

**List of genes associated with sudden cardiac death (SCDgset<sup>a</sup>)**

Gene symbol	Gene name	Uniprot ID	Uniprot name	Entrez_ID	mRNA expression in normal human heart from <sup>b</sup>		
					GTE <sub>x</sub> <sup>c</sup>	BioGPS <sub>d</sub>	SAGE <sub>e</sub>
<i>ABCB1</i>	ATP-binding cassette subfamily B member 1	P08183	MDR1_HUMAN	5243	√	√	■
<i>ABCC9</i>	ATP-binding cassette subfamily C member 9	O60706	ABCC9_HUMAN	10060	√	√	■
<i>ACE</i>	Angiotensin I-converting enzyme	P12821	ACE_HUMAN	1636	√	√	■
<i>ACE2</i>	Angiotensin I-converting enzyme 2	Q9BYF1	ACE2_HUMAN	59272	√	√	■

<i>ACHE</i>	Acetylcholinesterase (Cartwright blood group)	P22303	ACES_HUMAN	43	√	√	■
<i>ACTC1</i>	Actin, alpha, cardiac muscle 1	P68032	ACTC_HUMAN	70	√	√	■
<i>ACTN2</i>	Actinin alpha 2	P35609	ACTN2_HUMAN	88	√	√	√
<i>ACTN4</i>	Actinin alpha 4	O43707	ACTN4_HUMAN	81	√	√	√
<i>ADRA2B</i>	Adrenoceptor alpha 2B	P18089	ADA2B_HUMAN	151	√	√	■
<i>AGT</i>	Angiotensinogen	P01019	ANGT_HUMAN	183	√	√	√
<i>AGTR1</i>	Angiotensin II receptor type 1	P30556	AGTR1_HUMAN	185	√	√	■
<i>AGTR2</i>	Angiotensin II receptor type 2	P50052	AGTR2_HUMAN	186	√	√	■
<i>AKAP9</i>	A-kinase anchoring protein 9	Q99996	AKAP9_HUMAN	10142	√	√	√

<i>ANK2/ANKB/ANKYRI NB</i>	Ankyrin 2	Q01484	ANK2_HUMAN	287	√	√	√
<i>ANKRD1</i>	Ankyrin repeat domain 1	Q15327	ANKR1_HUMAN	27063	√	√	√
<i>ANKRD9</i>	Ankyrin repeat domain 9	Q96BM1	ANKR9_HUMAN	122416	√	■	√
<i>ARHGAP24</i>	Rho GTPase-activating protein 24	Q8N264	RHG24_HUMAN	83478	√	√	■
<i>ATP1B1</i>	ATPase Na <sup>+</sup> /K <sup>+</sup> -transporting subunit beta 1	P05026	AT1B1_HUMAN	481	√	√	√
<i>ATP2A2</i>	ATPase sarcoplasmic/endoplasmic reticulum Ca <sup>2+</sup> transporting 2	P16615	AT2A2_HUMAN	488	√	√	√

<i>AZIN1</i>	Antizyme inhibitor 1	O14977	AZIN1_HUMAN	51582	√	√	√
<i>B3GNT7</i>	UDP-GlcNAc: betaGal beta-1,3-N-acetylglucosaminyltransfe rase 7	Q8NFL0	B3GN7_HUMAN	93010	√	√	■
<i>BAG3</i>	BCL2-associated athanogene 3	O95817	BAG3_HUMAN	9531	√	√	√
<i>BAZ2B</i>	Bromodomain adjacent to zinc finger domain 2B	Q9UIF8	BAZ2B_HUMAN	29994	√	√	■
<i>BCAT1</i>	Branched chain amino acid transaminase 1	P54687	BCAT1_HUMAN	586	√	√	√

<i>BRG1/SNF2-β/SMARCA4</i>	SWI/SNF-related, matrix-associated, actin-dependent regulator of chromatin, subfamily a, member 4	P51532	SMCA4_HUMAN	6597	√	√	■
<i>CIORF185</i>	Chromosome 1 open reading frame 185	Q5T7R7	CA185_HUMAN	284546	√	■	■
<i>CACNA1C</i>	Calcium voltage-gated channel subunit alpha1 C	Q13936	CAC1C_HUMAN	775	√	√	■

