

Gene	Alias	% of coding sequence sufficiently covered to detect heterozygous mutations	panel
AAAS		100%	Congenital malformation syndromes
AARS1		100%	Congenital malformation syndromes
AASS		100%	Congenital malformation syndromes
ABAT		100%	Congenital malformation syndromes
ABCA12		100%	Congenital malformation syndromes
ABCC6		100%	Congenital malformation syndromes
ABCC9		100%	Congenital malformation syndromes
ABCD1		100%	Congenital malformation syndromes
ABCD3		100%	Congenital malformation syndromes
ABCD4		100%	Congenital malformation syndromes
ABHD5		100%	Congenital malformation syndromes
ABL1		100%	Congenital malformation syndromes
ACAD9		100%	Congenital malformation syndromes
ACADVL		100%	Congenital malformation syndromes
ACAN		98%	Congenital malformation syndromes
ACE		100%	Congenital malformation syndromes
ACO2		100%	Congenital malformation syndromes

ACOX1		100%	Congenital malformation syndromes
ACP5		100%	Congenital malformation syndromes
ACSL4		100%	Congenital malformation syndromes
ACTA1		100%	Congenital malformation syndromes
ACTA2		100%	Congenital malformation syndromes
ACTB		100%	Congenital malformation syndromes
ACTC1		100%	Congenital malformation syndromes
ACTG1		100%	Congenital malformation syndromes
ACTG2		100%	Congenital malformation syndromes
ACVR1		100%	Congenital malformation syndromes
ACVR2B		100%	Congenital malformation syndromes
ACY1		100%	Congenital malformation syndromes
ADAMTS3		100%	Congenital malformation syndromes
ADAMTS10		100%	Congenital malformation syndromes
ADAMTS17		98%	Congenital malformation syndromes
ADAMTSL2		100%	Congenital malformation syndromes
ADAR		100%	Congenital malformation syndromes
ADGRG1		100%	Congenital malformation syndromes

ADGRG6		100%	Congenital malformation syndromes
ADNP		100%	Congenital malformation syndromes
ADSL		100%	Congenital malformation syndromes
AFF3		100%	Congenital malformation syndromes
AFF4		100%	Congenital malformation syndromes
AGK		100%	Congenital malformation syndromes
AGL		100%	Congenital malformation syndromes
AGPS		100%	Congenital malformation syndromes
AHCY		100%	Congenital malformation syndromes
AHDC1		100%	Congenital malformation syndromes
AHI1		100%	Congenital malformation syndromes
AIFM1		100%	Congenital malformation syndromes
AIMP1		100%	Congenital malformation syndromes
AIP1		100%	Congenital malformation syndromes
AIRE		100%	Congenital malformation syndromes
AKR1C2		100%	Congenital malformation syndromes
AKT1		100%	Congenital malformation syndromes
AKT2		100%	Congenital malformation syndromes

AKT3		100%	Congenital malformation syndromes
ALDH1A3		100%	Congenital malformation syndromes
ALDH3A2		100%	Congenital malformation syndromes
ALDH7A1		100%	Congenital malformation syndromes
ALDH18A1		100%	Congenital malformation syndromes
ALDOA		100%	Congenital malformation syndromes
ALG1		100%	Congenital malformation syndromes
ALG2		100%	Congenital malformation syndromes
ALG3		100%	Congenital malformation syndromes
ALG6		100%	Congenital malformation syndromes
ALG8		95%	Congenital malformation syndromes
ALG9		100%	Congenital malformation syndromes
ALG11		100%	Congenital malformation syndromes
ALG12		100%	Congenital malformation syndromes
ALG13		100%	Congenital malformation syndromes
ALMS1		100%	Congenital malformation syndromes
ALOX12B		100%	Congenital malformation syndromes
ALOXE3		100%	Congenital malformation syndromes

ALPL		100%	Congenital malformation syndromes
ALX1		100%	Congenital malformation syndromes
ALX3		100%	Congenital malformation syndromes
ALX4		100%	Congenital malformation syndromes
AMACR		100%	Congenital malformation syndromes
AMBRA1		100%	Congenital malformation syndromes
AMER1		100%	Congenital malformation syndromes
AMMECR1		100%	Congenital malformation syndromes
AMPD2		100%	Congenital malformation syndromes
AMT		100%	Congenital malformation syndromes
ANAPC1		100%	Congenital malformation syndromes
ANKH		100%	Congenital malformation syndromes
ANKRD11		100%	Congenital malformation syndromes
ANKRD26		95%	Congenital malformation syndromes
ANKS6		97%	Congenital malformation syndromes
ANOS1		100%	Congenital malformation syndromes
ANTXR1		100%	Congenital malformation syndromes
ANTXR2		100%	Congenital malformation syndromes

AP1S2		100%	Congenital malformation syndromes
AP3B2		100%	Congenital malformation syndromes
AP4B1		100%	Congenital malformation syndromes
AP4E1		100%	Congenital malformation syndromes
AP4M1		100%	Congenital malformation syndromes
AP4S1		100%	Congenital malformation syndromes
AR		100%	Congenital malformation syndromes
ARCN1		100%	Congenital malformation syndromes
ARFGEF2		100%	Congenital malformation syndromes
ARHGAP29		100%	Congenital malformation syndromes
ARHGAP31		100%	Congenital malformation syndromes
ARID1A		100%	Congenital malformation syndromes
ARID1B		100%	Congenital malformation syndromes
ARID2		100%	Congenital malformation syndromes
ARL3		100%	Congenital malformation syndromes
ARL6		100%	Congenital malformation syndromes
ARL13B		100%	Congenital malformation syndromes
ARMC4		100%	Congenital malformation syndromes

ARMC9		100%	Congenital malformation syndromes
ARSA		100%	Congenital malformation syndromes
ARSB		100%	Congenital malformation syndromes
ARSL		100%	Congenital malformation syndromes
ARVCF		100%	Congenital malformation syndromes
ARX		95%	Congenital malformation syndromes
ASAH1		99%	Congenital malformation syndromes
ASCC1		90%	Congenital malformation syndromes
ASNS		100%	Congenital malformation syndromes
ASPA		100%	Congenital malformation syndromes
ASPH		99%	Congenital malformation syndromes
ASPM		100%	Congenital malformation syndromes
ASS1		100%	Congenital malformation syndromes
ASXL1		100%	Congenital malformation syndromes
ASXL2		100%	Congenital malformation syndromes
ASXL3		100%	Congenital malformation syndromes
ATAD3A		100%	Congenital malformation syndromes
ATIC		100%	Congenital malformation syndromes

ATL1		100%	Congenital malformation syndromes
ATM		100%	Congenital malformation syndromes
ATP1A2		100%	Congenital malformation syndromes
ATP6V1B2		100%	Congenital malformation syndromes
ATP6V0A2		100%	Congenital malformation syndromes
ATP7A		100%	Congenital malformation syndromes
ATP8A2		99%	Congenital malformation syndromes
ATR		100%	Congenital malformation syndromes
ATRX		100%	Congenital malformation syndromes
ATXN10		100%	Congenital malformation syndromes
AVIL		100%	Congenital malformation syndromes
B3GALNT2		100%	Congenital malformation syndromes
B3GALT6		89%	Congenital malformation syndromes
B3GAT3		100%	Congenital malformation syndromes
B3GLCT		96%	Congenital malformation syndromes
B4GALT1		100%	Congenital malformation syndromes
B4GALT7		100%	Congenital malformation syndromes
B4GAT1		100%	Congenital malformation syndromes

B9D1		100%	Congenital malformation syndromes
B9D2		100%	Congenital malformation syndromes
BANF1		100%	Congenital malformation syndromes
BBIP1		100%	Congenital malformation syndromes
BBS1		100%	Congenital malformation syndromes
BBS2		100%	Congenital malformation syndromes
BBS4		100%	Congenital malformation syndromes
BBS5		100%	Congenital malformation syndromes
BBS7		100%	Congenital malformation syndromes
BBS9		100%	Congenital malformation syndromes
BBS10		100%	Congenital malformation syndromes
BBS12		100%	Congenital malformation syndromes
BCAP31		100%	Congenital malformation syndromes
BCL9L		100%	Congenital malformation syndromes
BCL11A		100%	Congenital malformation syndromes
BCOR		100%	Congenital malformation syndromes
BCS1L		100%	Congenital malformation syndromes
BDNF		100%	Congenital malformation syndromes

BFSP2		100%	Congenital malformation syndromes
BGN		100%	Congenital malformation syndromes
BHLHA9		100%	Congenital malformation syndromes
BICC1		100%	Congenital malformation syndromes
BICD2		100%	Congenital malformation syndromes
BIN1		100%	Congenital malformation syndromes
BLM		100%	Congenital malformation syndromes
BLOC1S6		100%	Congenital malformation syndromes
BMP1		100%	Congenital malformation syndromes
BMP2		100%	Congenital malformation syndromes
BMP4		100%	Congenital malformation syndromes
BMPER		100%	Congenital malformation syndromes
BMPR1B		100%	Congenital malformation syndromes
BNC2		100%	Congenital malformation syndromes
BOLA3		100%	Congenital malformation syndromes
BPTF		100%	Congenital malformation syndromes
BRAF		100%	Congenital malformation syndromes
BRAT1		100%	Congenital malformation syndromes

BRCA2		100%	Congenital malformation syndromes
BRIP1		100%	Congenital malformation syndromes
BRPF1		100%	Congenital malformation syndromes
BSND		100%	Congenital malformation syndromes
BTD		100%	Congenital malformation syndromes
BUB1		98%	Congenital malformation syndromes
BUB1B		100%	Congenital malformation syndromes
BUB3		100%	Congenital malformation syndromes
C1QBP		100%	Congenital malformation syndromes
C1QTNF5		100%	Congenital malformation syndromes
C2CD3		100%	Congenital malformation syndromes
C4BPA		100%	Congenital malformation syndromes
C4BPB		100%	Congenital malformation syndromes
C8orf37		100%	Congenital malformation syndromes
C12orf57		100%	Congenital malformation syndromes
C12orf65		100%	Congenital malformation syndromes
CA2		100%	Congenital malformation syndromes
CA5A		100%	Congenital malformation syndromes

CA8		100%	Congenital malformation syndromes
CACNA1A		100%	Congenital malformation syndromes
CACNA1C		100%	Congenital malformation syndromes
CACNA1D		100%	Congenital malformation syndromes
CACNA1E		100%	Congenital malformation syndromes
CACNA1G		100%	Congenital malformation syndromes
CAMK2A		100%	Congenital malformation syndromes
CAMK2B		100%	Congenital malformation syndromes
CAMTA1		100%	Congenital malformation syndromes
CANT1		100%	Congenital malformation syndromes
CARS2		100%	Congenital malformation syndromes
CASK		100%	Congenital malformation syndromes
CASR		100%	Congenital malformation syndromes
CBL		100%	Congenital malformation syndromes
CC2D2A		100%	Congenital malformation syndromes
CCBE1		100%	Congenital malformation syndromes
CCDC8		100%	Congenital malformation syndromes
CCDC22		100%	Congenital malformation syndromes

