

CENTOGENE's Prenatal Gene List

Scope of analysis for CentoXome® and CentoGenome® Prenatal

Valid from April 6, 2023

Approved gene symbols according to HGNC, as of March 31, 2023

AAAS, AARS1, AARS2, ABAT, ABCA12, ABCA3, ABCB11, ABCB4, ABCB7, ABCC6, ABCC8, ABCC9, ABCD1, ABCD4, ABHD12, ABHD16A, ABHD5, ACACA, ACAD9, ACADM, ACADS, ACADVL, ACAN, ACAT1, ACBD6, ACE, ACO2, ACOX1, ACP5, ACSL4, ACTA1, ACTA2, ACTB, ACTG1, ACTL6B, ACTN2, ACVR2B, ACVRL1, ACY1, ADA, ADA2, ADAM17, ADAM22, ADAMTS10, ADAMTS13, ADAMTS19, ADAMTS2, ADAMTSL2, ADAR, ADARB1, ADAT3, ADCY5, ADGRG1, ADGRG6, ADGRV1, ADK, ADNP, ADPRS, ADSL, AEBP1, AFF2, AFG2A, AFG3L2, AGA, AGK, AGL, AGPAT2, AGPS, AGR2, AGRN, AGT, AGTPBP1, AGTR1, AGXT, AHCY, AHDC1, AHI1, AIFM1, AIMP1, AIPL1, AIRE, AK2, AKR1D1, AKT1, AKT2, AKT3, ALAD, ALDH18A1, ALDH1A3, ALDH3A2, ALDH4A1, ALDH5A1, ALDH6A1, ALDH7A1, ALDOA, ALDOB, ALG1, ALG11, ALG12, ALG13, ALG14, ALG2, ALG3, ALG6, ALG8, ALG9, ALOX12B, ALPL, ALS2, ALX3, ALX4, AMACR, AMER1, AMFR, AMN, AMPD1, AMPD2, AMT, ANK2, ANK3, ANKH, ANKRD11, ANKS6, ANO10, ANO5, ANOS1, ANTXR1, ANTXR2, AP1B1, AP1S1, AP1S2, AP3B1, AP3B2, AP4B1, AP4E1, AP4M1, AP4S1, APC2, APTX, AR, ARCN1, ARFGF2, ARG1, ARHGAP31, ARHGDIA, ARHGEF9, ARID1A, ARID1B, ARID2, ARL13B, ARL3, ARL6, ARL6IP1, ARMC9, ARNT2, ARSA, ARSB, ARSL, ARV1, ARX, ASAH1, ASCC1, ASH1L, ASL, ASNS, ASPA, ASPH, ASPM, ASS1, ASXL1, ASXL2, ASXL3, ATAD3A, ATCAY, ATIC, ATL1, ATM, ATOH7, ATP13A2, ATP1A1, ATP1A2, ATP1A3, ATP2B3, ATP5MK, ATP6AP2, ATP6V0A2, ATP6V0A4, ATP6V1A, ATP6V1B1, ATP6V1B2, ATP7A, ATP7B, ATP8A2, ATP8B1, ATR, ATRX, AUH, AUTS2, AXIN1, B3GALNT2, B3GALT6, B3GAT3, B3GLCT, B4GALNT1, B4GALT7, B4GAT1, B9D1, B9D2, BAG3, BANF1, BBS1, BBS10, BBS12, BBS2, BBS4, BBS5, BBS7, BBS9, BCAP31, BCKDHA, BCKDHB, BCKDK, BCL11A, BCOR, BCS1L, BGN, BHLHA9, BICD2, BIN1, BLM, BLNK, BLTP1, BMP1, BMP2, BMP4, BMPER, BMPR1B, BOLA3, BPNT2, BPTF, BRAF, BRAT1, BRCA1, BRCA2, BRD4, BRIP1, BRPF1, BRWD3, BSCL2, BSND, BTBD, BTK, BUB1B, C12orf57, C19orf12, C1orf127