

Somatic Disease/Germline Comparator Exome (SDGC) Gene List

A1CF, ABCA4, ABCD1, ABI1, ABL1, ABL2, ABRAXAS1, ACD, ACKR3, ACSL3, ACSL6, ACVR1, ACVR1B, ACVR2A, ADCY8, AFDN, AFF1, AFF3, AFF4, AIP, AKAP9, AKT1, AKT2, AKT3, ALDH2, ALK, AMER1, ANK1, ANKRD26, APC, APOBEC3B, AR, ARAF, ARHGAP26, ARHGAP35, ARHGAP5, ARHGEF10, ARHGEF10L, ARHGEF12, ARID1A, ARID1B, ARID2, ARID5B, ARMC5, ARNT, ASPM, ASPSCR1, ASXL1, ASXL2, ATE1, ATF1, ATG2B, ATIC, ATM, ATP1A1, ATP2B3, ATR, ATRX, AXIN1, AXIN2, B2M, BAP1, BARD1, BAX, BAZ1A, BCL10, BCL11A, BCL11B, BCL2, BCL2L12, BCL3, BCL6, BCL7A, BCL9, BCL9L, BCLAF1, BCOR, BCORL1, BCR, BEND2, BIRC3, BIRC6, BLM, BMP4, BMP5, BMPR1A, BRAF, BRCA1, BRCA2, BRD3, BRD4, BRIP1, BTG1, BTG2, BTK, BUB1B, CACNA1D, CALR, CAMTA1, CANT1, CARD11, CARS1, CASP10, CASP3, CASP8, CASP9, CAVIN1, CBFA2T3, CBFB, CBL, CBLB, CBLC, CCDC6, CCNB1IP1, CCNC, CCND1, CCND2, CCND3, CCNE1, CCR4, CCR7, CD209, CD274, CD28, CD74, CD79A, CD79B, CDC25A, CDC5L, CDC73, CDH1, CDH10, CDH11, CDH17, CDK12, CDK4, CDK6, CDKN1A, CDKN1B, CDKN1C, CDKN2A, CDKN2B, CDKN2C, CDX2, CEBPA, CEP43, CEP57, CEP89, CHCHD7, CHD2, CHD4, CHD7, CHEK2, CHIC2, CHN1, CHST11, CIC, CIITA, CLIP1, CLP1, CLTC, CLTCL1, CNBD1, CNBP, CNOT3, CNTNAP2, CNTRL, COL1A1, COL2A1, COL3A1, COPS3, COX6C, CPEB3, CREB1, CREB3L1, CREB3L2, CREBBP, CRLF2, CRNKL1, CRTCL1, CRTCL3, CSF1R, CSF3R, CSMD3, CSNK2B, CTC1, CTCF, CTDNEP1, CTNNA1, CTNNA2, CTNNA3, CTNNB1, CTNND1, CTNND2, CTR9, CTRC, CUL3, CUX1, CXCR4, CYLD, CYP2C8, CYSLTR2, DAXX, DCAF12L2, DCC, DCTN1, DDB2, DDIT3, DDR2, DDX10, DDX31, DDX3X, DDX41, DDX5, DDX6, DEK, DGCR8, DICER1, DIP2B, DIS3, DIS3L2, DKC1, DLG2, DNAJB1, DNAJC21, DNM2, DNMT3A, DROSHA, DUSP10, DUX4L1, E2F3, EBF1, ECT2L, EED, EFL1, EFR3A, EGFR, EIF1AX, EIF3E, EIF3H, EIF4A2, ELANE, ELF3, ELF4, ELK4, ELL, ELN, ELP1, EML4, EP300, EPAS1, EPCAM, EPHA3, EPHA7, EPS15, ERBB2, ERBB3, ERBB4, ERC1, ERCC1, ERCC2, ERCC3, ERCC4, ERCC5, ERCC6L, ERF, ERG, ESR1, ETNK1, ETV1, ETV4, ETV5, ETV6, EWSR1, EXO1, EXT1, EXT2, EZH2, EZHIP, EZR, FADD, FAM111B, FAM131B, FAM135B, FAM47C, FANCA, FANCB, FANCC, FANCD2, FANCE, FANCF, FANCG, FANCI, FANCL, FANCM, FAP, FAS, FAT1, FAT3, FAT4, FBLN2, FBXO11, FBXW7, FCGR2B, FCRL4, FEN1, FES, FEV, FGF19, FGFR1, FGFR2, FGFR3, FGFR4, FH, FHIT, FIP1L1, FKBP9, FLCN, FLG, FLI1, FLNA, FLT3, FLT4, FNBP1, FOXA1, FOXL2, FOXO1, FOXO3, FOXO4, FOXP1, FOXR1, FOXR2, FRG1, FRG2, FSTL3, FUBP1, FUS, G6PC3, GALNT1, GALNT12, GAR1, GAS7, GATA1, GATA2, GATA3, GFI1, GFI1B, GLI1, GLI2, GMPS, GNA11, GNAQ, GNAS, GOLGA5, GOLPH3, GOPC, GPC3, GPC4, GPC5, GPHN, GPR101, GPR161, GPS2, GREM1, GRIN2A, GRM3, GSE1, GSK3B, GSKIP, H3-3A, H3-3B, H3C1, H3C10, H3C11, H3C12, H3C13, H3C14, H3C15, H3C3, H3C4, H3C6, H3C7, H3C8, H4C9, HACE1, HAX1, HERPUD1, HEY1, HGF, HIF1A, HIP1, HLA-A, HLF, HMGA1, HMGA2, HMGN2P46, HNF1A, HNRNPA2B1, HOOK3, HOXA11, HOXA13, HOXA9, HOXB13, HOXC11, HOXC13, HOXD11, HOXD13, HRAS, HSP90AA1, HSP90AB1, HUNK, ID2, ID3, IDH1, IDH2, IGF1R, IGF2, IGF2BP2, IGF2R, IGH, IGK, IGL, IKBKB, IKZF1, IKZF3, IL2, IL21R, IL6ST, IL7R, IRF4, IRS2, IRS4, ISX, ITGAV, ITK, JAK1, JAK2, JAK3, JAZF1, JUN, KANK1, KAT6A, KAT6B, KAT7, KBTBD4, KCNJ5, KDM1A, KDM3A, KDM3B, KDM4C, KDM5A, KDM5C, KDM6A, KDM7A, KDR, KDSR, KEAP1, KIAA1549, KIF1B, KIF5B, KIT, KLF4, KLF6, KLHL1, KLK2, KMT2A, KMT2C, KMT2D, KNL1, KNSTRN, KRAS, KTN1, LAMA5, LAP3, LARP4B, LASP1, LATS1, LATS2, LCK, LCP1, LEF1, LEPROTL1, LHFPL6, LIFR, LIG1, LIG4, LMNA, LMO1, LMO2, LPP, LRIG3, LRP1B, LSAMP, LSM14A, LYL1, LYN, LZTR1, MACC1, MAD2L2, MAF, MAFB, MALAT1, MALT1, MAML2, MAMLD1, MAP2K1, MAP2K2, MAP2K4, MAP3K1, MAP3K13, MAPK1, MAX, MB21D2, MBD4, MC1R, MDH2, MDM2, MDM4, MDS2, MECOM, MED12, MEN1, MET, MFN2, MGMT, MITF, MLF1, MLH1, MLH3, MLLT1, MLLT10, MLLT11, MLLT3, MLLT6, MN1, MNX1, MPL, MRE11, MRTFA, MSH2, MSH3, MSH6, MSI2, MSN, MTAP, MTCP1, MTOR, MUC1, MUC16, MUC4, MUC6, MUTYH, MYB, MYC, MYCL, MYCN, MYD88, MYH11, MYH9, MYNN, MYO5A, MYOD1, MYOG, N4BP2, NAB2, NACA, NAF1, NBEA, NBN, NCKIPSD, NCOA1, NCOA2, NCOA4, NCOR1, NCOR2, NDRG1, NF1, NF2, NFATC2, NFE2L2, NFIA, NFIB, NFKB2, NFKBIE, NHP2, NIN, NKX2-1, NONO, NOP10, NOTCH1, NOTCH2, NPAT, NPM1, NR2F2, NR4A3, NRAS, NRG1, NSD1, NSD2, NSD3, NT5C2, NTHL1, NTRK1, NTRK2, NTRK3, NUMA1, NUP214, NUP98,

