

**The specific information of GO and KEGG pathway functional enrichment analysis of tar-DEmRNA**

Category	Term	Count	Percent	<i>P</i> value	Genes	List	Pop	Pop	Fold	Bonferroni	Benjamini	FDR
						Total	Hits	Total	Enrichment			
GOTERM _CC_DIR	GO:0005829~	531	30.102	0.0000	TES, SERPINE2, WIPF3, RAPH1, FNBPI1, RPL8, GLS, AS3MT, CREB3L3, ZMIZ1, PPP4R4, WDR91, STMN1, BBX, PLCE1, MLYCD, IER3, SULT2A1, SDS, STARD5, PRKCB, AFAP1, CLPX, RUFY1, NUP93, AR, MTHFD1, MAP1B, MAP1A, MYL3, PRKD1, ATF5, IDO2, UBA52, MYL9, GNE, NUP205, MTMR2, CDCA3, PRKDC, SAR1B, SHMT1, HSPA4L, ENDOD1, IQGAP1, THY1, SDS1, ADH7, IQGAP2, SKA3, MTMR7, ABR, ADH4, TTPA, PRKAR2A, PDGFC, PNPO, CEP72, HAO1, ZNF146, BTF3, LRBA, STARD10, LARP4, PRDX6, EHD2, EHD3, UCK2, BHMT, EIF5, ADH1, TOLLIP, PAH, PPT1, GTF2IRD1, CPEB3, GABRB2, MTMR10, QRPT, STON2, PHF7, GLI3, CHAF1B, MECOM, AIFM1, PEA15, IKBKG, TEAD2, DLGAP5, CEP68, ANXA2, SIRT5, NUTF2, PGM2L1, GPRC5B, BDH2, RILPL1, DPYD, PLIN4, GAS2, RGN, PLIN3, PLIN2, MOCS1, PLIN5, RAPGEF4, RPL10, RPL12, CENPA, LMAN1, CHN2, CHN1, RPS3, USP1, MFN2, CHML, GSN, PKLR, GK, GLYCTK, FABP1, CENPF, ABI2, CENPI, AGBL2, CENPL, CCDC6, CENPM, MSRB3, NCAPD2, CDKN3, RAB3B, PECR, RPL10L, FAM13A, FGF1, RPL10A, CLU, DACHI, GYG2, EPM2A, RPS9, TPM4, SWAP70, TUBA4A, ARMCX3, C1ORF116, CACNB3,	1703	5477	20472	1.1655	0.0122	0.0006	0.0005

			RAB31, FSCN1, SLC27A2, DGKI, FKBP5, NSMAF, PFKFB1, DLX1, PFKFB3, SHC3, FBLIM1, UAP1, RASAL2, AK5, KLC2, ORC1, BTBD3, PGK1, SMYD2, PLXNA1, HACL1, SRGAP1, MDN1, NADK, CD163, OSBPL6, OSBPL3, STYX, FANCC, MCC, FBXO32, BMX, FBXO31, ADCY10, CNOT6, DAB1, NBEA, ARPC2, P4HA2, SPIRE1, ACO1, NIT2, SERINC5, ARHGAP11A, ARHGAP11B, SH2D4A, FLT3, LECT2, BICD1, FTCD, ALAD, PPP1R13L, DDI2, ITGAV, DNM1L, HGFAC, NKX3-1, ACTR3, PLEKHG2, HMGCS1, SGIP1, CKAP2L, SIGMAR1, SORD, APOA1, RPL13A, KCNAB1, NGF, SYNPO2L, PCCA, DNAJC6, TRAF5, RPL37A, PCCB, ANG, DNAJC9, BCAT1, DTL, FXN, ASPA, SEC23A, SRC, SRI, MLLT3, EHBPI, C15ORF39, RAB23, CDC37L1, TRIM47, FYN, PCBD1, RBBP7, TRIM45, CYB5A, PRRX1, MMAA, CDC42BPG, AKR7L, PTPN13, MYO19, PML, MYO16, DHODH, RAB10, RAB14, PRC1, CTH, ALDH8A1, PFKM, MMACHC, PFKP, PTPN3, APP, ERF1I, PANK1, NUDT1, CCT6B, RPS15, RPS6KA6, TCL1A, RPS19, RPL18A, CHEK1, CHAC2, SEPHS2, B2M, PDK2, COG3, GOLPH3L, CMBL, CSNK1E, TIAM2, TIAM1, MT1A, PPP1R3C, KCTD10, CD109, TTLL11, ALDH7A1, CES3, STX1A, EPAS1, MYL12A, TTBK1, SEC14L2, RACGAP1, SNX9, ASL, RIMKLA, APOB, N4BP2, SPTBN2, SRPK2, WWTR1, CDT1, XBP1, SS18L1, RCC2, SURF4, IQSEC3, SH2D1B, LIF, CIDEB, MYO5A, ZWINT, DERA, NET1, CCT6A, MSRA, HAL,					
--	--	--	--	--	--	--	--	--

			WNK2, WNK3, CORO7, RPS24, RPS23, GBE1, KIF14, KIF11, LARP1B, KHK, AKAP12, SH3PXD2A, NKIRAS1, GNPNAT1, CTSH, BBS7, CLIC2, BHMT2, KIF23, RHOC, RHOB, ENAH, UGDH, CEACAM7, VSNL1, KIF2A, PACS1, PITPNM2, PABPC3, TAX1BP3, ALDOB, PABPC1, ALDOA, MAPRE1, PTMA, DYNC1I2, ADH1B, HAAO, AKR1D1, PRICKLE1, NT5E, RXRA, PNMA1, MTHFD1L, PDPN, CTNNA1, CTNNA3, LCMT1, DCPS, XDH, NQO2, MAP3K1, GCH1, AKR1C4, NUDT7, ITCH, GSTA5, NEDD4, RAB9B, SPC24, MAD2L1, GDA, DENND5B, RASEF, NRL, PEBP1, TTF2, GIMAP6, ETS2, CNDP1, ACTG1, ARHGAP44, CCND2, FAM162A, RGS1, KIF5B, FPGS, WWC3, CAPN2, CAPN3, KNTC1, ACAA1, SH3GL2, ANXA11, CASK, ACOT13, KCTD1, MAT1A, RPGRIP1L, KMO, ALDH3A2, SLFN12, CCNE2, KIF16B, SHPK, CHMP4C, ELMO1, MASP1, PPIA, IDI1, COX19, KLHL14, ARHGEF26, ACACB, NDRG1, CAMSAP2, ARHGAP22, ARHGAP20, NLRP6, KIF3A, NPHP1, MYH11, ECT2, CNTLN, SPECC1, IVNS1ABP, SMAD3, EPHX2, HSPA6, MSN, GGH, TRPV1, ARHGAP27, ESR1, SYT7, PAN2, QDPR, GRHPR, SEPSECS, GCLC, AMACR, HOOK2, DLG3, NAT2, KIF4A, PXMP2, CRYL1, GPSM2, KDM5B, DYRK2, PDE3B, SLC2A1, PCTP, SLC2A4, PPP1R9A, RERG, HK2, PITPNM1, HK1, GHR, CA1, SPRED1, UBE2Q2, CASP2, HORMAD2, NOS1, YWHAH, ARHGEF10, KLF12, ARHGEF12, PLA2G4D, ARHGEF17,					
--	--	--	---	--	--	--	--	--

					SPATS2, ABHD14B, SSTR2, YWHAZ, DCK, CCNA2, ARHGAP10, PSRC1, DDAH1, ACOX1, PEX3, TMEM216, RASA1, EHHADH, CAT, CHMP3, MYH9, ITGB1BP1, ACOX3, MCTP2, ITGB3BP, PAOX, PAPPA2, FAM72A, CAMK2B, DCTN5, DDC, MVK, HPGD, USP12, CYTH3, PDLM3, PDE11A, CBS, REPS2, NCAM1, POLQ, RRM2, FAHD1, CMTM3, CADPS, CCS, GNPDA2, ALOX5AP, RGS10, AQP11, CDK2AP1, VIM, PDE7B, LPIN2, RAN						
GOTERM	GO:00_05886~	530	30.045	0.0000	TES, TFRC, GLDC, RAPH1, MRGPRF, FZD10, FNBP1L, CLDN2, EPS8, GJA1, SCN11A, LIPH, PLCE1, PRKCB, UNC5B, SOX11, HSPG2, SYTL4, FCAMR, AR, MAP1B, TYRO3, AGTR1, PRKD1, UBA52, ENPEP, TTYH3, LYPD1, SLCOSA1, IQGAP1, THY1, ADH7, SLC30A10, IQGAP2, GJC1, FAM171A1, C6, C7, PRKAR2A, KCNMB1, PDGFC, SLC19A3, RHBDL2, SLC19A2, ABCA1, FZD1, JAG2, ST14, JAG1, ABCA5, FZD4, CADM2, ABCA6, ABCA3, MCAM, LRBA, FZD6, RDX, SLC16A10, VANGL1, EHD2, CYP2C9, EHD3, CYP2C8, EIF5, ADI1, GPR182, FXYD6, FAT4, XKR4, CPEB3, CDC42SE2, GABRB3, GPR27, GABRB2, GABRB1, SIGLEC9, FMN1, PHF7, SLC6A1, ABCC11, OLR1, HAVCR1, CEP55, GPR37, ANXA2, ANXA3, FCRL6, KCND3, GPR35, EMP1, F2, F3, F7, BACE2, F8, TMEFF2, CD200R1, GPRC5B, F9, MRAS, MMP16, RILPL1, PLIN4, PLIN2, RAPGEF4, ADCY1, ABCB11, SLC7A1, ADAM28, TMEM65, EPCAM, RPS3, STX3, LDLR, JAM2, GPR157, BCHE, SLC16A1, GSN, KCNB1, F11, SULF1, PLXDC1,	1703	5066	20472	1.2576	0.0000	0.0000
ECT	_CC_DIR	plasma membrane	4								

