

GENETIC TESTING COMPANIES: CARDIOMYOPATHY

Company & Contact Info	Tests
Ambry Genetics 1 Enterprise Aliso Viejo, CA 92656 ambrygen.com	ARVC Genes Tested: DES, DSC2, DSG2, DSP, JUP, LMNA, PKP2, PLN, RYR2, SCN5A, TMEM43
	DCM Genes Tested: ABCC9, ACTC1, ACTN2, ALMS1, ANKRD1, BAG3, CSRP3, DES, DMD, DOLK, DSP, FKRP, FLNC, LAMA4, LAMP2, LDB3, LMNA, MYBPC3, MYH6, MYH7, MYPN, NEXN, NKX2-5, PLN, RAF1, RBM20, SCN5A, TAZ, TBX20, TCAP, TNNC1, TNNI3, TNNT2, TPM1, TTN, TTR, VCL
	HCM Genes Tested: ACTC1, ACTN2, ALPK3, ANKRD1, CSRP3, FHL1, FLNC, GLA, JPH2, LAMP2, MYBPC3, MYH6, MYH7, MYL2, MYL3, MYPN, NEXN, PLN, PRKAG2, PTPN11, RAF1, RIT1, SOS1, TCAP, TNNC1, TNNI3, TNNT2, TPM1, TTR, VCL
	Multi-Gene Cardiomyopathy Panel: ABCC9, ACTC1, ACTN2, ALMS1, ALPK3, ANKRD1, BAG3, CRYAB, CSRP3, DES, DMD, DOLK, DSC2, DSG2, DSP, EMD, FHL1, FKRP, FLNC, GLA, HCN4, JPH2, JUP, LAMA4, LAMP2, LDB3, LMNA, MYBPC3, MYH6, MYH7, MYL2, MYL3, MYPN, NEXN, NKX2-5, PKP2, PLN, PRKAG2, PTPN11, RAF1, RBM20, RIT1, RYR2, SCN5A, SOS1, TAZ, TBX20, TCAP, TMEM43, TNNC1, TNNI3, TNNT2, TPM1, TTN, TTR, VCL
BluePrint Genetics 2505 3rd Ave Suite 204 Seattle, WA 98121 blueprintgenetics.com	Cardiomyopathy Panel: AARS2, ABCC6, ABCC9, ACAD9, ACTA1, ACTC1, ACTN2, AGK, AGL, ALMS1, ALPK3, ANO5, APOA1, BAG3, BRAF, CALR3, CAPN3, CASQ2, CASZ1, CBL, CDH2, CHRM2, COX15, CPT2, CRYAB, CSRP3, CTNNA3, DBH, DES, DMD, DNAJC19, DOLK, DPM3, DSC2, DSG2, DSP, DTNA, DYSF, EEF1A2, ELAC2, EMD, EPG5, ETFA, ETFB, ETFDH, FBXL4, FBXO32, FHL1, FHOD3, FKRP, FKTN, FLNC, FOXD4, FOXRED1, AR15, FXN, GAA, GATA4, GATA6, GATAD1, GATC, GBE1, GFM1, GLA, GLB1, HFE, HRAS, IDUA, ILK, ISPD, JPH2, JUP, KLHL24, KRAS, LAMA2, LAMP2, LDB3, LEMD2, LMNA, LMOD2, LRRC10, LZTR1, MAP2K1, MAP2K2, MAP3K8, MIPEP, MLYCD, MT-ATP6, MT-ATP8, MT-CO1, MT-CO2, MT-CO3, MT-CYB, MT-ND1, MT-ND2, MT-ND3, MT-ND4, MT-ND4L, MT-ND5, MT-ND6, MT-RNR1, MT-RNR2, MT-TA, MT-TC, MT-TD, MT-TE, MT-TF, MT-TG, MT-TH, MT-TI, MT-TK, MT-TL1, MT-TL2, MT-TM, MT-TN, MT-TP, MT-TQ, MT-TR, MT-TS1, MT-TS2, MT-TT, MT-TV, MT-TW, MT-TY, MTO1, MYBPC3, MYBPHL, MYH6, MYH7, MYL2, MYL3, MYL4, MYOT, MYPN, MYRF, NDUFAF2, NEXN, NF1, NKX2-5, NONO, NRAP, NRAS, PCCB#, PKP2#, PLEC, PLEKHM2, PLN, PNPLA2, PPA2, PPCS, PPP1CB, PRDM16, PRKAG2, PTPN11