CCDC28B		100%	Congenital malformation syndromes
CCDC39		100%	Congenital malformation syndromes
CCDC40		100%	Congenital malformation syndromes
CCDC78		100%	Congenital malformation syndromes
CCDC88C		100%	Congenital malformation syndromes
CCDC103		100%	Congenital malformation syndromes
CCDC114		100%	Congenital malformation syndromes
CCDC151		100%	Congenital malformation syndromes
CCM2		100%	Congenital malformation syndromes
CCND2		100%	Congenital malformation syndromes
CCNQ		100%	Congenital malformation syndromes
CD55		92%	Congenital malformation syndromes
CD96		100%	Congenital malformation syndromes
CD151		100%	Congenital malformation syndromes
CDAN1		100%	Congenital malformation syndromes
CDC6		100%	Congenital malformation syndromes
CDC45		100%	Congenital malformation syndromes
CDC73		100%	Congenital malformation syndromes

CDH1		100%	Congenital malformation syndromes
CDH3		100%	Congenital malformation syndromes
CDH11		100%	Congenital malformation syndromes
CDK5RAP2		100%	Congenital malformation syndromes
CDK8		100%	Congenital malformation syndromes
CDK13		100%	Congenital malformation syndromes
CDKL5		100%	Congenital malformation syndromes
CDKN1C		96%	Congenital malformation syndromes
CDON		100%	Congenital malformation syndromes
CDT1		99%	Congenital malformation syndromes
CELSR1		99%	Congenital malformation syndromes
CENPF		100%	Congenital malformation syndromes
CENPJ		100%	Congenital malformation syndromes
CEP41		100%	Congenital malformation syndromes
CEP55		100%	Congenital malformation syndromes
CEP57		100%	Congenital malformation syndromes
CEP63		100%	Congenital malformation syndromes
CEP83		100%	Congenital malformation syndromes

CEP104		100%	Congenital malformation syndromes
CEP120		100%	Congenital malformation syndromes
CEP135		100%	Congenital malformation syndromes
CEP152		100%	Congenital malformation syndromes
CEP164		100%	Congenital malformation syndromes
CEP290		97%	Congenital malformation syndromes
CERS3		100%	Congenital malformation syndromes
CERT1		100%	Congenital malformation syndromes
CFAP53		100%	Congenital malformation syndromes
CFAP298		100%	Congenital malformation syndromes
CFAP300		100%	Congenital malformation syndromes
CFAP410		100%	Congenital malformation syndromes
CFC1		100%	Congenital malformation syndromes
CFHR2		100%	Congenital malformation syndromes
CFL2		100%	Congenital malformation syndromes
CFTR		100%	Congenital malformation syndromes
CHAMP1		100%	Congenital malformation syndromes
CHAT		100%	Congenital malformation syndromes

CHUK		100%	Congenital malformation syndromes
CILK1		100%	Congenital malformation syndromes
CIT		100%	Congenital malformation syndromes
CKAP2L		100%	Congenital malformation syndromes
CLCN7		100%	Congenital malformation syndromes
CLCNKB		100%	Congenital malformation syndromes
CLDN10		100%	Congenital malformation syndromes
CLMP		100%	Congenital malformation syndromes
CLP1		100%	Congenital malformation syndromes
CLPB		100%	Congenital malformation syndromes
CLPP		100%	Congenital malformation syndromes
CLTC		100%	Congenital malformation syndromes
CNKSR2		98%	Congenital malformation syndromes
CNOT1		100%	Congenital malformation syndromes
CNOT3		100%	Congenital malformation syndromes
CNTN1		100%	Congenital malformation syndromes
CNTNAP1		100%	Congenital malformation syndromes
CNTNAP2		100%	Congenital malformation syndromes

COASY		100%	Congenital malformation syndromes
COG1		100%	Congenital malformation syndromes
COG4		100%	Congenital malformation syndromes
COG5		100%	Congenital malformation syndromes
COG6		100%	Congenital malformation syndromes
COG7		100%	Congenital malformation syndromes
COG8		100%	Congenital malformation syndromes
COL1A1		100%	Congenital malformation syndromes
COL1A2		99%	Congenital malformation syndromes
COL2A1		100%	Congenital malformation syndromes
COL3A1		100%	Congenital malformation syndromes
COL4A1		100%	Congenital malformation syndromes
COL4A2		100%	Congenital malformation syndromes
COL5A1		100%	Congenital malformation syndromes
COL5A2		100%	Congenital malformation syndromes
COL6A1		100%	Congenital malformation syndromes
COL6A2		100%	Congenital malformation syndromes
COL6A3		100%	Congenital malformation syndromes

COL7A1		100%	Congenital malformation syndromes
COL9A1		99%	Congenital malformation syndromes
COL9A2		100%	Congenital malformation syndromes
COL10A1		100%	Congenital malformation syndromes
COL11A1		100%	Congenital malformation syndromes
COL11A2		100%	Congenital malformation syndromes
COL12A1		100%	Congenital malformation syndromes
COL13A1		100%	Congenital malformation syndromes
COL18A1		100%	Congenital malformation syndromes
COL25A1		100%	Congenital malformation syndromes
COLEC10		100%	Congenital malformation syndromes
COLEC11		100%	Congenital malformation syndromes
COLQ		100%	Congenital malformation syndromes
COMT		100%	Congenital malformation syndromes
COQ4		100%	Congenital malformation syndromes
COQ7		100%	Congenital malformation syndromes
COQ9		100%	Congenital malformation syndromes
COX7B		100%	Congenital malformation syndromes

CPAMD8		100%	Congenital malformation syndromes
CPLANE1		98%	Congenital malformation syndromes
CPT2		100%	Congenital malformation syndromes
CRADD		100%	Congenital malformation syndromes
CRB1		100%	Congenital malformation syndromes
CRB2		100%	Congenital malformation syndromes
CREB3L1		100%	Congenital malformation syndromes
CREBBP		100%	Congenital malformation syndromes
CRELD1		100%	Congenital malformation syndromes
CRH		100%	Congenital malformation syndromes
CRIPT		100%	Congenital malformation syndromes
CRLF1		96%	Congenital malformation syndromes
CRPPA		100%	Congenital malformation syndromes
CRTAP		100%	Congenital malformation syndromes
CRX		100%	Congenital malformation syndromes
CRYAA		93%	Congenital malformation syndromes
CRYBA1		100%	Congenital malformation syndromes
CRYBA4		100%	Congenital malformation syndromes

CRYBB1		100%	Congenital malformation syndromes
CRYBB2		100%	Congenital malformation syndromes
CRYBB3		100%	Congenital malformation syndromes
CRYGC		100%	Congenital malformation syndromes
CRYGD		100%	Congenital malformation syndromes
CSF1R		100%	Congenital malformation syndromes
CSNK2A1		100%	Congenital malformation syndromes
CSPP1		100%	Congenital malformation syndromes
CSTA		100%	Congenital malformation syndromes
CTC1		100%	Congenital malformation syndromes
CTCF		100%	Congenital malformation syndromes
CTDP1		99%	Congenital malformation syndromes
CTNNB1		100%	Congenital malformation syndromes
CTNND1		100%	Congenital malformation syndromes
CTNS		100%	Congenital malformation syndromes
CTSA		100%	Congenital malformation syndromes
CTSD		100%	Congenital malformation syndromes
CTSK		100%	Congenital malformation syndromes

CTU2		100%	Congenital malformation syndromes
CUL4B		100%	Congenital malformation syndromes
CUL7		100%	Congenital malformation syndromes
CUX2		100%	Congenital malformation syndromes
CWC27		98%	Congenital malformation syndromes
CXCR4		100%	Congenital malformation syndromes
CYB5R3		100%	Congenital malformation syndromes
CYP1B1		100%	Congenital malformation syndromes
CYP2U1		100%	Congenital malformation syndromes
CYP4F22		100%	Congenital malformation syndromes
CYP11A1		100%	Congenital malformation syndromes
CYP11B1		100%	Congenital malformation syndromes
CYP17A1		100%	Congenital malformation syndromes
CYP19A1		100%	Congenital malformation syndromes
CYP21A2		100%	Congenital malformation syndromes
CYP26B1		100%	Congenital malformation syndromes
DACH1		100%	Congenital malformation syndromes
DAG1		100%	Congenital malformation syndromes

DARS1		100%	Congenital malformation syndromes
DCC		100%	Congenital malformation syndromes
DCDC2		100%	Congenital malformation syndromes
DCHS1		100%	Congenital malformation syndromes
DCX		100%	Congenital malformation syndromes
DDHD2		100%	Congenital malformation syndromes
DDR2		100%	Congenital malformation syndromes
DDX3X		100%	Congenital malformation syndromes
DDX6		100%	Congenital malformation syndromes
DDX11		100%	Congenital malformation syndromes
DDX59		100%	Congenital malformation syndromes
DENND5A		100%	Congenital malformation syndromes
DHCR7		100%	Congenital malformation syndromes
DHCR24		100%	Congenital malformation syndromes
DHDDS		100%	Congenital malformation syndromes
DHFR		100%	Congenital malformation syndromes
DHH		100%	Congenital malformation syndromes
DHODH		100%	Congenital malformation syndromes

DHTKD1		100%	Congenital malformation syndromes
DHX30		100%	Congenital malformation syndromes
DIAPH1		100%	Congenital malformation syndromes
DIS3L2		100%	Congenital malformation syndromes
DISP1		100%	Congenital malformation syndromes
DKC1		100%	Congenital malformation syndromes
DLG4		100%	Congenital malformation syndromes
DLL3		100%	Congenital malformation syndromes
DLL4		100%	Congenital malformation syndromes
DLX5		100%	Congenital malformation syndromes
DMD		100%	Congenital malformation syndromes
DMPK		100%	Congenital malformation syndromes
DNAAF1		100%	Congenital malformation syndromes
DNAAF2		100%	Congenital malformation syndromes
DNAAF3		100%	Congenital malformation syndromes
DNAAF4		100%	Congenital malformation syndromes
DNAAF5		97%	Congenital malformation syndromes
DNAH5		100%	Congenital malformation syndromes

DNAH9		100%	Congenital malformation syndromes
DNAH11		100%	Congenital malformation syndromes
DNAI1		100%	Congenital malformation syndromes
DNAI2		100%	Congenital malformation syndromes
DNAJB11		100%	Congenital malformation syndromes
DNAJC12		100%	Congenital malformation syndromes
DNAJC19		100%	Congenital malformation syndromes
DNAL1		90%	Congenital malformation syndromes
DNM1		100%	Congenital malformation syndromes
DNM1L		100%	Congenital malformation syndromes
DNM2		100%	Congenital malformation syndromes
DNMT3A		100%	Congenital malformation syndromes
DNMT3B		100%	Congenital malformation syndromes
DOCK6		100%	Congenital malformation syndromes
DOCK7		100%	Congenital malformation syndromes
DOK7		100%	Congenital malformation syndromes
DOLK		100%	Congenital malformation syndromes
DONSON		100%	Congenital malformation syndromes

