## **Invitae Genetic Health Screen Gene List**



INVITAE GENETIC HEALTH SCREEN INVITAE CANCER SCREEN

INVITAE CARDIO SCREEN

Gene(s)	Condition(s)
APC	Colorectal, endocrine, gastric, nervous system/brain, and
, o	pancreatic cancer, sarcoma
ATM	Breast, pancreatic, and prostate cancer
AXIN2	Colorectal cancer
BAP1	Renal/urinary tract cancer, melanoma
BARD1	Breast cancer
BMPR1A	Colorectal, gastric, and pancreatic cancer
BRCA1	Breast, gynecologic, pancreatic, and prostate cancer
BRCA2	Breast, gynecologic, pancreatic, and prostate cancer, melanoma
BRIP1	Breast and gynecologic cancer
CDC73	Endocrine and renal/urinary tract cancer
CDH1	Breast, colorectal, and gastric cancer
CDK4	Melanoma
CDKN2A	Nervous system/brain and pancreatic cancer, melanoma
CHEK2	Breast, colorectal, endocrine, gynecologic, and prostate cancer
DICER1	Endocrine, gynecologic, nervous system/brain, and renal/urinary tract cancer, sarcoma
EPCAM	Colorectal, gastric, gynecologic, nervous system/brain, pancreatic, prostate, and renal/urinary tract cancer
FH	Renal/urinary tract cancer, sarcoma
FLCN	Renal/urinary tract cancer
GREM1	Colorectal cancer
HOXB13	Prostate cancer
KIT	Gastric cancer, sarcoma
MAX	Endocrine cancer
MEN1	Endocrine, nervous system/brain, and pancreatic cancer
MET	Renal/urinary tract cancer
MITF	Melanoma
MLH1	Colorectal, gastric, gynecologic, nervous system/brain, pancreatic, prostate, and renal/urinary tract cancer
MSH2	Colorectal, gastric, gynecologic, nervous system/brain, pancreatic, prostate, and renal/urinary tract cancer
MSH3	Colorectal cancer, includes reporting of carrier status
MSH6	Colorectal, gastric, gynecologic, nervous system/brain, pancreatic, prostate, and renal/urinary tract cancer
MUTYH	Colorectal cancer
NBN	Breast and prostate cancer
Gene(s)	Condition(s)
ACTA2	Aortopathy
ACTC1	Cardiomyopathy, congenital heart disease
ACTN2	Arrhythmia, cardiomyopathy
ACVRL1	Hereditary hemorrhagic telangiectasia, pulmonary arterial hypertension
4000	Familial hypercholesterolemia, familial
APOB	hypobetalipoproteinemia
APOB BAG3	Cardiomyopathy, neuromuscular condition
	· · · ·
BAG3	Cardiomyopathy, neuromuscular condition

Gene(s)	Condition(s)
NF1	Breast, endocrine, gastric, and nervous system/brain cancer
NF2	Nervous system/brain cancer
NTHL1	Colorectal cancer, includes reporting of carrier status
PALB2	Breast and pancreatic cancer
PDGFRA	Gastric cancer, sarcoma
PMS2	Colorectal, gastric, gynecologic, nervous system/brain, pancreatic, prostate, and renal/urinary tract cancer
POLD1	Colorectal cancer
POLE	Colorectal cancer
PRKAR1A	Endocrine and nervous system/brain cancer, sarcoma
PTCH1	Nervous system/brain and skin cancer, sarcoma
PTEN	Breast, colorectal, endocrine, gynecologic, nervous system/brain and, renal/urinary tract cancer, melanoma
RAD51C	Breast and gynecologic cancer
RAD51D	Breast and gynecologic cancer
RB1	Melanoma, retinoblastoma, sarcoma
RET	Endocrine cancer
SDHA	Endocrine and gastric cancer, sarcoma
SDHAF2	Endocrine cancer
SDHB	Endocrine, gastric, and renal/urinary tract cancer, sarcoma
SDHC	Endocrine, gastric, and renal/urinary tract cancer, sarcoma
SDHD	Endocrine, gastric, and renal/urinary tract cancer,
SMAD4	Colorectal, gastric, and pancreatic cancer
SMARCA4	Gynecologic cancer
SMARCB1	Nervous system/brain and renal/urinary tract cancer
STK11	Breast, colorectal, gastric, gynecologic, and pancreatic cancer
TMEM127	Endocrine cancer
TP53	Breast, endocrine, gastrointestinal, genitourinary, gynecologic, hematologic, nervous system/brain, and skin cancer, sarcoma
TSC1	Nervous system/brain, pancreatic, and renal/urinary tract cancer
TSC2	Nervous system/brain, pancreatic, and renal/urinary tract cancer
VHL	Endocrine, nervous system/brain, pancreatic, and renal/urinary tract cancer
WT1	Renal/urinary tract cancer
Gene(s)	Condition(s)
CALM1	Arrhythmia
CALM2	Arrhythmia
CALM3	Arrhythmia
CASQ2	Arrhythmia, includes reporting of carrier status
CAV1	Pulmonary arterial hypertension
CAV3	Arrhythmia, cardiomyopathy, neuromuscular condition
COL3A1	Aortopathy
CRYAB	Cardiomyopathy, neuromuscular condition
CSRP3	Cardiomyopathy