<i>CACNA2D1</i>	Calcium voltage-gated channel auxiliary subunit alpha2delta 1	P54289	CA2D1_HUMAN	781	√	√	■
<i>CACNB2</i>	Calcium voltage-gated channel auxiliary subunit beta 2	Q08289	CACB2_HUMAN	783	√	√	■
<i>CALM1</i>	Calmodulin 1	P0DP23	CALM1_HUMAN	801	√	√	√
<i>CALM2</i>	Calmodulin 2	P0DP24	CALM2_HUMAN	805	√	√	√
<i>CASQ1</i>	Calsequestrin 1	P31415	CASQ1_HUMAN	844	√	√	√
<i>CASQ2</i>	Calsequestrin 2	O14958	CASQ2_HUMAN	845	√	√	√
<i>CAV1</i>	Caveolin 1	Q03135	CAV1_HUMAN	857	√	√	√

<i>CAV3</i>	Caveolin 3	P56539	CAV3_HUMAN	859	√	√	■
<i>CD34</i>	CD34 molecule	P28906	CD34_HUMAN	947	√	√	√
<i>CD46</i>	CD46 molecule	P15529	MCP_HUMAN	4179	√	√	√
<i>CDKN1A</i>	Cyclin-dependent kinase inhibitor 1A	P38936	CDN1A_HUMAN	1026	√	√	√
<i>CDKN2c</i>	Cyclin-dependent kinase inhibitor 2C	P42773	CDN2C_HUMAN	1031	√	√	■
<i>CEP85L</i>	Centrosomal protein 85 like	Q5SZL2	CE85L_HUMAN	387119	√	√	■
<i>CHST3</i>	Carbohydrate sulfotransferase 3	Q7LGC8	CHST3_HUMAN	9469	√	√	√
<i>CLDN14</i>	Claudin 14	O95500	CLD14_HUMAN	23562	√	√	■

<i>CNOT1</i>	CCR4-NOT transcription complex subunit 1	A5YKK6	CNOT1_HUMAN	23019	√	√	√
<i>COL3A1</i>	Collagen type III alpha 1 chain	P02461	CO3A1_HUMAN	1281	√	√	√
<i>CPNE8</i>	Copine 8	Q86YQ8	CPNE8_HUMAN	144402	√	√	■
<i>CREBBP</i>	CREB-binding protein	Q92793	CBP_HUMAN	1387	√	√	√
<i>CRIM1</i>	Cysteine rich transmembrane BMP regulator 1	Q9NZV1	CRIM1_HUMAN	51232	√	√	√
<i>CRYAB</i>	Crystallin alpha B	P02511	CRYAB_HUMAN	1410	√	√	√
<i>CSRP3</i>	Cysteine and glycine rich protein 3	P50461	CSRP3_HUMAN	8048	√	√	√



<i>CTF1</i>	Cardiotrophin 1	Q16619	CTF1_HUMAN	1489	√	√	■
<i>CTSS</i>	Cathepsin S	P25774	CATS_HUMAN	1520	√	√	√
<i>CXADR</i>	CXADR, Ig-like cell adhesion molecule	P78310	CXAR_HUMAN	1525	√	√	■
<i>CYP11B2</i>	Cytochrome P450 family 11 subfamily B member 2	P19099	C11B2_HUMAN	1585	√	√	■
<i>DCN</i>	Decorin	P07585	PGS2_HUMAN	1634	√	√	√
<i>DKK1</i>	Dickkopf WNT signaling pathway inhibitor 1	O94907	DKK1_HUMAN	22943	√	√	■
<i>DMD</i>	Dystrophin	P11532	DMD_HUMAN	1756	√	√	√
<i>DNM1L</i>	Dynamin 1 like	O00429	DNM1L_HUMAN	10059	√	√	√
<i>DPP4</i>	Dipeptidyl peptidase 4	P27487	DPP4_HUMAN	1803	√	√	■

<i>DPP6</i>	Dipeptidyl peptidase like 6	P42658	DPP6_HUMAN	1804	√	√	√
<i>DSC2</i>	Desmocollin 2	Q02487	DSC2_HUMAN	1824	√	√	√
<i>DSG2</i>	Desmoglein 2	Q14126	DSG2_HUMAN	1829	√	√	√
<i>DSP</i>	Desmoplakin	P15924	DESP_HUMAN	1832	√	√	√
<i>EDN1</i>	Endothelin 1	P05305	EDN1_HUMAN	1906	√	√	■
<i>ELN</i>	Elastin	P15502	ELN_HUMAN	2006	√	√	√
<i>EMD</i>	Emerin	P50402	EMD_HUMAN	2010	√	√	√
<i>ENG</i>	Endoglin	P17813	EGLN_HUMAN	2022	√	√	√
<i>EPHB4</i>	EPH receptor B4	P54760	EPHB4_HUMAN	2050	√	√	■
<i>ERBB2</i>	Erb-b2 receptor tyrosine kinase 2	P04626	ERBB2_HUMAN	2064	√	√	■
<i>ESR1</i>	Estrogen receptor 1	P03372	ESR1_HUMAN	2099	√	√	■