DPAGT1		100%	Congenital malformation syndromes
DPF2		100%	Congenital malformation syndromes
DPH1		100%	Congenital malformation syndromes
DPM1		94%	Congenital malformation syndromes
DPM2		100%	Congenital malformation syndromes
DPM3		100%	Congenital malformation syndromes
DPYD		100%	Congenital malformation syndromes
DRC1		100%	Congenital malformation syndromes
DSG1		99%	Congenital malformation syndromes
DSP		100%	Congenital malformation syndromes
DSTYK		100%	Congenital malformation syndromes
DUSP6		100%	Congenital malformation syndromes
DVL1		100%	Congenital malformation syndromes
DVL3		100%	Congenital malformation syndromes
DYM		100%	Congenital malformation syndromes
DYNC1H1		100%	Congenital malformation syndromes
DYNC2H1		99%	Congenital malformation syndromes
DYNC2LI1		100%	Congenital malformation syndromes

DYRK1A		100%	Congenital malformation syndromes
DZIP1L		100%	Congenital malformation syndromes
EARS2		100%	Congenital malformation syndromes
EBF3		100%	Congenital malformation syndromes
EBP		100%	Congenital malformation syndromes
ECEL1		100%	Congenital malformation syndromes
EDA		98%	Congenital malformation syndromes
EDN1		100%	Congenital malformation syndromes
EDNRA		100%	Congenital malformation syndromes
EDNRB		100%	Congenital malformation syndromes
EED		100%	Congenital malformation syndromes
EEF1A2		100%	Congenital malformation syndromes
EFL1		100%	Congenital malformation syndromes
EFNB1		100%	Congenital malformation syndromes
EFTUD2		100%	Congenital malformation syndromes
EGR2		100%	Congenital malformation syndromes
EHBP1L1		100%	Congenital malformation syndromes
EHHADH		100%	Congenital malformation syndromes

EHMT1		100%	Congenital malformation syndromes
EIF2AK3		99%	Congenital malformation syndromes
EIF2B2		100%	Congenital malformation syndromes
EIF2B3		100%	Congenital malformation syndromes
EIF2S3		100%	Congenital malformation syndromes
EIF4A3		100%	Congenital malformation syndromes
EIF5A		100%	Congenital malformation syndromes
ELAC2		100%	Congenital malformation syndromes
ELMO2		100%	Congenital malformation syndromes
ELN		100%	Congenital malformation syndromes
ELOVL4		100%	Congenital malformation syndromes
EMC1		100%	Congenital malformation syndromes
EMD		100%	Congenital malformation syndromes
EMG1		100%	Congenital malformation syndromes
EML1		100%	Congenital malformation syndromes
EMX2		100%	Congenital malformation syndromes
ENPP1		98%	Congenital malformation syndromes
EOGT		100%	Congenital malformation syndromes

EP300		100%	Congenital malformation syndromes
EPG5		100%	Congenital malformation syndromes
EPHB4		100%	Congenital malformation syndromes
EPHX1		100%	Congenital malformation syndromes
ERBB3		100%	Congenital malformation syndromes
ERCC1		100%	Congenital malformation syndromes
ERCC2		100%	Congenital malformation syndromes
ERCC3		100%	Congenital malformation syndromes
ERCC4		100%	Congenital malformation syndromes
ERCC5		100%	Congenital malformation syndromes
ERCC6		100%	Congenital malformation syndromes
ERCC8		100%	Congenital malformation syndromes
ERF		100%	Congenital malformation syndromes
ERGIC1		100%	Congenital malformation syndromes
ERLIN2		100%	Congenital malformation syndromes
ESCO2		100%	Congenital malformation syndromes
ESRRG		100%	Congenital malformation syndromes
ETFA		100%	Congenital malformation syndromes

ETFB		100%	Congenital malformation syndromes
ETFDH		100%	Congenital malformation syndromes
EVC		95%	Congenital malformation syndromes
EVC2		100%	Congenital malformation syndromes
EXOC3L2		100%	Congenital malformation syndromes
EXOSC3		100%	Congenital malformation syndromes
EXPH5		100%	Congenital malformation syndromes
EXT1		100%	Congenital malformation syndromes
EXT2		100%	Congenital malformation syndromes
EXTL3		100%	Congenital malformation syndromes
EYA1		100%	Congenital malformation syndromes
EZH2		100%	Congenital malformation syndromes
FA2H		100%	Congenital malformation syndromes
FAH		100%	Congenital malformation syndromes
FAM20A		100%	Congenital malformation syndromes
FAM20C		100%	Congenital malformation syndromes
FAM111A		100%	Congenital malformation syndromes
FAM126A		100%	Congenital malformation syndromes

FANCA		100%	Congenital malformation syndromes
FANCB		100%	Congenital malformation syndromes
FANCC		100%	Congenital malformation syndromes
FANCD2		100%	Congenital malformation syndromes
FANCE		100%	Congenital malformation syndromes
FANCF		100%	Congenital malformation syndromes
FANCG		100%	Congenital malformation syndromes
FANCI		100%	Congenital malformation syndromes
FANCL		100%	Congenital malformation syndromes
FANCM		100%	Congenital malformation syndromes
FAR1		100%	Congenital malformation syndromes
FAT4		100%	Congenital malformation syndromes
FBLN5		100%	Congenital malformation syndromes
FBN1		100%	Congenital malformation syndromes
FBN2		100%	Congenital malformation syndromes
FBXL4		100%	Congenital malformation syndromes
FEZF1		100%	Congenital malformation syndromes
FGD1		100%	Congenital malformation syndromes

FGF3		100%	Congenital malformation syndromes
FGF8		100%	Congenital malformation syndromes
FGF9		100%	Congenital malformation syndromes
FGF10		100%	Congenital malformation syndromes
FGF17		100%	Congenital malformation syndromes
FGFR1		100%	Congenital malformation syndromes
FGFR2		100%	Congenital malformation syndromes
FGFR3		100%	Congenital malformation syndromes
FGG		100%	Congenital malformation syndromes
FH		100%	Congenital malformation syndromes
FIG4		100%	Congenital malformation syndromes
FKBP8		100%	Congenital malformation syndromes
FKBP10		100%	Congenital malformation syndromes
FKBP14		100%	Congenital malformation syndromes
FKRP		100%	Congenital malformation syndromes
FKTN		100%	Congenital malformation syndromes
FLNA		100%	Congenital malformation syndromes
FLNB		100%	Congenital malformation syndromes

FLNC		100%	Congenital malformation syndromes
FLRT3		100%	Congenital malformation syndromes
FLT4		100%	Congenital malformation syndromes
FLVCR2		100%	Congenital malformation syndromes
FMN2		100%	Congenital malformation syndromes
FN1		100%	Congenital malformation syndromes
FOLR1		100%	Congenital malformation syndromes
FOXC1		100%	Congenital malformation syndromes
FOXC2		100%	Congenital malformation syndromes
FOXE1		100%	Congenital malformation syndromes
FOXE3		99%	Congenital malformation syndromes
FOXF1		100%	Congenital malformation syndromes
FOXG1		99%	Congenital malformation syndromes
FOXL2		100%	Congenital malformation syndromes
FOXP2		100%	Congenital malformation syndromes
FOXP3		100%	Congenital malformation syndromes
FOXP4		100%	Congenital malformation syndromes
FOXRED1		100%	Congenital malformation syndromes

FRAS1		100%	Congenital malformation syndromes
FREM1		100%	Congenital malformation syndromes
FREM2		100%	Congenital malformation syndromes
FRMD4A		100%	Congenital malformation syndromes
FRMPD4		100%	Congenital malformation syndromes
FRRS1L		99%	Congenital malformation syndromes
FTL		100%	Congenital malformation syndromes
FTO		100%	Congenital malformation syndromes
FUCA1		100%	Congenital malformation syndromes
FUT8		100%	Congenital malformation syndromes
FUZ		100%	Congenital malformation syndromes
FYCO1		100%	Congenital malformation syndromes
FZD2		100%	Congenital malformation syndromes
FZD5		100%	Congenital malformation syndromes
G6PC3		100%	Congenital malformation syndromes
GAA		100%	Congenital malformation syndromes
GABRA1		100%	Congenital malformation syndromes
GABRB2		100%	Congenital malformation syndromes

GABRG2		92%	Congenital malformation syndromes
GALC		100%	Congenital malformation syndromes
GALE		100%	Congenital malformation syndromes
GALK1		100%	Congenital malformation syndromes
GALNS		100%	Congenital malformation syndromes
GALNT2		100%	Congenital malformation syndromes
GANAB		100%	Congenital malformation syndromes
GATA1		100%	Congenital malformation syndromes
GATA2		100%	Congenital malformation syndromes
GATA3		100%	Congenital malformation syndromes
GATA4		100%	Congenital malformation syndromes
GATA6		99%	Congenital malformation syndromes
GBA		100%	Congenital malformation syndromes
GBA2		100%	Congenital malformation syndromes
GBE1		100%	Congenital malformation syndromes
GCDH		100%	Congenital malformation syndromes
GCSH		100%	Congenital malformation syndromes
GDF1		95%	Congenital malformation syndromes

GDF3		100%	Congenital malformation syndromes
GDF5		100%	Congenital malformation syndromes
GDF6		100%	Congenital malformation syndromes
GFAP		100%	Congenital malformation syndromes
GFM1		100%	Congenital malformation syndromes
GFPT1		100%	Congenital malformation syndromes
GFRA1		100%	Congenital malformation syndromes
GJA1		100%	Congenital malformation syndromes
GJA3		100%	Congenital malformation syndromes
GJA8		100%	Congenital malformation syndromes
GJB2		100%	Congenital malformation syndromes
GJC2		100%	Congenital malformation syndromes
GLA		100%	Congenital malformation syndromes
GLB1		100%	Congenital malformation syndromes
GLDC		100%	Congenital malformation syndromes
GLDN		100%	Congenital malformation syndromes
GLE1		100%	Congenital malformation syndromes
GLI1		100%	Congenital malformation syndromes

GLI2		100%	Congenital malformation syndromes
GLI3		100%	Congenital malformation syndromes
GLIS2		100%	Congenital malformation syndromes
GLIS3		100%	Congenital malformation syndromes
GLUL		100%	Congenital malformation syndromes
GM2A		100%	Congenital malformation syndromes
GMNN		100%	Congenital malformation syndromes
GMPPB		100%	Congenital malformation syndromes
GNA11		100%	Congenital malformation syndromes
GNA14		100%	Congenital malformation syndromes
GNAI1		100%	Congenital malformation syndromes
GNAI3		100%	Congenital malformation syndromes
GNAO1		100%	Congenital malformation syndromes
GNAQ		100%	Congenital malformation syndromes
GNAS		100%	Congenital malformation syndromes
GNB1		100%	Congenital malformation syndromes
GNB5		100%	Congenital malformation syndromes
GNPAT		100%	Congenital malformation syndromes