			SLCO4C1, PLP1, ANKS4B, SIGLEC1, SLC28A2, AGRN, CHRМ2, KCNG1, RAB3B, ATP8A1, TUSC3, RAB3D, RTKN2, GUCA1B, IL1RAP, LAPTM4B, IYD, SLC39A1, SLC16A3, PCDHAC2, PHLDA3, EPM2A, SLC38A1, KCNH4, SWAP70, DISP2, C1ORF16, CLEC4C, MELK, RAB31, LGSN, PKP2, PKP3, RHCG, SLC27A2, CLEC4G, DGKI, IFNAR1, SLC26A2, SHC3, SLC26A1, CCDC25, GPR88, ABHD6, UAP1, LIN7A, ITPR3, CYP2C19, KLC2, SLCO1B3, PLXNA1, TNFRSF14, NPTX1, DRD1, CD300LG, MPDZ, PLXNA3, CD163, OSBPL6, HTR1F, CD160, OSBPL3, SLC4A10, MCC, BMX, PTPRD, PTPRB, NBEA, ITGA10, ITGA11, SPIRE1, SERINC5, ITGB1, FLT3, ADRA1D, TREM2, FTCD, KIAA1549, ATP7B, CNGA1, PMEPA1, ITGB8, ITGAV, NEO1, SLC13A3, TRPC4, SGIP1, COL25A1, ITGA3, ITGA2, TNFRSF19, APOA1, RTN4RL2, KCNAB1, ATRN, PTP4A3, ADORA2B, NRG4, ITGA8, DNAJC9, DSG2, SMPDL3B, SLC47A1, SRC, ATP10B, LRP8, EHBPI, RAB23, FYN, CNNM4, KCNJ3, NLGN4X, ANGPT2, KCNJ10, KCNJ8, PCDH9, KCNJ12, SEMA4F, PTPN13, SORL1, MYO16, RAB10, MYO1E, P2RX6, FRAS1, RAB14, PRC1, SYT10, IL2RA, FCGR2B, MDGA2, KCNK2, KCNK4, PTPN3, RSC1A1, APP, SLC23A2, ERRFI1, VIPR1, SLC46A1, OXTR, SPARC, IL23R, AQP9, NUDT1, AQP7, EDNRA, EDNRB, KDR, B2M, PTGDR, MFSD2A, ACVR1, SLC34A2, EPHA4, ENTPD1, IL1R1, COG3, ACSL5, ACSL4, TM4SF5, HLA-A, TMEM170B,				
--	--	--	---	--	--	--	--

			<p>FNDC5, BTC, TIAM1, MIP, CD109, KCNQ3, STX1A, GPM6A, NRN1, TSHZ3, GYPC, PCDH10, TMEM63C, SDC2, SLC22A2, DCUN1D3, SLC22A1, LPAR2, CD1D, APCDD1, NKAIN2, NEU4, NAALAD2, SNX9, KCNN3, APOB, SPTBN2, TNFSF18, WWTR1, TNFSF15, RCC2, SURF4, GDF5, MSRA, VNN1, CD209, WNK2, ITGBL1, SDC1, SLC22A7, CALM2, TDGF1, DDR1, ROBO4, DIRAS2, KIF14, SLC7A11, SLC7A10, SIPA1L3, C8A, CX3CL1, EDA2R, AKAP12, CD36, CLIC2, CD34, RALGPS1, CAP1, MME, GFRA1, AVPR1A, RHOC, GFRA2, RHOB, LAT2, ENAH, CEACAM7, CEACAM6, CLDN18, TLR7, TAX1BP3, RHOV, CD47, TLR5, TLR4, ADH1B, SLC43A1, CXCR4, LILRA1, DRP2, NT5E, PERP, PDPN, ORMDL3, CTNNA1, GPCS, PTCHD3, CD59, GPC4, CD58, MICA, MPZL1, MPP3, GABBR1, SLC31A1, LHFPPL5, LHFPPL2, LYVE1, ITCH, XK, GPAM, KCNS1, NEDD4, RAB9B, IL18R1, KLB, STEAP3, STEAP4, CELSR1, ETS2, ACTG1, PLAU, RGS1, DUOXA1, CAPN2, SIRPA, CAPN3, KNTC1, IL6R, ENPP5, CA14, SH3GL2, ENPP7, PDGFRB, ABCG8, DSCAM, MMGT1, SPNS2, NPY1R, CASK, ATP1B3, SLC30A1, LIFR, RPGRIP1L, ATP1B1, GPRIN2, DOK7, CHMP4C, ELMO1, CERCAM, RELL2, ABCG2, RASL12, CHRNA5, CHRNA4, NPR1, SLC41A2, NTM, CHRNA6, SLC1A2, SLC41A1, LPL, ADRB2, CACNA1C, SEZ6L2, NDRG1, NALCN, ADIPOR2, ENHO, SCUBE1, NLRP6, PODXL, SMAD3, CAV2, CAV1, HSPA6, CRIM1,</p>							



			RPL12, ADCY1, AFP, PTGS1, LMAN1, FGD6, SRPX2, FRZB, RPS3, CHML, ANKIB1, GSN, PKLR, GLYCTK, PLXDC1, HIPK2, HEYL, CENPF, ABI2, MSRB3, NCAPD2, ZNF578, CDKN3, RAB3B, CLEC4M, RTKN2, FAM107A, FGF1, RPL10A, CLU, ALDH1L2, CDC14B, SALL1, DACH1, CFL2, TUBB1, NUDT16, GYG2, PHLDA3, EPM2A, RPS9, SWAP70, IPMK, MITF, THNSL1, TUBA4A, MOB3B, CLIP2, C1ORF116, CACNB3, MELK, MAF, LGSN, PKP2, FSCN1, ERG, PKP3, DGKI, FKBP5, NSMAF, FBLIM1, GPR88, AK3, AK4, ITPR3, AEBP1, AK5, CYP2C19, GLIS2, KLC2, BTBD3, SMYD2, SRGAPI, MPDZ, BDNF, CCDC14, STYX, FANCC, MCC, FBXO32, CYP4F12, HOPX, REEP1, ADCY10, CNOT6, DAB1, ARPC2, ALB, RCAN3, RNF182, ACO1, NIT1, MAP3K13, NES, ITGB1, BMP10, SH2D4A, LECT2, DUSP18, FTCD, SYNE1, ARL5B, LBH, SCRNI, SGCB, PPP1R13L, ACP6, DNM1L, CCDC38, ACTR3, HMGCS1, SGIP1, DNMT3A, RPL13A, KCNAB1, PTP4A1, ATRN, PTP4A3, EVC, DNAJC6, TRAF5, RPL37A, DNAJC9, BCAT1, MCM2, SRC, CCDC69, TYRP1, TTK, SRI, DRAM1, RAB23, CDC37L1, TRIM49, MMAA, CDC42BPG, MACC1, AKR7L, PTPN13, USH2A, MYO19, SGCG, PTPN14, BICC1, PML, MYO16, MYO1E, P2RX6, RAD51, PRC1, CTH, CD248, NAGS, PFKM, MMACHC, PFKP, PTPN3, DMGDH, APP, SLC23A2, ERRFI1, SLC46A1, SPARC, PANK1, HHIP, PLEKHB1, NUDT1, AQP7, RPS15, RPS6KA6, RPS19,				
--	--	--	--	--	--	--	--

			PPP2R1B, RPL18A, C7ORF31, CHEK1, CHAC2, ACAD11, SEPHS2, SOX4, EPHA4, LIMCH1, MTUS2, ACSL4, CSNK1E, SFRP4, MT1A, CYP2U1, SIK2, TRIM10, INTU, EPAS1, DCUN1D3, LPAR2, CD1D, MYL12A, TTBK1, SEC14L2, SEC14L3, NEU4, SNX9, ASL, KCNN3, RIMKLA, APOB, MAP9, SRPK2, APOBEC3C, WWTR1, EGR1, XBP1, APOBEC3F, TMEM50A, XRCC2, RANBP17, IQSEC3, MYO5A, ZWINT, DERA, CCT6A, MSRA, CD209, FUBP1, WNK2, WNK3, ID4, FBXL2, CALM2, RPS24, RPS23, INV3, CLIC5, GBE1, KIF11, SIPA1L3, KHK, AKAP12, SH3PXD2A, HNF4A, CD36, CLIC2, LMCD1, CD34, RALGPS1, CAP1, IL11, MME, KIF23, KIF6, MTSS1, CTTNBP2NL, ENAH, KIF2A, PTPNM2, CNKSRS3, PABPC3, TLR7, TAX1BP3, PABPC1, FAM20A, TLR4, DYNC1I2, HAAO, CXCR4, PRKX, CST8, RGPD1, PBLD, SCEL, SH3BGRL, RANBP3L, PNMA1, CYP2A13, CTNNA1, CTNNA3, MAP4K5, DCPS, MAP4K3, MICA, GINS1, ARNT2, GABBR1, MAP3K1, GCH1, GINS4, DDTL, AKR1C4, ITCH, NEDD4, KIF26B, CAMK4, CCNG2, PNPLA3, EPPK1, CAPS, MAD2L1, STEAP3, RASEF, NRL, ARHGAP44, PAIP2B, CCND2, KIF5B, FPGS, CAPN5, WWC3, CAPN2, CAPN3, KNTC1, SH3GL2, PDGFRB, ANXA11, CASK, SLC30A1, RPGRIP1L, ALDH3A2, SLFN13, CCNE2, KIF16B, SHPK, ELMO1, PPIF, PPIA, ID11, KLHL14, GSTCD, CACNA1C, NDRG1, CAMSAP2, FAM83H, RAI1, NLRP6, PODXL, KIF3A, SNTG1, NPHP1,				
--	--	--	--	--	--	--	--



			LRRC32, ABCC11, PIGV, AIFM1, C1QTNF6, OLR1, HAVCR1, MAMDC4, KCND3, GPR35, PRSS16, EMP1, SLC39A13, ELOVL6, ELOVL7, F3, BACE2, F8, TMEFF2, CD200R1, GPRC5B, MMP13, ADCY1, ABCB11, SLC7A1, TMEM165, LMAN1, MYCT1, ADAM28, TMEM65, EPCAM, TMEM67, MFN2, CHML, METTL7A, SLC17A8, STX3, SLC17A2, LDLR, JAM2, GPR157, BCHE, SLC16A1, GOLM1, ATRNL1, KCNB1, FMO3, PLXDC2, PLXDC1, RNF145, TMCO6, LPCAT3, PLP1, SIGLEC1, AGRN, CYB561, CHRM2, KCNG1, CLEC4M, ATP8A1, TUSC3, IL1RAP, CDC14B, TM7SF2, LAPTM4B, IYD, FADS6, LEPR, SLC25A42, SLC39A1, SLC16A3, PCDHAC2, UGT2B10, SLC38A1, UGT2B11, TAPI, SYPL2, ARMCX3, DISP2, CLEC4C, FRMD5, ARMCX2, SYPL1, PKP2, ADAM9, SLC27A3, FAM8A1, SLC27A2, CLEC4G, IFNAR1, SLC26A2, SLC26A1, INSIG1, ABHD6, ITPR3, VTCN1, SLCO1B3, UGT3A2, TNFRSF14, CD300LG, CD163, C3ORF80, SRD5A1, BDNF, SLC4A10, CYP4F12, FBXO31, REEP1, PTPRD, ADCY10, PTPRB, ITGA11, RNF182, REEP6, DHCR7, SERINC5, ST6GALNAC1, FLT3, ADRA1D, TREM2, SYNE1, KIAA1549, ATP7B, SGCB, CNGA1, C3ORF52, PMEPA1, SLC37A3, GAL3ST4, SLC13A3, TRPC4, COL25A1, SIGMAR1, TNFRSF19, GPX8, KCNAB1, SLC25A15, EVC, ADORA2B, NRG4, UGT2B4, TRIM59, SLC25A10, DSG2, ST6GALNAC3, SLC47A1, SMPX, FRRS1, SEMA3D, TYRP1, ATP10B,				
--	--	--	---	--	--	--	--

