

This test reads the DNA sequences of certain genes and looks for DNA differences important for your health. For some genes, a single difference increases your risk for certain diseases (Health Risk Genes). For other genes, a single sequence difference usually does not lead to disease (Carrier Genes). For those genes, two differences, one inherited from each parent, is usually necessary before health is affected. Altogether, 707 genes are tested.

Health Risk Genes (167 genes)

Cardiovascular Disease Risk									
ACTA2	ACTC1	ACTN2	ACVRL1	APOB	BAG3	BMPR2	CACNA1C	CACNB2	CALM1
CALM2	CALM3	CASQ2	CAV1	CAV3	COL3A1	COL5A1	COL5A2	CRYAB	CSRP3
DES	DMD	DSC2	DSG2	DSP	EMD	ENG	F2	F5	F9
FBN1	FHL1	FLNC	GDF2	GLA	GPD1L	HCN4	JUP	KCNE1	KCNE2
KCNH2	KCNJ2	KCNQ1	LAMP2	LDLR	LDLRAP1	LMNA	MYBPC3	MYH11	MYH7
MYL2	MYL3	MYLK	NKX2-5	PCSK9	PKP2	PLN	PRKAG2	PRKG1	PROC
PROS1	RBM20	RYR2	SCN5A	SERPINC1	SGCD	SMAD3	SMAD4	SMAD9	TCAP
TGFB2	TGFB3	TGFBR1	TGFBR2	TMEM43	TNNC1	TNNI3	TNNT2	TPM1	TRDN
TTN	TTR	VCL							
Cancer Risk									
AIP	APC	ATM	AXIN2	BAP1	BARD1	BMPR1A	BRCA1	BRCA2	BRIP1
CDC73	CDH1	CDK4	CDKN1B	CDKN2A	CHEK2	DICER1	EGFR	EPCAM	FH
FLCN	GREM1	HOXB13	KIT	LZTR1	MAX	MEN1	MET	MITF	MLH1
MSH2	MSH3	MSH6	MUTYH	NF1	NF2	NTHL1	PALB2	PDGFRA	PMS2
POLD1	POLE	POT1	PRKAR1A	PTCH1	PTEN	RAD51C	RAD51D	RB1	RET
SDHA	SDHAF2	SDHB	SDHC	SDHD	SMAD4	SMARCA4	SMARCB1	STK11	TMEM127
TP53	TSC1	TSC2	VHL	WT1					
Other Risks									
ABCD1	ATP7B	BTD	CACNA1S	G6PD	GAA	GCH1	HAMP	HFE	HJV
HMBS	HNF1A	HNF1B	MEFV	OTC	RPE65	RYR1	SERPINA1	SLC40A1	TFR2

Carrier Genes (569 genes)

(a wide range of disorders)

AAAS	ABCA12	ABCA3	ABCA4	ABCB11	ABCB4	ABCC2	ABCC8	ABCD1	ACAD9
ACADM	ACADVL	ACAT1	ACOX1	ACSF3	ADA	ADAMTS2	ADAMTS4	ADGRG1	ADGRV1
AGA	AGL	AGPS	AGXT	AHI1	AIPL1	AIRE	ALDH3A2	ALDH7A1	ALDOB
ALG1	ALG13	ALG6	ALMS1	ALPL	AMN	AMT	ANO10	AP1S1	AQP2
AR	ARG1	ARL6	ARSA	ARSB	ARSE	ARX	ASL	ASNS	ASPA
ASS1	ATM	ATP6V1B1	ATP7A	ATP7B	ATP8B1	ATRX	AVPR2	BBS1	BBS10
BBS12	BBS2	BBS4	BBS5	BBS7	BBS9	BCKDHA	BCKDHB	BCS1L	BLM
BLOC1S3	BLOC1S6	BMP1	BRIP1	BSND	BTD	BTK	CAD	CANT1	CAPN3
CASQ2	CBS	CC2D1A	CC2D2A	CCDC103	CCDC39	CCDC88C	CD3D	CD3E	CD40
CD40LG	CD59	CDH23	CEP152	CEP290	CERKL	CFTR	CHAT	CHM	CHRNE
CHRNG	CIITA	CLCN1	CLN3	CLN5	CLN6	CLN8	CLRN1	CNGB3	COL11A2
COL17A1	COL27A1	COL4A3	COL4A4	COL4A5	COL7A1	COX15	CPS1	CPT1A	CPT2
CRB1	CRTAP	CTNS	CTSA	CTSD	CTSK	CYBA	CYBB	CYP11A1	
CYP11B1	CYP11B2	CYP17A1	CYP19A1	CYP1B1	CYP21A2	CYP27A1	CYP27B1	CYP7B1	DBT
DCAF17	DCLRE1C	DDX11	DFNB59	DGAT1	DGUOK	DHCR7	DHDDS	DKC1	DLD
DLL3	DMD	DNAH11	DNAH5	DNAI1	DNAI2	DNMT3B	DOK7	DUOX2	DYNC2H1
DYSF	EDA	EIF2AK3	EIF2B1	EIF2B2	EIF2B3	EIF2B4	EIF2B5	ELP1	EMD
EPG5	ERCC2	ERCC6	ERCC8	ESCO2	ETFA	ETFB	ETFDH	ETHE1	EVG
EVC2	EXOSC3	EYS	F11	F2	F5	F9	FAH	FAM161A	FANCA
FANCB	FANCC	FANCD2	FANCE	FANCG	FANCI	FANCL	FBP1	FBXO7	FH
FHL1	FKBP10	FKRP	FKTN	FMO3	FMR1	FOXN1	FOXRED1	FRAS1	FREM2
FUCA1	G6PC	G6PC3	G6PD	GAA	GALC	GALE	GALK1	GALNS	GALNT3
GALT	GAMT	GATM	GBA	GBE1	GCDH	GCH1	GDF5	GFM1	GHR
GJB1	GJB2	GLA	GLB1	GLDC	GLE1	GNE	GNPAT	GNPTAB	GNPTG
GNS	GORAB	GP1BA	GP9	GRHPR	GRIP1	GSS	GUCY2D	GUSB	HADH
HADHA	HADHB	HAMP	HAX1	HBA1	HBA2	HBB	HCFC1	HEXA	HEXB
HFE	HGD	HGSNAT	HJV	HLCS	HMGCL	HMOX1	HOGA1	HPD	HPRT1
HPS1	HPS3	HPS4	HPS5	HPS6	HSD17B10	HSD17B3	HSD17B4	HSD3B2	HYAL1
HYLS1	IDS	IDUA	IGHMBP2	IKBKB	IL2RG	IL7R	INVS	ITGA6	ITGB3
ITGB4	IVD	JAK3	KCNJ1	KCNJ11	L1CAM	LAMA2	LAMA3	LAMB3	LAMC2
LARGE1	LCA5	LDLR	LDLRAP1	LHX3	LIFR	LIG4	LIPA	LMBRD1	LOXHD1
LPL	LRAT	LRP2	LRPPRC	LYST	MAK	MAN2B1	MANBA	MCCC1	MCCC2