GNPTAB		100%	Congenital malformation syndromes
GNPTG		100%	Congenital malformation syndromes
GNS		100%	Congenital malformation syndromes
GORAB		100%	Congenital malformation syndromes
GP1BB		100%	Congenital malformation syndromes
GPAA1		100%	Congenital malformation syndromes
GPC3		100%	Congenital malformation syndromes
GPC6		100%	Congenital malformation syndromes
GPI		100%	Congenital malformation syndromes
GPKOW		100%	Congenital malformation syndromes
GPSM2		100%	Congenital malformation syndromes
GPX4		100%	Congenital malformation syndromes
GREB1L		100%	Congenital malformation syndromes
GRHL2		100%	Congenital malformation syndromes
GRHL3		100%	Congenital malformation syndromes
GRIN1		100%	Congenital malformation syndromes
GRIN2B		100%	Congenital malformation syndromes
GRIN2D		94%	Congenital malformation syndromes

GRIP1		100%	Congenital malformation syndromes
GRM1		100%	Congenital malformation syndromes
GSC		100%	Congenital malformation syndromes
GSPT2		100%	Congenital malformation syndromes
GTF2E2		100%	Congenital malformation syndromes
GTF2H5		100%	Congenital malformation syndromes
GTPBP3		100%	Congenital malformation syndromes
GUCY2C		100%	Congenital malformation syndromes
GUCY2D		100%	Congenital malformation syndromes
GUSB		100%	Congenital malformation syndromes
GZF1		100%	Congenital malformation syndromes
H1-4		100%	Congenital malformation syndromes
H4C3		100%	Congenital malformation syndromes
HAAO		100%	Congenital malformation syndromes
HADHA		100%	Congenital malformation syndromes
HADHB		100%	Congenital malformation syndromes
HBA1		100%	Congenital malformation syndromes
HBA2		97%	Congenital malformation syndromes

HCCS		100%	Congenital malformation syndromes
HCFC1		100%	Congenital malformation syndromes
HDAC8		100%	Congenital malformation syndromes
HES7		100%	Congenital malformation syndromes
HESX1		100%	Congenital malformation syndromes
HGSNAT		98%	Congenital malformation syndromes
HIBCH		100%	Congenital malformation syndromes
HIRA		100%	Congenital malformation syndromes
HIVEP2		100%	Congenital malformation syndromes
HLX		100%	Congenital malformation syndromes
HMGA2		56%	Congenital malformation syndromes
HMX1		99%	Congenital malformation syndromes
HNF1B		100%	Congenital malformation syndromes
HNF4A		100%	Congenital malformation syndromes
HNRNPH2		100%	Congenital malformation syndromes
HNRNPK		100%	Congenital malformation syndromes
HOXA1		100%	Congenital malformation syndromes
HOXA2		100%	Congenital malformation syndromes

HOXA11		100%	Congenital malformation syndromes
HOXA13		93%	Congenital malformation syndromes
HOXB1		100%	Congenital malformation syndromes
HOXD13		100%	Congenital malformation syndromes
HPD		100%	Congenital malformation syndromes
HPGD		100%	Congenital malformation syndromes
HPSE2		100%	Congenital malformation syndromes
HR		100%	Congenital malformation syndromes
HRAS		100%	Congenital malformation syndromes
HS6ST1		100%	Congenital malformation syndromes
HSD17B3		100%	Congenital malformation syndromes
HSD17B4		100%	Congenital malformation syndromes
HSF4		100%	Congenital malformation syndromes
HSPD1		100%	Congenital malformation syndromes
HSPG2		100%	Congenital malformation syndromes
HUWE1		100%	Congenital malformation syndromes
HYAL1		100%	Congenital malformation syndromes
HYLS1		100%	Congenital malformation syndromes

IARS1		100%	Congenital malformation syndromes
IBA57		100%	Congenital malformation syndromes
IDH1		100%	Congenital malformation syndromes
IDS		100%	Congenital malformation syndromes
IDUA		100%	Congenital malformation syndromes
IER3IP1		100%	Congenital malformation syndromes
IFIH1		100%	Congenital malformation syndromes
IFITM5		100%	Congenital malformation syndromes
IFT27		100%	Congenital malformation syndromes
IFT43		100%	Congenital malformation syndromes
IFT52		100%	Congenital malformation syndromes
IFT80		100%	Congenital malformation syndromes
IFT81		99%	Congenital malformation syndromes
IFT88		100%	Congenital malformation syndromes
IFT122		100%	Congenital malformation syndromes
IFT140		100%	Congenital malformation syndromes
IFT172		100%	Congenital malformation syndromes
IGBP1		100%	Congenital malformation syndromes

IGF1		100%	Congenital malformation syndromes
IGF1R		100%	Congenital malformation syndromes
IGF2		100%	Congenital malformation syndromes
IGFBP7		100%	Congenital malformation syndromes
IGHMBP2		100%	Congenital malformation syndromes
IHH		100%	Congenital malformation syndromes
IKBKG		100%	Congenital malformation syndromes
IL1RAPL1		100%	Congenital malformation syndromes
IL11RA		100%	Congenital malformation syndromes
IL17RD		100%	Congenital malformation syndromes
IMPAD1		100%	Congenital malformation syndromes
IMPDH1		100%	Congenital malformation syndromes
INCENP		100%	Congenital malformation syndromes
INPP5B		100%	Congenital malformation syndromes
INPP5E		100%	Congenital malformation syndromes
INPP5K		100%	Congenital malformation syndromes
INPPL1		100%	Congenital malformation syndromes
INSR		100%	Congenital malformation syndromes

INTU		100%	Congenital malformation syndromes
INVS		100%	Congenital malformation syndromes
IQCB1		100%	Congenital malformation syndromes
IRF6		100%	Congenital malformation syndromes
IRX1		97%	Congenital malformation syndromes
IRX5		100%	Congenital malformation syndromes
ITCH		99%	Congenital malformation syndromes
ITGA3		100%	Congenital malformation syndromes
ITGA6		100%	Congenital malformation syndromes
ITGA8		100%	Congenital malformation syndromes
ITGB4		100%	Congenital malformation syndromes
ITPR1		100%	Congenital malformation syndromes
JAG1		100%	Congenital malformation syndromes
JAM3		100%	Congenital malformation syndromes
JUP		100%	Congenital malformation syndromes
KANSL1		100%	Congenital malformation syndromes
KAT6A		100%	Congenital malformation syndromes
KAT6B		100%	Congenital malformation syndromes

KATNB1		100%	Congenital malformation syndromes
KCNA1		100%	Congenital malformation syndromes
KCNC3		96%	Congenital malformation syndromes
KCNH1		100%	Congenital malformation syndromes
KCNJ1		100%	Congenital malformation syndromes
KCNJ2		100%	Congenital malformation syndromes
KCNJ6		100%	Congenital malformation syndromes
KCNJ8		100%	Congenital malformation syndromes
KCNJ13		100%	Congenital malformation syndromes
KCNK9		100%	Congenital malformation syndromes
KCNQ2		100%	Congenital malformation syndromes
KCNQ5		100%	Congenital malformation syndromes
KCNT1		100%	Congenital malformation syndromes
KCTD1		100%	Congenital malformation syndromes
KCTD7		100%	Congenital malformation syndromes
KDM1A		100%	Congenital malformation syndromes
KDM5C		100%	Congenital malformation syndromes
KDM6A		99%	Congenital malformation syndromes

KIAA0556		100%	Congenital malformation syndromes
KIAA0586		96%	Congenital malformation syndromes
KIAA0753		100%	Congenital malformation syndromes
KIAA1109		100%	Congenital malformation syndromes
KIDINS220		100%	Congenital malformation syndromes
KIF1A		100%	Congenital malformation syndromes
KIF2A		100%	Congenital malformation syndromes
KIF5C		100%	Congenital malformation syndromes
KIF7		100%	Congenital malformation syndromes
KIF11		100%	Congenital malformation syndromes
KIF14		100%	Congenital malformation syndromes
KIF22		100%	Congenital malformation syndromes
KIF26B		100%	Congenital malformation syndromes
KIFBP		100%	Congenital malformation syndromes
KISS1R		100%	Congenital malformation syndromes
KLF1		100%	Congenital malformation syndromes
KLHL7		100%	Congenital malformation syndromes
KLHL40		100%	Congenital malformation syndromes

KLHL41		100%	Congenital malformation syndromes
KMT2A		100%	Congenital malformation syndromes
KMT2B		99%	Congenital malformation syndromes
KMT2C		100%	Congenital malformation syndromes
KMT2D		100%	Congenital malformation syndromes
KNL1		98%	Congenital malformation syndromes
KPTN		100%	Congenital malformation syndromes
KRAS		100%	Congenital malformation syndromes
KRIT1		100%	Congenital malformation syndromes
KRT74		100%	Congenital malformation syndromes
KYNU		100%	Congenital malformation syndromes
L1CAM		100%	Congenital malformation syndromes
L2HGDH		100%	Congenital malformation syndromes
LAGE3		100%	Congenital malformation syndromes
LAMA1		100%	Congenital malformation syndromes
LAMA2		100%	Congenital malformation syndromes
LAMA5		100%	Congenital malformation syndromes
LAMB1		100%	Congenital malformation syndromes

LAMC3		100%	Congenital malformation syndromes
LARGE1		100%	Congenital malformation syndromes
LARP7		99%	Congenital malformation syndromes
LARS2		100%	Congenital malformation syndromes
LBR		100%	Congenital malformation syndromes
LCA5		100%	Congenital malformation syndromes
LEMD3		100%	Congenital malformation syndromes
LFNG		91%	Congenital malformation syndromes
LGI4		100%	Congenital malformation syndromes
LHB		100%	Congenital malformation syndromes
LHX3		100%	Congenital malformation syndromes
LHX4		100%	Congenital malformation syndromes
LIAS		100%	Congenital malformation syndromes
LIFR		100%	Congenital malformation syndromes
LIG4		100%	Congenital malformation syndromes
LINS1		100%	Congenital malformation syndromes
LIPA		100%	Congenital malformation syndromes
LIPN		100%	Congenital malformation syndromes