			CYP3A5, LRP8, DRAM1, MAL2, E2F5, CNNM4, SLC25A24, KCNJ3, CYB5A, NLGN4X, KCNJ10, SLC35A3, KCNJ8, RNF24, PCDH9, KCNJ12, TIE1, MBOAT2, SEMA4F, USH2A, SORL1, SGCZ, DHODH, P2RX6, FRAS1, SYT10, IL2RA, CD248, FCGR2B, MDGA2, SLC24A5, SLC25A33, KCNK2, SLC25A36, KCNK4, APP, SLC23A2, FAAH, VIPR1, SLC46A1, OXTR, PLEKHB2, IL23R, PLEKHB1, AQP9, AQP7, ZDHHC7, EDNRB, PTGFRN, PTGDR, ARL6IP6, MFSD2A, ACVR1, SLC34A2, ARSA, EPHA4, ENTPD1, ATP6V0E1, PAQR4, IL1R1, ACSL5, ACSL4, TM4SF5, HLA-A, CSNK1E, TMEM170B, RUNX1, MFSD10, FNDC5, CYP39A1, BTC, CCDC80, CYP2U1, MIP, KCNQ3, KDELR3, STX1A, CDS1, TMEM185B, SLC45A4, GPM6A, IGSF3, SLC35D1, PCDH10, TMEM63C, SDC2, SLC22A2, SLC22A1, SLC35D2, LPAR2, CD1D, APCDD1, UBE2J1, NKAIN2, SEC14L3, NAALAD2, KCNN3, B4GALNT4, TNFSF18, WWTR1, XBP1, LRRN3, TMEM50A, TNFSF15, SURF4, ACER1, VNN1, CD209, SDC1, CORO7, SLC22A7, TDGF1, CSRNP1, ROBO4, TRAM1, MOGAT3, MIA3, SLC7A11, SLC7A10, CX3CL1, CLYBL, EDA2R, SLC22A15, SPTLC3, CTSK, TMED3, CD36, CD34, SLC22A10, MME, ZDHHC13, SORCS1, AVPR1A, CYP7B1, LAT2, CEACAM7, B3GNT5, B3GNT3, CLDN18, RDH5, TLR7, CD302, TLR5, TLR4, POPDC2, STX18, SLC43A1, CXCR4, LILRA1, RFNG, NT5E, C10ORF105, PDPN, ORMDL3, GPC5, PTCHD3,				
--	--	--	--	--	--	--	--

					MGAT2, CD58, MICA, GABBR1, SLC31A1, TMEM176A, LHFPL5, LHFPL2, CYP8B1, LYVE1, XK, GPAM, KCNS1, PNPLA3, ESYT3, IL18R1, MEGF9, KLB, STEAP3, STEAP4, DENND5B, GXYLT2, CELSR1, MANEA, GALNT10, ARHGAP42, FAM162A, DUOXA1, ENPP3, IL6R, ENPP5, CA14, PDGFRB, ABCG8, MMTG1, ATG9B, SPNS2, NPY1R, CASK, SLC30A1, LIFR, KMO, SHISA9, TMEM130, ALDH3A2, GPD2, RELL2, ABCG2, CHRNA5, CHRNA4, NPR1, SLC41A2, SEL1L, CHRNA6, SLC1A2, SLC41A1, ADRB2, CACNA1C, DNAJC25, HIGD1A, SEZ6L2, NALCN, ADIPOR2, SEL1L3, TMEM125, MAN2A2, PODXL, CAV2, CAV1, CRIM1, LAYN, TRPV1, SYT9, ESR1, SELE, CRLS1, DNAJC16, SYT8, SYT7, DNAJC18, SLC2A9, NAT2, TMEM237, FAM163A, DNAJC10, PXMP2, EBPL, NMUR1, KLRD1, BMPR1A, TMEM45B, ABCD4, DYRK2, PDE3B, SLC2A1, SLC2A2, SLC2A4, ACSM2B, GHR, MFSD6, HEPH, CYP4V2, TMEM108, BDKRB2, GLP2R, ABCC9, RER1, TMEM216, CDH11, SCN4A, MCTP2, CDH19, HCN3, OR1E1, NRXN3, HMGCR, CLCN3, ATP2C1, AGPAT2, AGPAT3, AGPAT4, NT5DC1, CNR2, CLMN, SIPR1, NCAM1, NCAM2, GALNT7, CMTM8, GALNT5, CMTM3, CMTM4, BNIP3, B3GAT1, ATP2B2, CCS, SCD, ALOX5AP, AQP11, CKLF					
GOTERM _CC_DIR	GO:00 70062~	298	16.893	0.0000	APP, TFR, COL12A1, EPSS, RPS19, PPP2R1B, SCN11A, STMN1, B2M, ARSA, ENTPD1, PRKCB, ACSL4, CMBL, HLA-A, HSPG2, TIAM2, BTD, MTHFD1, SERPING1,	1703	2218	20472	1.6151	0.0000
ECT	extracel		4						0.0000	0.0000

				lular exosom e	UBA52, ATP6V0D2, CES3, ALDH7A1, CES2, GPLD1, CETP, GPM6A, MTMR2, ENPEP, TTYH3, STXBP4, SHMT1, PRKRIP1, SLC22A2, ENDOD1, IQGAP1, HPR, THY1, IQGAP2, MYL12A, SEC14L2, HPX, SEC14L3, C6, C7, RACGAP1, APOH, PRKAR2A, PDGFC, ST3GAL6, SNX9, ARSF, ASL, APOB, FUCA1, RDX, MYO5A, PRDX6, CCT6A, CS, EHD2, MSRA, BHMT, COL1A2, TOLLIP, GIPC2, PPT1, SDC1, SERPINI1, FAT4, DDR1, GABRB2, SERPINA3, CLIC5, PYGB, LAD1, ROBO4, ORM1, SERPINA1, GBE1, QPRT, SERPINA10, PEPD, SERPINA6, C8A, SERPINA7, ABCC11, SERPINA4, KHK, CTHS, QSOX1, CAP1, MME, ANXA2, ANXA3, BHMT2, GFRA1, NUTF2, F2, RHOC, RHOB, LAT2, UGDH, GPRC5B, BDH2, F9, UFC1, PAPC3, TAX1BP3, ALDOB, PAPC1, CD47, FAM20A, ALDOA, ANGPTL1, C11ORF54, TNXB, RPL12, CXCR4, ADCY1, ABCB11, FSTL1, CPN2, PBLD, PTGS1, SCEL, LMAN1, NT5E, SH3BGRL, CUX2, EPCAM, RPS3, CD59, STX3, GPC4, CD58, NQO2, MBD5, GSN, SLC16A1, GK, PKLR, F11, DDTL, AKR1C4, LYVE1, FABP1, ITCH, LRG1, GSTA5, NEDD4, CAMK4, SLCO4C1, AGRN, RAB3B, FCN2, STEAP4, ATP8A1, RAB3D, LOXL4, PLOD3, PEBP1, RPL10A, CLU, ALDH1L2, ACTG1, EFEMP1, PLAU, CFL2, C1RL, TUBB1, CAPN5, CAPN2, SIRPA, ENPP3, RPS9, SLC38A1, TPM4, IGFBP2, ANXA11, LIFR, ATP1B3, PCOLCE, NPNT, ATP1B1, TUBA4A, MINPP1, C1ORF116, SYPL1, COL4A2, RAB34, FSCN1,					
--	--	--	--	----------------------	--	--	--	--	--	--

					ADAM9, RHCG, SLC27A2, PPIA, FKBP5, SLC26A2, GSTCD, LIN7A, LTBP2, AEBP1, NDRG1, ACAT1, VTN, PODXL, KIF3A, COBLL1, PGK1, PLXNA1, MYH11, CNTLN, EPHX2, HSPA6, GGH, MSN, SYT7, PTPRD, QDPR, GRHPR, ARPC2, ALB, ALPL, CRYL1, ACO1, NIT2, SERINC5, ITGB1, SLC2A1, SLC2A4, FTCD, ALAD, CA1, ALDH2, ITGB8, ITGAV, EDIL3, GAL3ST4, YWHAH, FGB, ACTR3, SLC13A3, ARHGEF12, ITGA3, FGG, CTDSPL, SORD, APOA1, ABHD14B, RTN4RL2, YWHAZ, TTC38, ATRN, DDAH1, RPL37A, CAT, CDH11, MYH9, COL6A3, CHMP3, CDH13, DSG2, SMPDL3B, PAPPA2, CREB5, PON3, DDC, HPGD, SEMA3C, SRC, LAMA4, SRI, MLLT3, THBS1, TTR, MAN1C1, MAL2, PCBD1, SLIT2, BEND7, GALNT7, LUM, APOC3, AKR7L, ATP2B2, PTPN13, SORL1, RAB10, MYO1E, RAB14, CTH, GALM, CD248, VIM, ALDH8A1, PFKP, RAN						
GOTERM	GO:00	298	16.893	0.0000	APP, SLC46A1, SPARC, TFRC, IL23R, MKI67, RPL8, CYB5D2, RPS15, RPS19, CREB3L3, RPL18A, AKT3, STMN1, B2M, ACVR1, ENTPD1, IL1R1, COG3, ACSL5, ACSL4, HLA-A, HSPG2, SYTL4, TIAM2, NUP93, TIAM1, MTHFD1, PRKD1, ATP6V0D2, PRR11, SLC45A4, NUP205, MTMR2, NRN1, GYPC, PRKDC, SLC22A2, SLC22A1, ENDOD1, PDGFA, MTMR7, HSD11B1, ABR, NEU4, PRKAR2A, RAB11FIP5, WWTR1, JAG1, TNFSF15, RCC2, LRBA, EDEM1, STARD10, MYO5A, LARP4, PRDX6, CD209, CALU, PPT1, CORO7, FBXL2, FAT4, XKR4,	1703	2547	20472	1.4065	0.0000	0.0000
_CC_DIR	16020~		4		ECT membr ane						