, QRSL1, RAF1, RASA2, RBCK1, RBM20, RIT1, RMND1, RRAS, RYR2, SCN5A, SCNN1B, SCNN1G, SCO1, SCO2, SDHA, SELENON#, SGCA, SGCB, SGCD, SGCG, SHOC2, SLC22A5, SLC25A20, SLC25A4, SMCHD1, SOS1, SOS2, SPEG, SPRED1, TAB2, TAZ, TBX20, TBX5, TCAP, TGFB3, TMEM43, TMEM70, TNNC1, TNNI3, TNNI3K, TNNT2, TOR1AIP1, TPM1, TRIM32, TSFM, TTN, TTR, VCL, VCP, VPS13A, XK
GeneDx 207 Perry Parkway Gaithersburg, MD 20877 genedx.com	ARVC Genes Tested: CTNNA3, DES, DSC2, DSG2, DSP, FLNC, JUP, LDB3, LMNA, PKP2, PLN, RYR2, SCN5A, TGFB3, TMEM43, TTN
	Cardiomyopathy Panel: ABCC9, ACTC1, ACTN2, AKAP9, ALMS1, ALPK3, ANKRD1, BAG3, BRAF, CAV3, CAVIN4, CHRM2, CRYAB, CSRP3, CTNNA3, DES, DMD, DOLK, DSC2, DSG2, DSP, DTNA, EMD, EYA4, FHL1, FKRP, FKTN, FLNC, GAA, GATA4, GATAD1, GLA, HCN4, HFE, HRAS, ILK, JPH2, JUP, KRAS, LAMA4, LAMP2, LDB3, LMNA, LRRC10, MAP2K1, MAP2K2, MIB1, MTND1, MTND5, MTND6, MTTD, MTTG, MTTH, MTTI, MTTK, MTTL1, MTTL2, MTTM, MTTQ, MTTS1, MTTS2, MYBPC3, MYH6, MYH7, MYL2, MYL3, MYLK2, MYOZ2, MYPN, NEBL, NEXN, NKX2-5, NRAS, PDLIM3, PKP2, PLN, PRDM16, PRKAG2, PTPN11, RAF1, RBM20, RIT1, RYR2, SCN5A, SGCD, SHOC2, SOS1, TAZ, TBX20, TCAP, TGFB3, TMEM43, TMPO, TNNC1, TNNI3, TNNT2, TOR1AIP1, TPM1, TTN, TTR, TXNRD2, VCL

GeneDx continued	<p>Combined Cardiac Panel: ABCC9, ACTC1, ACTN2, AKAP9, ALMS1, ALPK3, ANK2, ANKRD1, BAG3, BRAF, CACNA1C, CACNA2D1, CACNB2, CALM1, CALM2, CALM3, CASQ2, CAV3, CAVIN4, CHRM2, CRYAB, CSRP3, CTNNA3, DES, DMD, DOLK, DSC2, DSG2, DSP, DTNA, EMD, EYA4, FHL1, FKRP, FKTN, FLNC, GAA, GATA4, GATA5, GATA6, GATAD1, GJA5, GLA, GNB5, GPD1L, HCN4, HFE, HRAS, ILK, JPH2, JUP, KCNA5, KCND3, KCNE1, KCNE2, KCNE3, KCNE5, KCNH2, KCNJ2, KCNJ5, KCNJ8, KCNQ1, KRAS, LAMA4, LAMP2, LDB3, LMNA, LRRC10, MAP2K1, MAP2K2, MIB1, MTND1, MTND5, MTND6, MTTD, MTTG, MTTH, MTTI, MTTK, MTTL1, MTTL2, MTTM, MTTQ, MTTS1, MTTS2, MYBPC3, MYH6, MYH7, MYL2, MYL3, MYL4, MYLK2, MYOZ2, MYPN, NEBL, NEXN, NKX2-5, NRAS, PDLIM3, PKP2, PLN, PPA2, PRDM16, PRKAG2, PTPN11, RAF1, RANGRF, RBM20, RIT1, RYR2, SCN10A, SCN1B, SCN2B, SCN3B, SCN4B, SCN5A, SGCD, SHOC2, SNTA1, SOS1, TAZ, TBX20, TCAP, TECRL, TGFB3, TMEM43, TMPO, TNNC1, TNNI3, TNNT2, TOR1AIP1, TPM1, TRDN, TRPM4, TTN, TTR, TXNRD2, VCL</p>
