**Figure S1.** Summary of associations for three polygenic risk score (PRS) models of posttraumatic stress disorder re-experiencing ($\mathrm{PTSD_{REX}}$) predicting traumatic loss-related PTSD: (**Model 1**) was covaried for age, sex, and 10 principal components of ancestry, (**Model 2**) was additionally covaried for attachment style, and (**Model 3**) was additionally covaried for attachment style and the interactive term of attachment style by $\mathrm{PTSD_{REX}}$ PRS**.** The most significant gene set is labeled.

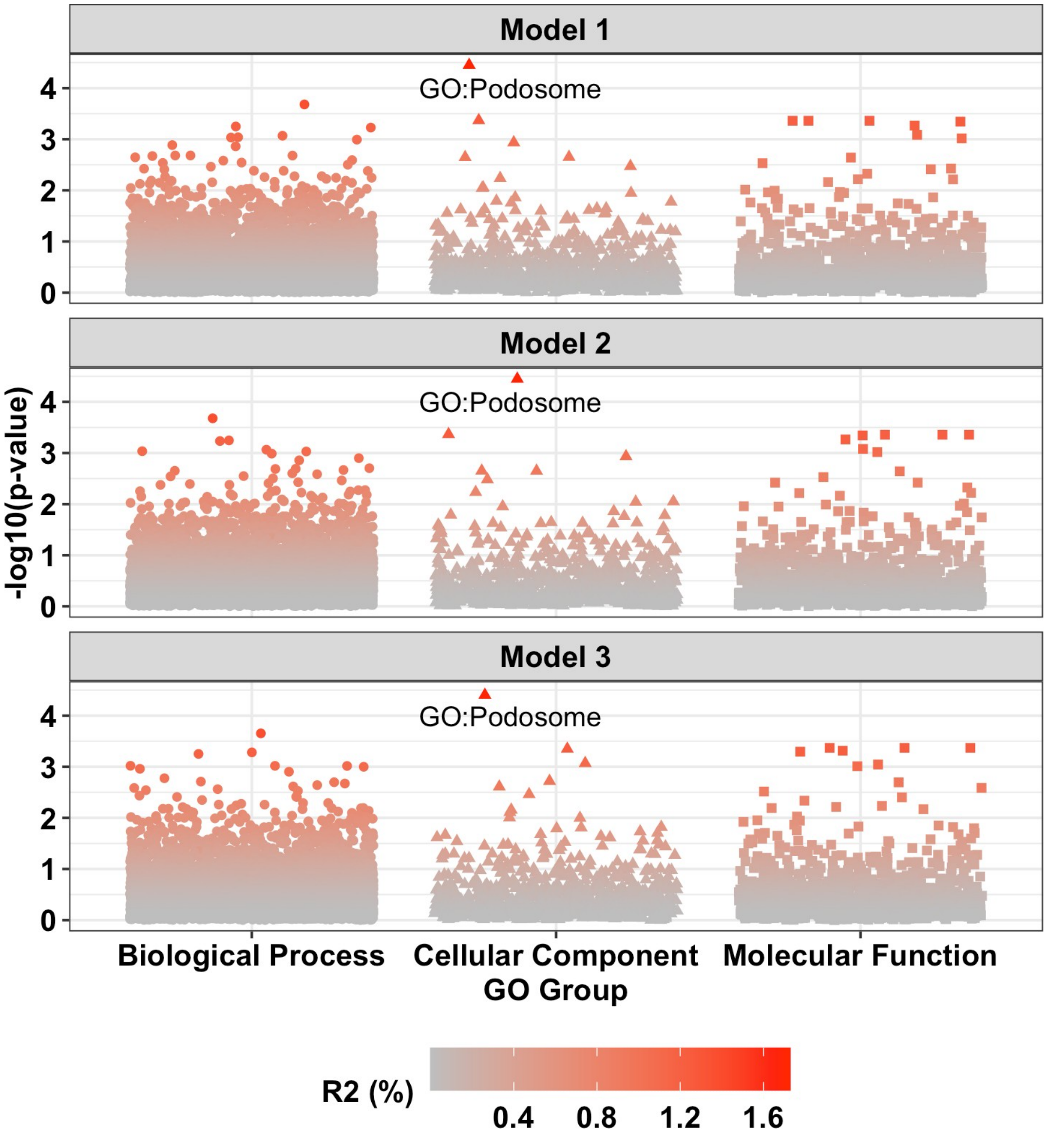

**Figure S2.** Representative Gene Ontology network for biological processes detected by models for $\text{PTSD}_{\text{REX}}$ PRS predicting traumatic loss-related PTSD. Due to lack of distinct observational network sub-clusters, network node positions were adjusted to improve visual clarity.

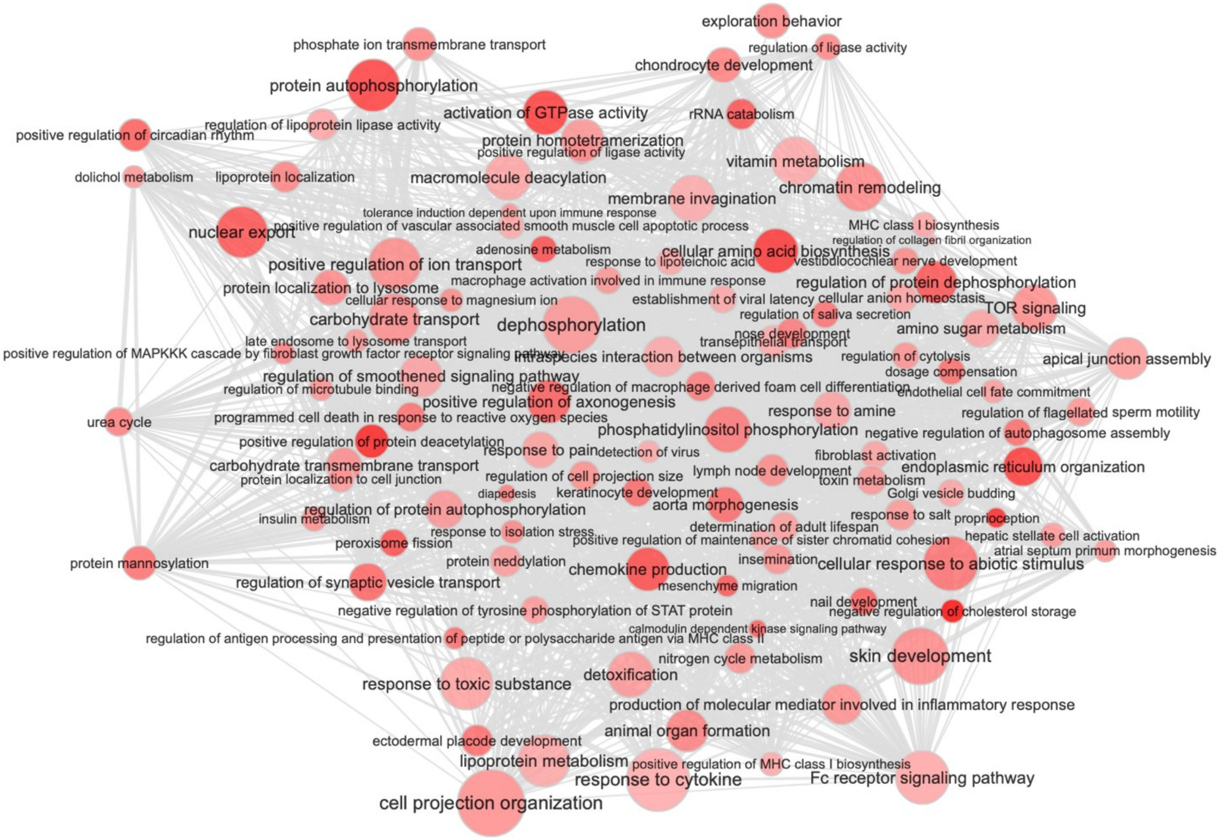

**Figure S3.** Representative Gene Ontology network for cellular components detected by models for PTSD$_{\mathrm{REX}}$ PRS predicting traumatic loss-related PTSD.

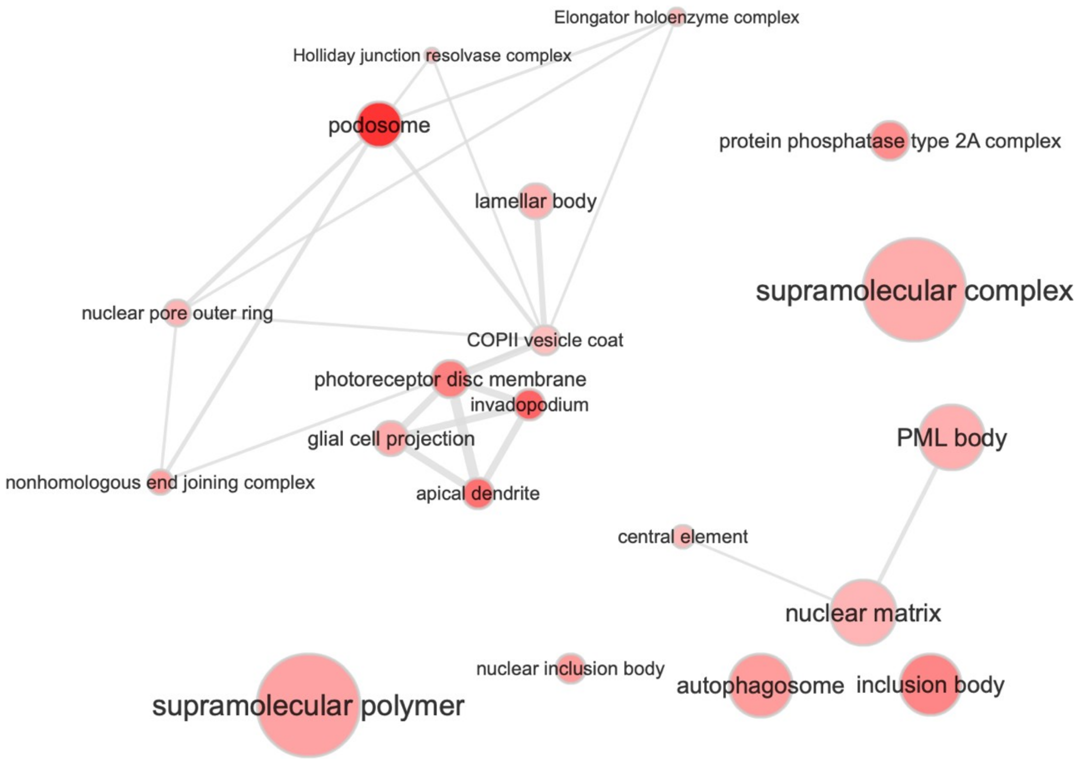

**Figure S4.** Representative Gene Ontology network for molecular functions detected by models for $\mathrm{PTSD}_{\mathrm{REX}}$ PRS predicting traumatic loss-related PTSD.