			SLC22A7, CALM2, RPS24, RPS23, PIGS, INV, PYGB, MTMR10, NCAPG2, DIRAS2, KIF14, MIA3, KIF11, EVPLL, STON2, SLC6A1, SLC7A10, C8A, ABCC11, CX3CL1, OLR1, BBS7, CD36, CLIC2, CEP55, MAMDC4, ANXA2, ANXA3, ZDHHC13, SORCS1, BACE2, MRAS, KIF2A, VSNL1, PITPNM2, CNKSR3, GAS2, PLIN3, PLEKHO1, CD302, PABPC1, ALDOA, RAPGEF4, RPL10, RPL12, ADCY1, TMEM163, SLC7A1, LMAN1, NT5E, MTHFD1L, FRZB, CHN2, PDPN, RPS3, CTNNA1, PTCHD3, CD59, MGAT2, METTL7A, CD58, SLC17A2, LDLR, BCHE, SLC16A1, MGMT, ATRNL1, F11, LHFPL5, LHFPL2, LYVE1, ITCH, LRG1, LPCAT3, PNPLA3, EPPK1, NCAPD2, SLC28A2, CLEC4M, ATP8A1, DENND5B, RPL10L, TNC, LOXL4, IL1RAP, RPL10A, CLU, ACTG1, CCND2, KIF5B, DUOXA1, LEPR, SIRPA, ACAA1, SLC39A1, SLC16A3, IL6R, SH3GL2, ENPP7, PDGFRB, ABCG8, RPS9, TPM4, DSCAM, MMTG1, HGF, SPNS2, TAP1, ANXA11, NPNT, ATP1B1, DISP2, CACNB3, MELK, COL4A2, MSH2, LGSN, ELMO1, PPIF, ADAM9, SLC27A3, PPIA, DGKI, ABCG2, FKBP5, RASL12, SLC26A2, CHRNA4, SLC1A2, ITPR3, ADRB2, DNAJC25, KLC2, NPHP1, PGK1, MDNI, FAM83B, PLXNA3, SPECC1, CD163, OSBPL6, CAV2, CAV1, OSBPL3, ARHGAP27, ESR1, CRLS1, SYT7, CDK9, REEP1, SLC2A9, CNOT6, DAB1, NBEA, TMEM237, KIF4A, DNAJC10, PXMP2, ITGA11, RNF182, ALPL, DHCR7, MAP3K13, SERINC5, ITGB1, PDE3B, SLC2A1,			
--	--	--	---	--	--	--

					SLC2A2, SLC2A4, BICD1, RERG, HK2, MFSD6, ATP7B, CASP2, ITGAV, DNML, GAL3ST4, ACTR3, HSDL2, ARHGEF12, EGFL6, PLA2G4D, NPY5R, ITGA3, ITGA2, SIGMAR1, SORD, RPL13A, ABCC9, ATRN, VCAN, ACOX1, PEX3, CAT, CDH11, MYH9, MCM4, ITGB1BP1, ACOX3, MCTP2, ITGB3BP, FAM72A, SLC47A1, LAMA4, ATP10B, RRBPI, TTK, SRI, CLCN3, ATP2C1, LRP8, AGPAT3, OGFR1L, RPS6KC1, MAN1C1, NCAM1, SLIT2, GALNT7, CYB5A, KCNJ10, TPBG, MBOAT2, NAPIL1, SEMA4F, SORL1, MYO16, SCD, ALOX5AP, PFKM, CKLF, PFKP, RAN, SNTB1						
KEGG_P	hsa011	247	14.002	0.0000	DMGDH, PANK1, GLDC, XYLT1, ABAT, GLS, LIPG, PLCE1, LRAT, CHAC2, MLYCD, SEPHS2, ARSA, ENTPD1, SDS, ATP6V0E1, ACSL5, ACSL4, CMBL, GCAT, BTD, MTHFD1, CYP2U1, MTHFD2, IDO2, ATP6V0D2, ALDH7A1, GPLD1, GNE, CDS1, MTMR2, SHMT1, SDSL, ADH7, MTMR7, HSD11B1, ADH4, NEU4, CYP2B6, LDHD, PNPO, HAO1, ST3GAL6, ASL, RIMKLA, B4GALNT4, ST3GAL3, B3GALNT2, B3GALNT1, CYP4F3, ACADS, B PRDX6, DERA, CS, CYP2C9, ACER1, CYP2C8, BHMT, UCK2, ALDH6A1, HAL, VNN1, ADI1, PAH, CYP1A2, CYP1A1, PPT1, PIGS, PYGB, MOGAT3, GBE1, QPRT, CSAD, PIGV, KHK, MECOM, SPTLC3, GNPNAT1, ACAD8, BHMT2, SIRT5, ELOVL6, ELOVL7, PGM2L1, SIRT3, UGDH, BDH2, ALDH5A1, BDH1, B3GNT5, IVD, DPYD, B3GNT3, RGN, RDH5, ALDOB, ALDOA, MOC51,	880	1539	8156	1.4875	0.0000	0.0000
ATHWA	00:Metabolic pathways	247	14.002	0.0000	DMGDH, PANK1, GLDC, XYLT1, ABAT, GLS, LIPG, PLCE1, LRAT, CHAC2, MLYCD, SEPHS2, ARSA, ENTPD1, SDS, ATP6V0E1, ACSL5, ACSL4, CMBL, GCAT, BTD, MTHFD1, CYP2U1, MTHFD2, IDO2, ATP6V0D2, ALDH7A1, GPLD1, GNE, CDS1, MTMR2, SHMT1, SDSL, ADH7, MTMR7, HSD11B1, ADH4, NEU4, CYP2B6, LDHD, PNPO, HAO1, ST3GAL6, ASL, RIMKLA, B4GALNT4, ST3GAL3, B3GALNT2, B3GALNT1, CYP4F3, ACADS, B PRDX6, DERA, CS, CYP2C9, ACER1, CYP2C8, BHMT, UCK2, ALDH6A1, HAL, VNN1, ADI1, PAH, CYP1A2, CYP1A1, PPT1, PIGS, PYGB, MOGAT3, GBE1, QPRT, CSAD, PIGV, KHK, MECOM, SPTLC3, GNPNAT1, ACAD8, BHMT2, SIRT5, ELOVL6, ELOVL7, PGM2L1, SIRT3, UGDH, BDH2, ALDH5A1, BDH1, B3GNT5, IVD, DPYD, B3GNT3, RGN, RDH5, ALDOB, ALDOA, MOC51,	880	1539	8156	1.4875	0.0000	0.0000
Y	abolic pathways	247	14.002	0.0000	DMGDH, PANK1, GLDC, XYLT1, ABAT, GLS, LIPG, PLCE1, LRAT, CHAC2, MLYCD, SEPHS2, ARSA, ENTPD1, SDS, ATP6V0E1, ACSL5, ACSL4, CMBL, GCAT, BTD, MTHFD1, CYP2U1, MTHFD2, IDO2, ATP6V0D2, ALDH7A1, GPLD1, GNE, CDS1, MTMR2, SHMT1, SDSL, ADH7, MTMR7, HSD11B1, ADH4, NEU4, CYP2B6, LDHD, PNPO, HAO1, ST3GAL6, ASL, RIMKLA, B4GALNT4, ST3GAL3, B3GALNT2, B3GALNT1, CYP4F3, ACADS, B PRDX6, DERA, CS, CYP2C9, ACER1, CYP2C8, BHMT, UCK2, ALDH6A1, HAL, VNN1, ADI1, PAH, CYP1A2, CYP1A1, PPT1, PIGS, PYGB, MOGAT3, GBE1, QPRT, CSAD, PIGV, KHK, MECOM, SPTLC3, GNPNAT1, ACAD8, BHMT2, SIRT5, ELOVL6, ELOVL7, PGM2L1, SIRT3, UGDH, BDH2, ALDH5A1, BDH1, B3GNT5, IVD, DPYD, B3GNT3, RGN, RDH5, ALDOB, ALDOA, MOC51,	880	1539	8156	1.4875	0.0000	0.0000
	ys	247	14.002	0.0000	DMGDH, PANK1, GLDC, XYLT1, ABAT, GLS, LIPG, PLCE1, LRAT, CHAC2, MLYCD, SEPHS2, ARSA, ENTPD1, SDS, ATP6V0E1, ACSL5, ACSL4, CMBL, GCAT, BTD, MTHFD1, CYP2U1, MTHFD2, IDO2, ATP6V0D2, ALDH7A1, GPLD1, GNE, CDS1, MTMR2, SHMT1, SDSL, ADH7, MTMR7, HSD11B1, ADH4, NEU4, CYP2B6, LDHD, PNPO, HAO1, ST3GAL6, ASL, RIMKLA, B4GALNT4, ST3GAL3, B3GALNT2, B3GALNT1, CYP4F3, ACADS, B PRDX6, DERA, CS, CYP2C9, ACER1, CYP2C8, BHMT, UCK2, ALDH6A1, HAL, VNN1, ADI1, PAH, CYP1A2, CYP1A1, PPT1, PIGS, PYGB, MOGAT3, GBE1, QPRT, CSAD, PIGV, KHK, MECOM, SPTLC3, GNPNAT1, ACAD8, BHMT2, SIRT5, ELOVL6, ELOVL7, PGM2L1, SIRT3, UGDH, BDH2, ALDH5A1, BDH1, B3GNT5, IVD, DPYD, B3GNT3, RGN, RDH5, ALDOB, ALDOA, MOC51,	880	1539	8156	1.4875	0.0000	0.0000

			ADH1B, HAAO, AKR1D1, HSD17B3, ADCY1, HSD17B6, PTGS1, NTSE, MTHFD1L, MGAT2, XDH, GCH1, GK, PKLR, AADAT, GLYCTK, AKRIC4, FMO3, CYP8B1, AGMAT, GSTA5, GPAM, PNPLA3, OTC, ACAA2, TUSC3, GDA, PRDM6, PLOD3, OGDHL, ALDH1L2, CNDP1, GALNT10, TM7SF2, FPGS, ENPP3, NUDT16, ACAA1, GYG2, CA14, ENPP7, UGT2B10, CSGALNACT1, UGT2B11, GPT2, IPMK, MAT1A, KMO, ALDH3A2, MINPP1, SHPK, DGKI, PFKFB1, IDI1, PFKFB3, H6PD, FECH, NPRI, UAP1, AK4, GLYAT, AK5, CYP2C19, ACACB, ACAT1, MAN2A2, PGK1, SMYD2, NADK, SRD5A1, EPHX2, CRLS1, COQ6, QDPR, ADCY10, GRHPR, SEPSECS, GCLC, AMACR, NAT2, P4HA2, ALPL, CRYL1, ACO1, DHCR7, NIT2, ST6GALNAC1, PDE3B, HK2, FTCD, ACSM2B, HK1, DHTKD1, ALAD, CA1, ALDH2, NOS1, HIBCH, HMGCS1, PLA2G4D, BCKDHB, DNMT3A, GPX8, SORD, DCK, PCCA, ACOX1, CHDH, EHHADH, CAT, PCCB, UGT2B4, ACOX3, BCAT1, ST6GALNAC3, ASPA, BCAT2, DDC, MVK, TYRP1, HMGCR, CYP3A5, AGPAT2, AGPAT3, AGPAT4, PDE11A, CBS, OXCT1, MAN1C1, PCBD1, GALNT7, GALNT5, RRM2, FAHD1, MMAB, B3GAT1, MBOAT2, SUOX, DHODH, GNPDA2, SCD, CTH, GALM, NAGS, PDE7B, ALDH8A1, PFKM, LPIN2, PFKP					
--	--	--	--	--	--	--	--	--