LIPT1		100%	Congenital malformation syndromes
LIPT2		100%	Congenital malformation syndromes
LMBR1		95%	Congenital malformation syndromes
LMBRD1		93%	Congenital malformation syndromes
LMNA		100%	Congenital malformation syndromes
LMNB1		100%	Congenital malformation syndromes
LMNB2		98%	Congenital malformation syndromes
LMOD3		100%	Congenital malformation syndromes
LMX1B		100%	Congenital malformation syndromes
LONP1		100%	Congenital malformation syndromes
LRAT		100%	Congenital malformation syndromes
LRBA		100%	Congenital malformation syndromes
LRIG2		100%	Congenital malformation syndromes
LRIT3		100%	Congenital malformation syndromes
LRP2		100%	Congenital malformation syndromes
LRP4		100%	Congenital malformation syndromes
LRP5		99%	Congenital malformation syndromes
LRRC6		98%	Congenital malformation syndromes

LRRC56		100%	Congenital malformation syndromes
LTBP3		100%	Congenital malformation syndromes
LTBP4		100%	Congenital malformation syndromes
LYST		100%	Congenital malformation syndromes
LZTFL1		100%	Congenital malformation syndromes
LZTR1		100%	Congenital malformation syndromes
MAB21L2		100%	Congenital malformation syndromes
MACF1		100%	Congenital malformation syndromes
MAF		86%	Congenital malformation syndromes
MAFB		100%	Congenital malformation syndromes
MAGEL2		100%	Congenital malformation syndromes
MAMLD1		100%	Congenital malformation syndromes
MAN1B1		100%	Congenital malformation syndromes
MANBA		100%	Congenital malformation syndromes
MAP2K1		100%	Congenital malformation syndromes
MAP2K2		100%	Congenital malformation syndromes
MAP3K1		100%	Congenital malformation syndromes
MAP3K7		100%	Congenital malformation syndromes

MAP3K20		99%	Congenital malformation syndromes
MAPKBP1		100%	Congenital malformation syndromes
MAPRE2		100%	Congenital malformation syndromes
MASP1		100%	Congenital malformation syndromes
MAT1A		100%	Congenital malformation syndromes
MATN3		100%	Congenital malformation syndromes
MBOAT7		100%	Congenital malformation syndromes
MBTPS2		100%	Congenital malformation syndromes
MCOLN1		100%	Congenital malformation syndromes
MCPH1		100%	Congenital malformation syndromes
MDH2		100%	Congenital malformation syndromes
MECOM		100%	Congenital malformation syndromes
MECP2		100%	Congenital malformation syndromes
MECR		100%	Congenital malformation syndromes
MED12		100%	Congenital malformation syndromes
MED13L		100%	Congenital malformation syndromes
MED17		100%	Congenital malformation syndromes
MED28		100%	Congenital malformation syndromes

MEF2C		100%	Congenital malformation syndromes
MEGF8		100%	Congenital malformation syndromes
MEGF10		100%	Congenital malformation syndromes
MEIS2		100%	Congenital malformation syndromes
MEOX1		100%	Congenital malformation syndromes
MESD		100%	Congenital malformation syndromes
MESP2		100%	Congenital malformation syndromes
MFRP		100%	Congenital malformation syndromes
MFSD2A		100%	Congenital malformation syndromes
MGP		91%	Congenital malformation syndromes
MID1		100%	Congenital malformation syndromes
MIPOL1		100%	Congenital malformation syndromes
MITF		100%	Congenital malformation syndromes
MKKS		100%	Congenital malformation syndromes
MKS1		100%	Congenital malformation syndromes
MLC1		100%	Congenital malformation syndromes
MLH1		100%	Congenital malformation syndromes
MLYCD		100%	Congenital malformation syndromes

MMACHC		100%	Congenital malformation syndromes
MMADHC		100%	Congenital malformation syndromes
MMP13		100%	Congenital malformation syndromes
MMP15		100%	Congenital malformation syndromes
MMP21		100%	Congenital malformation syndromes
MN1		100%	Congenital malformation syndromes
MNX1		86%	Congenital malformation syndromes
MOCOS		100%	Congenital malformation syndromes
MOCS1		100%	Congenital malformation syndromes
MOCS2		100%	Congenital malformation syndromes
MOGS		100%	Congenital malformation syndromes
MPDU1		100%	Congenital malformation syndromes
MPDZ		100%	Congenital malformation syndromes
MPL		100%	Congenital malformation syndromes
MPLKIP		100%	Congenital malformation syndromes
MPZ		100%	Congenital malformation syndromes
MRAS		100%	Congenital malformation syndromes
MRPS16		100%	Congenital malformation syndromes

MRPS22		100%	Congenital malformation syndromes
MRPS34		100%	Congenital malformation syndromes
MSH2		100%	Congenital malformation syndromes
MSH6		100%	Congenital malformation syndromes
MSL3		100%	Congenital malformation syndromes
MSMO1		100%	Congenital malformation syndromes
MSTO1		100%	Congenital malformation syndromes
MSX1		100%	Congenital malformation syndromes
MSX2		100%	Congenital malformation syndromes
MTM1		100%	Congenital malformation syndromes
MTO1		95%	Congenital malformation syndromes
MTOR		100%	Congenital malformation syndromes
MUSK		100%	Congenital malformation syndromes
MVK		100%	Congenital malformation syndromes
MYBPC1		100%	Congenital malformation syndromes
MYCN		98%	Congenital malformation syndromes
MYH2		100%	Congenital malformation syndromes
MYH3		100%	Congenital malformation syndromes

MYH6		100%	Congenital malformation syndromes
MYH7		100%	Congenital malformation syndromes
MYH8		100%	Congenital malformation syndromes
MYH9		100%	Congenital malformation syndromes
MYH10		100%	Congenital malformation syndromes
MYH11		100%	Congenital malformation syndromes
MYL1		100%	Congenital malformation syndromes
MYL9		100%	Congenital malformation syndromes
MYLK		100%	Congenital malformation syndromes
MYMK		100%	Congenital malformation syndromes
MYO9A		100%	Congenital malformation syndromes
MYO18B		100%	Congenital malformation syndromes
MYOCD		100%	Congenital malformation syndromes
MYOD1		100%	Congenital malformation syndromes
MYPN		100%	Congenital malformation syndromes
MYRF		100%	Congenital malformation syndromes
MYT1		100%	Congenital malformation syndromes
NAA10		100%	Congenital malformation syndromes

NAA15		100%	Congenital malformation syndromes
NACC1		100%	Congenital malformation syndromes
NADSYN1		100%	Congenital malformation syndromes
NAGA		100%	Congenital malformation syndromes
NAGLU		100%	Congenital malformation syndromes
NALCN		100%	Congenital malformation syndromes
NANS		100%	Congenital malformation syndromes
NAXE		100%	Congenital malformation syndromes
NBAS		100%	Congenital malformation syndromes
NBN		100%	Congenital malformation syndromes
NDE1		100%	Congenital malformation syndromes
NDP		100%	Congenital malformation syndromes
NDUFA10		100%	Congenital malformation syndromes
NDUFAF2		100%	Congenital malformation syndromes
NDUFAF5		100%	Congenital malformation syndromes
NDUFB11		97%	Congenital malformation syndromes
NEB		100%	Congenital malformation syndromes
NECTIN1		100%	Congenital malformation syndromes

NECTIN4		100%	Congenital malformation syndromes
NEDD4L		99%	Congenital malformation syndromes
NEK1		99%	Congenital malformation syndromes
NEK8		100%	Congenital malformation syndromes
NEK9		100%	Congenital malformation syndromes
NEU1		100%	Congenital malformation syndromes
NEXMIF		100%	Congenital malformation syndromes
NF1		100%	Congenital malformation syndromes
NFIX		99%	Congenital malformation syndromes
NHEJ1		100%	Congenital malformation syndromes
NHP2		100%	Congenital malformation syndromes
NHS		100%	Congenital malformation syndromes
NIN		100%	Congenital malformation syndromes
NIPAL4		100%	Congenital malformation syndromes
NIPBL		100%	Congenital malformation syndromes
NKX2-5		100%	Congenital malformation syndromes
NKX3-2		100%	Congenital malformation syndromes
NKX6-2		100%	Congenital malformation syndromes

NLRC4		100%	Congenital malformation syndromes
NME1		100%	Congenital malformation syndromes
NMNAT1		100%	Congenital malformation syndromes
NMNAT2		100%	Congenital malformation syndromes
NODAL		100%	Congenital malformation syndromes
NOG		100%	Congenital malformation syndromes
NONO		100%	Congenital malformation syndromes
NOTCH1		100%	Congenital malformation syndromes
NOTCH2		100%	Congenital malformation syndromes
NOVA2		100%	Congenital malformation syndromes
NPC1		100%	Congenital malformation syndromes
NPC2		100%	Congenital malformation syndromes
NPHP1		97%	Congenital malformation syndromes
NPHP3		98%	Congenital malformation syndromes
NPHP4		100%	Congenital malformation syndromes
NPHS1		100%	Congenital malformation syndromes
NPR2		100%	Congenital malformation syndromes
NR2F2		100%	Congenital malformation syndromes

NR5A1		100%	Congenital malformation syndromes
NRAS		100%	Congenital malformation syndromes
NROB1		100%	Congenital malformation syndromes
NRXN2		99%	Congenital malformation syndromes
NSD1		100%	Congenital malformation syndromes
NSDHL		100%	Congenital malformation syndromes
NSMF		100%	Congenital malformation syndromes
NSUN2		100%	Congenital malformation syndromes
NT5C2		100%	Congenital malformation syndromes
NTRK2		100%	Congenital malformation syndromes
NUAK2		100%	Congenital malformation syndromes
NUBPL		100%	Congenital malformation syndromes
NUP62		100%	Congenital malformation syndromes
NUP88		100%	Congenital malformation syndromes
NUP107		100%	Congenital malformation syndromes
NUS1		100%	Congenital malformation syndromes
NXN		100%	Congenital malformation syndromes
OBSL1		100%	Congenital malformation syndromes

OCLN		100%	Congenital malformation syndromes
OCRL		100%	Congenital malformation syndromes
ODC1		100%	Congenital malformation syndromes
OFD1		100%	Congenital malformation syndromes
OPHN1		100%	Congenital malformation syndromes
ORC1		100%	Congenital malformation syndromes
ORC4		99%	Congenital malformation syndromes
ORC6		100%	Congenital malformation syndromes
OSGEP		100%	Congenital malformation syndromes
OSTM1		100%	Congenital malformation syndromes
OTUD5		97%	Congenital malformation syndromes
OTUD6B		100%	Congenital malformation syndromes
OTX2		100%	Congenital malformation syndromes
P3H1		100%	Congenital malformation syndromes
P4HB		100%	Congenital malformation syndromes
PACS1		100%	Congenital malformation syndromes
PAFAH1B1		94%	Congenital malformation syndromes
PAICS		100%	Congenital malformation syndromes