	<p>DCM Genes Tested: ABCC9, ACTC1, ACTN2, ALMS1, ANKRD1, BAG3, CHRM2, CRYAB, CSRP3, DES, DMD, DOLK, DSC2, DSG2, DSP, DTNA, EMD, FKTN, FLNC, GATAD1, HCN4, ILK, LAMA4, LAMP2, LDB3, LMNA, LRRC10, MIB1, MTND1, MTND5, MTND6, MTTD, MTTG, MTTH, MTTI, MTTK, MTTL1, MTTL2, MTTM, MTTQ, MTTS1, MTTS2, MYBPC3, MYH6, MYH7, MYPN, NEBL, NEXN, NKX2-5, PLN, PRDM16, RAF1, RBM20, RYR2, SCN5A, SGCD, TAZ, TBX20, TCAP, TMPO, TNNC1, TNNI3, TNNT2, TPM1, TTN, TTR, TXNRD2, VCL</p>
	<p>HCM Genes Tested: ACTC1, ACTN2, ALPK3, CAV3, CSRP3, FHL1, FLNC, GAA, GLA, JPH2, LAMP2, MTND1, MTND5, MTND6, MTTD, MTTG, MTTH, MTTI, MTTK, MTTL1, MTTL2, MTTM, MTTQ, MTTS1, MTTS2, MYBPC3, MYH6, MYH7, MYL2, MYL3, MYOZ2, PLN, PRKAG2, RAF1, RIT1, TCAP, TNNC1, TNNI3, TNNT2, TPM1, TTN, TTR, VCL</p>
Invitae Corporation 1400 16th Street San Francisco, CA 94103 invitae.com	<p>Arrhythmia and Cardiomyopathy Comprehensive Panel: ABCC9, ACTC1, ACTN2, AGL, ANK2, BAG3, CACNA1C, CACNB2, CALM1, CALM2, CALM3, CASQ2, CAV3, CRYAB, CSRP3, DES, DMD, DOLK, DSC2, DSG2, DSP, EMD, EYA4, FHL1, FKRP, FKTN, FLNC, GAA, GLA, GPD1L, HCN4, JUP, KCNA5, KCNE1, KCNE2, KCNH2, KCNJ2, KCNQ1, LAMP2, LMNA, MYBPC3, MYH7, MYL2, MYL3, MYL4, NKX2-5, PKP2, PLN, PRKAG2, RAF1, RBM20, RYR2, SCN5A, SGCD, SLC22A5, TAZ, TCAP, TGFB3, TMEM43, TNNC1, TNNI3, TNNT2, TPM1, TRDN, TTN, TTR, VCL</p>
	<p>ARVC: Genes tested: ACTN2, DES, DSC2, DSG2, DSP, EMD, FLNC, JUP, LMNA, PKP2, PLN, PRKAG2, RBM20, RYR2, SCN5A, TMEM43, TNNI3, TNNT2, TTN</p>
	<p>Cardiomyopathy and Skeletal Muscle Disease Panel: ABCC9, ACTA1, ACTC1, ACTN2, AGL, ANO5, ATP2A1, B3GALNT2, B4GAT1, BAG3, BIN1, CACNA1C, CAPN3, CAV3, CCDC78, CFL2, CHKB, CNTN1, COL12A1, COL6A1, COL6A2, COL6A3, CPT2, CRYAB, CSRP3, DAG1, DES, DMD, DNAJB6, DNM2, DOLK, DPM1, DPM2, DPM3, DSC2, DSG2, DSP, DYSF, EMD, EYA4, FHL1, FKBP14, FKRP, FKTN, FLNC, GAA, GLA, GMPPB, GNE, GYS1, HCN4, ISPD, ITGA7, JUP, KBTBD13, KLHL40, KLHL41, LAMA2, LAMP2, LARGE1, LMNA, LMOD3, MATR3, MEGF10, MTM1, MYBPC3, MYH7, MYL2, MYL3, MYOT, MYPN, NEB, PKP2, PLEC, PLN, PNPLA2, POMGNT1, POMGNT2, POMK, POMT1, POMT2, PRKAG2, RAF1, RBM20, RXYLT1, RYR1, RYR2, SCN5A, SELENON, SGCA, SGCB, SGCD, SGCG, SLC22A5, SQSTM1, STAC3, STIM1, TAZ, TCAP, TIA1, TMEM43, TNNC1, TNNI3, TNNT1, TNNT2, TNPO3, TOR1AIP1, TPM1, TPM2, TPM3, TRAPPC11, TRIM32, TTN, TTR, VCL, VCP</p>