			SERPINA1, QPRT, SLC6A1, C1QTNF1, C1QTNF6, GNPNAT1, OLR1, IKBKG, CEP55, ZNF365, ANXA2, NUTF2, MTSS1, UGDH, ALDH5A1, CEACAM6, IVD, CLDN18, ALDOB, ALDOA, MAPRE1, TLR4, PLIN5, PBLD, MIPOL1, RXRA, SRPX2, CTNNA1, DCPS, LDLR, BCHE, SLC16A1, GCH1, SLC31A1, F11, ABI2, PLP1, CCDC6, CFHR5, RAB9B, OTC, MAD2L1, STEAP3, PRDM6, RASEF, HJURP, ACTG1, TNN, KIF5B, LEPR, CAPN3, OIP5, NUDT16, SH3GL2, TPM4, HGF, ADIPOQ, KCTD1, MAT1A, FOXP2, MAF, CERCAM, IAPP, RHCG, ABCG2, PFKFB1, UAP1, ADRB2, ACACB, ADIPOR2, ACAT1, VTN, SCUBE1, BTBD3, HACL1, CBX5, SMAD3, CAV1, CBX1, INHBA, TRPV1, SYT9, ESR1, QDPR, HOOK2, ALB, CNTN2, TCF4, MAP3K13, FBNI, ABCD4, GPSM2, LECT2, FHL2, SLC2A1, MCM10, ADRA1D, PPP1R9A, LMNB2, SYNE1, GHR, ALAD, PPP1R13L, DDI2, CASP2, DNMT3A, SORD, APOA1, YWHAZ, GREM2, DMRTA1, TRAF5, CAT, MYH9, CHMP3, MCM6, BCAT1, ASPA, CREB5, CAMK2B, COLEC11, MVK, HPGD, TTK, SRI, HMGCR, THBS1, TTR, CBS, OXCT1, PCBD1, FYN, NCAM2, SLIT2, E2F7, TIMM8A, POLQ, MMAA, BNIP3, USH2A, PML, RAD51, GNPDA2, ZNF618, PRC1, CTH, ALOX5AP, AQP11, CDR2L, VIM, TEK, PFKM, PFKP, KCNK4					
--	--	--	--	--	--	--	--	--

GOTERM	GO:00	188	10.657	0.0000	CHRM2, APP, SLC23A2, VIPR1, OXTR, CLEC4M, TFRC, TUSC3, HHIP, AQP9, AQP7, FZD10, IL1RAP, TM7SF2, EDNRA, GJA1, EDNRB, GJA3, IYD, GJA5, KDR, SIRPA, SLC16A3, PCDHAC2, ENPP7, MFSD2A, PDGFRB, ACVR1, SLC34A2, ABCG8, EPHA4, KCNH4, SLC38A1, ENTPD1, DSCAM, IL1R1, KCNK12, NPY1R, TAP1, TM4SF5, LIFR, HLA-A, TMEM130, SYPL1, MIP, TYRO3, AGTR1, KCNQ3, RHCG, CLEC4G, IFNAR1, SLC26A2, ENPEP, SLC26A1, CHRNA5, GYPC, CHRNA4, PCDH10, SLC22A2, CCDC25, CHRNA6, GPR88, SLC22A1, SLC1A2, LPAR2, ITPR3, SLC05A1, CACNA1C, CD1D, ADRB2, THY1, APCDD1, PODXL, SLC01B3, PLXNA1, DRD1, PLXNA3, ABCA1, JAG2, ST14, CD163, JAG1, HTR1F, CAV2, FZD4, TNFSF15, CAV1, FZD6, SLC16A10, TRPV1, SELE, DCLK1, SLC2A9, PTPRD, PTPRB, SSPN, SDC1, NMUR1, KLRD1, SLC22A7, GABRB3, DDR1, GABRB2, GABRB1, SIGLEC9, FLT3, SLC2A1, SLC2A2, ADRA1D, TREM2, SLC2A4, LRRC32, SLC6A1, SLC7A10, ABCC11, EDA2R, GHR, ATP7B, C1QTNF1, SGCB, BDKRB2, CNGA1, OLR1, ITGAV, CD36, NEO1, CD34, HS3ST3B1, PCDHGA7, GPR37, NPY5R, MME, GPR35, TRPC4, COL25A1, FCRL6, AVPR1A, SSTR1, SSTR2, F3, ATRN, MMP16, ADORA2B, B3GNT3, SCN4A, CD47, TLR5, TLR4, HCN3, SEMA3C, SEMA3D, SLC43A1, NRXN3, SEMA3E, ADCY1, CLCN3, SLC7A1, CNR2, PERP, PDPN, CD58, GABRE, SLC17A2, LDLR, MPZL1, JAM2, MICA,	1703	1508	20472	1.4987	0.0000	0.0000	0.0000
--------	-------	-----	--------	--------	---	------	------	-------	--------	--------	--------	--------

					GABBR1, NLGN4X, SLC16A1, KCNJ10, PCDH9, SLC31A1, GOLM1, TIE1, TPBG, SEMA4F, ATP2B2, LYVE1, SORL1, P2RX6, SLC04C1, ESYT3, TEK, FCGR2B, SLC28A2, KCNK2, KCNK4							
GOTERM _CC_DIR	GO:0005739~	154	8.7302	0.0008	DMGDH, PECR, APP, ACAA2, TFRC, TUSC3, GLDC, TACO1, HJURP, NUDT1, ABAT, C10ORF67, OGDHL, CLU, ALDH1L2, GLS, GJA1, RPS6KA6, ABHD11, FAM162A, FPGS, PMPCA, SLC25A42, MLYCD, ACAD11, SOX4, PDK2, SDS, ACSL5, CLPX, GCAT, ARMCX3, ARMCX2, MTHFD1, MTHFD2, GPD2, DOK7, FDX1, PPIF, SLC27A3, ALDH7A1, COX19, H6PD, FECH, AK3, ABHD6, AK4, GLYAT, HIGD1A, ACACB, ACAT1, KLC2, GRPEL1, GRPEL2, LDHD, CEP72, NPTX1, RAB11FIP5, GLYATL1, BDNF, ADHFE1, DNAJC11, TRPV1, ACADSB, PRDX6, CRLS1, COQ6, CS, ADCY10, MSRA, GCLC, ALDH6A1, AMACR, HOOK2, PXMP2, ECHDC2, ACO1, ECHDC3, SFXN2, NIT1, SFXN5, HRK, ETFA, MTO1, HK2, CLYBL, ACSM2B, HK1, DHTKD1, GHR, ATP7B, AIFM1, ALDH2, ACP6, CASP2, NOS1, DNM1L, DLGAP5, HIBCH, HSDL2, BCKDHB, SIRT5, DCK, MRPL46, SIRT3, SLC25A15, ALDH5A1, BDH1, PCCA, IVD, CAT, PCCB, SLC25A10, BCAT1, FXN, BCAT2, PLIN5, FAM72A, SRC, SRI, BPHL, ADAM28, RXRA, MTHFD1L, TMEM65, OXCT1, PERP, PDPN, MFN2, FYN, RPP14, DCPS, SLC25A24, TIMM8A, FAHD1, MMAA, GK, KCNJ8, MACC1, GLYCTK, BNIP3,	1703	1437	20472	1.2883	0.4902	0.0198	0.0187





	d organel le				ABCA6, ABCA3, XRCC2, OSBPL3, FUCA1, CYP4F3, ABCA9, SLC16A10, CYP4F12, CYP2C9, EHD2, CYP2C8, EHD3, AMACR, DAB1, HOOK2, P4HA2, CYP1A2, CYP1A1, PPT1, SERINC5, SERPINA1, LECT2, MIA3, STON2, RND2, RND3, HK2, LRRC2, GLI3, ADAMTSL3, CTSK, BDKRB2, PMEPA1, OLR1, CTSH, QSOX1, DNM1L, TEAD2, ZNF365, TCF12, RHOC, RHOB, GPRC5B, BDH1, DNAJC6, CAT, RDH5, UGT2B4, DSG2, TAX1BP3, PLIN5, FAM72A, PON3, SMARCD1, MVK, HSD17B3, HSD17B6, CLCN3, CYP3A5, TMEM165, PTGS1, AP3M2, MYCT1, CYP2A13, S1PR1, CTNNAA1, E2F5, MTA3, CNNM4, CYB5A, SLC16A1, B3GAT1, ATP2B2, FMO3, RAB10, ITCH, LRG1, KLF5, RAB14, ABI2, OTC							
GOTERM _CC_DIR ECT	GO:00 09986~ cell surface	113	6.4059	0.0000	APP, SLC46A1, SPARC, TFRC, EPO, HHIP, FZD10, CLU, TNN, PLAU, LIPG, CAPN5, SIRPA, PTGFRN, BSN, PDGFRB, EPHA4, ADIPOQ, HLA-A, SFRP4, CD109, TYRO3, KCNQ3, ADAM9, INTU, IGSF3, SDC2, SLC1A2, PDGFA, LPL, LPAR2, CD1D, THY1, IQGAP2, ADAMTS13, SCUBE1, APOH, PDGFC, TNFSF18, FZD1, FZD4, FZD6, LAYN, MSN, CD209, ITGBLI, SDC1, CNTN2, TDGF1, ITGB1, BMP10, SLC7A11, LRRC32, SLC6A1, CX3CL1, GHR, TIMP2, ITGB8, ITGAV, CD36, HAVCR1, OIT3, NEO1, MBL2, FGB, GPR37, ANXA2, MME, TRPC4, ITGA3, ITGA2, FGG, APOA1, RTN4RL2, F3, AJAP1, CD200R1, GPRC5B, RER1, MMP16, CEACAM6, ITGA8, ANGPTL3, DSG2, CD47, TLR4, CXCR4, CST8, CLCN3, ABCB11,	1703	638	20472	2.1291	0.0000	0.0000	0.0000