Carrier Genes (continued)		(a wide range of disorders)								
MCEE	MCOLN1	MCPH1	MECP2	MECR	MED17	MEFV	MESP2	MFSD8	MID1	
MKKS	MKS1	MLC1	MLYCD	MMAA	MMBAB	MMACHC	MMADHC	MOCS1	MOCS2	
MPI	MPL	MPV17	MRE11	MTHFR	MTM1	MTR	MTRR	MTTP	MUSK	
MUT	MVK	MYO15A	MYO7A	NAGA	NAGLU	NAGS	NBN	NCF2	NDRG1	
NDUFAF2	NDUFAF5	NDUFS4	NDUFS6	NDUFS7	NDUFV1	NEB	NEU1	NGLY1	NPC1	
NPC2	NPHP1	NPHS1	NPHS2	NR0B1	NR2E3	NSMCE3	NTRK1	OAT	OCA2	
OCRL	OPA3	OSTM1	OTC	OTOA	OTOF	P3H1	PAH	PANK2	PC	
PCBD1	PCCA	PCCB	PCDH15	PCNT	PDHA1	PDHB	PEPD	PET100	PEX1	
PEX10	PEX12	PEX13	PEX16	PEX2	PEX26	PEX5	PEX6	PEX7	PFKM	
PGM3	PHGDH	PHKB	PHKG2	PHYH	PIGN	PKHD1	PLA2G6	PLEKHG5	PLOD1	
PLP1	PMM2	PNPO	POLG	POLH	POMGNT1	POMT1	POMT2	POR	POU1F1	
PPT1	PRCD	PRDM5	PRF1	PROP1	PRPS1	PSAP	PTPRC	PTS	PUS1	
PYGM	QDPR	RAB23	RAG1	RAG2	RAPSN	RARS2	RDH12	RLBP1	RMRP	
RNASEH2A	RNASEH2B	RNASEH2C	RP2	RPE65	RPGRIP1L	RS1	RTEL1	RXYLT1	RYR1	
SACS	SAMD9	SAMHD1	SCO2	SEC23B	SEPSECS	SERPINA1	SGCA	SGCB	SGCD	
SGCG	SGSH	SKIV2L	SLC12A1	SLC12A3	SLC12A6	SLC17A5	SLC19A2	SLC19A3	SLC1A4	
SLC22A5	SLC25A13	SLC25A15	SLC25A20	SLC26A2	SLC26A3	SLC26A4	SLC27A4	SLC35A3	SLC37A4	
SLC38A8	SLC39A4	SLC45A2	SLC4A11	SLC5A5	SLC6A8	SLC7A7	SMARCAL1	SMN1	SMPD1	
SNAP29	SPG11	SPR	SRD5A2	ST3GAL5	STAR	STX11	STXBP2	SUMF1	SUOX	
SURF1	SYNE4	TANGO2	TAT	TAZ	TBCD	TBCE	TCIRG1	TCN2	TECPR2	
TERT	TF	TFR2	TG	TGM1	TH	TK2	TMC1	TMEM216	TMEM67	
TMPRSS3	TPO	TPP1	TREX1	TRIM32	TRIM37	TRMU	TSEN54	TSFM	TSHB	
TSHR	TTC37	TPPA	TULP1	TYMP	TYR	TYRP1	UBR1	UNC13D	USH1C	
USH2A	VDR	VLDLR	VPS11	VPS13A	VPS13B	VPS45	VPS53	VRK1	VSX2	
WAS	WISP3	WNT10A	WRN	XPA	XPC	ZBTB24	ZFYVE26	ZNF469		

For more information on these genes and their related diseases, search the gene name above at <https://medlineplus.gov/genetics/> (MedlinePlus Genetics, a service of the National Library of Medicine).