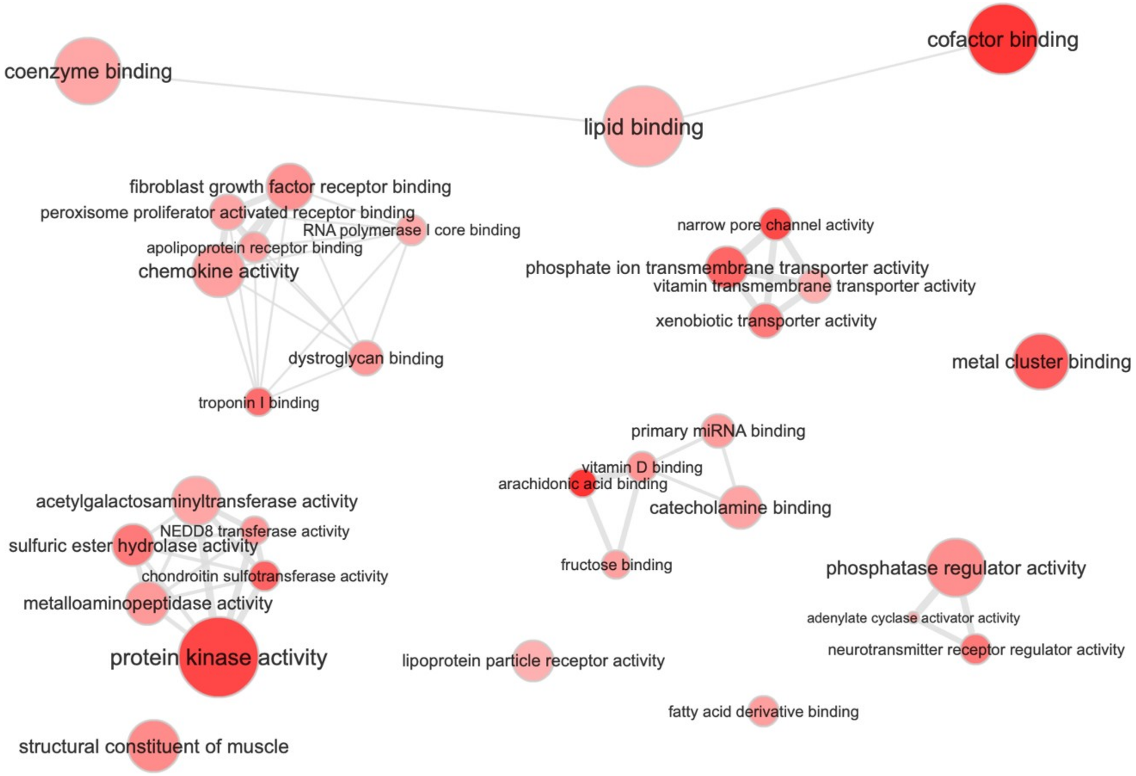

**Table S1.** Full list of genes represented in gene ontologies (GO) from **Table 2** and **Figures S1-S4** for gene-sets identified by polygenic risk score (PRS) models of posttraumatic stress disorder re-experiencing (PTSDREX).

| **Type** | **Biological Process** | | | | **Cellular Component** | | | | **Molecular Function** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GO** | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| **Description** | Endoplasmic reticulum organization | Negative regulation of cholesterol storage | Proprioception | Exploration behavior | Podosome | Supramolecular complex | Supramolecular polymer | Invadopodium | Protein kinase activity | Structural constituent of muscle | Narrow-pore channel activity | Lipoprotein particle receptor activity | Arachidonic acid binding | Neurotransmitter receptor regulator activity | Troponin I binding | Cofactor binding | Fatty acid derivative binding |
| **Genes** | RTN3 | NR1H3 | FXN | CHL1 | ACTR2 | ARHGEF2 | KIF28P | ACTR2 | BK3 | NEBL | KCNK7 | STAB1 | ALOX5AP | RTN4 | NR1H4 | RTN4 | ACOT7 |
| | TRDN | TTC39B | GBX1 | CHRNA4 | ADAM8 | ACTL8 | KRTAP4_9 | PDPN | SGK2 | MYOM3 | PANX1 | LRP10 | PPARG | TRDN | TTC39B | TRDN | ACOT12 |
| | RAB10 | ABCA1 | TMEM150C | LRRK2 | AFAP1L1 | ACTN2 | DNAJB6 | AFAP1L1 | HIPK3 | MYL6B | NALCN | ILDR1 | S100A8 | RAB11 | ABCA2 | RAB11 | DBI |
| | LMAN2 | MIR146A | POU4F1 | BRINP1 | PALLD | AGO1 | KRTAP9_7 | DPP4 | CDK2 | CSRP1 | KCNK18 | LRP12 | STX3 | LMAN3 | MIR146A | LMAN3 | ALOX5AP |
| | ZFYVE27 | PPARA | | DLG4 | SH3PXD2B | AGO3 | KRTAP16_1 | FAP | CDK3 | DAG1 | KCNK1 | LDLR | | ZFYVE28 | PPARA | ZFYVE28 | ACOT11 |
| | LRRK2 | PPARD | | ABAT | GSN | AHCTF1 | KRTAP9_6 | RUFY3 | TNK2 | SYNM | KCNK2 | LRP1 | | LRRK3 | PPARD | LRRK3 | GCDH |
| | TOR1AIP2 | PPARG | | DPP4 | HNRNPK | ASPM | KRTAP29_1 | ITGA3 | CDK4 | PDLIM3 | KCNK3 | LRP6 | | TOR1AIP3 | PPARG | TOR1AIP3 | ACAD9 |
| | SPTSSB | NR1H2 | | GAD1 | LCP1 | ATP2B4 | DNM1L | ITGB1 | CDK6 | MYLPF | KCNK4 | STAB2 | | SPTSSB | NR1H3 | SPTSSB | HADHA |
| | MAPK15 | ABCG1 | | GIP | ASAP1 | BCL10 | ABCC9 | PAK1 | CDK7 | KRT19 | KCNK9 | CXCL16 | | MAPK16 | ABCG2 | MAPK16 | ACADL |
| | SEC31A | | | ABL2 | BIN2 | CACNA1S | MYZAP | PLAUR | CDK8 | ASPH | KCNK10 | SORL1 | | SEC31A | | SEC31A | ACBD7 |
| | RAB3GAP1 | | | APOE | PTPN12 | CAMSAP2 | ARPC3 | FSCN1 | CDK9 | MYBPC1 | KCNK13 | VLDLR | | RAB3GAP2 | | RAB3GAP2 | ALDH6A1 |
| | RAB18 | | | ITGA3 | KIF9 | CAPZB | KIF20A | SVIL | CDKN1A | MYBPC2 | KCNK12 | LRP8 | | RAB19 | | RAB19 | PPARG |
| | TMCC1 | | | PRKCE | SH3GL1 | CASQ1 | DNAL4 | EZR | SPEG | MYBPC3 | RHAG | CD36 | | TMCC2 | | TMCC2 | S100A8 |
| | ARL6IP1 | | | SLC4A10 | FSCN1 | CASQ2 | LRPPRC | | PAK4 | MYBPH | KCNK16 | SCARB1 | | ARL6IP2 | | ARL6IP2 | SCP2 |
| | RAB3GAP2 | | | JPH3 | SRC | CCDC181 | SPRY2 | | TESK2 | MYH8 | TMEM175 | | | RAB3GAP3 | | RAB3GAP3 | ACBD3 |
| | GAK | | | C12orf10 | SVIL | CCSAP | CDK2AP2 | | MERTK | MYH11 | KCNK5 | | | GAK | | GAK | SOAT1 |
| | ATL3 | | | TNR | TJP1 | CCT3 | APC2 | | STK25 | MYL1 | KCNK17 | | | ATL4 | | ATL4 | STX3 |
| | SEC31B | | | EIF4A3 | VCAM1 | CDC42 | KATNB1 | | CAMKK2 | MYL2 | KCNK6 | | | SEC31B | | SEC31B | ACBD4 |
| | TOR1B | | | | VCL | CENPF | KLHL41 | | MAP3K2 | MYL3 | | | | TOR1B | | TOR1B | PNPLA3 |
| | SEC61A1 | | | | FERMT3 | CEP170 | TUBA1B | | PLK2 | MYL5 | | | | SEC61A2 | | SEC61A2 | ACBD6 |
| | MIA3 | | | | SCIN | CHTOP | TUBB3 | | NEK6 | MYL6 | | | | MIA4 | | MIA4 | ACBD5 |
| | ATL1 | | | | ARHGEF2 | COL11A1 | MYL12B | | CCNI | NEB | | | | ATL2 | | ATL2 | |
| | REEP2 | | | | LPXN | CSRP1 | NDRG1 | | TLK2 | PLEC | | | | REEP3 | | REEP3 | |
| | STX18 | | | | SH3PXD2A | DHX9 | TUBGCP3 | | RIPK3 | JPH1 | | | | STX19 | | STX19 | |
| | TMEM38B | | | | WDR1 | DISC1 | BAIAP2 | | CHEK1 | SMTN | | | | TMEM38B | | TMEM38B | |
| | TMEM33 | | | | | DNAH14 | APPBP2 | | CIT | TPM1 | | | | TMEM34 | | TMEM34 | |
| | CCDC47 | | | | | DNM3 | FBLN5 | | MAP4K5 | TPM2 | | | | CCDC48 | | CCDC48 | |
| | RTN4 | | | | | DVL1 | NEBL | | MAP4K1 | TPM4 | | | | RTN5 | | RTN5 | |
| | ATL2 | | | | | DYRK3 | GLRX3 | | CHEK2 | TTN | | | | ATL3 | | ATL3 | |
| | SGTA | | | | | ENO1 | DCTN2 | | IRAK3 | CSRP3 | | | | SGTA | | SGTA | |
| | REEP1 | | | | | ESPN | ARFGEF2 | | AKAP13 | CAPN3 | | | | REEP2 | | REEP2 | |
| | BNIP1 | | | | | FBXO28 | CCT7 | | STK38 | OBSCN | | | | BNIP2 | | BNIP2 | |
| | TMEM38A | | | | | FLG | CCT4 | | CHUK | SORBS2 | | | | TMEM38A | | TMEM38A | |
| | BAG6 | | | | | GNG12 | CCT2 | | ALPK2 | MYOM1 | | | | BAG7 | | BAG7 | |
| | LMAN1L | | | | | HAX1 | PDLIM5 | | CLK1 | ACTN2 | | | | LMAN1L | | LMAN1L | |
| | LMAN2L | | | | | HOOK1 | SPAG5 | | CLK2 | ACTN3 | | | | LMAN2L | | LMAN2L | |
| | CASQ1 | | | | | IFFO2 | CENPE | | CLK3 | NEXN | | | | CASQ2 | | CASQ2 | |
| | JAGN1 | | | | | IGFN1 | GAS2L1 | | LRRK2 | MYOM2 | | | | JAGN2 | | JAGN2 | |
| | CAV2 | | | | | ITGB3BP | RGS14 | | CSNK1A1L | | | | | CAV3 | | CAV3 | |

