4,NACA,NAP1L4,NDUFA1,OAZ1,PLCB1,POLD4,RBL2,RGS10,SERPINA5,SMAD3,SYT7,TCL1A,THRB,TNF,TYROBP,WNT7B |
| SIRT2 | transcription regulator | 0.0302 | green | IDI1 |
| SREBF2 | transcription regulator | 0.0109 | turquoise | ACAA2,ACSL1,APOA2,CAMK1D,CYP51A1,DBI,FABP5,GTF2I,IDI1,IRS2,LDLR,NLRP3,PCYT1A,PLIN2,PMVK,STARD4 |
| TFDP2 | transcription regulator | 0.0322 | blue | STAG3 |
| TFDP2 | transcription regulator | 0.03 | yellow | STAG3 |
| TFEB | transcription regulator | 0.0313 | turquoise | ATP6V0E1,ATP6V1A,CCL5,CTSA,GBA,GNS,IL1B,PSAP,VEGFA |
| TRIM32 | transcription regulator | 0.013 | blue | DTNBP1 |
| VAV1 | transcription regulator | 0.0317 | turquoise | CCND2,CD69,PTGS2,REL,TNF,VEGFA |
| YBX1 | transcription regulator | 0.0398 | yellow | CDK6,PIK3CA |
| ZNF382 | transcription regulator | 0.0476 | yellow | CDK6 |
| ZNF423 | transcription regulator | 0.0448 | blue | CD79B |
| EEF1A2 | translation regulator | 0.0448 | blue | NCF1 |
| PCBP1 | translation regulator | 0.0361 | brown | CD44 |
| CD247 | transmembrane receptor | 0.0339 | turquoise | ALAS1,ANG,ETFA,FCGR2A,ITPR1,MTHFD2,QPCT,RNF103,RPS17,SSR4,SYT7,TFEC |
| CD69 | transmembrane receptor | 0.0317 | turquoise | CCL5,CD69,IL1B,S100A9,TGFB2,TNF |
| CSF3R | transmembrane receptor | 0.0189 | turquoise | CD14,CSF3R,GFI1,ITGAM,LYZ |
| IL21R | transmembrane receptor | 0.0461 | brown | IGHG1 |
| OSMR | transmembrane receptor | 0.0351 | turquoise | ADGRE1,BIRC3,BIRC5,CD4,CFLAR,CXCL2,GBP4,IL6R,ITGAX,SERPINA1,TIMP1 |
| SEMA4D | transmembrane receptor | 0.031 | brown | IGHG1 |
| TNFRSF11A | transmembrane receptor | 0.0417 | grey | AKAP13 |
| APOB | transporter | 0.0418 | turquoise | BIVM,CD36,PPARGC1B,PSMA7,PSMB7,PSME2,RUNX2 |
| ATP2B2 | transporter | 0.031 | brown | XBP1 |
| ATP2B4 | transporter | 0.0156 | brown | ATP2A3 |
| MFSD2A | transporter | 0.0376 | green | IDI1 |
| NUP98 | transporter | 0.013 | blue | YWHAH |
| NUP98 | transporter | 0.0121 | yellow | YWHAH |
| PRF1 | transporter | 0.0461 | brown | CD44 |
| SLC4A5 | transporter | 0.013 | blue | SPTBN1 |
| SLC5A8 | transporter | 0.0361 | brown | TNFRSF10B |
| SLC5A8 | transporter | 0.0418 | yellow | TNFRSF10A |