, C1QBP, C2CD3, C2orf69, CA2, CA5A, CA8, CACNA1A, CACNA1C, CACNA1D, CACNA1E, CACNA1G, CAD, CAMK2A, CAMK2B, CAMTA1, CANT1, CARD11, CARS2, CASK, CASP10, CASR, CAV1, CAVIN1, CBL, CBS, CBY1, CC2D1A, CC2D2A, CCBE1, CCDC103, CCDC115, CCDC22, CCDC39, CCDC40, CCDC47, CCDC65, CCDC78, CCDC8, CCDC88A, CCDC88C, CCN6, CCND2, CCNK, CCNO, CCT5, CD19, CD247, CD2AP, CD3D, CD3E, CD3G, CD40, CD40LG, CD79A, CD79B, CD96, CDC45, CDH1, CDH2, CDH23, CDH3, CDIN1, CDK10, CDK13, CDK19, CDK5RAP2, CDKL5, CDKN1C, CDON, CDSN, CDT1, CENPF, CENPJ, CEP104, CEP135, CEP152, CEP164, CEP290, CEP41, CEP55, CEP57, CEP63, CEP83, CERS1, CERS3, CERT1, CFAP298, CFAP300, CFAP410, CFAP418, CFC1, CFL2, CFTR, CHAMP1, CHAT, CHD2, CHD3, CHD4, CHD7, CHD8, CHKB, CHM, CHMP1A, CHRDL1, CHRNA1, CHRNA2, CHRNA4, CHRN1, CHRND, CHRNE, CHRNG, CHST14, CHST3, CHSY1, CHUK, CIB2, CILK1, CISD2, CIT, CKAP2L, CLCN1, CLCN2, CLCN4, CLCN5, CLCN7, CLCNKA, CLCNKB, CLDN1, CLDN16, CLDN19, CLMP, CLN3, CLN5, CLN6, CLN8, CLP1, CLPB, CLPP, CLRN1, CLTC, CNKSR2, CNNM2, CNOT1, CNOT3, CNPY3, CNTNAP1, CNTNAP2, COA6, COA8, COASY, COG1, COG4, COG5, COG6, COG7, COG8, COL10A1, COL11A1, COL11A2, COL13A1, COL17A1, COL1A1, COL1A2, COL2A1, COL3A1, COL4A1, COL4A2, COL4A3, COL4A4, COL4A5, COL6A1, COL6A2, COL6A3, COL7A1, COL9A1, COL9A2, COL9A3, COLEC10, COLEC11, COLQ, COMP, COQ2, COQ4, COQ6, COQ8A, COQ8B, COQ9, CORO1A, COX10, COX15, COX20, COX6B1, COX7B, CPLANE1, CPS1, CPT1A, CPT2, CRADD, CRB1, CRB2, CRBN, CREB3L1, CREBBP, CRELD1, CRIPT, CRKL, CRLF1, CRPPA, CRTAP, CRX, CRYAA, CRYAB, CSF1R, CSF2RB, CSF3R, CSNK1E, CSNK2A1, CSNK2B, CSP1, CSTA, CSTB, CTC1, CTCF, CTD1, CTNNA2, CTNNA1, CTNND1, CTNS, CTPS1, CTSA, CTSD, CTSK, CTU2, CUL3, CUL4B, CUL7, CWC27, CWF19L1, CXCR4, CYB5R3, CYBA, CYBB, CYC1,