					LRP8, THBS1, NTSE, SRPX2, EPCAM, NCAM1, CD59, GPC5, SLIT2, GPC4, CD58, LDLR, MPZL1, JAM2, MICA, NLGN4X, KCNB1, TPBG, SULF1, SORL1, AQP11, TEK, KCNK2							
GOTERM _MF_DIR	GO:00 42803~	97	5.4989	0.0000	APP, TFRC, PANK1, GLDC, CREB3L3, NUDT16, B2M, IL6R, PDK2, RAG1, EPM2A, ACVR1, SDS, TPM4, ADIPOQ, TAPI1, MTUS2, FOXP2, RUNX1, ALDH3A2, MSH2, CHMP4C, MASPI, ABCG2, FECH, SHMT1, PEX11A, PDGFA, LPL, ADRB2, HSD11B1, GRPEL1, STC2, GRPEL2, PDGFC, PNPO, SNX9, ECT2, BARD1, WWTR1, XBP1, TGFB2, SMAD3, CAV2, FZD4, EPHX2, TMEM192, GRHPR, CRYL1, TCF3, MAP3K13, BMPR1A, SYNE1, GHR, MECOM, HNF4A, IKBKG, DNM1L, ZNF365, HMGCS1, MME, APOA1, SLC39A13, DCK, ACOXI, DPYD, CAT, FIBIN, MYH9, RDH5, CDH13, ANG, JDP2, CAMK2B, PON3, TYRP1, MTHFD1L, CBS, SLIT2, MGAT2, XDH, PDLM4, NQO2, RRM2, NLGN4X, GCH1, MMAA, AADAT, BNIP3, PML, TBX15, HEYL, CENPF, SYT10, MMACHC, MIXL1, MAD2L1	1666	713	18811	1.5361	0.0353	0.0040	0.0039
GOTERM _MF_DIR	GO:00 05509~	96	5.4422	0.0002	SNED1, SPARC, RASEF, GUCA1B, CELSR1, EFEMP1, CAPN2, CAPN3, ENPP3, OIT3, EDIL3, PCDHAC2, ARSA, PCDHGA7, CCBE1, EGFL6, TPM4, ANXA2, PLA2G4D, ANXA3, SWAP70, ANXA11, F2, NPNT, HSPG2, RUNX1, F7, VCAN, RCN2, MMP13, MELK, F9, VSNL1, GPD2, PITPNM2, MYL3, CDH11, RGN, CDH13, DSG2, MASPI, MCTP2, MYL9, DNASE1L3, MATN3, CDH19, COLEC11,	1666	752	18811	1.4414	0.3437	0.0324	0.0320

					PCDH10, LPL, LTBP2, ITPR3, SRI, IQGAP1, THBS2, ATP2C1, THBS1, FSTL1, LRP8, MYL12A, ACAN, SCUBE1, ADAMTS13, MAN1C1, REPS2, SPOCK1, SLIT2, LDLR, SLC25A24, JAG2, JAG1, GSN, GCH1, PCDH9, MGMT, EDEM1, ATP2B2, PPP2R3A, SULF1, SYT9, SYT8, SYT7, PDP1, EHD2, EHD3, SMOC1, SYT10, CALU, ESYT3, ALPL, CD248, FAT4, AGRN, CALM2, MMACHC, CAPS, FBN1							
GOTERM	GO:00_07155~	81	4.5918	0.0000	DDR1, ITGB1, APP, BMP10, SIGLEC9, COL12A1, TNC, SLC7A11, CLDN2, RND3, HAPLN4, CX3CL1, EMILIN2, SIRPA, ITGB8, ITGAV, CD36, NEO1, CD34, EDIL3, PCDHAC2, FGB, PCDHGA7, EPHA4, ENTPD1, EGFL6, DSCAM, ITGA3, ITGA2, CASK, ATP1B1, NPNT, MTSS1, RHOB, AJAP1, VCAN, CDH11, TYRO3, ITGA8, CERCAM, CLDN18, COL6A3, ADAM9, COL6A6, DSG2, CD47, ITGB3BP, GNE, TNXB, SRC, PCDH10, NTM, LAMA4, DPT, PRKX, THY1, THBS2, THBS1, VTN, ACAN, PODXL, CTNNA1, S1PR1, SPOCK1, CTNNA3, NCAM1, NCAM2, NLGN4X, PCDH9, CADM2, MCAM, TPBG, BMX, SELE, LYVE1, COL1A1, ITGA10, ITGA11, SSPN, ITGBL1, CNTN2	1629	557	19256	1.7190	0.0103	0.0015	0.0015
GOTERM	GO:00_05925~	73	4.1383	0.0000	ITGB1, TES, FAM107A, TNC, FHL2, RPL10A, RPL8, RND3, ACTG1, RPS15, AKAP12, GJA1, RPS19, PLAU, CAPN5, CAPN2, ITGB8, ITGAV, B2M, PDGFRB, ACTR3, CAP1, RPS9, TPM4, MME, ITGA3, ITGA2, AFAP1, RPL13A, CASK, KIF23, HSPG2, YWHAZ, RHOB, ENAH,	1703	424	20472	2.0697	0.0000	0.0000	0.0000

					RPL37A, CAT, ITGA8, MYH9, ADAM9, CDH13, PABPC1, MAPRE1, PPIA, SRC, FBLIM1, RPL12, THY1, IQGAP1, ARHGAP22, CNN1, PRKAR2A, RPS3, NHS, CTNNA1, CD59, MPZL1, FZD1, GSN, CAV2, MCAM, CAV1, RDX, LAYN, MSN, RAB10, EHD3, ARPC2, ITGA11, ITGBL1, VIM, TEK, SNTB1						
GOTERM _CC_DIR	GO:00 16324~	69	3.9116	0.0000	CLIC5, SLC23A2, OXTR, SLC46A1, SLC2A1, SLC2A2, SIPA1L3, ABCC11, GJA1, DSTYK, CTSK, ENPP3, CD36, SLC16A3, CD34, IL6R, PDGFRB, SLC34A2, ABCG8, IGFBP2, ATP1B3, ATP1B1, AJAP1, CACNB3, CEACAM7, MIP, CEACAM6, CNKSR3, RHCG, ATP6V0D2, PAPPA2, ABCG2, SLC26A2, ENPEP, SLC47A1, SLC22A2, SLC22A1, ADRB2, THY1, CLCN3, ABCB11, SLC7A1, PODXL, EPCAM, PDPN, NHS, MAL2, STX3, MPDZ, CD300LG, SPTBN2, SLC16A1, JAG1, KCNB1, CAV1, FZD6, RDX, SLC4A10, LHFPL5, MSN, ATP2B2, CYP4F12, USH2A, SLC2A9, ADCY10, TEK, KCNK2, TDGF1, PFKM	1703	374	20472	2.2178	0.0000	0.0000
GOTERM _CC_DIR	GO:00 09897~	69	3.9116	0.0000	ITGB1, FCN2, CLEC4M, TFRC, IL23R, SLC2A4, GHR, CTSK, CAPN2, KDR, LEPR, ITGAV, ENPP3, CD36, CD34, B2M, IL6R, MBL2, FGB, ITGA3, IL1R1, FCRL6, ITGA2, FGG, LIFR, RTN4RL2, GFRA1, F2, GFRA2, CLEC4C, CD200R1, ITGA8, CDH13, CD302, TLR4, CLEC4G, COLEC11, COLEC10, ENPEP, CHRNA4, CXCR4, CD1D, THY1, VTCN1, CLCN3, THBS1, NT5E, SCUBE1, S1PR1, TNFRSF14, NCAM1, GPC4, LDLR, MICA, KCNJ3, ABCA1,	1703	456	20472	1.8190	0.0014	0.0001

					CD163, MCAM, TRPV1, SELE, CD209, ITGA10, IL2RA, ITGA11, SDC1, CD248, KLRD1, FCGR2B, BMPR1A							
GOTERM _MF_DIR	GO:00 05102~	63	3.5714	0.0000	PECR, FCN2, APP, SERPINE2, CLU, CX3CL1, HNF4A, RSPO3, SLC39A1, MBL2, PDGFRB, FGB, IGFBP4, HGF, ADIPOQ, IGFBP2, FGG, APOA1, CASK, GFRA1, HLA-A, NGF, F2, MTSS1, F7, AR, NRG4, RASA1, ANGPTL3, ANG, IAPP, TLR4, ANGPTL1, SMARCD1, SRC, LAMA4, NXPH4, LPL, SRI, VTCN1, SRPX2, PDPN, NTF3, APOF, CYTL1, FYN, CD58, FZD1, ABCA1, TNFSF18, ANGPT4, TGFB2, ANGPT2, TNFSF15, CD160, CAV1, LIF, IGFL3, MSN, PTPRD, AMACR, CLCF1, TDGF1	1666	396	18811	1.7963	0.0124	0.0018	0.0018
GOTERM _CC_DIR	GO:00 43025~	62	3.5147	0.0000	CHRM2, NRSN1, SLC6A1, PPP1R9A, CX3CL1, GHR, AKAP12, TNN, TIMP2, CAPN2, SH3GL2, SLC38A1, DSCAM, MME, KCND3, ANXA3, ACSL4, GFRA1, CSNK1E, TIAM1, MAP1B, MAP1A, ANG, DGKI, GPM6A, HCN3, DDC, KLHL14, SRC, CHRNA4, ITPR3, SEZ6L2, LRP8, TTBK1, CNR2, KIF3A, KCNN3, APOB, CNNM4, SPTBN2, TGFB2, GABBR1, TMEM50A, SLC31A1, SRD5A1, SLC4A10, TRPV1, PLXDC1, USH2A, SORL1, FBXO31, DHODH, ADCY10, P2RX6, DAB1, DLG3, PPT1, RGS10, CNTN2, SERPINI1, KCNK2, BMPR1A	1703	407	20472	1.8312	0.0040	0.0002	0.0002
GOTERM _CC_DIR	GO:00 05759~	61	3.4580	0.0000	DMGDH, ARHGAP11B, ACAA2, GLDC, NUDT1, ABAT, ETFA, OGDHL, ALDH1L2, ACSM2B, GLS, DHTKD1, ALDH2, ACP6, FPGS, PMPCA, MLYCD, HIBCH, PDK2, ACAD8, GPT2, BCKDHB, ACOT13, SIRT5, CLPX, SIRT3, BTD, ALDH5A1, PCCA, BDH1, MTHFD2, IVD, FDX1,	1703	390	20472	1.8802	0.0020	0.0001	0.0001