	<p>Cardiomyopathy Comprehensive Panel: ABCC9, ACTC1, ACTN2 AGL, BAG3, CACNA1C, CAV3, CRYAB, CSRP3, DES, DMD, DOLK, DSC2, DSG2, DSP, EMD, EYA4, FHL1, FKRP, FKTN, FLNC, GAA, GLA, HCN4, JUP, LAMP2, LMNA, MYBPC3, MYH7, MYL2, MYL3, PKP2, PLN, PRKAG2, RAF1, RBM20, RYR2, SCN5A SGCD SLC22A5 TAZ TCAP TMEM43, TNNC1, TNNI3, TNNT2, TPM1, TTN, TTR, VCL</p>

Invitae continued	<p>DCM: Genes tested: ABCC9, ACTC1, ACTN2, BAG3, CAV3, CRYAB, CSRP3, DES, DMD, DOLK, DSC2, DSG2, DSP, EMD, EYA4, FKRP, FTKN, FLNC, JUP, LAMP2, LMNA, MYBPC3, MYH7, PKP2, PLN, RAF1, RBM20, RYR2, SCN5A, SGCD, SLC22A5, TAZ, TCAP, TMEM43, TNNT1, TNNT2, TPM1, TTN, TTR, VCL</p> <p>HCM Genes tested: ACTC1, ACTN2, AGL, BAG3, CACNA1C, CAV3, CSRP3, DES, FHL1, FLNC, GAA, GLA, LAMP2, MYBPC3, MYH7, MYL2, MYL3, PLN, PRKAG2, TCAP, TNNT1, TNNT2, TPM1, TTR, VCL</p>
LabCorp 531 South Spring Street Burlington, NC 27215 labcorp.com	<p>Cardio-Familial Cardiomyopathy Panel: ABCC9, ACTC1, ACTN2, ALMS1, APOA1, BAG3, CAV3, CSRP3, CTF1, DES, DNAJC19, DSC2, DSG2, DSP, DTNA, EMD, EYA4, FTKN, GLA, JUP, LAMP2, LDB3, LMNA, MYBPC3, MYH6, MYH7, MYL2, MYL3, MYLK2, PLN, PKP2, PRKAG2, RBM20, RYR2, SCN5A, SGCD, TAZ, TCAP, TGFB3, TMEM43, TMPO, TNNT1, TNNT2, TPM1, TTR, TTN, and VCL, plus at least two and typically 10 flanking intronic nucleotides upstream and downstream of each coding exon, covering the conserved donor and acceptor splice sites, as well as typically 10 flanking nucleotides in the 5' and 3' UTR.</p>
Partners HealthCare Personalized Medicine 65 Lansdowne Street Cambridge, MA 02139 personalizedmedicine.partners.org	<p>Pan Cardiomyopathy Panel: ABCC9, ACTC1, ACTN2, ANKRD1, BAG3, CASQ2, CAV3, CHRM2, CRYAB, CSRP3, DES, DMD, DOLK, DSC2, DSG2, DSP, DTNA, EMD, FHL2, GATAD1, GLA (includes deep intronic c.639+919G>A variant), ILK, JPH2, JUP, LAMA4 (excludes exon 2A* in NM_001105209.1 and exon 8 in NM_002290.3), LAMP2, LDB3, LMNA (excludes exons 1B* and 13B* in NM_001257374.2), CAVIN4, MYBPC3 (includes the intronic c.1224-52G>A variant), MYH6 (excludes exon 37 in NM_002471.3), MYH7, MYL2, MYL3, MYLK2, MYOM1, MYOZ2, MYPN, NEBL, NEXN, PDLIM3, PKP2, PLN, PRDM16, PRKAG2, PTPN11, RAF1, RBM20, RYR2, SCN5A, SGCD, TAZ, TCAP, TMEM43, TNNT1, TNNT2, TPM1, TRDN, TTN, TTR, VCL. *Exon from an alternate transcript.</p>