NUTM1, NUTM2A, NUTM2B, NUTM2D, NXN, NYNRIN, OLIG2, OMD, OTX2, P2RY8, PABPC1, PAFAH1B2, PALB2, PALLD, PARN, PATZ1, PAX3, PAX5, PAX6, PAX7, PAX8, PBRM1, PBX1, PCBP1, PCM1, PCSK7, PDCD1LG2, PDE4DIP, PDGFB, PDGFRA, PDGFRB, PER1, PHF6, PHOX2B, PICALM, PIGA, PIK3C2B, PIK3CA, PIK3CB, PIK3R1, PIK3R3, PIM1, PINK1, PLAG1, PLAGL1, PLAGL2, PLCG1, PLEC, PMEL, PML, PMS1, PMS2, POLD1, POLD3, POLE, POLG, POLQ, POLR2A, POT1, POU2AF1, POU2AF3, POU5F1, POU6F2, PPARG, PPFIBP1, PPM1D, PPP2R1A, PPP6C, PRCC, PRDM1, PRDM16, PRDM2, PREX2, PRF1, PRKACA, PRKAR1A, PRKCB, PRKD1, PRPF40B, PRRX1, PRSS1, PSIP1, PTCH1, PTCH2, PTEN, PTK6, PTPN11, PTPN13, PTPN6, PTPRB, PTPRC, PTPRD, PTPRK, PTPRT, PWWP2A, QKI, RAB27A, RABEP1, RAC1, RAD17, RAD21, RAD50, RAD51B, RAD51C, RAD51D, RAF1, RAG1, RAG2, RALGDS, RANBP17, RANBP2, RAP1B, RAP1GDS1, RARA, RASA2, RB1, RBM10, RBM15, RBM8A, RECQL, RECQL4, REL, RELA, REST, RET, RFWF3, RGP3, RGS7, RHBDF2, RHOA, RHOH, RHPN2, RIT1, RMI2, RNF213, RNF43, ROBO2, ROS1, RPL10, RPL11, RPL15, RPL22, RPL23, RPL26, RPL27, RPL31, RPL35A, RPL5, RPN1, RPS10, RPS17, RPS19, RPS20, RPS24, RPS26, RPS27, RPS28, RPS29, RPS7, RRAS2, RSPO2, RSPO3, RTEL1, RUNX1, RUNX1T1, RUNX2, RXRA, S100A7, SALL4, SAMD9, SAMD9L, SBDS, SCG5, SCN9A, SDC4, SDHA, SDHAF2, SDHB, SDHC, SDHD, SEPTIN5, SEPTIN6, SEPTIN9, SET, SETBP1, SETD1B, SETD2, SETDB1, SF3B1, SFPQ, SFRP4, SGK1, SH2B3, SH2D1A, SH3GL1, SHOC2, SHROOM2, SHTN1, SIRPA, SIX1, SIX2, SKI, SLC29A3, SLC34A2, SLC45A3, SLX4, SMAD2, SMAD3, SMAD4, SMAD7, SMARCA4, SMARCB1, SMARCD1, SMARCE1, SMC1A, SMO, SNCAIP, SND1, SNX29, SOCS1, SOS1, SOS2, SOX2, SOX21, SPECC1, SPEN, SPINK1, SPOP, SPRED1, SRC, SRGAP3, SRP72, SRSF2, SRSF3, SS18, SS18L1, SSX1, SSX2, SSX4, STAG1, STAG2, STAT3, STAT5B, STAT6, STIL, STK11, STRN, STX11, STXB2, SUB1, SUFU, SUPT3H, SUZ12, SYK, SYNCRIP, TACC3, TAF15, TAL1, TAL2, TBL1XR1, TBR1, TBX3, TCEA1, TCF12, TCF3, TCF4, TCF7L1, TCF7L2, TCL1A, TCL6, TEC, TENT5C, TERC, TERT, TET1, TET2, TFE3, TFEB, TFG, TFPT, TFRC, TGFBR1, TGFBR2, THRAP3, TIN2, TLX1, TLX3, TMEM127, TMPRSS2, TMSB4X, TNC, TNFAIP3, TNFRSF14, TNFRSF17, TNRC18, TOP1, TOP3A, TP53, TP63, TPM3, TPM4, TPR, TPTE2, TRA, TRAF7, TRB, TRD, TRG, TRIM24, TRIM27, TRIM28, TRIM33, TRIM37, TRIP11, TRIP13, TRRAP, TSC1, TSC2, TSHR, TSR2, TTL, TYK2, U2AF1, UBE2T, UBR5, UNC13D, USP44, USP6, USP8, USP9X, VAV1, VEGFA, VHL, VPS53, VTI1A, WAS, WDCP, WIF1, WNK2, WRAP53, WRN, WT1, WWOX, WWTR1, XPA, XPC, XPO1, XPO5, XRCC2, YAP1, YWHAE, ZBTB16, ZCCHC8, ZEB1, ZFH3, ZFTA, ZIC1, ZMYM2, ZMYM3, ZNF331, ZNF384, ZNF429, ZNF479, ZNF521, ZNRF3, ZRSR2

