

Cardiology Screening Gene List



Our cardiology next generation sequencing (NGS) panel covers up to 174 different genes, which correspond to various cardiac disorders.

Subpanels are available if testing for all genes is not desired.

Full Gene Name	Gene Abbreviation
ATP Binding Cassette Subfamily C Member 9	ABCC9
ATP Binding Cassette Subfamily G Member 5	ABCG5
ATP Binding Cassette Subfamily G Member 8	ABCG8
Actin Alpha 1	ACTA1
Actin Alpha 2	ACTA2
Actin Alpha Cardiac Muscle 1	ACTC1
Actinin Alpha 2	ACTN2
A-Kinase Anchoring Protein 9	AKAP9
ALMS1 Centrosome and Basal Body Associated Protein	ALMS1
Ankyrin-2	ANK2
Ankyrin Repeat Domain 1	ANKRD1
Apolipoprotein A4	APOA4
Apolipoprotein A5	APOA5
Apolipoprotein B	APOB
Apolipoprotein C2	APOC2
Apolipoprotein E	APOE
BAG Cochaperone 3	BAG3
Proto-Oncogene B-Raf	BRAF
Calcium Voltage-Gated Channel Subunit Alpha1 C	CACNA1C
Calcium Voltage-Gated Channel Auxiliary Subunit Alpha 2 Delta 1	CACNA2D1
Calcium Voltage-Gated Channel Auxiliary Subunit Beta 2	CACNB2
Calmodulin 1	CALM1
Calreticulin 3	CALR3
Calsequestrin 2	CASQ2
Caveolin 3	CAV3
CBL Proto-Oncogene	CBL
Cystathionine Beta-Synthase	CBS
Cholesteryl Ester Transfer Protein	CETP

Collagen Type III Alpha 1 Chain	COL3A1
Collagen Type V Alpha 1 Chain	COL5A1
Collagen Type V Alpha 2 Chain	COL5A2
Cytochrome C Oxidase Assembly Homolog COX15	COX15
CAMP Responsive Element Binding Protein 3 Like 3	CREB3L3
CAMP Responsive Element Binding Protein 3 Like 3	CRELD1
Crystallin Alpha B	CRYAB
Cysteine And Glycine Rich Protein 3	CSRP3
Cardiotrophin 1	CTF1
Desmin	DES
Dystrophin	DMD
DnaJ Heat Shock Protein Family	DNAJC19
Dolichol Kinase	DOLK
Dipeptidyl Peptidase Like 6	DPP6
Desmocollin-2	DSC2
Desmoglein 2	DSG2
Desmoplakin	DSP
Dystrobrevin Alpha	DTNA
EGF Containing Fibulin Extracellular Matrix Protein 2	EFEMP2
Elastin	ELN
Emerin	EMD
EYA Transcriptional Coactivator and Phosphatase 4	EYA4
Fibrillin 1	FBN1
Fibrillin 2	FBN2
Four and a Half LIM Domains 1	FHL1
Four and a Half LIM Domains Protein 2	FHL2
Fukutin-Related Protein	FKRP
Fukutin	FKTN
Frataxin	FXN

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Alpha Glucosidase	GAA
GATA Zinc Finger Domain Containing 1	GATAD1
Glucokinase Regulator	GCKR
Gap Junction Alpha-5 Protein	GJA5
Galactosidase Alpha	GLA
Glycerol-3-Phosphate Dehydrogenase 1 Like	GPD1L
Glycosylphosphatidylinositol Anchored High Density Lipoprotein Binding Protein 1	GPIHBP1
Hydroxyacyl-CoA Dehydrogenase Trifunctional Multienzyme Complex Subunit Alpha	HADHA
Hyperpolarization Activated Cyclic Nucleotide Gated Potassium Channel 4	HCN4
Homeostatic Iron Regulator	HFE
HRas Proto-Oncogene	HRAS
Heat Shock Protein Family B (Small) Member 8	HSPB8
Integrin Linked Kinase	ILK
Jagged Canonical Notch Ligand 1	JAG1
Junctophilin 2	JPH2
Junction Plakoglobin	JUP
Potassium Voltage-Gated Channel Subfamily A Member 5	KCNA5
Potassium Voltage-Gated Channel Subfamily D Member 3	KCND3
Potassium Voltage-Gated Channel Subfamily E Regulatory Subunit 1	KCNE1
Potassium Voltage-Gated Channel Subfamily E Regulatory Subunit 2	KCNE2
Potassium Voltage-Gated Channel Subfamily E Regulatory Subunit 3	KCNE3
Potassium Voltage-Gated Channel Subfamily H Member 2	KCNH2
Potassium Inwardly Rectifying Channel Subfamily J Member 2	KCNJ2
Potassium Inwardly Rectifying Channel Subfamily J Member 5	KCNJ5
Potassium Inwardly Rectifying Channel Subfamily J Member 8	KCNJ8
Potassium Voltage-Gated Channel Subfamily Q Member 1	KCNQ1
Kruppel Like Factor 10	KLF10
Kirsten Rat Sarcoma Virus	KRAS
Laminin Subunit Alpha 2	LAMA2
Laminin Subunit Alpha 4	LAMA4

