

## Gene list for CENTOGENE's Carriership Findings

CENTOGENE's curated gene list of genes associated with recessive severe and early-onset Mendelian diseases used for the reporting of Carriership Findings for the patients undergoing exome and genome sequencing

Valid from April 6, 2023

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

AAAS, AARS1, AARS2, AASS, ABAT, ABCA12, ABCA3, ABCA5, ABCB11, ABCB4, ABCB7, ABCC6, ABCC8, ABCD1, ABCD4, ABHD12, ABHD5, ACACA, ACAD8, ACAD9, ACADM, ACADS, ACADSB, ACADVL, ACAN, ACAT1, ACBD6, ACE, ACO2, ACOX1, ACP5, ACTA1, ACTL6B, ACY1, ADA, ADA2, ADAM17, ADAM22, ADAMTS10, ADAMTS17, ADAMTS18, ADAMTS19, ADAMTS2, ADAMTS3, ADAMTSL2, ADAR, ADARB1, ADAT3, ADCY1, ADCY6, ADD3, ADGRG1, ADGRG6, ADGRV1, ADK, ADPRS, ADSL, AEBP1, AFF2, AFG2A, AFG3L2, AGA, AGK, AGL, AGPAT2, AGPS, AGR2, AGRN, AGT, AGTPBP1, AGTR1, AGXT, AHCY, AHI1, AIFM1, AIMP1, AIPL1, AIRE, AK2, AKR1C2, AKR1D1, ALAD, ALAS2, ALDH18A1, ALDH1A3, ALDH3A2, ALDH4A1, ALDH5A1, ALDH6A1, ALDH7A1, ALDOA, ALDOB, ALG1, ALG11, ALG12, ALG13, ALG14, ALG2, ALG3, ALG6, ALG8, ALG9, ALKBH8, ALOX12B, ALOXE3, ALPL, ALS2, ALX1, ALX3, ALX4, AMACR, AMER1, AMFR, AMN, AMPD1, AMPD2, AMT, ANAPC1, ANK3, ANKLE2, ANKS6, ANO10, ANOS1, ANTXR1, ANTXR2, AP1B1, AP1S1, AP1S2, AP3B1, AP3B2, AP4B1, AP4E1, AP4M1, AP4S1, APC2, APTX, AR, ARFGEF2, ARG1, ARHGDI1, ARHGEF9, ARL13B, ARL3, ARL6, ARL6IP1, ARMC9, ARNT2, ARSA, ARSB, ARSL, ARV1, ARX, ASAH1, ASCC1, ASL, ASNS, ASPA, ASPH, ASPM, ASS1, ATAD1, ATAD3A, ATCAY, ATIC, ATOH7, ATP13A2, ATP2B2, ATP2B3, ATP5F1A, ATP5F1D, ATP5F1E, ATP5MK, ATP6AP2, ATP6V0A2, ATP6V0A4, ATP6V1A, ATP6V1B1, ATP7A, ATP7B, ATP8A2, ATP8B1, ATPAF2, ATRX, AUH, AVPR2, B3GALNT2, B3GALT6, B3GAT3, B3GLCT, B4GALNT1, B4GALT1, B4GALT7, B4GAT1, B9D1, B9D2, BANF1, BBIP1, BBS1, BBS10, BBS12, BBS2, BBS4, BBS5, BBS7, BBS9, BCAP31, BCKDHA, BCKDHB, BCKDK, BCOR, BCORL1, BCS1L, BGN, BHLHA9, BIN1, BLM, BLNK, BLTP1, BMP1, BMP2, BMPER, BMPR1B, BOLA3, BPGM, BPNT2, BRAT1, BRF1, BRWD3, BSCL2, BSND, BTB, BTK, C12orf57, C19orf12, C1orf127, C1QBP, C2CD3, C2orf69, CA12, CA2, CA5A, CA8, CABP2, CABP4, CACNA1B, CACNA1D, CACNA1F, CACNA2D4, CAD, CAMK2A, CANT1, CARD11, CARMIL2, CARS2, CASK, CASR, CAST, CAV1, CAVIN1, CBLIF, CBS, CBY1, CC2D1A, CC2D2A, CCBE1, CCDC103, CCDC115, CCDC174, CCDC22, CCDC39, CCDC40, CCDC47, CCDC65, CCDC8, CCDC88A, CCDC88C, CCN6, CCNO, CCT5, CD19, CD247, CD3D, CD3E, CD3G, CD40, CD40LG, CD55, CD59, CD70, CD79A, CD79B, CD8A, CDAN1, CDC14A, CDC45, CDC6, CDCA7, CDH11, CDH23, CDH3, CDIN1, CDK10, CDK5RAP2, CDK6, CDKL5, CDSN, CDT1, CEBPE, CENPE, CENPF, CENPJ, CEP104, CEP120, CEP135, CEP152, CEP164, CEP19, CEP290, CEP41, CEP55, CEP57, CEP63, CEP83, CERS1, CERS3, CFAP298, CFAP300, CFAP410, CFAP418, CFAP53, CFL2, CFTR, CHAT, CHKB, CHMP1A, CHRDL1, CHRM3, CHRNA1, CHRNB1, CHRND, CHRNE, CHRNG, CHST14, CHST3, CHST8, CHSY1, CHUK, CIB2, CIITA, CILK1, CISD2, CIT, CKAP2L, CLCN1, CLCN2, CLCN4, CLCN5, CLCN7, CLCNKA, CLCNKB, CLDN1, CLDN14, CLDN16, CLDN19, CLEC7A, CLIC2, CLIC5, CLMP, CLN3, CLN5, CLN6, CLN8, CLP1, CLPB, CLPP, CLRN1, CNGB3, CNKSR2, CNNM4, CNPY3, CNTN1, CNTNAP1, CNTNAP2, COA6, COA8, COASY, COG1, COG2, COG4, COG5, COG6, COG7, COG8, COL11A1, COL11A2, COL13A1, COL17A1, COL1A2, COL25A1, COL27A1, COL3A1, COL4A3, COL4A4, COL6A1, COL6A2, COL6A3, COL7A1, COL9A2, COLEC10, COLEC11, COLQ, COPB2, COQ2, COQ4, COQ6, COQ8A, COQ8B, COQ9, CORO1A, COX10, COX15, COX20, COX4I2, COX6A1, COX6B1, COX7B, CPLANE1, CPLX1, CPS1, CPT1A, CPT2, CRADD, CRB1, CRB2, CRBN, CREB3L1, CRIPT, CRLF1, CRPPA, CRTAP, CRYAA, CSF1R, CSF2RB, CSF3R, CSPP1, CSTA, CTC1, CTDP1, CTNNA2, CTNS, CTPS1, CTSA, CTSC, CTSD, CTSK, CTU2, CUL4B, CUL7, CWC27, CWF19L1, CYB5A, CYB5R3, CYBA, CYBB, CYC1, CYP11A1, CYP11B1, CYP11B2, CYP17A1, CYP1B1, CYP24A1, CYP26C1, CYP27A1, CYP27B1, CYP2R1, CYP2U1,

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