## Invitae Genetic Health Screen Gene List



		Gene(s)	Condition(s)
INVITAE GENETIC HEALTH SCREEN (continued)	(p)	DES	
	nue	DMD	Arrhythmia, cardiomyopathy, neuromuscular condition
onti	onti		Cardiomyopathy, neuromuscular condition
) <u>-</u>	(C	DSC2	Arrhythmia, cardiomyopathy
	H.	DSG2	Arrhythmia, cardiomyopathy
CRI	CR	DSP	Arrhythmia, cardiomyopathy
S	S	EMD	Arrhythmia, cardiomyopathy, neuromuscular condition
盲	INVITAE CARDIO SCREEN (continued	ENG	Hereditary hemorrhagic telangiectasia, pulmonary arterial hypertension
₩.	AR	F2	Hereditary thrombophilia
C	В	F5	Hereditary thrombophilia
ᇤ	¥	F9	Hemophilia, hereditary thrombophilia
Ä	$\geq$	FBN1	Aortopathy
ы О	=	FHL1	Cardiomyopathy, neuromuscular condition
₹		FLNC	Cardiomyopathy, neuromuscular condition
$\geq$		GDF2	Hereditary hemorrhagic telangiectasia
=		GLA	Cardiomyopathy, lysosomal storage disease
		GPD1L	Arrhythmia
		HCN4	Arrhythmia, cardiomyopathy
		JUP	Arrhythmia, cardiomyopathy
		KCNE1	Arrhythmia
		KCNE2	Arrhythmia
		KCNH2	Arrhythmia
		KCNJ2	Arrhythmia
		KCNQ1	Arrhythmia
		LAMP2	Cardiomyopathy, glycogen storage disease
		LDLR	Familial hypercholesterolemia
		LDLRAP1	Familial hypercholesterolemia, includes reporting of carrier status
		LMNA	Arrhythmia, cardiomyopathy, neuromuscular condition
		MYBPC3	Cardiomyopathy
		MYH11	Aortopathy
		Gene(s)	Condition(s)
		ATP7B	Wilson disease, includes reporting of carrier status

Hypokalemic periodic paralysis, malignant hyperthermia

Hereditary hemochromatosis, includes reporting of carrier

Hereditary hemochromatosis, includes reporting of carrier

Hereditary hemochromatosis, includes reporting of carrier

CACNA1S

HAMP

HFE

HJV

susceptibility

status

status

Gene(s)	Condition(s)		
MYH7	Cardiomyopathy, neuromuscular condition		
MYL2	Cardiomyopathy		
MYL3	Cardiomyopathy		
MYLK	Aortopathy		
NKX2-5	Arrhythmia, congenital heart disease		
PCSK9	Familial hypercholesterolemia		
PKP2	Arrhythmia, cardiomyopathy		
PLN	Arrhythmia, cardiomyopathy		
PRKAG2	Arrhythmia, cardiomyopathy		
PRKG1	Aortopathy		
PROC	Hereditary thrombophilia		
PROS1	Hereditary thrombophilia		
RBM20	Arrhythmia, cardiomyopathy		
RYR2	Arrhythmia, cardiomyopathy		
SCN5A	Arrhythmia, cardiomyopathy		
SERPINC1	Hereditary thrombophilia		
SGCD	Cardiomyopathy, neuromuscular condition		
SMAD3	Aortopathy		
SMAD4	Hereditary hemorrhagic telangiectasia		
TCAP	Cardiomyopathy, neuromuscular condition		
TGFB2	Aortopathy		
TGFB3	Aortopathy, arrhythmia, cardiomyopathy		
TGFBR1	Aortopathy, multiple self-healing squamous epithelioma		
TGFBR2	Aortopathy		
TMEM43	Arrhythmia, cardiomyopathy		
TNNC1	Cardiomyopathy		
TNNI3	Arrhythmia, cardiomyopathy		
TNNT2	Arrhythmia, cardiomyopathy		
TPM 1	Cardiomyopathy		
VCL	Cardiomyopathy		
Gene(s)	Condition(s)		
OTC	Ornithine transcarbamylase deficiency		
RYR1	Malignant hyperthermia susceptibility, neuromuscular condition		
SERPINA1	Alpha-1 antitrypsin deficiency, includes reporting of carrier status		
SLC40A1	Hereditary hemochromatosis		
TFR2	Hereditary hemochromatosis, includes reporting of carrier status		