CYP11A1, CYP11B1, CYP11B2, CYP17A1, CYP21A2, CYP24A1, CYP27A1, CYP27B1, CYP2U1, CYP4F22, CYP7B1, D2HGDH, DAG1, DARS1, DARS2, DAW1, DBT, DCAF17, DCC, DCDC2, DCHS1, DCLRE1C, DCX, DDB2, DDC, DDHD1, DDHD2, DDR2, DDX11, DDX3X, DDX59, DDX6, DEAF1, DEGS1, DENND5A, DEPDC5, DGAT1, DGKE, DGUOK, DHCR24, DHCR7, DHDDS, DHH, DHODH, DHTKD1, DHX16, DHX30, DHX37, DIAPH1, DIS3L2, DKC1, DLAT, DLD, DLG3, DLG4, DLG5, DLL1, DLL3, DLL4, DLX5, DMD, DMP1, DMPK, DMXL2, DNA2, DNAAF11, DNAAF3, DNAAF4, DNAAF5, DNAAF6, DNAH5, DNAH9, DNAJC12, DNAJC19, DNAJC3, DNAJC5, DNM1, DNM1L, DNM2, DNMT3A, DNMT3B, DOCK6, DOCK7, DOCK8, DOK7, DOLK, DPAGT1, DPF2, DPM1, DPM2, DPYD, DRC1, DSE, DSG1, DSP, DST, DSTYK, DTNA, DUOX2, DUOXA2, DVL1, DVL3, DYM, DYNC1H1, DYNC2H1, DYNC2I1, DYNC2I2, DYRK1A, DYSF, EARS2, EBF3, EBP, ECEL1, ECHS1, EDA, EDAR, EDN3, EDNRA, EDNRB, EED, EEF1A2, EFEMP2, EFN1, EFTUD2, EGR2, EHMT1, EIF2AK2, EIF2AK3, EIF2B1, EIF2B2, EIF2B3, EIF2B4, EIF2B5, EIF2S3, EIF3F, EIF4A3, ELAC2, ELANE, ELMO2, ELN, ELOVL4, ELP1, ELP2, EMC1, EMC10, EMD, EMX2, ENG, ENPP1, ENTPD1, EOGT, EP300, EPB42, EPCAM, EPG5, EPHB4, EPM2A, EPRS1, ERCC1, ERCC2, ERCC3, ERCC4, ERCC5, ERCC6, ERCC6L2, ERCC8, ERF, ERLIN1, ERLIN2, ESCO2, ETFA, ETFB, ETFDH, ETHE1, EVC, EVC2, EXOC3L2, EXOSC3, EXOSC8, EXOSC9, EXPH5, EXT1, EXT2, EXTL3, EYA1, EZH2, F10, F13A1, F2, F7, F8, F9, FA2H, FADD, FAH, FAM111A, FAM149B1, FAM161A, FAM20A, FAM20C, FANCA, FANCB, FANCC, FANCD2, FANCE, FANCF, FANCG, FANCI, FANCL, FANCM, FAR1, FARS2, FAS, FASLG, FASTKD2, FAT4, FBLN5, FBN1, FBN2, FBP1, FBRSL1, FBXL4, FBXO11, FBXO22, FBXW11, FBXW4, FCSK, FERMT3, FEZF1, FGA, FGB, FGD1, FGD4, FGF10, FGF12, FGF3, FGF8, FGF9, FGFR1, FGFR2, FGFR3, FGG, FH, FHL1, FIG4, FKBP10, FKBP14, FKRP, FKTN, FLAD1, FLNA, FLNB, FLT4, FLVCR1, FLVCR2, FMN2, FMR1, FN1, FOCAD, FOLR1, FOXC1, FOXC2, FOXE1, FOXE3, FOXF1, FOXG1, FOXL2, FOXN1, FOXP1, FOXP3, FOXRED1, FRAS1, FREM1, FREM2, FRMPD4, FRRS1L, FTCD, FTL, FTSJ1, FUCA1, FUT8, FXN, G6PC1, G6PC3, GAA, GABBR2, GABRA1, GABRB1, GABRB2, GABRB3, GABRG2, GAD1, GALC, GALE, GALK1, GALNS, GALT, GAMT, GAN, GAS8, GATA1, GATA2, GATA3, GATA4, GATA6, GATAD2B, GATM, GBA1, GBA2, GBE1, GCDH, GCH1, GCK, GDAP1, GDF1, GDF3, GDF5, GDF6, GDI1, GEMIN4, GFAP, GFER, GFM1, GFM2, GFPT1, GFRA1, GHR