<i>EYA4</i>	EYA transcriptional coactivator and phosphatase 4	O95677	EYA4_HUMAN	2070	√	√	√
<i>factor v leiden</i>	Factor v leiden	P12259	FA5_HUMAN	2153	√	√	■
<i>FADS1</i>	Fatty acid desaturase 1	O60427	FADS1_HUMAN	3992	√	√	√
<i>FADS2</i>	Fatty acid desaturase 2	O95864	FADS2_HUMAN	9415	√	√	√
<i>FAF1</i>	Fas-associated factor 1	Q9UNN5	FAF1_HUMAN	11124	√	√	√
<i>FEN1</i>	Flap structure-specific endonuclease 1	P39748	FEN1_HUMAN	2237	√	√	√
<i>FGF12</i>	Fibroblast growth factor 12	P61328	FGF12_HUMAN	2257	√	√	√

<i>FGF13</i>	Fibroblast growth factor 13	Q92913	FGF13_HUMAN	2258	√	√	■
<i>FGF23</i>	Fibroblast growth factor 23	Q9GZV9	FGF23_HUMAN	8074	√	√	■
<i>FLNA</i>	Filamin A	P21333	FLNA_HUMAN	2316	√	√	√
<i>FLNC</i>	Filamin C	Q14315	FLNC_HUMAN	2318	√	√	√
<i>FLRT2</i>	Fibronectin leucine rich transmembrane protein 2	O43155	FLRT2_HUMAN	23768	√	√	■
<i>FOXP1</i>	Forkhead box P1	Q9H334	FOXP1_HUMAN	27086	√	√	√
<i>FSP1</i>	Fibroblas-specific protein-1	P26447	S10A4_HUMAN	6275	√	√	■
<i>GATA5</i>	GATA-binding protein 5	Q9BWX5	GATA5_HUMAN	140628	√	√	■

<i>GBF1</i>	Golgi brefeldin A-resistant guanine nucleotide exchange factor 1	Q92538	GBF1_HUMAN	8729	√	√	√
<i>GFRA3</i>	GDNF family receptor alpha 3	O60609	GFRA3_HUMAN	2676	√	√	■
<i>GJA1</i>	Gap junction protein alpha 1	P17302	CXA1_HUMAN	2697	√	√	√
<i>GJA5</i>	Gap junction protein alpha 5	P36382	CXA5_HUMAN	2702	√	√	■
<i>GLA</i>	Galactosidase alpha	P06280	AGAL_HUMAN	2717	√	√	■
<i>GMPR</i>	Guanosine monophosphate reductase	P36959	GMPR1_HUMAN	2766	√	√	■

<i>GNB4</i>	G protein subunit beta 4	Q9HAV0	GBB4_HUMAN	59345	√	■	√
<i>GNG11</i>	G protein subunit gamma 11	P61952	GBG11_HUMAN	2791	√	√	√
<i>GOSR2</i>	Golgi SNAP receptor complex member 2	O14653	GOSR2_HUMAN	9570	√	√	■
<i>GP1BA</i>	Glycoprotein Ib platelet subunit alpha	P07359	GP1BA_HUMAN	2811	√	√	■
<i>GPD1L</i>	Glycerol-3-phosphate dehydrogenase 1 like	Q8N335	GPD1L_HUMAN	23171	√	√	√
<i>GPR133</i>	Adhesion G protein-coupled receptor D1	Q6QNK2	AGRD1_HUMAN	283383	√	■	■

<i>HAND1</i>	Heart and neural crest derivatives expressed 1	O96004	HAND1_HUMAN	9421	√	√	√
<i>HBA1</i>	Hemoglobin subunit alpha 1	P69905	HBA_HUMAN	3039	√	√	■
<i>HCN4</i>	Hyperpolarization-activated cyclic nucleotide gated potassium channel 4	Q9Y3Q4	HCN4_HUMAN	10021	√	√	■
<i>HEATR5B</i>	HEAT repeat containing 5B	Q9P2D3	HTR5B_HUMAN	54497	√	√	■
<i>HERG</i>	Potassium voltage-gated channel subfamily H member 2	Q12809	KCNH2_HUMAN	3757	√	√	√