| Type | Biological Process | | | | Cellular Component | | | | Molecular Function | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GO | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| Genes | SEC16B | | | | | KCNAB2 | NUDC | | PLK5 | | | | | SEC16B | | SEC16B | |
| | VAPB | | | | | KIF14 | KIF1C | | UHMK1 | | | | | VAPB | | VAPB | |
| | EIF2AK3 | | | | | KIF17 | NEK6 | | ACVR1C | | | | | EIF2AK4 | | EIF2AK4 | |
| | TRAM2 | | | | | KIF1B | NCKAP1 | | GRK7 | | | | | TRAM3 | | TRAM3 | |
| | SEC16A | | | | | KIF21B | GJB6 | | MAP3K8 | | | | | SEC16A | | SEC16A | |
| | | | | | | KIF26B | HSPH1 | | TAF1L | | | | | | | | |
| | | | | | | KIF28P | TUBGCP2 | | MYO3B | | | | | | | | |
| | | | | | | KIF2C | FERMT2 | | NEK7 | | | | | | | | |
| | | | | | | KIFAP3 | MAPRE2 | | TRPM6 | | | | | | | | |
| | | | | | | KLHL21 | KIF2C | | STK35 | | | | | | | | |
| | | | | | | LDLRAP1 | TLK2 | | MAPK14 | | | | | | | | |
| | | | | | | LIN28A | TPPP | | CSF1R | | | | | | | | |
| | | | | | | LMNA | KATNA1 | | CSK | | | | | | | | |
| | | | | | | LMOD1 | KIF3A | | CSNK1A1 | | | | | | | | |
| | | | | | | MACF1 | LDB3 | | CSNK1E | | | | | | | | |
| | | | | | | MAEL | RASSF1 | | CSNK1G2 | | | | | | | | |
| | | | | | | MAP10 | AKAP13 | | CSNK1G3 | | | | | | | | |
| | | | | | | MEAF6 | DCTN3 | | CSNK2A1 | | | | | | | | |
| | | | | | | MOV10 | KRT71 | | CSNK2A2 | | | | | | | | |
| | | | | | | MYBPH | AHNAK2 | | CSNK2B | | | | | | | | |
| | | | | | | MYOM3 | KIF12 | | TTBK2 | | | | | | | | |
| | | | | | | NAV1 | TWF2 | | HIPK4 | | | | | | | | |
| | | | | | | NEK2 | SYNPO | | PDIK1L | | | | | | | | |
| | | | | | | NEK7 | TUBGCP5 | | SIK1 | | | | | | | | |
| | | | | | | NEXN | FBXO32 | | NEK10 | | | | | | | | |
| | | | | | | NOS1AP | HAUS1 | | DAPK1 | | | | | | | | |
| | | | | | | NSL1 | ARHGEF25 | | DAPK3 | | | | | | | | |
| | | | | | | NUDC | C10orf71 | | DCLK2 | | | | | | | | |
| | | | | | | NUF2 | CLTC | | NIM1K | | | | | | | | |
| | | | | | | NUP133 | KRT74 | | DYRK1A | | | | | | | | |
| | | | | | | OBSCN | TPPP2 | | EFNA3 | | | | | | | | |
| | | | | | | PABPC4 | WHAMM | | EFNA4 | | | | | | | | |
| | | | | | | PBXIP1 | ACKR2 | | EGFR | | | | | | | | |
| | | | | | | PDE4B | KIF19 | | EPHA2 | | | | | | | | |
| | | | | | | PDE4DIP | KRT222 | | MARK2 | | | | | | | | |
| | | | | | | PKP1 | KRT40 | | STK32A | | | | | | | | |
| | | | | | | PMF1 | MISP | | EPHA1 | | | | | | | | |
| | | | | | | PPP1R12B | CCSAP | | EPHA3 | | | | | | | | |
| | | | | | | PPP2R5A | IFFO2 | | EPHA4 | | | | | | | | |
| | | | | | | PSEN2 | MYOM3 | | EPHA5 | | | | | | | | |
| | | | | | | PSRC1 | DNAH14 | | EPHA7 | | | | | | | | |
| | | | | | | PUM1 | COL1A1 | | EPHA8 | | | | | | | | |
| | | | | | | RASSF5 | COL1A2 | | EPHB1 | | | | | | | | |
| | | | | | | RC3H1 | COL2A1 | | EPHB2 | | | | | | | | |
| | | | | | | RCC2 | COL3A1 | | HIPK1 | | | | | | | | |
| | | | | | | RCSD1 | COL4A1 | | EPHB3 | | | | | | | | |
| | | | | | | RYR2 | COL4A2 | | EPHB4 | | | | | | | | |
| | | | | | | SLC2A1 | COL4A3 | | EPHB6 | | | | | | | | |
| | | | | | | STMN1 | COL4A4 | | ERBB2 | | | | | | | | |
| | | | | | | SYNC | COL5A1 | | ERBB3 | | | | | | | | |
| | | | | | | TAF5L | COL5A2 | | ERBB4 | | | | | | | | |
| | | | | | | TARDBP | COL6A1 | | ERCC2 | | | | | | | | |

| **Type** | **Biological Process** | | | | **Cellular Component** | | | | **Molecular Function** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GO** | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| **Genes** | | | | | | TBCE | XIRP2 | | AKT1 | | | | | | | | |
| | | | | | | TDRD5 | COL8A1 | | ERCC3 | | | | | | | | |
| | | | | | | TDRKH | COL11A1 | | AKT2 | | | | | | | | |
| | | | | | | TMOD4 | COL11A2 | | ERN1 | | | | | | | | |
| | | | | | | TNNI1 | KLHL40 | | PTK2B | | | | | | | | |
| | | | | | | TNNT2 | SHROOM1 | | EFEMP1 | | | | | | | | |
| | | | | | | TPM3 | ADORA2A | | MMD2 | | | | | | | | |
| | | | | | | TPR | CRHBP | | FER | | | | | | | | |
| | | | | | | TRIM63 | MYL6B | | FES | | | | | | | | |
| | | | | | | TTLL7 | NEK7 | | MAPK15 | | | | | | | | |
| | | | | | | UHMK1 | DYNLL2 | | FGFR1 | | | | | | | | |
| | | | | | | WDR47 | KRT72 | | FGFR3 | | | | | | | | |
| | | | | | | YBX1 | CRYAB | | FGFR2 | | | | | | | | |
| | | | | | | YTHDF2 | PARP4 | | FGFR4 | | | | | | | | |
| | | | | | | ACTG2 | KRT80 | | FGR | | | | | | | | |
| | | | | | | ANKRD23 | CSNK1A1 | | AAK1 | | | | | | | | |
| | | | | | | BARD1 | CSRP1 | | LMTK2 | | | | | | | | |
| | | | | | | BIN1 | DNAH2 | | ICK | | | | | | | | |
| | | | | | | BMP10 | KIF18B | | FASTKD2 | | | | | | | | |
| | | | | | | CALM2 | WIPF2 | | MAST1 | | | | | | | | |
| | | | | | | CCT4 | KRT25 | | STK38L | | | | | | | | |
| | | | | | | CCT7 | KLC3 | | MAST3 | | | | | | | | |
| | | | | | | CENPA | ADRA1A | | TNIK | | | | | | | | |
| | | | | | | CENPO | CTNNB1 | | SMG1 | | | | | | | | |
| | | | | | | CLASP1 | TTC30B | | CDK19 | | | | | | | | |
| | | | | | | COL3A1 | RMDN2 | | MAST2 | | | | | | | | |
| | | | | | | COL4A3 | UPP2 | | PASK | | | | | | | | |
| | | | | | | COL4A4 | JAKMIP1 | | FLT1 | | | | | | | | |
| | | | | | | COL5A2 | CYLD | | FLT3 | | | | | | | | |
| | | | | | | DCDC2C | CYP2A6 | | SIK2 | | | | | | | | |
| | | | | | | DCTN1 | CAMSAP1 | | FLT4 | | | | | | | | |
| | | | | | | DDX1 | TTLL11 | | SIK3 | | | | | | | | |
| | | | | | | DES | DAG1 | | BRD4 | | | | | | | | |
| | | | | | | DIS3L2 | DAPK3 | | MMD | | | | | | | | |
| | | | | | | DNAH6 | EML5 | | CDK20 | | | | | | | | |
| | | | | | | DNAH7 | KRT28 | | DAPK2 | | | | | | | | |
| | | | | | | DYNC1I2 | DBN1 | | PRKD3 | | | | | | | | |
| | | | | | | DYNC2LI1 | DCTN1 | | ALK | | | | | | | | |
| | | | | | | DYSF | TTLL9 | | FRK | | | | | | | | |
| | | | | | | EHBP1 | TTLL8 | | MTOR | | | | | | | | |
| | | | | | | EML4 | DDX6 | | ABL1 | | | | | | | | |
| | | | | | | EML6 | DCLK2 | | FYN | | | | | | | | |
| | | | | | | ESPNL | DES | | ANKK1 | | | | | | | | |
| | | | | | | FAM161A | SYNPO2 | | PAN3 | | | | | | | | |
| | | | | | | FASTKD2 | DLG1 | | DSTYK | | | | | | | | |
| | | | | | | FHL2 | DNM1 | | GAK | | | | | | | | |
| | | | | | | FIGN | DNAH5 | | PRKD2 | | | | | | | | |
| | | | | | | GIGYF2 | DNAH6 | | SOSTDC1 | | | | | | | | |
| | | | | | | GPATCH11 | DNAH8 | | LATS2 | | | | | | | | |
| | | | | | | HDAC4 | DNAH9 | | AMHR2 | | | | | | | | |
| | | | | | | HJURP | DYNC1H1 | | ABL2 | | | | | | | | |
| | | | | | | HNRNPA3 | DYNC1I1 | | EIF2AK1 | | | | | | | | |