PAK3		100%	Congenital malformation syndromes
PALB2		100%	Congenital malformation syndromes
PAPSS2		100%	Congenital malformation syndromes
PARN		100%	Congenital malformation syndromes
PAX2		100%	Congenital malformation syndromes
PAX3		100%	Congenital malformation syndromes
PAX6		100%	Congenital malformation syndromes
PAX7		100%	Congenital malformation syndromes
PAX8		100%	Congenital malformation syndromes
PBX1		100%	Congenital malformation syndromes
PCGF2		100%	Congenital malformation syndromes
PCNT		100%	Congenital malformation syndromes
PCYT1A		100%	Congenital malformation syndromes
PDCD10		100%	Congenital malformation syndromes
PDE4D		100%	Congenital malformation syndromes
PDE6D		100%	Congenital malformation syndromes
PDE6H		100%	Congenital malformation syndromes
PDE10A		100%	Congenital malformation syndromes

PDGFB		100%	Congenital malformation syndromes
PDGFRB		100%	Congenital malformation syndromes
PDHA1		99%	Congenital malformation syndromes
PDHB		100%	Congenital malformation syndromes
PDHX		100%	Congenital malformation syndromes
PDSS1		99%	Congenital malformation syndromes
PDYN		100%	Congenital malformation syndromes
PEPD		100%	Congenital malformation syndromes
PET100		100%	Congenital malformation syndromes
PEX1		100%	Congenital malformation syndromes
PEX2		100%	Congenital malformation syndromes
PEX3		100%	Congenital malformation syndromes
PEX5		100%	Congenital malformation syndromes
PEX6		100%	Congenital malformation syndromes
PEX7		100%	Congenital malformation syndromes
PEX10		100%	Congenital malformation syndromes
PEX11B		100%	Congenital malformation syndromes
PEX12		100%	Congenital malformation syndromes

PEX13		100%	Congenital malformation syndromes
PEX14		100%	Congenital malformation syndromes
PEX16		100%	Congenital malformation syndromes
PEX19		100%	Congenital malformation syndromes
PEX26		100%	Congenital malformation syndromes
PFKM		100%	Congenital malformation syndromes
PGAP1		95%	Congenital malformation syndromes
PGAP2		100%	Congenital malformation syndromes
PGAP3		100%	Congenital malformation syndromes
PGM1		100%	Congenital malformation syndromes
PGM3		100%	Congenital malformation syndromes
PHF6		99%	Congenital malformation syndromes
PHF8		100%	Congenital malformation syndromes
PHF21A		100%	Congenital malformation syndromes
PHGDH		100%	Congenital malformation syndromes
PHIP		98%	Congenital malformation syndromes
PHOX2B		99%	Congenital malformation syndromes
PIBF1		100%	Congenital malformation syndromes

PIEZO1		100%	Congenital malformation syndromes
PIEZO2		100%	Congenital malformation syndromes
PIGA		100%	Congenital malformation syndromes
PIGG		100%	Congenital malformation syndromes
PIGL		100%	Congenital malformation syndromes
PIGN		100%	Congenital malformation syndromes
PIGO		100%	Congenital malformation syndromes
PIGS		100%	Congenital malformation syndromes
PIGT		100%	Congenital malformation syndromes
PIGV		100%	Congenital malformation syndromes
PIGY		100%	Congenital malformation syndromes
PIH1D3		100%	Congenital malformation syndromes
PIK3C2A		100%	Congenital malformation syndromes
PIK3CA		100%	Congenital malformation syndromes
PIK3R1		100%	Congenital malformation syndromes
PIK3R2		98%	Congenital malformation syndromes
PIP5K1C		99%	Congenital malformation syndromes
PITX1		100%	Congenital malformation syndromes

PITX2		100%	Congenital malformation syndromes
PITX3		100%	Congenital malformation syndromes
PKD1		99%	Congenital malformation syndromes
PKD1L1		100%	Congenital malformation syndromes
PKD2		99%	Congenital malformation syndromes
PKHD1		100%	Congenital malformation syndromes
PKLR		100%	Congenital malformation syndromes
PLAA		100%	Congenital malformation syndromes
PLAG1		100%	Congenital malformation syndromes
PLCB1		100%	Congenital malformation syndromes
PLCB4		100%	Congenital malformation syndromes
PLD1		100%	Congenital malformation syndromes
PLEC		100%	Congenital malformation syndromes
PLG		100%	Congenital malformation syndromes
PLK4		100%	Congenital malformation syndromes
PLOD1		100%	Congenital malformation syndromes
PLOD2		97%	Congenital malformation syndromes
PLOD3		100%	Congenital malformation syndromes

PLP1		100%	Congenital malformation syndromes
PLPBP		100%	Congenital malformation syndromes
PMM2		100%	Congenital malformation syndromes
PMP22		100%	Congenital malformation syndromes
PMS2		100%	Congenital malformation syndromes
PNKP		100%	Congenital malformation syndromes
PNPLA1		100%	Congenital malformation syndromes
POC1A		100%	Congenital malformation syndromes
POGZ		100%	Congenital malformation syndromes
POLE		100%	Congenital malformation syndromes
POLG2		100%	Congenital malformation syndromes
POLR1A		100%	Congenital malformation syndromes
POLR1B		100%	Congenital malformation syndromes
POLR1C		100%	Congenital malformation syndromes
POLR1D		100%	Congenital malformation syndromes
POLR3A		100%	Congenital malformation syndromes
POLR3B		100%	Congenital malformation syndromes
POMGNT1		100%	Congenital malformation syndromes

POMGNT2		100%	Congenital malformation syndromes
POMK		100%	Congenital malformation syndromes
POMT1		100%	Congenital malformation syndromes
POMT2		100%	Congenital malformation syndromes
POP1		100%	Congenital malformation syndromes
POR		100%	Congenital malformation syndromes
PORCN		100%	Congenital malformation syndromes
POU1F1		100%	Congenital malformation syndromes
PPIB		100%	Congenital malformation syndromes
PPP1CB		100%	Congenital malformation syndromes
PPP2R1A		100%	Congenital malformation syndromes
PPP2R5D		100%	Congenital malformation syndromes
PPP3CA		100%	Congenital malformation syndromes
PQBP1		100%	Congenital malformation syndromes
PRDM5		100%	Congenital malformation syndromes
PREPL		100%	Congenital malformation syndromes
PRG4		100%	Congenital malformation syndromes
PRIM1		100%	Congenital malformation syndromes

PRKAG2		92%	Congenital malformation syndromes
PRKAR1A		100%	Congenital malformation syndromes
PRKD1		100%	Congenital malformation syndromes
PRMT7		100%	Congenital malformation syndromes
PROK2		100%	Congenital malformation syndromes
PROKR2		100%	Congenital malformation syndromes
PROP1		100%	Congenital malformation syndromes
PRR12		100%	Congenital malformation syndromes
PRRX1		100%	Congenital malformation syndromes
PRSS56		100%	Congenital malformation syndromes
PRUNE1		100%	Congenital malformation syndromes
PRX		100%	Congenital malformation syndromes
PSAP		100%	Congenital malformation syndromes
PSAT1		99%	Congenital malformation syndromes
PSPH		100%	Congenital malformation syndromes
PTCH1		100%	Congenital malformation syndromes
PTCH2		100%	Congenital malformation syndromes
PTDSS1		100%	Congenital malformation syndromes

PTEN		100%	Congenital malformation syndromes
PTF1A		99%	Congenital malformation syndromes
PTH		100%	Congenital malformation syndromes
PTH1R		100%	Congenital malformation syndromes
PTHLH		100%	Congenital malformation syndromes
PTPN11		100%	Congenital malformation syndromes
PTPN14		100%	Congenital malformation syndromes
PTS		100%	Congenital malformation syndromes
PUF60		100%	Congenital malformation syndromes
PXDN		100%	Congenital malformation syndromes
PYCR1		100%	Congenital malformation syndromes
PYCR2		100%	Congenital malformation syndromes
PYGM		100%	Congenital malformation syndromes
PYROXD1		100%	Congenital malformation syndromes
QARS1		100%	Congenital malformation syndromes
QRICH1		100%	Congenital malformation syndromes
RAB3GAP1		100%	Congenital malformation syndromes
RAB3GAP2		98%	Congenital malformation syndromes

RAB11A		100%	Congenital malformation syndromes
RAB11B		100%	Congenital malformation syndromes
RAB18		100%	Congenital malformation syndromes
RAB23		100%	Congenital malformation syndromes
RAB33B		100%	Congenital malformation syndromes
RAB40AL		100%	Congenital malformation syndromes
RAC1		100%	Congenital malformation syndromes
RAC3		98%	Congenital malformation syndromes
RAD21		100%	Congenital malformation syndromes
RAD51		88%	Congenital malformation syndromes
RAD51C		100%	Congenital malformation syndromes
RAF1		100%	Congenital malformation syndromes
RAI1		100%	Congenital malformation syndromes
RAPSN		100%	Congenital malformation syndromes
RARB		100%	Congenital malformation syndromes
RARS2		100%	Congenital malformation syndromes
RASA1		98%	Congenital malformation syndromes
RAX		100%	Congenital malformation syndromes

RB1		93%	Congenital malformation syndromes
RBBP8		100%	Congenital malformation syndromes
RBM8A		100%	Congenital malformation syndromes
RBM10		100%	Congenital malformation syndromes
RBPJ		100%	Congenital malformation syndromes
RCOR1		98%	Congenital malformation syndromes
RD3		100%	Congenital malformation syndromes
RDH12		100%	Congenital malformation syndromes
RECQL4		100%	Congenital malformation syndromes
RELN		100%	Congenital malformation syndromes
REN		100%	Congenital malformation syndromes
RERE		100%	Congenital malformation syndromes
RET		100%	Congenital malformation syndromes
RFT1		100%	Congenital malformation syndromes
RFX6		99%	Congenital malformation syndromes
RIN2		100%	Congenital malformation syndromes
RIPK4		100%	Congenital malformation syndromes
RIT1		100%	Congenital malformation syndromes

RLIM		100%	Congenital malformation syndromes
RMND1		100%	Congenital malformation syndromes
RMRP		100%	Congenital malformation syndromes
RNASEH2A		100%	Congenital malformation syndromes
RNASEH2B		100%	Congenital malformation syndromes
RNASEH2C		100%	Congenital malformation syndromes
RNASET2		100%	Congenital malformation syndromes
RNU4ATAC		100%	Congenital malformation syndromes
ROBO1		100%	Congenital malformation syndromes
ROBO3		100%	Congenital malformation syndromes
ROGDI		100%	Congenital malformation syndromes
ROR2		100%	Congenital malformation syndromes
RORA		100%	Congenital malformation syndromes
RPE65		100%	Congenital malformation syndromes
RPGRIP1		100%	Congenital malformation syndromes
RPGRIP1L		100%	Congenital malformation syndromes
RPL5		100%	Congenital malformation syndromes
RPL10		100%	Congenital malformation syndromes