<i>HSPB7</i>	Heat shock protein family B (small) member 7	Q9UBY9	HSPB7_HUMAN	27129	√	√	√
<i>IGFBP3</i>	Insulin-like growth factor binding protein 3	P17936	IBP3_HUMAN	3486	√	√	√
<i>IL-18</i>	Interleukin 18	Q14116	IL18_HUMAN	3606	√	√	■
<i>ILK</i>	Integrin-linked kinase	Q13418	ILK_HUMAN	3611	√	√	√
<i>ITGA2</i>	Integrin subunit alpha 2	P17301	ITA2_HUMAN	3673	√	√	■
<i>ITGB3</i>	Integrin subunit beta 3	P05106	ITB3_HUMAN	3690	√	√	■
<i>JPH2</i>	Junctophilin 2	Q9BR39	JPH2_HUMAN	57158	√	√	√
<i>JUP</i>	Junction plakoglobin	P14923	PLAK_HUMAN	3728	√	√	√



<i>KCNA5</i>	Potassium voltage-gated channel subfamily A member 5	P22460	KCNA5_HUMAN	3741	√	√	■
<i>KCND2</i>	Potassium voltage-gated channel subfamily D member 2	Q9NZV8	KCND2_HUMAN	3751	√	√	■
<i>KCND3</i>	Potassium voltage-gated channel subfamily D member 3	Q9UK17	KCND3_HUMAN	3752	√	√	■
<i>KCNE1</i>	Potassium voltage-gated channel subfamily E regulatory subunit 1	P15382	KCNE1_HUMAN	3753	√	√	■

<i>KCNE2</i>	Potassium voltage-gated channel subfamily E regulatory subunit 2	Q9Y6J6	KCNE2_HUMAN	9992	√	√	■
<i>KCNE3</i>	Potassium voltage-gated channel subfamily E regulatory subunit 3	Q9Y6H6	KCNE3_HUMAN	10008	√	√	■
<i>KCNE5</i>	Potassium voltage-gated channel subfamily E regulatory subunit 5	Q9UJ90	KCNE5_HUMAN	23630	√	■	■

<i>KCNJ11</i>	Potassium voltagegated channel subfamily J member 11	Q14654	KCJ11_HUMAN	3767	√	■	√
<i>KCNJ2</i>	Potassium voltage-gated channel subfamily J member 2	P63252	KCNJ2_HUMAN	3759	√	√	■
<i>KCNJ5</i>	Potassium voltage-gated channel subfamily J member 5	P48544	KCNJ5_HUMAN	3762	√	√	■
<i>KCNJ8</i>	Potassium voltage-gated channel subfamily J member 8	Q15842	KCNJ8_HUMAN	3764	√	√	√

<i>KCNQ1</i>	Potassium voltage-gated channel subfamily Q member 1	P51787	KCNQ1_HUMAN	3784	√	√	■
<i>KCNT1</i>	Potassium sodium-activated channel subfamily T member 1	Q5JUK3	KCNT1_HUMAN	57582	√	√	■
<i>KCTD1</i>	Potassium channel tetramerization domain containing 1	Q719H9	KCTD1_HUMAN	284252	√	√	■
<i>KIAA1755</i>	KIAA1755	Q5JYT7	K1755_HUMAN	85449	√	√	■
<i>KLF12</i>	Kruppel-like factor 12	Q9Y4X4	KLF12_HUMAN	11278	√	√	√
<i>KNG1</i>	Kininogen 1	P01042	KNG1_HUMAN	3827	√	√	■

<i>LAMP2</i>	Lysosomal-associated membrane protein 2	P13473	LAMP2_HUMAN	3920	√	√	√
<i>LAPTM4B</i>	Lysosomal protein transmembrane 4 beta	Q86VI4	LAP4B_HUMAN	55353	√	√	√
<i>LDB3</i>	LIM domain-binding 3	O75112	LDB3_HUMAN	11155	√	√	√
<i>LDLR</i>	Lo-density lipoprotein receptor	P01130	LDLR_HUMAN	3949	√	√	■
<i>LIG3</i>	DNA ligase 3	P49916	DNLI3_HUMAN	3980	√	√	■
<i>LIPC</i>	Lipase C, hepatic type	P11150	LIPC_HUMAN	3990	√	√	■
<i>LITAF</i>	Lipopolysaccharide-induced TNF factor	Q99732	LITAF_HUMAN	9516	√	√	√
<i>LMNA</i>	Lamin A/C	P02545	LMNA_HUMAN	4000	√	√	√