| **Type** | **Biological Process** | | | | **Cellular Component** | | | | **Molecular Function** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GO** | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| **Genes** | | | | | | HOXD10 | DYNC1I2 | | STK36 | | | | | | | | |
| | | | | | | KIF1A | DYNC1LI2 | | STK39 | | | | | | | | |
| | | | | | | KIF3C | DNM2 | | STK32C | | | | | | | | |
| | | | | | | KIF5C | DPYSL2 | | KSR2 | | | | | | | | |
| | | | | | | KLHL41 | DPYSL3 | | NEK8 | | | | | | | | |
| | | | | | | LRPPRC | DSP | | EPHA10 | | | | | | | | |
| | | | | | | LTBP1 | DVL1 | | EPHA6 | | | | | | | | |
| | | | | | | MAP2 | DNAH10 | | GRK4 | | | | | | | | |
| | | | | | | MAPRE3 | AIF1 | | GRK5 | | | | | | | | |
| | | | | | | MARCO | ANKRD23 | | GRK6 | | | | | | | | |
| | | | | | | MYL1 | ELN | | MKNK2 | | | | | | | | |
| | | | | | | MYO1B | KCTD6 | | HIPK2 | | | | | | | | |
| | | | | | | NCKAP1 | EML1 | | TBK1 | | | | | | | | |
| | | | | | | NCKAP5 | MARK2 | | GSK3A | | | | | | | | |
| | | | | | | NEB | DNAH12 | | GSK3B | | | | | | | | |
| | | | | | | OBSL1 | ENO1 | | GTF2H3 | | | | | | | | |
| | | | | | | ORC2 | CMYA5 | | GTF2H4 | | | | | | | | |
| | | | | | | POLR2D | TUBB | | GUCY2C | | | | | | | | |
| | | | | | | POTEKP | DMTN | | EEF2K | | | | | | | | |
| | | | | | | PUM2 | EVPL | | PKN3 | | | | | | | | |
| | | | | | | RHOQ | FBLN1 | | HCK | | | | | | | | |
| | | | | | | RMDN2 | FBN1 | | HUNK | | | | | | | | |
| | | | | | | ROCK2 | FBN2 | | PIK3R4 | | | | | | | | |
| | | | | | | SCN1A | SKA1 | | MYLK4 | | | | | | | | |
| | | | | | | SCTR | REEP3 | | NEK5 | | | | | | | | |
| | | | | | | SLC1A4 | KIF6 | | IGF1R | | | | | | | | |
| | | | | | | SLC8A1 | ALDOA | | IGF2R | | | | | | | | |
| | | | | | | SNRPG | FHL2 | | IKBKB | | | | | | | | |
| | | | | | | SPAST | FKBP1A | | INSR | | | | | | | | |
| | | | | | | SPC25 | FKBP4 | | INSRR | | | | | | | | |
| | | | | | | SPTBN1 | WDR47 | | IRAK2 | | | | | | | | |
| | | | | | | SUMO1 | MAPRE1 | | ITK | | | | | | | | |
| | | | | | | TIA1 | KIFAP3 | | ITPKA | | | | | | | | |
| | | | | | | TMEM214 | MAPRE3 | | JAK1 | | | | | | | | |
| | | | | | | TRAPPC12 | HABP4 | | JAK2 | | | | | | | | |
| | | | | | | TRIM54 | SIRT2 | | JAK3 | | | | | | | | |
| | | | | | | TTC30A | SHANK2 | | MAST4 | | | | | | | | |
| | | | | | | TTC30B | TRIM32 | | KDR | | | | | | | | |
| | | | | | | TTLL4 | TPX2 | | KIT | | | | | | | | |
| | | | | | | TTN | NINL | | SBK1 | | | | | | | | |
| | | | | | | TUBA4A | MYH15 | | LCK | | | | | | | | |
| | | | | | | TUBA4B | PALLD | | LIMK1 | | | | | | | | |
| | | | | | | UPP2 | KIF21B | | LIMK2 | | | | | | | | |
| | | | | | | WIPF1 | TTLL5 | | LTBP1 | | | | | | | | |
| | | | | | | XIRP2 | KIF1B | | LYN | | | | | | | | |
| | | | | | | XPO1 | SARM1 | | MAK | | | | | | | | |
| | | | | | | ZNF804A | FLG | | MARK1 | | | | | | | | |
| | | | | | | KIF9 | CLASP2 | | MARK3 | | | | | | | | |
| | | | | | | ACKR2 | FLNB | | MATK | | | | | | | | |
| | | | | | | BFSP2 | FLNC | | PIM3 | | | | | | | | |
| | | | | | | CACNA1D | SYNE2 | | MAP3K1 | | | | | | | | |
| | | | | | | CAV3 | COBL | | MAP3K3 | | | | | | | | |

| Type | Biological Process | | | | Cellular Component | | | | Molecular Function | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GO | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| **Genes** | | | | | | CCDC66 | CAMSAP2 | | MAP3K4 | | | | | | | | |
| | | | | | | CLASP2 | MTUS2 | | MAP3K5 | | | | | | | | |
| | | | | | | CLRN1 | EHBP1 | | MET | | | | | | | | |
| | | | | | | COL7A1 | KIF13B | | MAP3K9 | | | | | | | | |
| | | | | | | COL8A1 | FKBP15 | | MAP3K10 | | | | | | | | |
| | | | | | | CTNNB1 | RPGRIP1L | | MAP3K11 | | | | | | | | |
| | | | | | | DAG1 | CLASP1 | | MNAT1 | | | | | | | | |
| | | | | | | DCP1A | SYNM | | MOS | | | | | | | | |
| | | | | | | DHX30 | SYNE1 | | EIF2AK4 | | | | | | | | |
| | | | | | | DHX36 | OBSL1 | | MST1R | | | | | | | | |
| | | | | | | DLG1 | SPECC1L | | MUSK | | | | | | | | |
| | | | | | | DNAH1 | COTL1 | | MYLK | | | | | | | | |
| | | | | | | DNAH12 | RHOQ | | ATM | | | | | | | | |
| | | | | | | DYNC1LI1 | MACF1 | | NEK1 | | | | | | | | |
| | | | | | | FLNB | CASP14 | | NEK2 | | | | | | | | |
| | | | | | | FXR1 | CORO1C | | NEK3 | | | | | | | | |
| | | | | | | HCLS1 | CD2AP | | NME2 | | | | | | | | |
| | | | | | | KAT2B | EML2 | | NPR1 | | | | | | | | |
| | | | | | | KCTD6 | GAS2L2 | | NPR2 | | | | | | | | |
| | | | | | | KIF15 | FRG1 | | NTRK1 | | | | | | | | |
| | | | | | | KLHL40 | NEIL2 | | NTRK2 | | | | | | | | |
| | | | | | | KY | FYN | | NTRK3 | | | | | | | | |
| | | | | | | LIMD1 | EHBP1L1 | | ROR2 | | | | | | | | |
| | | | | | | LMOD3 | NPNT | | DDR2 | | | | | | | | |
| | | | | | | LSM3 | LMOD1 | | WEE2 | | | | | | | | |
| | | | | | | MAP4 | TTLL1 | | MINK1 | | | | | | | | |
| | | | | | | MAP6D1 | IFFO1 | | PAK1 | | | | | | | | |
| | | | | | | MBNL1 | ASPM | | PAK2 | | | | | | | | |
| | | | | | | MYH15 | BOD1L1 | | TNNI3K | | | | | | | | |
| | | | | | | MYL3 | TPGS2 | | VRK3 | | | | | | | | |
| | | | | | | NCKIPSD | DNAH1 | | CRIM1 | | | | | | | | |
| | | | | | | NFKBIZ | KRT23 | | CDKL3 | | | | | | | | |
| | | | | | | NICN1 | DNM3 | | CDK17 | | | | | | | | |
| | | | | | | PLS1 | LDLRAP1 | | CDK18 | | | | | | | | |
| | | | | | | RASSF1 | TTLL3 | | TAOK3 | | | | | | | | |
| | | | | | | RPL15 | KIF26A | | PRKAG2 | | | | | | | | |
| | | | | | | SCN5A | GAS2 | | PDGFRA | | | | | | | | |
| | | | | | | SEC13 | GAS8 | | PDGFRL | | | | | | | | |
| | | | | | | SERP1 | FBXO22 | | PDGFRB | | | | | | | | |
| | | | | | | SRPRB | NARF | | PDK1 | | | | | | | | |
| | | | | | | TIMP4 | CKAP2 | | PDK2 | | | | | | | | |
| | | | | | | TRIM71 | GFAP | | PDK4 | | | | | | | | |
| | | | | | | TTLL3 | DNAI1 | | PDPK1 | | | | | | | | |
| | | | | | | TWF2 | STAU2 | | NLK | | | | | | | | |
| | | | | | | XRN1 | INVS | | CAB39 | | | | | | | | |
| | | | | | | WDR1 | DISC1 | | CDK12 | | | | | | | | |
| | | | | | | PALLD | TUBGCP4 | | CDK14 | | | | | | | | |
| | | | | | | ANK2 | SERP1 | | PHKB | | | | | | | | |
| | | | | | | BOD1L1 | PDLIM3 | | PHKG1 | | | | | | | | |
| | | | | | | CENPC | BMP10 | | PIK3C3 | | | | | | | | |
| | | | | | | CENPE | BIN1 | | PIK3CA | | | | | | | | |
| | | | | | | CENPU | EML4 | | PIM1 | | | | | | | | |