, GJA1, GJA8, GJB2, GJB3, GJC2, GK, GLA, GLB1, GLDC, GLDN, GLE1, GLI2, GLI3, GLIS2, GLIS3, GLMN, GLRX5, GLUD1, GLUL, GLYCK, GM2A, GMNN, GMPPA, GMPPB, GNA11, GNAI3, GNAO1, GNAQ, GNAS, GNB1, GNB5, GNPAT, GNPTAB, GNPTG, GNS, GOLGA2, GORAB, GOSR2, GOT2, GPAA1, GPC3, GPC6, GPHN, GPSM2, GPT2, GPX4, GREB1L, GRHL2, GRHL3, GRIA2, GRIA3, GRID2, GRIK2, GRIN1, GRIN2A, GRIN2B, GRIN2D, GRIP1, GRM1, GRM7, GSS, GTF2H5, GTPBP1, GTPBP3, GUCY2C, GUF1, GUSB, GYS1, GZF1, H1-4, HACD1, HACE1, HADH, HADHA, HADHB, HARS1, HAX1, HBA1, HBA2, HBB, HCCS, HCFC1, HCN1, HDAC4, HDAC8, HECW2, HEPACAM, HERC2, HESX1, HEXA, HEXB, HGSNAT, HIBCH, HINT1, HIVEP2, HK1, HLCS, HMGCL, HMGCS2, HMX1, HNF1B, HNF4A, HNRNPH2, HNRNPK, HNRNPU, HOXA1, HOXA13, HOXC13, HOXD13, HPD, HPDL, HPGD, HPRT1, HPS1, HPSE2, HRAS, HSD11B2, HSD17B10, HSD17B4, HSD3B2, HSD3B7, HSPA9, HSPD1, HSPG2, HTRA2, HUWE1, HYAL1, HYCC1, HYDIN, HYLS1, IARS1, IARS2, IBA57, ICOS, IDS, IDUA, IER3IP1, IFIH1, IFITM5, IFNGR2, IFT122, IFT140, IFT172, IFT27, IFT43, IFT56, IFT80, IGF1, IGF1R, IGF2, IGFBP7, IGSF1, IHH, IKKB, IKKKG, IL11RA, IL12RB1, IL1RAPL1, IL21R, IL2RA, IL2RG, IL7R, INPP5E, INPP5K, INPPL1, INS, INSR, INVS, IPO8, IQCB1, IQSEC1, IQSEC2, IRAK4, IRF6, IRF8, IRX5, ISCA2, ITFG2, ITGA3, ITGA6, ITGA7, ITGA8, ITGB4, ITK, ITPA, ITPR1, ITSN1, IVD, JAG1, JAGN1, JAK3, JAM2, JAM3, JARID2, KANK1, KANSL1, KARS1, KAT5, KAT6A, KAT6B, KAT8, KATNB1, KBTBD13, KCNA2, KCNB1, KCNC1, KCNC3, KCND2, KCNE1, KCNH1, KCNJ1, KCNJ10, KCNJ11, KCNJ6, KCNMA1, KCNQ1, KCNQ2, KCNQ3, KCNQ5, KCNT1, KCTD1, KCTD3, KCTD7, KDM5C, KDM6A, KIAA0586, KIDINS220, KIF11, KIF12, KIF14, KIF1A, KIF1C, KIF22, KIF2A, KIF5A, KIF5C, KIF7, KIFBP, KIRREL3, KLF1, KLHL15, KLHL40, KLHL41, KLHL7, KMT2A, KMT2B, KMT2C, KMT2D, KMT2E, KMT5B, KNL1, KPTN, KRAS, KRIT1, KRT10, KRT14, KRT8, L1CAM, L2HGDH, LAMA1, LAMA2, LAMA3, LAMB1, LAMB2, LAMB3, LAMC2, LAMC3, LAMP2, LARGE1, LARP7, LARS2, LAS1L, LBR, LDB3, LEMD3, LETM1, LFNG, LGI4, LHX3, LHX4, LIAS, LIFR, LIG4, LINS1, LIPA, LIPT1, LMBRD1, LMNA, LMOD2, LMOD3, LMX1B, LONP1, LPIN2, LRBA, LRP2, LRP4, LRP5, LRPPRC, LRRC56, LSS, LTBP2, LTBP3, LYRM7, LYST, LZTFL1, LZTR1, MAB21L1, MAB21L2, MACF1, MAF, MAFB, MAG, MAGEL2, MAGI2, MAGT1, MALT1, MAMLD1, MAN1B1, MAN2B1, MANBA, MAOA, MAP1B, MAP2K1, MAP2K2, MAP3K1, MAP3K7, MAPK8IP3,