<i>LRIG1</i>	Leucine rich repeats and immunoglobulin-like domains 1	Q96JA1	LRIG1_HUMAN	26018	√	√	√
<i>LRIG2</i>	Leucine rich repeats and immunoglobulin-like domains 2	O94898	LRIG2_HUMAN	9860	√	√	■
<i>MCTP2</i>	Multiple C2 and transmembrane domain-containing 2	Q6DN12	MCTP2_HUMAN	55784	√	√	■
<i>MECP2</i>	Methyl-CpG-binding protein 2	P51608	MECP2_HUMAN	4204	√	√	√
<i>MEIS1</i>	Meis homeobox 1	O00470	MEIS1_HUMAN	4211	√	√	■
<i>MKL2</i>	MKL1/Myocardin-like 2	Q9ULH7	MKL2_HUMAN	57496	√	√	■

<i>MLP</i>	Muscle LIM Protein	P49006	MRP_HUMAN	65108	√	√	√
<i>MOG1(RANGRF)</i>	RAN guanine nucleotide release factor	Q9HD47	MOG1_HUMAN	29098	√	√	√
<i>MYBPC3</i>	Myosin-binding protein C, cardiac	Q14896	MYPC3_HUMAN	4607	√	√	√
<i>MYH6</i>	Myosin heavy chain 6	P13533	MYH6_HUMAN	4624	√	√	■
<i>MYH7</i>	Myosin heavy chain 7	P12883	MYH7_HUMAN	4625	√	√	√
<i>MYL2</i>	Myosin light chain 2	P10916	MLRV_HUMAN	4633	√	√	√
<i>MYL3</i>	Myosin light chain 3	P08590	MYL3_HUMAN	4634	√	√	■
<i>MYLK2</i>	Myosin light chain kinase 2	Q9H1R3	MYLK2_HUMAN	85366	√	√	√

<i>MYOT</i>	Myotilin	Q9UBF9	MYOTI_HUMAN	9499	√	√	√
<i>MYOZ2</i>	Myozenin 2	Q9NPC6	MYOZ2_HUMAN	51778	√	√	■
<i>MYPN</i>	Myopalladin	Q86TC9	MYPN_HUMAN	84665	√	√	■
<i>NCOA2</i>	Nuclear receptor coactivator 2	Q15596	NCOA2_HUMAN	10499	√	√	■
<i>NCX1</i>	Sodium/calcium exchanger 1	P32418	NAC1_HUMAN	6546	√	√	■
<i>NEBL</i>	Nebulette	O76041	NEBL_HUMAN	10529	√	√	√
<i>NEXN</i>	Nexilin F-actin binding protein	Q0ZGT2	NEXN_HUMAN	91624	√	■	√
<i>NFIA</i>	Nuclear factor I A	Q12857	NFIA_HUMAN	4774	√	√	■
<i>NGF</i>	Nerve growth factor	P01138	NGF_HUMAN	4803	√	√	√



<i>NKX2-5</i>	NK2 homeobox 5	P52952	NKX25_HUMAN	1482	√	√	√
<i>NOS1AP</i>	Nitric oxide synthase 1 adaptor protein	O75052	CAPON_HUMAN	9722	√	√	√
<i>NOTCH1</i>	Notch 1	P46531	NOTC1_HUMAN	4851	√	√	√
<i>NPHP4</i>	Nephrocystin 4	O75161	NPHP4_HUMAN	261734	√	√	■
<i>NPPA</i>	Natriuretic peptide A	P01160	ANF_HUMAN	4878	√	√	√
<i>NR3C2</i>	Nuclear receptor subfamily 3 group C member 2	P08235	MCR_HUMAN	4306	√	√	■
<i>NRG1</i>	Neuregulin 1	Q02297	NRG1_HUMAN	3084	√	√	■
<i>NUP155</i>	Nucleoporin 155	O75694	NU155_HUMAN	9631	√	√	■
<i>OLFML2B</i>	Olfactomedin like 2B	Q68BL8	OLM2B_HUMAN	25903	√	√	■