Prevention Genetics 3800 South Business Park Ave Marshfield, WI, 54449 preventiongenetics.com	<p>Pan Cardiomyopathy Panel: ABCC9, ACTC1, ACTN2, ALMS1, ANKRD1, BAG3, BRAF, CALR3, CAV3, CAVIN4, CRYAB, CSRP3, DES, DMD, DOLK, DPP6, DSC2, DSG2, DSP, DTNA, EMD, EYA4, FHL1, FHL2, FKRP, FTKN, GAA, GATAD1, GLA, HCN4, HRAS, ILK, JPH2, JUP, KRAS, LAMA4, LAMP2, LDB3, LMNA, MAP2K1, MAP2K2, MIB1, MYBPC3, MYH6, MYH7, MYL2, MYL3, MYLK2, MYO6, MYOZ2, MYPN, NEXN, NKX2-5, NRAS, PDLIM3, PKP2, PLN, PRDM16, PRKAG2, PRKAR1A, PTPN11, RAF1, RBM20, RYR2, SCN5A, SCO2, SGCD, SGCG, SOS1, TAZ, TCAP, TGFB3, TGFBR2, TMEM43, TMPO, TNNT1, TNNT2, TPM1, TTN, TTR, VCL</p> <p>ARVC/Dysplasia Panel: CDH2, CTNNA3, DES, DSC2, DSG2, DSP, FLNC, JUP, LDB3, LMNA, PKP2, PLN, RYR2, SCN5A, TGFB3, TMEM43</p> <p>Dilated Cardiomyopathy Panel: ABCC9, ACTC1, ACTN2, ALMS1, ANKRD1, BAG3, CAV3, CRYAB, CSRP3, DES, DMD, DOLK, DSC2, DSG2, DSP, EMD, EYA4, FHL2, FTKN, FLNC, GATAD1, ILK, LAMA4, LAMP2, LDB3, LMNA, MIB1, MYBPC3, MYH6, MYH7, MYPN, NEBL, NEXN, NKX2-5, PDLIM3, PKP2, PLN, PPCS, PRDM16, RAF1, RBM20, RYR2, SCN5A, SGCD, TAZ, TCAP, TMPO, TNNT1, TNNT2, TPM1, TTN, TTR, TXNRD2, VCL</p> <p>HCM Genes Tested: ACTC1, ACTN2, ALPK3, ANKRD1, BAG3, BRAF, CAV3, CBL, CSRP3, DES, FHL1, FLNC, GAA, GLA, HRAS, JPH2, KRAS, LAMP2, LZTR1, MAP2K1, MAP2K2, MRAS, MYBPC3, MYH6, MYH7, MYL2, MYL3, MYOZ2, MYPN, NEXN, NF1, NRAS, PLN, PPP1CB, PRKAG2, PTPN11, RAF1, RASA2, RIT1, RRAS, SHOC2, SOS1, SOS2, TCAP, TNNT1, TNNT2, TPM1, TTR, VCL</p>
Transgenomic Five Science Park New Haven, CT 06511 transgenomic.com	<p>ARVC Genes Tested: DSC2, DSG2, DSP, PKP2, and TMEM43</p> <p>DCM Genes Tested: LMNA, ANKRD1, TNNT1, SCN5A, TPM1, MYBPC3, ACTC, LDB3, PLN, MYH7, TNNT2, TNNT3, TAZ</p>

Transgenomic continued	HCM Genes Tested: MYH7, MYBPC3, TNNT2, TNNI3, TPM1, MYL2, TNNC1, MYL3, ACTC, GLA, LAMP2, PRKAG2
	LVNC Genes Tested: MYH7, LDB3, ACTC, TAZ, TNNT2, MYBPC3, LMNA

Please note that clinical sensitivity, turnaround time, fees and insurance coverage vary by test panels and company. Please contact individual companies for the most current information.

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