| **Type** | **Biological Process** | | | | **Cellular Component** | | | | **Molecular Function** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GO** | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| **Genes** | | | | | | CLOCK | IGSF22 | | PIK3CG | | | | | | | | |
| | | | | | | DCLK2 | RASSF3 | | PLK1 | | | | | | | | |
| | | | | | | EIF4E | GAS2L3 | | PRKAG3 | | | | | | | | |
| | | | | | | FHDC1 | CEP170B | | FGFRL1 | | | | | | | | |
| | | | | | | FRG1 | FBXL22 | | MYO3A | | | | | | | | |
| | | | | | | G3BP2 | HID1 | | CSNK1G1 | | | | | | | | |
| | | | | | | GRSF1 | TTLL6 | | RIPK4 | | | | | | | | |
| | | | | | | HAUS3 | BOD1L2 | | ATR | | | | | | | | |
| | | | | | | JAKMIP1 | ODF3L2 | | TRPM7 | | | | | | | | |
| | | | | | | LSM6 | KRTAP13_4 | | SNRK | | | | | | | | |
| | | | | | | MAD2L1 | GPER1 | | ULK4 | | | | | | | | |
| | | | | | | MAP9 | CCDC66 | | STK32B | | | | | | | | |
| | | | | | | MYL5 | KIF4B | | STYK1 | | | | | | | | |
| | | | | | | MYOZ2 | ANK1 | | STRADB | | | | | | | | |
| | | | | | | NPNT | FAM83H | | CDC42BPG | | | | | | | | |
| | | | | | | ODAM | KRT6C | | BMP2K | | | | | | | | |
| | | | | | | PABPC4L | ANK2 | | PRKAA1 | | | | | | | | |
| | | | | | | PDLIM3 | ANK3 | | PRKAB1 | | | | | | | | |
| | | | | | | PDLIM5 | RACGAP1 | | PRKAB2 | | | | | | | | |
| | | | | | | PKD2 | GSK3A | | PRKACA | | | | | | | | |
| | | | | | | PPP3CA | TMOD4 | | PRKACB | | | | | | | | |
| | | | | | | RNF4 | TMOD3 | | SCYL2 | | | | | | | | |
| | | | | | | SHROOM3 | TMOD2 | | PRKAG1 | | | | | | | | |
| | | | | | | SLAIN2 | PARVB | | PRKCA | | | | | | | | |
| | | | | | | SNCA | MYLPF | | RIOK2 | | | | | | | | |
| | | | | | | SORBS2 | HOOK2 | | PRKCB | | | | | | | | |
| | | | | | | SYNPO2 | PRICKLE4 | | AXL | | | | | | | | |
| | | | | | | ACTBL2 | HCK | | PRKCD | | | | | | | | |
| | | | | | | APC | HCLS1 | | PRKCE | | | | | | | | |
| | | | | | | BOD1 | KRT73 | | PRKCG | | | | | | | | |
| | | | | | | CCNB1 | APC | | PRKCH | | | | | | | | |
| | | | | | | CENPH | HRC | | PRKCI | | | | | | | | |
| | | | | | | CENPK | BIRC5 | | PKN1 | | | | | | | | |
| | | | | | | CMYA5 | KRTAP11_1 | | PKN2 | | | | | | | | |
| | | | | | | CNOT8 | KRTAP22_1 | | PRKD1 | | | | | | | | |
| | | | | | | COL23A1 | KRT79 | | PBK | | | | | | | | |
| | | | | | | CRHBP | ADAMTSL5 | | PRKCQ | | | | | | | | |
| | | | | | | CSNK1A1 | ESPNL | | PRKCZ | | | | | | | | |
| | | | | | | DBN1 | KY | | PRKDC | | | | | | | | |
| | | | | | | DCP2 | DCDC1 | | PRKG1 | | | | | | | | |
| | | | | | | DNAH5 | FMN1 | | PRKG2 | | | | | | | | |
| | | | | | | DPYSL3 | SMTNL2 | | MAPK1 | | | | | | | | |
| | | | | | | FBN2 | KRT27 | | MAPK3 | | | | | | | | |
| | | | | | | G3BP1 | NCKAP5 | | MAPK4 | | | | | | | | |
| | | | | | | GHR | ACTBL2 | | MAPK6 | | | | | | | | |
| | | | | | | HOMER1 | KIF24 | | MAPK8 | | | | | | | | |
| | | | | | | KCNN2 | TUBB8 | | MAPK11 | | | | | | | | |
| | | | | | | KIF20A | KRT26 | | MAPK9 | | | | | | | | |
| | | | | | | KIF2A | KRTAP12_2 | | MAPK10 | | | | | | | | |
| | | | | | | KIF3A | KRTAP12_1 | | MAP2K1 | | | | | | | | |
| | | | | | | KIF4B | KRTAP10_10 | | MAP2K2 | | | | | | | | |
| | | | | | | LARP1 | INCENP | | MAP2K3 | | | | | | | | |

| Type | Biological Process | | | | Cellular Component | | | | Molecular Function | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GO | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| Genes | | | | | | LMNB1 | IDO1 | | MAP2K5 | | | | | | | | |
| | | | | | | MAP1B | EIF6 | | MAP2K6 | | | | | | | | |
| | | | | | | MCC | JUP | | MAP2K7 | | | | | | | | |
| | | | | | | MTMR12 | KRT77 | | EIF2AK2 | | | | | | | | |
| | | | | | | MYOZ3 | KIF7 | | TEX14 | | | | | | | | |
| | | | | | | NSUN2 | KCNE1 | | STK31 | | | | | | | | |
| | | | | | | NUDCD2 | LRRC10 | | PSKH1 | | | | | | | | |
| | | | | | | PDLIM4 | KCNN2 | | PAK6 | | | | | | | | |
| | | | | | | PDLIM7 | KIF2A | | FAM20C | | | | | | | | |
| | | | | | | REEP2 | KIF3C | | CAMK1D | | | | | | | | |
| | | | | | | RGS14 | KIF5A | | ADCK1 | | | | | | | | |
| | | | | | | SHROOM1 | KIF5B | | CAMK1G | | | | | | | | |
| | | | | | | SNCAIP | KIF5C | | CLK4 | | | | | | | | |
| | | | | | | SPDL1 | KIFC3 | | PTK2 | | | | | | | | |
| | | | | | | SQSTM1 | KLC1 | | PTK6 | | | | | | | | |
| | | | | | | SYNPO | KIF11 | | ALPK3 | | | | | | | | |
| | | | | | | TBCA | KIFC1 | | PTK7 | | | | | | | | |
| | | | | | | TPPP | KIF25 | | TAOK1 | | | | | | | | |
| | | | | | | YTHDC2 | KIF22 | | MARK4 | | | | | | | | |
| | | | | | | AIF1 | KRT1 | | MAP4K2 | | | | | | | | |
| | | | | | | ATAT1 | KRT3 | | MOK | | | | | | | | |
| | | | | | | BAG2 | KRT6A | | RAF1 | | | | | | | | |
| | | | | | | CD2AP | KRT6B | | RET | | | | | | | | |
| | | | | | | CENPQ | KRT7 | | ROS1 | | | | | | | | |
| | | | | | | COL11A2 | KRT8 | | BCR | | | | | | | | |
| | | | | | | DCDC2 | KRT9 | | RPS6KA1 | | | | | | | | |
| | | | | | | DNAH8 | KRT10 | | RPS6KA2 | | | | | | | | |
| | | | | | | DSP | KRT12 | | RPS6KB1 | | | | | | | | |
| | | | | | | DST | KRT13 | | MAPK12 | | | | | | | | |
| | | | | | | DYNLT1 | KRT14 | | CCL2 | | | | | | | | |
| | | | | | | EZR | KRT15 | | BLK | | | | | | | | |
| | | | | | | FHL5 | KRTAP10_7 | | MAP2K4 | | | | | | | | |
| | | | | | | FYN | KRTAP10_9 | | SGK1 | | | | | | | | |
| | | | | | | KATNA1 | KRTAP10_11 | | CCNI2 | | | | | | | | |
| | | | | | | KIF13A | KRTAP12_3 | | SBK2 | | | | | | | | |
| | | | | | | KIF25 | KRTAP12_4 | | PINK1 | | | | | | | | |
| | | | | | | KIF6 | KRT16 | | SLA | | | | | | | | |
| | | | | | | KIFC1 | KRTAP5_3 | | CDK15 | | | | | | | | |
| | | | | | | KLC4 | KRTAP5_4 | | WNK1 | | | | | | | | |
| | | | | | | LSM2 | KRT18 | | WNK4 | | | | | | | | |
| | | | | | | MAP7 | KRT19 | | WNK2 | | | | | | | | |
| | | | | | | MICAL1 | KRT31 | | BMPR1A | | | | | | | | |
| | | | | | | MYO6 | KRT32 | | BMPR1B | | | | | | | | |
| | | | | | | NUP43 | KRT33A | | BMPR2 | | | | | | | | |
| | | | | | | PRICKLE4 | KRT33B | | STK33 | | | | | | | | |
| | | | | | | SYNE1 | KRT34 | | SRC | | | | | | | | |
| | | | | | | TBCC | KRT35 | | SRMS | | | | | | | | |
| | | | | | | TCTE3 | KRT82 | | BRAF | | | | | | | | |
| | | | | | | TDRD6 | KRTAP26_1 | | SRPK2 | | | | | | | | |
| | | | | | | TTK | KRT84 | | NEK4 | | | | | | | | |
| | | | | | | TUBB | KRT39 | | STK3 | | | | | | | | |
| | | | | | | TUBB2A | STMN1 | | STK4 | | | | | | | | |