Additional Genes assessed if indication is for Somatic Overgrowth and/or Vascular Malformation

A2ML1, ACTB, ACTG1, ACVRL1, ADAMTS3, AKT1, AKT2, AKT3, ANTXR1, ARAF, BRAF, CALCRL, CAMTA1, CBL, CCBE1, CCM2, CELSR1, CTNNB1, DCHS1, EGFR, ELMO2, ENG, EPHB4, FAT4, FGFR1, FLT4, FOS, FOSB, FOXC2, GATA2, GDF2, GJC2, GLMN, GNA11, GNA14, GNAQ, GNAS, HGF, HRAS, IDH1, IDH2, KAT6B, KDR, KIF11, KRAS, KRIT1, LZTR1, MAP2K1, MAP2K2, MAP3K3, MAP3K8, MAPK1, MET, MRAS, MTOR, MYC, NF1, NRAS, NSD1, NSUN2, PDCD10, PDGFRA, PDGFRB, PIEZO1, PIGA, PIK3CA, PIK3CD, PIK3R1, PIK3R2, PPP1CB, PTEN, PTPN11, PTPN14, RAF1, RASA1, RASA2, RIT1, RRAS, RRS2, SHOC2, SMAD4, SMO, SOS1, SOS2, SOX18, SPRED1, STAMPB, TEK, TFE3, TIE1, TSC1, TSC2, VEGFC, YAP1