					PCCB, PPIF, FXN, ALDH7A1, BCAT2, FECH, ETFDH, AK3, AK4, GLYAT, ACAT1, GRPEL1, MTHFD1L, OXCT1, RPS3, FAHD1, MMAA, AADAT, MMAB, ADHFE1, SUOX, ACADSB, CS, PDP1, ALDH6A1, RAD51, NAGS, OTC							
GOTERM _CC_DIR ECT	GO:00 45202~ synapse	61	3.4580	0.0014	GABRB3, CHRM2, GABRB2, APP, GABRB1, FAM107A, CLU, HAPLN4, GLS, RPS15, CAPN5, NOS1, FGB, RPS9, GPR37, NPY5R, DSCAM, MME, TMOD2, MYRIP, SHISA9, ENAH, TIAM2, TIAM1, CACNB3, MAP1B, MAP1A, DOK7, KCNQ3, DGKI, CAMK2B, RGS17, NRN1, CHRNA5, RPL10, CHRNA4, CHRNA6, LYPD1, LIN7A, GIC1, SRPX2, KCNMB1, CHN2, GPC4, GABRE, NLGN4X, SLC16A1, HTR1F, CADM2, SLC4A10, ARPC2, SYT10, PLP1, RGS10, CNTN2, PDE7B, CPEB3, AGRN, FGF12, SNTB1, RPS23	1703	488	20472	1.5026	0.6991	0.0324	0.0306
GOTERM _CC_DIR ECT	GO:00 05788~ endopla smic reticulu m lumen	60	3.4014	0.0000	APP, SERPINA1, FLT3, COL12A1, SERPINA10, TNC, PLOD3, MIA3, QSOX1, B2M, ARSA, IGFBP5, IGFBP4, COL25A1, FGG, GPX8, APOA1, F2, MINPP1, F7, VCAN, F8, RCN2, F9, COL4A2, COL8A2, CERCAM, COL6A3, SERPING1, RDH5, ERP27, CES3, SLC27A2, MATN3, CES2, H6PD, SDC2, PDGFA, AFP, THBS1, FSTL1, FOXRED2, ADAMTS13, STC2, PDGFC, SERPINH1, ARSF, APOB, BCHE, GOLM1, COL1A1, COL3A1, COL1A2, P4HA2, DNAJC10, ALB, COL20A1, CALU, COL9A2, FBN1	1703	306	20472	2.3571	0.0000	0.0000	0.0000
GOTERM _CC_DIR ECT	GO:00 70161~ anchori ng	59	3.3447	0.0027	GABRB3, CHRM2, GABRB2, GABRB1, STON2, SLC6A1, PPP1R9A, EPS8, ARHGAP44, DSTYK, SH3PXD2A, KDR, TMEM108, NOS1, DNML1, BSN, SH3GL2, DSCAM, SIGMAR1, SHISA9, TANC2, GAP43, MAP1B, DOK7,	1703	481	20472	1.4745	0.8907	0.0502	0.0473

	junctio n				STX1A, DGKI, CAMK2B, GPM6A, RGS17, NRN1, CTBP2, CHRNA5, CHRNA4, CHRNA6, CXCR4, CACNA1C, TMEM163, DRP2, ABR, SRPX2, PDPN, DRD1, SLC17A8, GABRE, GABBR1, NLGN4X, KCNB1, CADM2, IQSEC3, CADPS, SLC4A10, SEMA4F, ATP2B2, TRPV1, SYT9, SYT7, SSPN, CPEB3, AGRN							
KEGG_P ATHWA Y	hsa041 51:PI3 K-Akt signalin g pathwa y	57	3.2313	0.0019	ITGB1, CHRM2, EPO, FLT3, TNC, FGF1, GHR, TCL1A, CCND2, PPP2R1B, CREB3L3, TNN, AKT3, KDR, ITGB8, ITGAV, IKBKG, IL6R, YWHAH, PDGFRB, ITGA3, HGF, ITGA2, NGF, YWHAZ, COL4A2, CCNE2, ITGA8, COL6A3, COL6A6, TLR4, CREB5, IFNAR1, TNXB, LAMA4, PDGFA, LPAR2, THBS2, THBS1, VTN, RXRA, NTF3, PDGFC, ANGPT4, ANGPT2, LAMB3, BDNF, PPP2R3A, IGF1, COL1A1, EFNA3, COL1A2, ITGA10, IL2RA, ITGA11, COL9A2, TEK	880	354	8156	1.4923	0.4690	0.0313	0.0286
GOTERM _CC_DIR ECT	GO:00 16323~ basolat eral plasma membr ane	52	2.9478	0.0000	SLC23A2, SLC46A1, TFRC, AQP9, SLC2A1, AQP7, SLC7A11, DSTYK, ATP7B, HEPH, LEPR, SLC16A3, SLC38A1, SLC13A3, ANXA2, TRPC4, ITGA3, CASK, ATP1B3, ATP1B1, AJAP1, ADAM9, RHCG, SLC47A1, SLC26A1, HPGD, SLC22A1, SLC41A1, LIN7A, CD1D, SLC7A1, EPCAM, PDPN, SLCO1B3, CD300LG, LDLR, CNNM4, ABCA1, ST14, SLC16A1, KCNJ10, CAV1, SLC4A10, MSN, ATP2B2, SLC16A10, SLC2A9, DLG3, SLCO4C1, EPPK1, TEK, SLC22A7	1703	238	20472	2.6265	0.0000	0.0000	0.0000



GOTERM _MF_DIR	GO:0016491~	47	2.6644	0.0000	DMGDH, DHRS12, PECR, OXNAD1, HPGD, ADH1B, TYRP1, HSD17B3, ETFDH, ETFA, HSD17B6, ADH7, CYP2C19, CYP3A5, HSD11B1, FOXRED2, AIFM1, HEPH, FADS6, IYD, HEATR4, NOS1, XDH, NQO2, HSDL2, RRM2, SRD5A1, ADHFE1, SORD, COQ6, ALDH3A2, CYP2C9, F8, BDH2, ALDH5A1, BDH1, ADI1, SCD, CHDH, CYP1A2, CYP1A1, RDH5, CRYL1, FAR1, MMACHC, CYB561, PAOX	1666	241	18811	2.2020	0.0009	0.0002	0.0002
GOTERM _BP_DIR	GO:0030335~	47	2.6644	0.0000	ITGB1, SEMA3C, ATP8A1, SEMA3D, LEF1, FAM107A, PDGFA, SEMA3E, FGF1, THBS1, ACTG1, FAM83H, PLAU, PODXL, PDPN, PDGFC, NTF3, KDR, S1PR1, CTSH, ITGAV, DRD1, ACVR1, PDGFRB, EPHA4, XBPI, SMAD3, FZD4, MCAM, HGF, CAV1, RDX, SEMA4F, IGF1, RHOC, F3, PTP4A1, COL1A1, TIAM1, F7, SH3RF2, CEACAM6, ANGPTL3, PLP1, ADAM9, CDH13, TDGF1	1629	256	19256	2.1702	0.0044	0.0014	0.0014
GOTERM _CC_DIR	GO:0043235~	44	2.4943	0.0000	DDR1, ITGB1, APP, VIPR1, NPR1, FLT3, IL23R, LOXL4, ITPR3, ADRB2, LRP8, TM7SF2, GHR, ACVR1C, RXRA, KDR, LEPR, OLR1, CD36, LDLR, IL6R, ACVR1, PDGFRB, ABCG8, EPHA4, GPR37, SMAD3, ITGA3, TIE1, NR1H4, LIFR, GFRA1, PLXDC1, GFRA2, P2RX6, PTPRB, CD200R1, GPRC5B, TYRO3, TLR7, KLRD1, TEK, TLR4, BMPR1A	1703	217	20472	2.4375	0.0001	0.0000	0.0000
GOTERM _CC_DIR	GO:0045121~	41	2.3243	0.0001	ITGB1, APP, SRC, SLC1A2, THY1, ADCY1, SLC2A4, IQGAPI, HK1, GJA1, EDNRB, PPP2R1B, PODXL, PDPN, KDR, SERPINH1, S1PR1, PGK1, CAPN2, MAL2, OLR1,	1703	251	20472	1.9636	0.0409	0.0017	0.0016



					COL6A3, ALPL, COL6A6, CD248, COL9A2, FMOD, GPLD1, MATN3, FBN1							
GOTERM _CC_DIR	GO:00 14069~	39	2.2109	0.0008	MTMR2, SRC, RPL12, CACNA1C, RPL10A, RPL8, PPP1R9A, LRP8, EPS8, DRP2, ARHGAP44, RPS19, RPL18A, TMEM108, RPS3, SPOCK1, FYN, NOS1, BSN, MPDZ, EPHA4, KCND3, BNIP3, IQSEC3, SIGMAR1, SEMA4F, NETO2, SHISA9, DCLK1, P2RX6, GAP43, DAB1, DNAJC6, DLG5, MAP1B, ITGA8, CPEB3, DGKI, STX1A	1703	267	20472	1.7559	0.4749	0.0195	0.0184
GOTERM _MF_DIR	GO:00 05178~	37	2.0975	0.0000	ITGB1, APP, TNXB, SRC, THY1, FGF1, THBS1, CX3CL1, VTN, ESM1, ADAMTS13, TNN, KDR, TIMP2, ITGB8, ITGAV, EDIL3, JAM2, EGFL6, ITGA3, ITGA2, GFRA1, IGF1, NPNT, HSPG2, COL3A1, FRMD5, ITGA10, ITGA11, ANGPTL3, ITGA8, ITGBL1, MYH9, ADAM9, ITGB1BP1, PPIA, FBN1	1666	161	18811	2.5949	0.0003	0.0001	0.0001
KEGG_P ATHWA Y	hsa052 05:Prot eoglyca ns in cancer	37	2.0975	0.0020	ITGB1, CAMK2B, SRC, SDC2, ITPR3, FZD10, IQGAP1, THBS1, ACTG1, VTN, PLAU, AKT3, KDR, PLCE1, ITGAV, FZD1, TGFB2, ARHGEF12, FZD4, PRKCB, CAV2, LUM, HGF, CAV1, ITGA2, FZD6, RDX, MSN, IGF1, HSPG2, ESR1, COL1A1, TIAM1, MRAS, COL1A2, SDC1, TLR4	880	205	8156	1.6728	0.4977	0.0313	0.0286
KEGG_P ATHWA Y	hsa012 40:Bios ynthesis s of cofacto rs	36	2.0408	0.0000	FECH, PANK1, SHMT1, HAAO, QPRT, AK3, AK4, AK5, HSD17B6, ALAD, ALDH2, MTHFD1L, FPGS, PNPO, NADK, UGT2B10, UGT2B11, GCH1, MMAB, GGH, MAT1A, KMO, COQ6, DHODH, ALDH3A2, UGDH, GCLC, MTHFD1, MTHFD2, RGN, UGT2B4, ALPL, IDO2, BCAT1, MOCS1, BCAT2	880	153	8156	2.1807	0.0036	0.0006	0.0006