| Type | Biological Process | | | | Cellular Component | | | | Molecular Function | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GO | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| Genes |  |  |  |  |  | ZC3H12D | LCP1 |  | AURKA |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ACTB | LMNA |  | STK10 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ASZ1 | LMNB1 |  | STK11 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CALD1 | VMAC |  | AURKC |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CCT6A | EML6 |  | SYK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CLIP2 | ARL3 |  | MAP3K7 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | COBL | LTBP1 |  | TEC |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | COL1A2 | LUM |  | BUB1B |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNAH11 | MAP1A |  | TEK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNAJB6 | MAP1B |  | TGFBR1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DYNC1I1 | MAP2 |  | TGFBR2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ELN | MAP4 |  | TGFBR3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FLNC | MAP6 |  | TOP1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | GPER1 | MAPT |  | TRIO |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | LMOD2 | MEFV |  | TTK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | LRWD1 | MFAP1 |  | TTN |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MAD1L1 | MFAP4 |  | TXK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYL7 | MAP3K11 |  | TYK2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PMS2 | MMP2 |  | TYRO3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PSMA2 | KRTAP5_6 |  | VRK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PSMC2 | KRTAP5_11 |  | VRK2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RAC1 | POTEKP |  | WEE1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RADIL | LMOD2 |  | YES1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SRI | MYO1B |  | ZAP70 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | WASL | MT3 |  | DDR1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | WIPF3 | MYBPC1 |  | MAPKAPK3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ADRA1A | MYBPC2 |  | CAD |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | AGO2 | MYBPC3 |  | CAMKV |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ANK1 | MYBPH |  | FASTKD3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | BIN3 | MYH2 |  | CCNJL |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CNOT7 | MYH3 |  | FASTKD1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CSPP1 | MYH4 |  | LRRK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DCTN6 | MYH6 |  | PEAK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DLGAP2 | MYH7 |  | NEK11 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DMTN | MYH8 |  | CNTD2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DPYSL2 | MYH9 |  | MAP3K19 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | EPPK1 | MYH10 |  | ALPK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FAM83H | MYH11 |  | CAMK4 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FBXO32 | MYL1 |  | CAMK2A |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | HOOK3 | MYL2 |  | CAMK2B |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | HSF1 | MYL3 |  | CAB39L |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | IDO1 | MYL4 |  | CAMK2D |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | JPH1 | MYL5 |  | NUAK2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIF13B | MYO1A |  | CAMK2G |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIFC2 | MYO1C |  | CDC7 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MTBP | MYO5A |  | RPS6KL1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MTUS1 | MYO6 |  | RIOK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYOM2 | MYO9B |  | TSSK1B |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NDRG1 | PPP1R12A |  | TSSK6 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NEFL | PPP1R12B |  | OBSCN |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NEFM | NEB |  | ULK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NEIL2 | NEFM |  | LTBP4 |  |  |  |  |  |  |  |  |

| Type | Biological Process |  |  |  | Cellular Component |  |  |  | Molecular Function |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GO | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| Genes |  |  |  |  |  | ODF1 | NEFH |  | CAMKK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PABPC1 | NEFL |  | STK24 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PDLIM2 | NEK2 |  | DYRK3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PINX1 | NME2 |  | BRSK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PIWIL2 | NOS1 |  | DYRK2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PLEC | NRAP |  | TTBK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | POLB | ROR2 |  | PPP1R9B |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RBPMS | NUMA1 |  | CDC42BPA |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RMDN1 | ATP2B4 |  | MAP4K3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RP1 | ODF1 |  | MASTL |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RP1L1 | ODF2 |  | CAMK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | STAU2 | PAFAH1B1 |  | MYLK2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SYBU | COL5A3 |  | DCLK3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TIGD5 | PAK1 |  | PSKH2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TRIM55 | PAWR |  | MAPKAPK5 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ZFAND1 | RMDN1 |  | CDK10 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | HNRNPK | DYNC1LI1 |  | MKNK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | AIF1L | PCNT |  | CDK13 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | AKNA | TUBD1 |  | TNK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | C9orf72 | NIN |  | RIPK2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CAMSAP1 | NUSAP1 |  | RIOK3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CDK5RAP2 | REEP2 |  | DYRK4 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CDK9 | KRT76 |  | TRIM24 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | COL27A1 | HOOK1 |  | CCNK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | COL5A1 | PDE4B |  | CDKL1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DCTN3 | DCDC2 |  | NRP2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNAI1 | GTSE1 |  | NRP1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNM1 | NCKIPSD |  | KSR1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FBP2 | DYNC2LI1 |  | CDK5R1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FKBP15 | MYOZ2 |  | STK19 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | HABP4 | TUBA8 |  | SQSTM1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | HAUS6 | PGM5 |  | CPNE3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | INVS | PKD2 |  | PRPF4B |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIF12 | PKP1 |  | CCNA2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIF24 | PKP2 |  | CCNB1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIF27 | PLEC |  | CCND2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NEK6 | PLK1 |  | CCND3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ODF2 | PLS1 |  | CCNE1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PGM5 | MYO3A |  | RPS6KA4 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PHF2 | PNN |  | CCNF |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RC3H2 | POLB |  | KALRN |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ROR2 | KRT20 |  | CDKL2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RPS6 | MTMR12 |  | ACVR1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SHB | INO80 |  | CCNG1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TDRD7 | MAP10 |  | CCNG2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TEK | KIF1A |  | CCNH |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TMOD1 | HAUS6 |  | MAP3K14 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TPM2 | NDE1 |  | BRSK2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TRIM32 | BCAS3 |  | BAZ1B |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TSC1 | LRRC49 |  | MAP3K6 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TTLL11 | TMEM214 |  | PKMYT1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | VCP | PPL |  | ADCK2 |  |  |  |  |  |  |  |  |

| Type | Biological Process |  |  |  | Cellular Component |  |  |  | Molecular Function |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GO | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| Genes |  |  |  |  |  | VCL | ODAM |  | ACVR1B |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SVIL | KIF26B |  | LATS1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ACTA2 | FIGN |  | CCNB2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ANAPC16 | RMDN3 |  | CCNE2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ANK3 | PPP2R5A |  | PKDCC |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ARL3 | PPP3CA |  | DYRK1B |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | BAG3 | PPP3CB |  | MAP3K13 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | BLNK | MNS1 |  | NEK9 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | BUB3 | TCP11L1 |  | MYLK3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | C10orf71 | DNAH3 |  | ACVR2A |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CDK1 | KIF27 |  | DCLK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | GLRX3 | KIF21A |  | STRADA |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | INA | KIF16B |  | TBRG4 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIF11 | SYBU |  | RPS6KA5 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIF20B | RADIL |  | MAPKAPK2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIF5B | PARVA |  | STK17B |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | LARP4B | CDK5RAP2 |  | STK17A |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | LDB3 | CENPJ |  | ACVR2B |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | LZTS2 | BIN3 |  | TBCK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYO3A | RCC2 |  | MAP4K4 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYPN | GNG12 |  | EIF2AK3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NEBL | MAP2K2 |  | ROCK2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NRAP | DNAH7 |  | CDC42BPB |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NRP1 | LMOD3 |  | AATK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PARD3 | PRPH |  | IKBKE |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PDLIM1 | PSEN1 |  | SLK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PPP3CB | PSEN2 |  | RASSF2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | REEP3 | JPH1 |  | CDK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SPAG6 | PSMA6 |  | MELK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SYNPO2L | MDM1 |  | TLK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TDRD1 | KIF15 |  | NUAK1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TIAL1 | JPH2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TUBB8 | TRIM54 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TUBGCP2 | PBXIP1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | UPF2 | MTUS1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ZWINT | MICAL3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ACTN3 | TWF1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | AHNAK | KIF17 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ARNTL | SLAIN2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CAPRIN1 | VPS18 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CDK2AP2 | SHROOM3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CEP57 | MYH7B |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CKAP5 | CAMSAP3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CLMP | NCKAP5L |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CRYAB | CCDC181 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CSRP3 | SRPRB |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DCDC1 | MYL7 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DCPS | RAC1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DDX25 | RAC2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DDX6 | RAC3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DYNC2H1 | ACTA2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | EHBP1L1 | TRPV4 |  |  |  |  |  |  |  |  |  |  |

| Type | Biological Process | | | | Cellular Component | | | | Molecular Function | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GO | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| Genes | | | | | | FEZ1 | ACTB | | | | | | | | | | |
| | | | | | | GAS2 | RNF4 | | | | | | | | | | |
| | | | | | | IGSF22 | RP1 | | | | | | | | | | |
| | | | | | | INCENP | RPL15 | | | | | | | | | | |
| | | | | | | JAM3 | CLIP1 | | | | | | | | | | |
| | | | | | | KIF18A | RYR1 | | | | | | | | | | |
| | | | | | | KLC2 | RYR2 | | | | | | | | | | |
| | | | | | | MAP3K11 | RYR3 | | | | | | | | | | |
| | | | | | | MAP6 | BFSP1 | | | | | | | | | | |
| | | | | | | MARK2 | SCN1A | | | | | | | | | | |
| | | | | | | MICAL2 | SCN5A | | | | | | | | | | |
| | | | | | | MYBPC3 | SCN8A | | | | | | | | | | |
| | | | | | | NUMA1 | SCO1 | | | | | | | | | | |
| | | | | | | NUP160 | SCTR | | | | | | | | | | |
| | | | | | | NUP98 | BICD1 | | | | | | | | | | |
| | | | | | | PAK1 | SDC4 | | | | | | | | | | |
| | | | | | | PARVA | KIF13A | | | | | | | | | | |
| | | | | | | PATL1 | KIF9 | | | | | | | | | | |
| | | | | | | PITPNM1 | PDLIM2 | | | | | | | | | | |
| | | | | | | PIWIL4 | MAP1LC3B2 | | | | | | | | | | |
| | | | | | | RBM4 | KRTAP24_1 | | | | | | | | | | |
| | | | | | | SHANK2 | WIPF3 | | | | | | | | | | |
| | | | | | | STIM1 | DNAI2 | | | | | | | | | | |
| | | | | | | TCP11L1 | EVPLL | | | | | | | | | | |
| | | | | | | TNNI2 | MICAL1 | | | | | | | | | | |
| | | | | | | TNNT3 | KLC2 | | | | | | | | | | |
| | | | | | | TRIM21 | SLC1A4 | | | | | | | | | | |
| | | | | | | TRIM5 | SLC2A1 | | | | | | | | | | |
| | | | | | | ZW10 | SLC4A1 | | | | | | | | | | |
| | | | | | | ABCC9 | SMTN | | | | | | | | | | |
| | | | | | | ARHGEF25 | KRTAP4_11 | | | | | | | | | | |
| | | | | | | ARPC3 | SLC8A1 | | | | | | | | | | |
| | | | | | | ATXN2 | SLC8A3 | | | | | | | | | | |
| | | | | | | BICD1 | SNCA | | | | | | | | | | |
| | | | | | | CACNA1C | SNTB2 | | | | | | | | | | |
| | | | | | | CBX5 | DST | | | | | | | | | | |
| | | | | | | CCT2 | SPAST | | | | | | | | | | |
| | | | | | | CKAP4 | SPTBN1 | | | | | | | | | | |
| | | | | | | CLIP1 | SRC | | | | | | | | | | |
| | | | | | | CNOT2 | SRI | | | | | | | | | | |
| | | | | | | COL2A1 | SS18 | | | | | | | | | | |
| | | | | | | CORO1C | STIM1 | | | | | | | | | | |
| | | | | | | DCP1B | AURKA | | | | | | | | | | |
| | | | | | | DCTN2 | AURKC | | | | | | | | | | |
| | | | | | | DNAH10 | SVIL | | | | | | | | | | |
| | | | | | | DNM1L | TBCA | | | | | | | | | | |
| | | | | | | DYNLL1 | TBCC | | | | | | | | | | |
| | | | | | | FKBP4 | TBCD | | | | | | | | | | |
| | | | | | | GAS2L3 | TBCE | | | | | | | | | | |
| | | | | | | IFFO1 | TCTE3 | | | | | | | | | | |
| | | | | | | KIF21A | DYNLT1 | | | | | | | | | | |
| | | | | | | KIF5A | TEK | | | | | | | | | | |