Lysosomal Associated Membrane Protein 2	LAMP2
LIM Domain Binding 3	LDB3
Low Density Lipoprotein Receptor	LDLR
Low Density Lipoprotein Receptor Adaptor Protein 1	LDLRAP1
Lipase Maturation Factor 1	LMF1
Prelamin-A/C	LMNA
Lipoprotein Lipase	LPL
Latent Transforming Growth Factor Beta Binding Protein 2	LTBP2
Mitogen-Activated Protein Kinase Kinase 1	MAP2K1
Mitogen-Activated Protein Kinase Kinase 2	MAP2K2
MIB E3 Ubiquitin Protein Ligase 1	MIB1
Caveolae-Associated Protein 4	MURC/CAVIN4
Myosin Binding Protein C3	MYBPC3
Myosin Heavy Chain 11	MYH11
Myosin Heavy Chain 6	MYH6
Myosin Heavy Chain 7	MYH7
Myosin Light Chain 2	MYL2
Myosin Light Chain 3	MYL3
Myosin Light Chain Kinase	MYLK
Myosin Light Chain Kinase 2	MYLK2
Myosin VI	MYO6
Myozenin 2	MYOZ2
Myopalladin	MYPN
Nexilin F-Actin Binding Protein	NEXN
Homeobox Protein Nkx-2.5	NKX2-5
Nodal Growth Differentiation Factor	NODAL
Notch Receptor 1	NOTCH1
Natriuretic Peptide A	NPPA
NRAS Proto-Oncogene	NRAS
Proprotein Convertase Subtilisin/Kexin Type 9	PCSK9
Actin-Associated LIM Protein	PDLIM3/ALP
Plakophilin 2	PKP2

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Phospholamban	PLN
PR/SET Domain 16	PRDM16
Protein Kinase AMP-Activated Non-Catalytic Subunit Gamma 2	PRKAG2
Protein Kinase CAMP-Dependent Type I Regulatory Subunit Alpha	PRKAR1
Protein Tyrosine Phosphatase Non-Receptor Type 11	PTPN11
Raf-1 Proto-Oncogene, Serine/Threonine Kinase	RAF1
RAN Guanine Nucleotide Release Factor	RANGRF
RNA Binding Motif Protein 20	RBM20
Ryanodine Receptor 1	RYR1
Ryanodine Receptor 2	RYR2
Sal-like Protein 4	SALL4
Sodium Voltage-Gated Channel Beta Subunit 1	SCN1B
Sodium Voltage-Gated Channel Beta Subunit 2	SCN2B
Sodium Voltage-Gated Channel Beta Subunit 3	SCN3B
Sodium Voltage-Gated Channel Beta Subunit 4	SCN4B
Sodium Voltage-Gated Channel Alpha Subunit 5	SCN5A
Synthesis Of Cytochrome C Oxidase 2	SCO2
Succinate Dehydrogenase Complex Flavoprotein Subunit A	SDHA
Selenoprotein 1	SEPN1
Sarcoglycan Beta	SGCB
Sarcoglycan Delta	SGCD
Sarcoglycan Gamma	SGCG
SHOC2 Leucine Rich Repeat Scaffold Protein	SHOC2
Solute Carrier Family 25 Member 4	SLC25A4
Solute Carrier Family 2 Member 10	SLC2A10
SMAD Family Member 3	SMAD3
SMAD Family Member 4	SMAD4

Syntrophin Alpha 1	SNTA1
Son of Sevenless Homolog 1	SOS1
Sterol Regulatory Element Binding Transcription Factor 2	SREBF2
Tafazzin	TAZ
T-Box Transcription Factor 3	TBX3
T-Box Transcription Factor 5	TBX5
T-Box Transcription Factor 20	TBX20
Telethonin	TCAP
Transforming Growth Factor Beta 2	TGFB2
Transforming Growth Factor Beta 3	TGFB3
Transforming Growth Factor Beta Receptor 1	TGFBRI
Transforming Growth Factor Beta Receptor 2	TGFBRII
Transmembrane Protein 43	TMEM43
TMPO Thymopoietin	TMPO
Troponin C1	TNNC1
Troponin I3	TNNI3
Troponin T2	TNNT2
Tropomyosin 1	TPM1
Triadin	TRDN
E3 ubiquitin-protein ligase TRIM63	TRIM63
Transient Receptor Potential Cation Channel Subfamily M Member 4	TRPM4
Titin	TTN
Transthyretin	TTR
Thioredoxin Reductase 2	TXNRD2
Vinculin	VCL
Zinc Finger and BTB Domain Containing 17	ZBTB17
Zinc Fingers and Homeoboxes 3	ZHX3
Zic Family Member 3	ZIC3