RPL11		100%	Congenital malformation syndromes
RPL26		100%	Congenital malformation syndromes
RPL35A		100%	Congenital malformation syndromes
RPS6KA3		98%	Congenital malformation syndromes
RPS7		100%	Congenital malformation syndromes
RPS10		100%	Congenital malformation syndromes
RPS17		100%	Congenital malformation syndromes
RPS19		100%	Congenital malformation syndromes
RPS23		100%	Congenital malformation syndromes
RPS24		100%	Congenital malformation syndromes
RPS26		100%	Congenital malformation syndromes
RRAS		100%	Congenital malformation syndromes
RRAS2		100%	Congenital malformation syndromes
RRM2B		100%	Congenital malformation syndromes
RSPH4A		100%	Congenital malformation syndromes
RSPH9		100%	Congenital malformation syndromes
RSPRY1		100%	Congenital malformation syndromes
RTEL1		100%	Congenital malformation syndromes

RTTN		100%	Congenital malformation syndromes
RUNX2		100%	Congenital malformation syndromes
RXYLT1		100%	Congenital malformation syndromes
RYR1		100%	Congenital malformation syndromes
SACS		100%	Congenital malformation syndromes
SALL1		100%	Congenital malformation syndromes
SALL4		100%	Congenital malformation syndromes
SAMD9		100%	Congenital malformation syndromes
SAMHD1		100%	Congenital malformation syndromes
SASS6		96%	Congenital malformation syndromes
SATB2		100%	Congenital malformation syndromes
SBDS		100%	Congenital malformation syndromes
SC5D		100%	Congenital malformation syndromes
SCARF2		100%	Congenital malformation syndromes
SCLT1		100%	Congenital malformation syndromes
SCN1A		100%	Congenital malformation syndromes
SCN2A		100%	Congenital malformation syndromes
SCN3A		100%	Congenital malformation syndromes

SCN4A		100%	Congenital malformation syndromes
SCO2		100%	Congenital malformation syndromes
SCUBE3		100%	Congenital malformation syndromes
SCYL1		100%	Congenital malformation syndromes
SDCCAG8		100%	Congenital malformation syndromes
SDR9C7		100%	Congenital malformation syndromes
SEC23A		100%	Congenital malformation syndromes
SEC23B		100%	Congenital malformation syndromes
SEC24D		100%	Congenital malformation syndromes
SEC61B		100%	Congenital malformation syndromes
SECISBP2		100%	Congenital malformation syndromes
SELENON		90%	Congenital malformation syndromes
SEMA3A		100%	Congenital malformation syndromes
SEMA3E		100%	Congenital malformation syndromes
SEPSECS		100%	Congenital malformation syndromes
SEPTIN9		100%	Congenital malformation syndromes
SERPINF1		100%	Congenital malformation syndromes
SERPINH1		100%	Congenital malformation syndromes

SET		100%	Congenital malformation syndromes
SETBP1		100%	Congenital malformation syndromes
SETD1A		100%	Congenital malformation syndromes
SETD1B		100%	Congenital malformation syndromes
SETD2		100%	Congenital malformation syndromes
SETD5		100%	Congenital malformation syndromes
SF3B4		100%	Congenital malformation syndromes
SGCG		100%	Congenital malformation syndromes
SGPL1		100%	Congenital malformation syndromes
SGSH		100%	Congenital malformation syndromes
SH3PXD2B		100%	Congenital malformation syndromes
SHANK1		100%	Congenital malformation syndromes
SHANK2		100%	Congenital malformation syndromes
SHANK3		99%	Congenital malformation syndromes
SHH		100%	Congenital malformation syndromes
SHOC2		100%	Congenital malformation syndromes
SHOX		100%	Congenital malformation syndromes
SHROOM3		100%	Congenital malformation syndromes

SIK3		99%	Congenital malformation syndromes
SIL1		100%	Congenital malformation syndromes
SIN3A		100%	Congenital malformation syndromes
SIX1		100%	Congenital malformation syndromes
SIX3		100%	Congenital malformation syndromes
SIX5		100%	Congenital malformation syndromes
SIX6		100%	Congenital malformation syndromes
SKI		100%	Congenital malformation syndromes
SLC1A2		100%	Congenital malformation syndromes
SLC2A10		100%	Congenital malformation syndromes
SLC5A7		100%	Congenital malformation syndromes
SLC6A8		100%	Congenital malformation syndromes
SLC6A9		100%	Congenital malformation syndromes
SLC6A17		100%	Congenital malformation syndromes
SLC7A9		100%	Congenital malformation syndromes
SLC9A6		100%	Congenital malformation syndromes
SLC10A7		100%	Congenital malformation syndromes
SLC12A1		100%	Congenital malformation syndromes

SLC12A6		100%	Congenital malformation syndromes
SLC13A5		100%	Congenital malformation syndromes
SLC16A2		100%	Congenital malformation syndromes
SLC17A5		100%	Congenital malformation syndromes
SLC18A3		100%	Congenital malformation syndromes
SLC20A1		100%	Congenital malformation syndromes
SLC20A2		100%	Congenital malformation syndromes
SLC24A4		100%	Congenital malformation syndromes
SLC25A4		100%	Congenital malformation syndromes
SLC25A19		100%	Congenital malformation syndromes
SLC25A20		100%	Congenital malformation syndromes
SLC25A22		100%	Congenital malformation syndromes
SLC25A24		100%	Congenital malformation syndromes
SLC25A38		100%	Congenital malformation syndromes
SLC26A2		100%	Congenital malformation syndromes
SLC26A3		100%	Congenital malformation syndromes
SLC27A4		100%	Congenital malformation syndromes
SLC29A3		100%	Congenital malformation syndromes

SLC33A1		100%	Congenital malformation syndromes
SLC35A1		100%	Congenital malformation syndromes
SLC35A2		100%	Congenital malformation syndromes
SLC35A3		100%	Congenital malformation syndromes
SLC35C1		100%	Congenital malformation syndromes
SLC35D1		92%	Congenital malformation syndromes
SLC39A8		100%	Congenital malformation syndromes
SLC45A1		100%	Congenital malformation syndromes
SLIT2		100%	Congenital malformation syndromes
SLX4		100%	Congenital malformation syndromes
SMAD3		100%	Congenital malformation syndromes
SMAD4		100%	Congenital malformation syndromes
SMARCA2		99%	Congenital malformation syndromes
SMARCA4		100%	Congenital malformation syndromes
SMARCB1		100%	Congenital malformation syndromes
SMARCC1		100%	Congenital malformation syndromes
SMARCE1		100%	Congenital malformation syndromes
SMC1A		100%	Congenital malformation syndromes

SMC3		100%	Congenital malformation syndromes
SMCHD1		100%	Congenital malformation syndromes
SMG9		100%	Congenital malformation syndromes
SMN1		100%	Congenital malformation syndromes
SMO		100%	Congenital malformation syndromes
SMOC1		100%	Congenital malformation syndromes
SMOC2		100%	Congenital malformation syndromes
SMPD1		100%	Congenital malformation syndromes
SMPD4		100%	Congenital malformation syndromes
SMS		100%	Congenital malformation syndromes
SNAP25		100%	Congenital malformation syndromes
SNAP29		100%	Congenital malformation syndromes
SNIP1		100%	Congenital malformation syndromes
SNRPB		100%	Congenital malformation syndromes
SNRPE		100%	Congenital malformation syndromes
SNX10		100%	Congenital malformation syndromes
SNX14		100%	Congenital malformation syndromes
SON		100%	Congenital malformation syndromes

SOS1		100%	Congenital malformation syndromes
SOS2		100%	Congenital malformation syndromes
SOST		100%	Congenital malformation syndromes
SOX2		100%	Congenital malformation syndromes
SOX3		99%	Congenital malformation syndromes
SOX5		100%	Congenital malformation syndromes
SOX6		100%	Congenital malformation syndromes
SOX9		100%	Congenital malformation syndromes
SOX10		100%	Congenital malformation syndromes
SOX11		100%	Congenital malformation syndromes
SOX17		100%	Congenital malformation syndromes
SOX18		94%	Congenital malformation syndromes
SP7		100%	Congenital malformation syndromes
SPAG1		98%	Congenital malformation syndromes
SPARC		100%	Congenital malformation syndromes
SPATA5		100%	Congenital malformation syndromes
SPATA7		100%	Congenital malformation syndromes
SPECC1L		100%	Congenital malformation syndromes

SPEG		100%	Congenital malformation syndromes
SPG11		100%	Congenital malformation syndromes
SPRED1		100%	Congenital malformation syndromes
SPRY4		100%	Congenital malformation syndromes
SPTAN1		100%	Congenital malformation syndromes
SRCAP		100%	Congenital malformation syndromes
SRD5A2		100%	Congenital malformation syndromes
SRD5A3		100%	Congenital malformation syndromes
SRGAP1		100%	Congenital malformation syndromes
SRP54		100%	Congenital malformation syndromes
SRY		38%	Congenital malformation syndromes
ST3GAL3		100%	Congenital malformation syndromes
ST3GAL5		100%	Congenital malformation syndromes
ST14		100%	Congenital malformation syndromes
STAC3		100%	Congenital malformation syndromes
STAG2		100%	Congenital malformation syndromes
STAMPB		100%	Congenital malformation syndromes
STAR		100%	Congenital malformation syndromes

STAT3		100%	Congenital malformation syndromes
STAT5B		100%	Congenital malformation syndromes
STIL		100%	Congenital malformation syndromes
STRA6		100%	Congenital malformation syndromes
STRADA		100%	Congenital malformation syndromes
STS		100%	Congenital malformation syndromes
STX1B		100%	Congenital malformation syndromes
STXBP1		100%	Congenital malformation syndromes
SUCLG1		100%	Congenital malformation syndromes
SUFU		100%	Congenital malformation syndromes
SULT2B1		100%	Congenital malformation syndromes
SUMF1		100%	Congenital malformation syndromes
SUMO1		100%	Congenital malformation syndromes
SUZ12		99%	Congenital malformation syndromes
SYN1		100%	Congenital malformation syndromes
SYNE1		100%	Congenital malformation syndromes
SYNM		99%	Congenital malformation syndromes
SZT2		100%	Congenital malformation syndromes

TAB2		100%	Congenital malformation syndromes
TAC3		100%	Congenital malformation syndromes
TACO1		100%	Congenital malformation syndromes
TACR3		100%	Congenital malformation syndromes
TAF1		100%	Congenital malformation syndromes
TAF2		99%	Congenital malformation syndromes
TAF13		100%	Congenital malformation syndromes
TALDO1		100%	Congenital malformation syndromes
TAPT1		98%	Congenital malformation syndromes
TAZ		100%	Congenital malformation syndromes
TBC1D1		100%	Congenital malformation syndromes
TBC1D20		100%	Congenital malformation syndromes
TBC1D23		100%	Congenital malformation syndromes
TBC1D24		100%	Congenital malformation syndromes
TBC1D32		98%	Congenital malformation syndromes
TBCD		100%	Congenital malformation syndromes
TBCE		100%	Congenital malformation syndromes
TBCK		100%	Congenital malformation syndromes