| Type | Biological Process |  |  |  | Cellular Component |  |  |  | Molecular Function |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GO | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| Genes |  |  |  |  |  | KNTC1 | TIAM1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT1 | TIMP4 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT18 | ACTG1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT3 | TMOD1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT6A | TNNI1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT6B | TNNI2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT6C | TNNI3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT7 | TNNT1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT71 | TNNT2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT72 | TNNT3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT73 | TPM1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT74 | TPM2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT75 | TPM3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT76 | TPM4 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT77 | ACTG2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT79 | CCT3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT8 | TSC1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT80 | TTN |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT82 | TUBA4A |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KRT84 | TUBA3C |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | LARP4 | TUBB2A |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | LRRC10 | KRTAP4_8 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | LUM | DCDC2C |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MAP1LC3B | CLRN1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MDM1 | VCL |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MFAP5 | EZR |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYBPC1 | WIPF1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYL2 | CLIP2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYL6B | YES1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYO1A | CACNA1C |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NAV3 | ZNF207 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NCKAP5L | CACNA1D |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NOS1 | CACNA1S |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NUP107 | TUBA1A |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NUP37 | AHNAK |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PAN2 | FSD1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PAWR | HAUS3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PIWIL1 | DYNC2H1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PKP2 | TTLL7 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PPP1CC | MYH14 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PPP1R12A | CLMP |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PRPH | CSPP1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PYROXD1 | THSD4 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RACGAP1 | MAP9 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RASSF3 | PYROXD1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RPL6 | MAP6D1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RPLP0 | SYNPO2L |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SARNP | ATAT1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SCN8A | CALD1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TCHP | TUBA4B |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TRPV4 | CALM1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TUBA1A | FHOD3 |  |  |  |  |  |  |  |  |  |  |

| **Type** | **Biological Process** | | | | **Cellular Component** | | | | **Molecular Function** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GO** | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| **Genes** | | | | | | TUBA1B | CDK5RAP3 | | | | | | | | | | |
| | | | | | | TUBA1C | CSRP3 | | | | | | | | | | |
| | | | | | | TWF1 | CALM2 | | | | | | | | | | |
| | | | | | | LCP1 | AKNA | | | | | | | | | | |
| | | | | | | CDC16 | MFAP5 | | | | | | | | | | |
| | | | | | | CENPJ | CALM3 | | | | | | | | | | |
| | | | | | | CHAMP1 | FXR1 | | | | | | | | | | |
| | | | | | | CKAP2 | ACTN4 | | | | | | | | | | |
| | | | | | | COL4A1 | TUBB1 | | | | | | | | | | |
| | | | | | | COL4A2 | SYNC | | | | | | | | | | |
| | | | | | | GJB6 | NDEL1 | | | | | | | | | | |
| | | | | | | HSPH1 | ACTL8 | | | | | | | | | | |
| | | | | | | KATNAL1 | MAP1LC3B | | | | | | | | | | |
| | | | | | | MTUS2 | ADAMTS10 | | | | | | | | | | |
| | | | | | | PAN3 | KRTAP9_9 | | | | | | | | | | |
| | | | | | | PARP4 | KIF18A | | | | | | | | | | |
| | | | | | | SPRY2 | CAPN3 | | | | | | | | | | |
| | | | | | | SUGT1 | DYSF | | | | | | | | | | |
| | | | | | | TUBA3C | CAPZB | | | | | | | | | | |
| | | | | | | TUBGCP3 | KATNAL2 | | | | | | | | | | |
| | | | | | | ACTN1 | EPPK1 | | | | | | | | | | |
| | | | | | | AHNAK2 | AIF1L | | | | | | | | | | |
| | | | | | | CALM1 | DNAL1 | | | | | | | | | | |
| | | | | | | CEP170B | RASSF5 | | | | | | | | | | |
| | | | | | | CTSG | DYNLRB2 | | | | | | | | | | |
| | | | | | | DNAL1 | TEKT1 | | | | | | | | | | |
| | | | | | | DYNC1H1 | JAM3 | | | | | | | | | | |
| | | | | | | EIF2S1 | ESPN | | | | | | | | | | |
| | | | | | | EML1 | KRTAP3_1 | | | | | | | | | | |
| | | | | | | EML5 | KRTAP3_2 | | | | | | | | | | |
| | | | | | | FBLN5 | KRTAP9_8 | | | | | | | | | | |
| | | | | | | FERMT2 | KRTAP17_1 | | | | | | | | | | |
| | | | | | | KIF26A | OBSCN | | | | | | | | | | |
| | | | | | | KLC1 | KATNAL1 | | | | | | | | | | |
| | | | | | | MIS18BP1 | ENKD1 | | | | | | | | | | |
| | | | | | | MYH6 | FAM161A | | | | | | | | | | |
| | | | | | | MYH7 | BFSP2 | | | | | | | | | | |
| | | | | | | NIN | TCHP | | | | | | | | | | |
| | | | | | | PNN | NICN1 | | | | | | | | | | |
| | | | | | | PSEN1 | HOOK3 | | | | | | | | | | |
| | | | | | | PSMA6 | CASQ1 | | | | | | | | | | |
| | | | | | | REC8 | LZTS2 | | | | | | | | | | |
| | | | | | | SAMD4A | CASQ2 | | | | | | | | | | |
| | | | | | | SLC8A3 | TUBB6 | | | | | | | | | | |
| | | | | | | SYNE2 | KIF2B | | | | | | | | | | |
| | | | | | | TDRD9 | MYPN | | | | | | | | | | |
| | | | | | | TPPP2 | TRIM55 | | | | | | | | | | |
| | | | | | | TTLL5 | TRIM63 | | | | | | | | | | |
| | | | | | | ZFP36L1 | SORBS2 | | | | | | | | | | |
| | | | | | | AKAP13 | MYO18B | | | | | | | | | | |
| | | | | | | BTBD1 | PSRC1 | | | | | | | | | | |
| | | | | | | BUB1B | TUBA1C | | | | | | | | | | |

| Type | Biological Process |  |  |  | Cellular Component |  |  |  | Molecular Function |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GO | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| Genes |  |  |  |  |  | CAPN3 | LMNB2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CPEB1 | KLHL22 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CTSH | TIGD5 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | EDC3 | KCNAB2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | EID1 | KRTAP9_4 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | EXD1 | KRTAP4_5 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FBN1 | KRTAP3_3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FBXL22 | COL27A1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FBXO22 | FBF1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FMN1 | MYLK2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | GABPB1 | TUBGCP6 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | INO80 | FHDC1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | IQGAP1 | PDLIM4 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIF23 | CAV3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIF7 | SKAP1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KNSTRN | DNAH17 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | LRRC49 | DYNLL1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MAP1A | MARCO |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MFAP1 | KRT38 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MNS1 | KRT37 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYO5A | KRT36 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYZAP | ACTN1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NUSAP1 | DNAH11 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PATL2 | MYH13 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PRC1 | MYOM1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PSMA4 | RAB11A |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RAB11A | FBP2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RMDN3 | ACTN2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RYR3 | IQGAP1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SIN3A | NRP1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SYNM | KAT2B |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | THSD4 | CDK5R1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TMOD2 | SYNJ1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TMOD3 | SQSTM1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TP53BP1 | CDC16 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TPM1 | ACTN3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TUBGCP4 | BCL10 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TUBGCP5 | WASL |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | USP3 | RSPH1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | VPS18 | NAV3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | WHAMM | NAV1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ZWILCH | KLC4 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ALDOA | KNSTRN |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ATXN2L | MAP7 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CARHSP1 | PRC1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CDT1 | CCT6A |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CENPN | DNAJA3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CENPT | KIFC2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CFDP1 | IGFN1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CNOT1 | INA |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | COTL1 | KRT75 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CYLD | PDLIM1 |  |  |  |  |  |  |  |  |  |  |

| **Type** | **Biological Process** |  |  |  | **Cellular Component** |  |  |  | **Molecular Function** |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GO** | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| **Genes** |  |  |  |  |  | DCTN5 | BOD1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DDX19A | COL23A1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DDX19B | NEXN |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DDX28 | MYOM2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNAH3 | ZNF804A |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNAJA3 | ARHGEF2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DYNC1LI2 | ZW10 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DYNLRB2 | MYOZ3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | EDC4 | TPGS1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ENKD1 | TTC30A |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | GAS8 | RCSD1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KAT8 | DLGAP2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KATNB1 | SPECC1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIF22 | PDLIM7 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KIFC3 | HAUS8 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MAP1LC3B | KIF3B |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MEFV | RP1L1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MMP2 | HOMER1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MT3 | FHL5 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYH11 | KIF23 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYLPF | BAG3 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NDE1 | BAG2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | OGFOD1 | SPAG6 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PLK1 | KIF20B |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PPL | FEZ1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RPGRIP1L | MICAL2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SNTB2 | TTLL4 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SOCS1 | PDE4DIP |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TNRC6A | CEP57 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TUBB3 | NOS1AP |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ZNF276 | KNTC1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ACTG1 | SNPH |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | APPBP2 | HDAC4 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | BAIAP2 | CKAP5 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | BCAS3 | CDK1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | BIRC5 | CEP170 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CASC3 | KLHL21 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CDC27 | KIF14 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CDK5R1 | WDR1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CDK5RAP3 | CDC27 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CENPV | SCO2 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CLTC |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | COL1A1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DCXR |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNAH17 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNAH2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNAH9 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNAI2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DYNLL2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | EVPL |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | EVPLL |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FBF1 |  |  |  |  |  |  |  |  |  |  |  |