MAPRE2, MARS1, MASP1, MAST1, MAT1A, MATN3, MBD5, MBOAT7, MBTPS2, MC2R, MCCC1, MCCC2, MCEE, MCOLN1, MCPH1, MDH2, MECOM, MECP2, MECP, MED12, MED13, MED13L, MED17, MED23, MED25, MEF2C, MEGF10, MEGF8, MEIS2, MEOX1, MESP2, METTL5, MFF, MFN2, MFRP, MFSD2A, MFSD8, MGAT2, MGME1, MGP, MICU1, MID1, MIPEP, MITF, MKKS, MKS1, MLC1, MLPH, MLYCD, MMAA, MMAB, MMACHC, MMADHC, MMP13, MMP21, MMUT, MN1, MNX1, MOCS1, MOCS2, MOGS, MORC2, MPDU1, MPDZ, MPI, MPLKIP, MPV17, MPZ, MRE11, MRPL3, MRPL44, MRPS2, MRPS22, MRPS34, MSL3, MSMO1, MSX1, MSX2, MTFMT, MTHFR, MTM1, MTO1, MTOR, MTR, MTRFR, MTRR, MTPP, MTX2, MUSK, MVK, MYBPC1, MYBPC3, MYCN, MYD88, MYH3, MYH6, MYH7, MYH8, MYH9, MYL3, MYO18B, MYO5A, MYO5B, MYO7A, MYOD1, MYPN, MYSM1, MYT1L, NAA10, NAA15, NACC1, NADSYN1, NAGA, NAGLU, NAGS, NALCN, NANS, NARS1, NARS2, NAXD, NAXE, NBAS, NBEA, NBN, NCAPD3, NCKAP1, NCKAP1L, NDE1, NDN, NDP, NDST1, NDUFA1, NDUFA10, NDUFA11, NDUFA12, NDUFA13, NDUFA2, NDUFA6, NDUFA9, NDUFAF1, NDUFAF2, NDUFAF3, NDUFAF4, NDUFAF5, NDUFAF6, NDUFAF8, NDUFB3, NDUFB8, NDUFS1, NDUFS2, NDUFS3, NDUFS4, NDUFS6, NDUFS7, NDUFS8, NDUFV1, NDUFV2, NEB, NECAP1, NECTIN1, NECTIN4, NEDD4L, NEK1, NEK8, NEMF, NEU1, NEUROG3, NEXMIF, NF1, NFASC, NFIA, NFIB, NFIX, NFKBIA, NFU1, NGF, NGLY1, NHEJ1, NHLRC1, NHP2, NHS, NIPAL4, NIPBL, NKX2-1, NKX2-5, NKX2-6, NKX3-2, NKX6-2, NLRC4, NLRP3, NMNAT1, NNT, NODAL, NOG, NONO, NOTCH1, NOTCH2, NOTCH3, NOVA2, NPC1, NPC2, NPHP1, NPHP3, NPHP4, NPHS1, NPHS2, NPR2, NR0B1, NR1H4, NR2F1, NR2F2, NR3C2, NR5A1, NRAP, NRAS, NRXN1, NRXN3, NSD1, NSDHL, NSUN2, NT5C2, NT5C3A, NTNG2, NTRK1, NTRK2, NUBPL, NUDT2, NUP107, NUP188, NYX, OBSL1, OCLN, OCRL, ODAD1, ODAD2, ODAD3, ODAPH, OFD1, OGDH, OLA1, OPA1, OPA3, OPHN1, ORC1, ORC4, ORC6, OSGEP, OSTM1, OTC, OTOGL, OTUD5, OTUD6B, OTULIN, OTX2, OXCT1, OXR1, P3H1, P4HB, P4HTM, PACS1, PACS2, PAFAH1B1, PAH, PAK3, PALB2, PAM16, PAN2, PANK2, PAPSS2, PARN, PARS2, PAX2, PAX3, PAX6, PAX7, PAX8, PC, PCARE, PCBD1, PCCA, PCCB, PCDH15, PCDH19, PCDHGC4, PCGF2, PCK1, PCNT, PCYT1A, PCYT2, PDCD10, PDE10A, PDE4D, PDE6D, PDE6G, PDGFRB, PDHA1, PDHB, PDHX, PDP1, PDSS2, PDX1, PEPD, PET100, PEX1, PEX10, PEX11B, PEX12, PEX13, PEX14, PEX16, PEX19, PEX2, PEX26, PEX3, PEX5, PEX6, PEX7, PGAP1, PGAP2, PGAP3, PGK1, PGM1, PGM3, PHACTR1, PHEX, PHF21A, PHF6, PHF8, PHGDH, PHIP, PHKG2, PHOX2B, PIBF1, PIEZO1, PIEZO2, PIGA, PIGB, PIGG, PIGK, PIGL, PIGN, PIGO, PIGQ, PIGS, PIGT, PIGV, PIGY, PIK3CA, PIK3CD, PIK3R1, PIK3R2, PISD, PITX1, PITX2, PITX3, PKD1L1, PKHD1, PKLR, PKP2, PLA2G6, PLAA, PLCB1, PLCB4, PLCE1, PLECG2, PLD1, PLEC, PLEKHG5, PLG, PLK4, PLOD1, PLOD2, PLOD3, PLP1, PLPBP, PLS3, PMM2, PMP22, PMPCB, PMS2, PNKP, PNP, PNPLA1, PNPLA8, PNPO, PNPT1, POC1A, POC1B, POGZ, POLA1, POLD1, POLE, POLG, POLG2, POLR1A, POLR1B, POLR1C, POLR1D, POLR3A, POLR3B, POMGNT1, POMGNT2, POMK, POMP, POMT1, POMT2, POR, PORCN, POU1F1, PPA2, PPFIBP1, PPIB, PPM1D, PPP1CB, PPP1R12A, PPP1R13L, PPP1R15B, PPP1R21, PPP2CA, PPP2R1A, PPP2R5D, PPP3CA, PPT1, PQBP1, PRDM12, PRDM16, PREPL, PRF1, PRICKLE1, PRKAG2, PRKAR1A, PRKAR1B, PRKCD, PRKD1, PRMT7, PROC, PRODH, PROP1, PROS1, PRPS1, PRRT2, PRRX1, PRSS12, PRSS56, PRUNE1, PRX, PSAP, PSAT1, PSMB8, PSMD12, PSPH, PTCH1, PTCHD1, PTDSS1, PTEN, PTF1A, PTH1R, PTHLH, PTPN11, PTPN14, PTPN23, PTPRC, PTRH2, PTS, PUF60, PURA, PUS1, PUS3, PUS7, PXDN, PYCR1, PYCR2, PYGL, PYGM, PYROXD1, QARS1, QDPR, QRICH1, RAB11A, RAB11B, RAB18, RAB23, RAB27A, RAB39B, RAB3GAP1, RAB3GAP2, RAC1, RAC2, RAD21, RAD50, RAD51C, RAF1, RAG1, RAG2, RAI1, RALGAPA1, RAPSN, RARB, RARS1, RARS2, RASA1, RAX, RB1, RBBP8, RBCK1, RBM10, RBM8A, RBPJ, RDH11, RELN, REN, RERE, RET, RETREG1, RFT1, RFX5, RFX6, RFXANK, RFXAP, RHOA, RHOBTB2, RIC1, RIMS2, RIN2, RIPK1, RIPK4, RIT1, RLIM, RMND1, RNASEH2A, RNASEH2B, RNASEH2C, RNASET2, RNF113A, RNF13, RNF135, RNF168, ROBO3, ROGDI, ROR2, RORA, RPE65, RPGRIP1, RPGRIP1L, RPIA, RPL10, RPL11, RPL13, RPL26, RPL5, RPS19, RPS26, RPS28, RPS29, RPS6KA3, RPS7, RRAGD, RRM2B, RSPH1, RSPH3, RSPO2, RSPRY1, RTEL1, RTN4IP1, RTTN, RUNX2, RXYLT1, RYR1, SACS, SALL1, SALL4, SAMD9, SAMD9L, SAMHD1, SARS2, SASS6, SATB2, SBDS, SBF1, SC5D, SCAF4, SCAMP5, SCAPER, SCARF2, SCN11A, SCN1A, SCN1B, SCN2A, SCN3A, SCN4A, SCN8A, SCN9A, SCNN1A, SCO1, SCO2, SCUBE3, SCYL1, SCYL2, SDCCAG8, SDHA, SDHAF1, SDHD, SEC23B, SEC24D, SELENOI, SELENON, SEPSECS, SERAC1, SERPINF1, SERPINH1, SET, SETBP1, SETD1A, SETD2, SETD5, SETX, SF3B4, SFTPB, SFTPC, SFXN4, SGCA, SGCE, SGCG, SGPL1, SGSH, SH2D1A, SH3PXD2B, SHANK1, SHANK2, SHH,

SHOC2, SHOX, SHROOM4, SIK1, SIL1, SIM1, SIN3A, SIX1, SIX3, SIX5, SKI, SKIC3, SKIV2L, SLC10A7, SLC12A1, SLC12A2, SLC12A3, SLC12A5, SLC12A6, SLC13A5, SLC16A1, SLC16A2, SLC17A5, SLC19A2, SLC19A3, SLC1A2, SLC1A4, SLC22A5, SLC25A1, SLC25A12, SLC25A13, SLC25A15, SLC25A19, SLC25A20, SLC25A22, SLC25A24, SLC25A26, SLC25A3, SLC25A38, SLC25A4, SLC25A42, SLC26A2, SLC26A3, SLC26A7, SLC27A4, SLC2A1, SLC2A10, SLC2A2, SLC30A10, SLC33A1, SLC35A1, SLC35A2, SLC35A3, SLC35C1, SLC35D1, SLC39A13, SLC39A14, SLC39A8, SLC4A1, SLC4A11, SLC4A4, SLC52A2, SLC52A3, SLC5A1, SLC5A5, SLC5A6, SLC5A7, SLC6A1, SLC6A3, SLC6A5, SLC6A8, SLC6A9, SLC7A7, SLC9A1, SLC9A6, SLX4, SMAD3, SMAD4, SMARCA2, SMARCA4, SMARCAL1, SMARCB1, SMARCC2, SMARCD1, SMARCE1, SMC1A, SMC3, SMCHD1, SMG9, SMN1, SMO, SMOC1, SMPD1, SMPD4, SMS, SNAP29, SNRPB, SNX14, SON, SOS1, SOS2, SOX10, SOX11, SOX17, SOX2, SOX3, SOX5, SOX6, SOX9, SP110, SP7, SPAG1, SPART, SPAST, SPECC1L, SPEG, SPG11, SPINK5, SPR, SPRED1, SPTAN1, SPTBN2, SPTBN4, SPTLC2, SQSTM1, SRCAP, SRD5A3, SRP54, SRY, SSR4, ST14, ST3GAL3, ST3GAL5, STAC3, STAG1, STAG2, STAMBIP, STAR, STAT2, STAT5B, STEEP1, STIL, STIM1, STRA6, STRADA, STS, STX11, STX1B, STXBP1, STXBP2, SUCLA2, SUCLG1, SUFU, SUMF1, SUOX, SURF1, SUZ12, SVBP, SYN1, SYNE1, SYNGAP