TBL1XR1		100%	Congenital malformation syndromes
TBR1		100%	Congenital malformation syndromes
TBX1		93%	Congenital malformation syndromes
TBX3		100%	Congenital malformation syndromes
TBX4		100%	Congenital malformation syndromes
TBX5		100%	Congenital malformation syndromes
TBX6		100%	Congenital malformation syndromes
TBX15		100%	Congenital malformation syndromes
TBX18		100%	Congenital malformation syndromes
TBX20		100%	Congenital malformation syndromes
TBX22		100%	Congenital malformation syndromes
TBXT		100%	Congenital malformation syndromes
TCF4		100%	Congenital malformation syndromes
TCF12		100%	Congenital malformation syndromes
TCF20		100%	Congenital malformation syndromes
TCIRG1		100%	Congenital malformation syndromes
TCOF1		100%	Congenital malformation syndromes
TCTEX1D2		100%	Congenital malformation syndromes

TCTN1		99%	Congenital malformation syndromes
TCTN2		93%	Congenital malformation syndromes
TCTN3		100%	Congenital malformation syndromes
TECPR2		100%	Congenital malformation syndromes
TELO2		100%	Congenital malformation syndromes
TENM3		100%	Congenital malformation syndromes
TENT5A		100%	Congenital malformation syndromes
TFAP2A		100%	Congenital malformation syndromes
TFAP2B		100%	Congenital malformation syndromes
TGDS		95%	Congenital malformation syndromes
TGFB2		100%	Congenital malformation syndromes
TGFB3		100%	Congenital malformation syndromes
TGFBR1		98%	Congenital malformation syndromes
TGFBR2		100%	Congenital malformation syndromes
TGIF1		100%	Congenital malformation syndromes
TGM1		100%	Congenital malformation syndromes
THOC2		99%	Congenital malformation syndromes
THOC6		100%	Congenital malformation syndromes

THRA		100%	Congenital malformation syndromes
THSD1		100%	Congenital malformation syndromes
TINF2		100%	Congenital malformation syndromes
TKT		99%	Congenital malformation syndromes
TLL1		100%	Congenital malformation syndromes
TMCO1		100%	Congenital malformation syndromes
TMEM38B		100%	Congenital malformation syndromes
TMEM67		100%	Congenital malformation syndromes
TMEM70		100%	Congenital malformation syndromes
TMEM94		100%	Congenital malformation syndromes
TMEM98		100%	Congenital malformation syndromes
TMEM107		100%	Congenital malformation syndromes
TMEM138		100%	Congenital malformation syndromes
TMEM165		100%	Congenital malformation syndromes
TMEM216		100%	Congenital malformation syndromes
TMEM231		100%	Congenital malformation syndromes
TMEM237		100%	Congenital malformation syndromes
TMEM260		100%	Congenital malformation syndromes

TMTC3		100%	Congenital malformation syndromes
TMX2		100%	Congenital malformation syndromes
TNC		100%	Congenital malformation syndromes
TNFRSF13B		100%	Congenital malformation syndromes
TNNI2		100%	Congenital malformation syndromes
TNNT1		100%	Congenital malformation syndromes
TNNT3		100%	Congenital malformation syndromes
TNXB		100%	Congenital malformation syndromes
TOE1		100%	Congenital malformation syndromes
TOP3A		100%	Congenital malformation syndromes
TOR1A		100%	Congenital malformation syndromes
TP53RK		100%	Congenital malformation syndromes
TP63		100%	Congenital malformation syndromes
TPM2		100%	Congenital malformation syndromes
TPM3		100%	Congenital malformation syndromes
TPRKB		86%	Congenital malformation syndromes
TRAF3IP1		100%	Congenital malformation syndromes
TRAF7		100%	Congenital malformation syndromes

TRAIP		100%	Congenital malformation syndromes
TRAP1		100%	Congenital malformation syndromes
TRAPPC9		100%	Congenital malformation syndromes
TRAPPC11		100%	Congenital malformation syndromes
TRAPPC12		100%	Congenital malformation syndromes
TREM2		100%	Congenital malformation syndromes
TREX1		100%	Congenital malformation syndromes
TRIM32		100%	Congenital malformation syndromes
TRIM37		100%	Congenital malformation syndromes
TRIO		99%	Congenital malformation syndromes
TRIP4		100%	Congenital malformation syndromes
TRIP11		100%	Congenital malformation syndromes
TRIP12		100%	Congenital malformation syndromes
TRIP13		100%	Congenital malformation syndromes
TRMT10A		100%	Congenital malformation syndromes
TRMT10C		100%	Congenital malformation syndromes
TRPM7		100%	Congenital malformation syndromes
TRPS1		100%	Congenital malformation syndromes

TRPV3		100%	Congenital malformation syndromes
TRPV4		100%	Congenital malformation syndromes
TRPV6		100%	Congenital malformation syndromes
TSC1		100%	Congenital malformation syndromes
TSC2		100%	Congenital malformation syndromes
TSEN2		100%	Congenital malformation syndromes
TSEN15		100%	Congenital malformation syndromes
TSEN34		100%	Congenital malformation syndromes
TSEN54		98%	Congenital malformation syndromes
TSFM		94%	Congenital malformation syndromes
TSPYL1		100%	Congenital malformation syndromes
TTC7A		100%	Congenital malformation syndromes
TTC8		95%	Congenital malformation syndromes
TTC9		99%	Congenital malformation syndromes
TTC21B		100%	Congenital malformation syndromes
TTC25		100%	Congenital malformation syndromes
TTC37		100%	Congenital malformation syndromes
TTI2		100%	Congenital malformation syndromes

TTN		100%	Congenital malformation syndromes
TUBA1A		100%	Congenital malformation syndromes
TUBA8		100%	Congenital malformation syndromes
TUBB		100%	Congenital malformation syndromes
TUBB2A		100%	Congenital malformation syndromes
TUBB2B		100%	Congenital malformation syndromes
TUBB3		100%	Congenital malformation syndromes
TUBB4A		100%	Congenital malformation syndromes
TUBG1		100%	Congenital malformation syndromes
TUBGCP4		100%	Congenital malformation syndromes
TUBGCP6		100%	Congenital malformation syndromes
TUFM		100%	Congenital malformation syndromes
TULP1		100%	Congenital malformation syndromes
TWIST1		97%	Congenital malformation syndromes
TWIST2		100%	Congenital malformation syndromes
TXNDC15		100%	Congenital malformation syndromes
TXNL4A		100%	Congenital malformation syndromes
TYR		100%	Congenital malformation syndromes

TYROBP		100%	Congenital malformation syndromes
UBA1		100%	Congenital malformation syndromes
UBB		100%	Congenital malformation syndromes
UBE2T		100%	Congenital malformation syndromes
UBE3A		100%	Congenital malformation syndromes
UBE3B		100%	Congenital malformation syndromes
UBR1		98%	Congenital malformation syndromes
UBTF		100%	Congenital malformation syndromes
UFD1		100%	Congenital malformation syndromes
UMOD		100%	Congenital malformation syndromes
UMPS		100%	Congenital malformation syndromes
UNC50		100%	Congenital malformation syndromes
UPF3B		100%	Congenital malformation syndromes
UPK3A		100%	Congenital malformation syndromes
UQCRB		100%	Congenital malformation syndromes
UQCRQ		100%	Congenital malformation syndromes
UROS		100%	Congenital malformation syndromes
USP9X		100%	Congenital malformation syndromes

USP18		100%	Congenital malformation syndromes
USP27X		100%	Congenital malformation syndromes
UTRN		100%	Congenital malformation syndromes
VAMP1		100%	Congenital malformation syndromes
VANGL1		100%	Congenital malformation syndromes
VANGL2		100%	Congenital malformation syndromes
VAX1		96%	Congenital malformation syndromes
VDR		100%	Congenital malformation syndromes
VEGFC		100%	Congenital malformation syndromes
VIPAS39		100%	Congenital malformation syndromes
VLDLR		100%	Congenital malformation syndromes
VMA21		100%	Congenital malformation syndromes
VPS13B		100%	Congenital malformation syndromes
VPS33B		100%	Congenital malformation syndromes
VPS53		100%	Congenital malformation syndromes
VRK1		100%	Congenital malformation syndromes
VSX2		100%	Congenital malformation syndromes
VTI1A		100%	Congenital malformation syndromes

VWA2		100%	Congenital malformation syndromes
WASHC5		100%	Congenital malformation syndromes
WBP11		100%	Congenital malformation syndromes
WDPCP		100%	Congenital malformation syndromes
WDR4		100%	Congenital malformation syndromes
WDR11		100%	Congenital malformation syndromes
WDR19		100%	Congenital malformation syndromes
WDR26		100%	Congenital malformation syndromes
WDR34		100%	Congenital malformation syndromes
WDR35		98%	Congenital malformation syndromes
WDR60		100%	Congenital malformation syndromes
WDR62		100%	Congenital malformation syndromes
WDR73		100%	Congenital malformation syndromes
WDR81		100%	Congenital malformation syndromes
WNT1		100%	Congenital malformation syndromes
WNT3		100%	Congenital malformation syndromes
WNT4		98%	Congenital malformation syndromes
WNT5A		100%	Congenital malformation syndromes

WNT7A		100%	Congenital malformation syndromes
WNT10B		100%	Congenital malformation syndromes
WRAP53		100%	Congenital malformation syndromes
WT1		100%	Congenital malformation syndromes
WWOX		100%	Congenital malformation syndromes
XRCC4		100%	Congenital malformation syndromes
XYLT1		97%	Congenital malformation syndromes
XYLT2		100%	Congenital malformation syndromes
YAP1		100%	Congenital malformation syndromes
YWHAG		100%	Congenital malformation syndromes
YY1		100%	Congenital malformation syndromes
ZBTB18		100%	Congenital malformation syndromes
ZBTB20		100%	Congenital malformation syndromes
ZC4H2		100%	Congenital malformation syndromes
ZDHHC9		100%	Congenital malformation syndromes
ZEB2		100%	Congenital malformation syndromes
ZFP57		100%	Congenital malformation syndromes
ZFPM2		100%	Congenital malformation syndromes

ZFYVE26		100%	Congenital malformation syndromes
ZIC1		100%	Congenital malformation syndromes
ZIC2		98%	Congenital malformation syndromes
ZIC3		100%	Congenital malformation syndromes
ZMPSTE24		100%	Congenital malformation syndromes
ZMYND10		100%	Congenital malformation syndromes
ZMYND11		100%	Congenital malformation syndromes
ZNF423		100%	Congenital malformation syndromes
ZNF462		100%	Congenital malformation syndromes
ZNF469		100%	Congenital malformation syndromes
ZNF750		100%	Congenital malformation syndromes
ZNRF3		96%	Congenital malformation syndromes
ZPR1		100%	Congenital malformation syndromes
ZSWIM6		95%	Congenital malformation syndromes