| **Type** | **Biological Process** | | | | **Cellular Component** | | | | **Molecular Function** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GO** | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| **Genes** | | | | | | FXR2 | | | | | | | | | | | |
| | | | | | | GAS2L2 | | | | | | | | | | | |
| | | | | | | GFAP | | | | | | | | | | | |
| | | | | | | GRB7 | | | | | | | | | | | |
| | | | | | | HELZ | | | | | | | | | | | |
| | | | | | | HID1 | | | | | | | | | | | |
| | | | | | | IGF2BP1 | | | | | | | | | | | |
| | | | | | | JUP | | | | | | | | | | | |
| | | | | | | KANSL1 | | | | | | | | | | | |
| | | | | | | KIF18B | | | | | | | | | | | |
| | | | | | | KIF19 | | | | | | | | | | | |
| | | | | | | KIF1C | | | | | | | | | | | |
| | | | | | | KIF2B | | | | | | | | | | | |
| | | | | | | KPNB1 | | | | | | | | | | | |
| | | | | | | KRT10 | | | | | | | | | | | |
| | | | | | | KRT12 | | | | | | | | | | | |
| | | | | | | KRT13 | | | | | | | | | | | |
| | | | | | | KRT14 | | | | | | | | | | | |
| | | | | | | KRT15 | | | | | | | | | | | |
| | | | | | | KRT16 | | | | | | | | | | | |
| | | | | | | KRT19 | | | | | | | | | | | |
| | | | | | | KRT20 | | | | | | | | | | | |
| | | | | | | KRT222 | | | | | | | | | | | |
| | | | | | | KRT23 | | | | | | | | | | | |
| | | | | | | KRT25 | | | | | | | | | | | |
| | | | | | | KRT26 | | | | | | | | | | | |
| | | | | | | KRT27 | | | | | | | | | | | |
| | | | | | | KRT28 | | | | | | | | | | | |
| | | | | | | KRT31 | | | | | | | | | | | |
| | | | | | | KRT32 | | | | | | | | | | | |
| | | | | | | KRT33A | | | | | | | | | | | |
| | | | | | | KRT33B | | | | | | | | | | | |
| | | | | | | KRT34 | | | | | | | | | | | |
| | | | | | | KRT35 | | | | | | | | | | | |
| | | | | | | KRT36 | | | | | | | | | | | |
| | | | | | | KRT37 | | | | | | | | | | | |
| | | | | | | KRT38 | | | | | | | | | | | |
| | | | | | | KRT39 | | | | | | | | | | | |
| | | | | | | KRT40 | | | | | | | | | | | |
| | | | | | | KRT9 | | | | | | | | | | | |
| | | | | | | MAPT | | | | | | | | | | | |
| | | | | | | MFAP4 | | | | | | | | | | | |
| | | | | | | MIS12 | | | | | | | | | | | |
| | | | | | | MYH10 | | | | | | | | | | | |
| | | | | | | MYH13 | | | | | | | | | | | |
| | | | | | | MYH2 | | | | | | | | | | | |
| | | | | | | MYH3 | | | | | | | | | | | |
| | | | | | | MYH4 | | | | | | | | | | | |
| | | | | | | MYH8 | | | | | | | | | | | |
| | | | | | | MYL4 | | | | | | | | | | | |
| | | | | | | MYO1C | | | | | | | | | | | |
| | | | | | | NARF | | | | | | | | | | | |

| Type | Biological Process |  |  |  | Cellular Component |  |  |  | Molecular Function |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GO | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| Genes |  |  |  |  |  | NDEL1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NME2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NUFIP2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NUP85 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | PAFAH1B1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RAC3 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | RPTOR |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SARM1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SCO1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SKAP1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SLC4A1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SMTNL2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SPAG5 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SPECC1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TBCD |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TEKT1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TEX14 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TLK2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TNRC6C |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TTLL6 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TUBD1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | WIPF2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ZNF207 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | BOD1L2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | FHOD3 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | HAUS1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | KATNAL2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MAPRE2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYL12B |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MYOM1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | NDC80 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | POLI |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SEH1L |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SKA1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | SS18 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TPGS2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | TUBB6 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | YES1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ACTN4 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ADAMTS10 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ADAMTSL5 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | APC2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | AURKC |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | BTBD2 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CALM3 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CAMSAP3 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CASP14 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CNOT3 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | COL5A3 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | CYP2A6 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DAPK3 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | DNM2 |  |  |  |  |  |  |  |  |  |  |  |

| **Type** | **Biological Process** | | | | **Cellular Component** | | | | **Molecular Function** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GO** | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| **Genes** | | | | | | ELAVL1 | | | | | | | | | | | |
| | | | | | | EML2 | | | | | | | | | | | |
| | | | | | | FSD1 | | | | | | | | | | | |
| | | | | | | GSK3A | | | | | | | | | | | |
| | | | | | | HAUS8 | | | | | | | | | | | |
| | | | | | | HNRNPL | | | | | | | | | | | |
| | | | | | | HOOK2 | | | | | | | | | | | |
| | | | | | | HRC | | | | | | | | | | | |
| | | | | | | KHSRP | | | | | | | | | | | |
| | | | | | | KLC3 | | | | | | | | | | | |
| | | | | | | LMNB2 | | | | | | | | | | | |
| | | | | | | LSM14A | | | | | | | | | | | |
| | | | | | | LSM4 | | | | | | | | | | | |
| | | | | | | MAP2K2 | | | | | | | | | | | |
| | | | | | | MISP | | | | | | | | | | | |
| | | | | | | MYBPC2 | | | | | | | | | | | |
| | | | | | | MYH14 | | | | | | | | | | | |
| | | | | | | MYO9B | | | | | | | | | | | |
| | | | | | | NANOS3 | | | | | | | | | | | |
| | | | | | | ODF3L2 | | | | | | | | | | | |
| | | | | | | RPL28 | | | | | | | | | | | |
| | | | | | | RYR1 | | | | | | | | | | | |
| | | | | | | SAMD4B | | | | | | | | | | | |
| | | | | | | SIRT2 | | | | | | | | | | | |
| | | | | | | SPC24 | | | | | | | | | | | |
| | | | | | | SYMPK | | | | | | | | | | | |
| | | | | | | TNNI3 | | | | | | | | | | | |
| | | | | | | TNNT1 | | | | | | | | | | | |
| | | | | | | TPGS1 | | | | | | | | | | | |
| | | | | | | TPM4 | | | | | | | | | | | |
| | | | | | | UPF1 | | | | | | | | | | | |
| | | | | | | VMAC | | | | | | | | | | | |
| | | | | | | WTIP | | | | | | | | | | | |
| | | | | | | ZFP36 | | | | | | | | | | | |
| | | | | | | SRC | | | | | | | | | | | |
| | | | | | | ARFGEF2 | | | | | | | | | | | |
| | | | | | | AURKA | | | | | | | | | | | |
| | | | | | | BFSP1 | | | | | | | | | | | |
| | | | | | | DSN1 | | | | | | | | | | | |
| | | | | | | EIF6 | | | | | | | | | | | |
| | | | | | | FKBP1A | | | | | | | | | | | |
| | | | | | | HCK | | | | | | | | | | | |
| | | | | | | JPH2 | | | | | | | | | | | |
| | | | | | | KIF16B | | | | | | | | | | | |
| | | | | | | KIF3B | | | | | | | | | | | |
| | | | | | | MAPRE1 | | | | | | | | | | | |
| | | | | | | MYH7B | | | | | | | | | | | |
| | | | | | | MYLK2 | | | | | | | | | | | |
| | | | | | | NINL | | | | | | | | | | | |
| | | | | | | PABPC1L | | | | | | | | | | | |
| | | | | | | RASSF2 | | | | | | | | | | | |
| | | | | | | SDC4 | | | | | | | | | | | |

| **Type** | **Biological Process** | | | | **Cellular Component** | | | | **Molecular Function** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GO** | 7029 | 10887 | 19230 | 35640 | 2102 | 99080 | 99081 | 71437 | 4672 | 8307 | 22842 | 30228 | 50544 | 99602 | 31013 | 48037 | 1901567 |
| **Genes** | | | | | | SNPH | | | | | | | | | | | |
| | | | | | | STAU1 | | | | | | | | | | | |
| | | | | | | TOP1 | | | | | | | | | | | |
| | | | | | | TPX2 | | | | | | | | | | | |
| | | | | | | TTLL9 | | | | | | | | | | | |
| | | | | | | TUBB1 | | | | | | | | | | | |
| | | | | | | COL6A1 | | | | | | | | | | | |
| | | | | | | ICOSLG | | | | | | | | | | | |
| | | | | | | KCNE1 | | | | | | | | | | | |
| | | | | | | PCNT | | | | | | | | | | | |
| | | | | | | RSPH1 | | | | | | | | | | | |
| | | | | | | SUMO3 | | | | | | | | | | | |
| | | | | | | SYNJ1 | | | | | | | | | | | |
| | | | | | | TIAM1 | | | | | | | | | | | |
| | | | | | | ADORA2A | | | | | | | | | | | |
| | | | | | | APOBEC3A | | | | | | | | | | | |
| | | | | | | APOBEC3C | | | | | | | | | | | |
| | | | | | | APOBEC3D | | | | | | | | | | | |
| | | | | | | APOBEC3H | | | | | | | | | | | |
| | | | | | | CENPM | | | | | | | | | | | |
| | | | | | | DNAL4 | | | | | | | | | | | |
| | | | | | | EIF4ENIF1 | | | | | | | | | | | |
| | | | | | | FBLN1 | | | | | | | | | | | |
| | | | | | | GAS2L1 | | | | | | | | | | | |
| | | | | | | GTSE1 | | | | | | | | | | | |
| | | | | | | KLHL22 | | | | | | | | | | | |
| | | | | | | MICAL3 | | | | | | | | | | | |
| | | | | | | MOV10L1 | | | | | | | | | | | |
| | | | | | | MYH9 | | | | | | | | | | | |
| | | | | | | MYO18B | | | | | | | | | | | |
| | | | | | | NEFH | | | | | | | | | | | |
| | | | | | | PARVB | | | | | | | | | | | |
| | | | | | | POLDIP3 | | | | | | | | | | | |
| | | | | | | RAC2 | | | | | | | | | | | |
| | | | | | | RAN | | | | | | | | | | | |