GOTERM	GO:00	34	1.9274	0.0000	SPARC, TNXB, LAMA4, TNC, DPT, LTBP2, AEBP1, THBS2, THBS1, VTN, ACAN, SRPX2, EFEMP1, OIT3, EDIL3, FGB, LAMB3, LUM, ADIPOQ, FGG, PCOLCE, NPNT, MFAP5, COL1A1, COL3A1, FRAS1, COL1A2, COL4A2, MFAP2, COL8A2, COL9A2, AGRN, MATN3, FBN1	1666	138	18811	2.7819	0.0002	0.0001	0.0001
GOTERM	GO:00	33	1.8707	0.0001	TFRC, EPO, CHRNA4, EPAS1, SLC2A1, PDGFA, CXCR4, ABAT, THBS1, HK2, ALAD, EDNRA, PLAU, CAPN2, NOS1, EGR1, ARNT2, TGFB2, ANGPT2, SMAD3, PKLR, BNIP3, CAV1, ITGA2, ADIPOQ, ATP1B1, PML, F7, CAT, CYP1A1, ANG, TEK, PPARA	1629	182	19256	2.1433	0.2685	0.0195	0.0194
GOTERM	GO:00	31	1.7574	0.0002	SLC46A1, SLC47A1, SLC22A2, SLC22A1, SLC43A1, SLC2A1, SLC41A1, SLC2A2, SLCO5A1, SLC7A10, SLC7A1, MFSD6, SLC22A15, SLCO1B3, SLC17A8, SLC17A2, SLC37A3, CNNM4, SLC22A10, SLC13A3, SPNS2, SLC4A10, ABCC9, MFSD10, DISP2, SLC2A9, SLC25A15, SLC25A10, SFXN2, SLC22A7, SFXN5	1666	171	18811	2.0469	0.3269	0.0324	0.0320
GOTERM	GO:00	31	1.7574	0.0004	APP, LCN, TNXB, SERPINE2, SERPINA10, LPL, LTBP2, FGF1, THBS2, THBS1, FSTL1, VTN, APOH, LIPH, LIPG, RSPO3, SLIT2, APOB, ZNF146, COL25A1, F11, PCOLCE,	1666	176	18811	1.9888	0.4838	0.0473	0.0467







KEGG_P	hsa033	24	1.3605	0.0000	HMGCS1, GK, ADIPOQ, AQP7, APOA1, ACSL5, LPL, APOC3, ACSL4, CYP8B1, FABP1, RXRA, SCD, ACOX1, EHHADH, PLIN4, OLR1, PLIN2, CD36, ACOX3, PPARA, ACAA1, SLC27A2, PLIN5	880	75	8156	2.9658	0.0007	0.0002	0.0002
ATHWA Y	20:PPA R signalin g pathwa y											
KEGG_P	hsa041	24	1.3605	0.0000	ABCD4, PECR, MVK, PEX11A, EPHX2, ACSL5, ACSL4, NUDT7, AMACR, ACOX1, PEX3, EHHADH, PXMP2, CAT, HACL1, HAO1, FAR1, ACOX3, MLYCD, PEX11G, ACAA1, XDH, SLC27A2, PAOX	880	82	8156	2.7126	0.0037	0.0006	0.0006
ATHWA Y	46:Pero xisome											
GOTERM _CC_DIR ECT	GO:00 05796~ Golgi lumen	23	1.3039	0.0001	APP, LUM, SDC2, PDGFA, KERA, NGF, F2, HSPG2, HS3ST1, MMP11, F7, ACAN, VTN, F8, VCAN, F9, MMP16, SDC1, GPC5, ZG16, GPC4, AGRN, FMOD	1703	106	20472	2.6084	0.0412	0.0017	0.0016
KEGG_P	hsa046	23	1.3039	0.0001	FGB, SERPINA1, F11, FGG, F13A1, F2, CLU, F3, C8A, F7, VTN, F8, F9, C6, C7, PLAU, CFHR4, BDKRB2, SERPING1, CFHR5, CD59, MASP1, MBL2	880	85	8156	2.5079	0.0221	0.0022	0.0020
ATHWA Y	10:Co mplem ent and coagula tion cascade s											
GOTERM _MF_DIR ECT	GO:00 05518~ collage	22	1.2472	0.0000	DDR1, CCBE1, TNXB, SPARC, SMAD3, ITGA3, LUM, ITGA2, PDGFA, PCOLCE, AEBP1, USH2A, VTN, MMP13,	1666	68	18811	3.6530	0.0004	0.0001	0.0001

	n binding				C1QTNF1, LOX, ITGA10, CTSK, ITGA11, SERPINH1, ADAM9, RELL2							
GOTERM _MF_DIR	GO:00 04497~	22	1.2472	0.0000	CYP4F3, FMO3, CYP7B1, CYP2C19, CYP3A5, CYP8B1, YWHAZ, CYP4F12, COQ6, CYP39A1, FOXRED2, CYP2C9, CYP2C8, CYP2B6, CYP2U1, CYP2A13, CYP4V2, AGMO, PAH, CYP1A2, CYP1A1, YWHAH	1666	76	18811	3.2685	0.0031	0.0006	0.0006
ECT	monooxygense activity											
GOTERM _BP_DIR	GO:00 07596~	22	1.2472	0.0000	FGB, ENTPD1, SERPINA1, SERPINE2, ITGA2, F11, SERPINA10, F13A1, AK3, F2, F3, F7, LMAN1, F8, F9, SCUBE1, PLAU, HNF4A, SERPING1, CD59, CD36, HGFAC	1629	88	19256	2.9552	0.0560	0.0058	0.0057
ECT	blood coagulation											
GOTERM _BP_DIR	GO:00 08203~	21	1.1905	0.0000	ABCA1, CETP, APP, ABCA5, INSIG1, ERLIN1, APOA1, CYP7B1, TSKU, CYP2C9, RXRA, CYP1A2, CAT, APOC1, FDX1, ANGPTL3, LEPR, APOF, APOB, LDLR, SULT2A1	1629	82	19256	3.0273	0.0635	0.0060	0.0059
ECT	cholesterol metabolism process											
KEGG_P ATHWA Y	hsa012 30:Biosynthesis of amino acids	21	1.1905	0.0001	SDS, PKLR, GPT2, SHMT1, MAT1A, SDSL, CS, CBS, CTH, PAH, PGK1, ACO1, ASL, ALDOB, NAGS, ALDOA, BCAT1, PFKM, PFKP, BCAT2, OTC	880	75	8156	2.5951	0.0298	0.0025	0.0023

KEGG_P	hsa002	20	1.1338	0.0000	ACAD8, ACAA2, HMGCS1, BCKDHB, ABAT, ACADSB, ACAT1, ALDH3A2, ALDH6A1, PCCA, ALDH2, OXCT1, IVD, EHHADH, PCCB, BCAT1, ACAA1, ALDH7A1, HIBCH, BCAT2	880	48	8156	3.8617	0.0001	0.0000	0.0000
ATHWA Y	80:Valine, leucine and isoleucine degradation											
GOTERM _CC_DIR	GO:0031093~ platelet alpha granule lumen	19	1.0771	0.0000	FGB, SERPINA3, APP, TGFB2, ORM1, SERPINA1, SPARC, HGF, FGG, PDGFA, F13A1, IGF1, CLU, THBS1, F8, ALB, SERPING1, QSOX1, ALDOA	1703	67	20472	3.4090	0.0049	0.0002	0.0002
GOTERM _CC_DIR	GO:0042470~ melano some	19	1.0771	0.0020	ITGB1, GSN, ANXA2, TFRC, TYRP1, SLC2A1, MYO5A, GGH, ANXA11, NAPIL1, ATP1B3, MYRIP, YWHAZ, SYPL1, CALU, MYH11, STX3, SLC24A5, RAN	1703	103	20472	2.2175	0.8068	0.0406	0.0382
GOTERM _BP_DIR	GO:0014068~ positive regulation of phosphatidylin	19	1.0771	0.0002	PDGFRB, TGFB2, UNC5B, FLT3, SRC, HGF, PDGFA, TREM2, SEMA3E, IGF1, F2, NEDD4, PDGFC, CAT, KDR, FYN, TEK, SOX9, NKX3-1	1629	83	19256	2.7060	0.5983	0.0480	0.0477

	ositol 3- kinase signalin g										
KEGG_P ATHWA Y	hsa054 12:Arrh ythmog enic right ventric ular cardio myopat hy	19	1.0771	0.0011	ITGB1, ITGA3, ITGA2, LEF1, TCF7, CACNA1C, ACTG1, GJA1, CACNB3, SGCB, ITGA10, ITGA11, ITGA8, PKP2, CTNNA1, ITGB8, DSG2, ITGAV, CTNNA3	880	77	8156	2.2870	0.3131	0.0221
GOTERM _MF_DIR ECT	GO:00 50660~ flavin adenine dinucle otide binding	18	1.0204	0.0001	ACAD8, ETFDH, ETFA, FMO3, KMO, ACADSB, MTO1, FOXRED2, AIFM1, ACOX1, IVD, CHDH, LDHD, DPYD, NOS1, ACOX3, ACAD11, XDH	1666	68	18811	2.9888	0.1124	0.0119
GOTERM _CC_DIR ECT	GO:00 43202~ lysoso	18	1.0204	0.0022	PDGFRB, ARSA, LUM, SDC2, FUCA1, KERA, HSPG2, ACAN, NEU4, VCAN, CTSK, PPT1, SDC1, GPC5, GPC4, AGRN, APOB, FMOD	1703	96	20472	2.2540	0.8460	0.0435





KEGG_P	hsa003	15	0.8503	0.0001	DDC, AADAT, HAAO, KMO, ACAT1, DHTKD1, ALDH3A2, ALDH2, EHHAHDH, CYP1A2, CAT, CYP1A1, ALDH8A1, IDO2, ALDH7A1	880	42	8156	3.3101	0.0250	0.0023	0.0021
ATHWA Y	80:Try ptophan metabolism											
GOTERM _CC_DIR	GO:00 05782~ peroxisomal matrix	14	0.7937	0.0003	EPHX2, FABP1, GRHPR, NUDT7, AMACR, ACOX1, EHHAHDH, CAT, HACLI, HAO1, ACOX3, MLYCD, ACAA1, PAOX	1703	53	20472	3.1754	0.2272	0.0089	0.0084
KEGG_P	hsa049	14	0.7937	0.0019	ABCA1, CETP, ABCG8, APOA1, LPL, APOC3, ABCB11, APOH, LIPG, APOC1, ANGPTL3, CD36, APOB, LDLR	880	50	8156	2.5951	0.4778	0.0313	0.0286
GOTERM _BP_DIR	GO:00 33627~ cell adhesion mediate d by integrin	13	0.7370	0.0001	ITGB1, ITGA3, ITGA2, VTN, ITGA10, ITGA11, ITGA8, EMILIN2, ITGBL1, ITGB8, ADAM9, ITGAV, FBN1	1629	40	19256	3.8417	0.3483	0.0252	0.0250