1, SYNJ1, SYP, SYT1, SZT2, TAB2, TAC3, TACR3, TAF1, TAF13, TAF2, TAF6, TAF8, TAFAZZIN, TANGO2, TAOK1, TASP1, TAT, TBC1D20, TBC1D23, TBC1D24, TBCD, TBCE, TBCK, TBL1XR1, TBR1, TBX1, TBX15, TBX18, TBX20, TBX22, TBX3, TBX4, TBX5, TBXAS1, TCF12, TCF20, TCF4, TCIRG1, TCN2, TCOF1, TCTN1, TCTN2, TCTN3, TECPR2, TEK, TELO2, TERT, TFAP2A, TFAP2B, TFG, TGDS, TGFB1, TGFB2, TGFB3, TGFB1, TGFB2, TGIF1, TGM1, TH, THAP1, THOC2, THOC6, THRA, TIMM8A, TINF2, TJP2, TK2, TKT, TLK2, TMC01, TMEM107, TMEM126B, TMEM138, TMEM147, TMEM165, TMEM199, TMEM216, TMEM231, TMEM237, TMEM38B, TMEM67, TMEM70, TMEM94, Tmprss6, TMTC3, TMX2, TNFRSF11A, TNFRSF11B, TNFRSF13B, TNFSF11, TNNT1, TOE1, TOP3A, TOR1A, TP53, TP63, TP73, TPI1, TPK1, TPM2, TPM3, TPO, TPP1, TRAPPC11, TRAPPC2, TRAPPC4, TRAPPC9, TREX1, TRIM2, TRIM32, TRIM37, TRIO, TRIP11, TRIP12, TRIP13, TRIP4, TRIT1, TRMT1, TRMT10A, TRMU, TRNT1, TRPM1, TRPM3, TRPM6, TRPS1, TRPV3, TRPV4, TRPV6, TRRAP, TSC1, TSC2, TSEN15, TSEN2, TSEN54, TSFM, TSHB, TSHR, TSPAN7, TSPYL1, TTC19, TTC21B, TTC5, TTC7A, TTC8, TTN, TUBA1A, TUBA1B, TUBA8, TUBB, TUBB2A, TUBB2B, TUBB3, TUBB4A, TUBG1, TUBGCP2, TUBGCP6, TUFM, TUSC3, TWIST1, TWIST2, TWNK, TXNDC15, TXNL4A, TYMP, TYRP1, UBA1, UBA5, UBE2A, UBE2T, UBE3A, UBE3B, UBR1, UBTF, UCHL1, UFC1, UFM1, UGDH, UGP2, UGT1A1, UMPS, UNC13D, UNC80, UPB1, UPF3B, UQCC2, UQCRC2, UROC1, UROS, USB1, USH1C, USH1G, USH2A, USP18, USP53, USP7, USP9X, UVSSA, VAMP1, VAMP2, VANGL1, VARS1, VARS2, VDR, VIPAS39, VLDLR, VPS13B, VPS33B, VPS37A, VPS41, VPS45, VPS50, VPS53, VRK1, VSX2, WAC, WAS, WASF1, WASHC5, WDFY3, WDPCP, WDR11, WDR19, WDR26, WDR35, WDR37, WDR45, WDR45B, WDR62, WDR73, WDR81, WHRN, WLS, WNK1, WNT1, WNT10A, WNT10B, WNT3, WNT4, WNT5A, WNT7A, WRAP53, WT1, WWOX, XIAP, XPA, XPC, XRCC2, XRCC4, XYLT1, XYLT2, YAP1, YARS2, YIF1B, YWHAG, YY1, ZAP70, ZBTB18, ZBTB20, ZBTB24, ZC3H14, ZC4H2, ZDHHC9, ZEB2, ZFP57, ZFPM2, ZFYVE26, ZIC1, ZIC2, ZIC3, ZMIZ1, ZMPSTE24, ZMYM6, ZMYND10, ZMYND11, ZNF335, ZNF423, ZNF462, ZNF699, ZNF711, ZNHIT3