<i>PASK</i>	PAS domain-containing serine/threonine kinase	Q96RG2	PASK_HUMAN	23178	√	√	■
<i>PDE11A</i>	Phosphodiesterase 11A	Q9HCR9	PDE11_HUMAN	50940	√	√	■
<i>PDLIM3</i>	PDZ and LIM domain 3	Q53GG5	PDLI3_HUMAN	27295	√	√	√
<i>PKP2</i>	Plakophilin 2	Q99959	PKP2_HUMAN	5318	√	√	√
<i>PLEKHG5</i>	Pleckstrin homology and RhoGEF domain-containing G5	O94827	PKHG5_HUMAN	57449	√	√	■
<i>PLN</i>	Phospholamban	P26678	PPLA_HUMAN	5350	√	√	√
<i>PLXNA2</i>	Plexin A2	O75051	PLXA2_HUMAN	5362	√	√	√

<i>PPARG</i>	Peroxisome proliferator activated receptor gamma	P37231	PPARG_HUMAN	5468	√	√	■
<i>PRDM16</i>	PR/SET domain 16	Q9HAZ2	PRD16_HUMAN	63976	√	√	√
<i>PRKAG2</i>	Protein kinase AMP-activated noncatalytic subunit gamma 2	Q9UGJ0	AAKG2_HUMAN	51422	√	√	√
<i>PRKCA</i>	Protein kinase C alpha	P17252	KPCA_HUMAN	5578	√	√	■
<i>PSEN1</i>	Presenilin 1	P49768	PSN1_HUMAN	5663	√	√	■
<i>PSEN2</i>	Presenilin 2	P49810	PSN2_HUMAN	5664	√	√	■
<i>PTK2B</i>	Protein tyrosine kinase 2 beta	Q14289	FAK2_HUMAN	2185	√	√	√

<i>PTRF</i>	Caveolae-associated protein 1	Q6NZI2	CAVN1_HUMAN	284119	√	√	√
<i>PXDNL</i>	Peroxidasin like	A1KZ92	PXDNL_HUMAN	137902	√	√	√
<i>RAB3GAP1</i>	RAB3 GTPase-activating protein catalytic subunit 1	Q15042	RB3GP_HUMAN	22930	√	√	√
<i>RBM20</i>	RNA-binding motif protein 20	Q5T481	RBM20_HUMAN	282996	√	√	√
<i>RELA</i>	RELA proto-oncogene, NF-kB subunit	Q04206	TF65_HUMAN	5970	√	√	√
<i>RNF207</i>	Ring finger protein 207	Q6ZRF8	RN207_HUMAN	388591	√	√	■

<i>ROCK2</i>	Rho-associated coiled-coil-containing protein kinase 2	O75116	ROCK2_HUMAN	9475	√	√	■
<i>RYR1</i>	Ryanodine receptor 1	P21817	RYR1_HUMAN	6261	√	√	■
<i>RYR2</i>	Ryanodine receptor 2	Q92736	RYR2_HUMAN	6262	√	√	√
<i>SCN10A</i>	Sodium voltage-gated channel alpha subunit 10	Q9Y5Y9	SCNAA_HUMAN	6336	√	√	■
<i>SCN1B</i>	Sodium voltage-gated channel beta subunit 1	Q07699	SCN1B_HUMAN	6324	√	√	√

<i>SCN2B</i>	Sodium voltage-gated channel beta subunit 2	O60939	SCN2B_HUMAN	6327	√	√	√
<i>SCN3B</i>	Sodium voltage-gated channel beta subunit 3	Q9NY72	SCN3B_HUMAN	55800	√	√	■
<i>SCN4B</i>	Sodium voltage-gated channel beta subunit 4	Q8IWT1	SCN4B_HUMAN	6330	√	√	■
<i>SCN5A</i>	Sodium voltage-gated channel alpha subunit 5	Q14524	SCN5A_HUMAN	6331	√	√	■

<i>SCNN1A</i>	Sodium channel epithelial 1 alpha subunit	P37088	SCNNA_HUMAN	6337	√	√	■
<i>SDHA</i>	Succinate dehydrogenase complex flavoprotein subunit A	P31040	SDHA_HUMAN	6389	√	√	√
<i>SELP</i>	Selectin P	P16109	LYAM3_HUMAN	6403	√	√	■
<i>SEMA3A</i>	Semaphorin 3A	Q14563	SEM3A_HUMAN	10371	√	√	■
<i>SERCA2A</i>	Sarcoplasmic reticulum Ca-ATPase	A0A0S2Z3L2	A0A0S2Z3L2_HUMAN	488	√	√	■
<i>SERPINE1</i>	Serpin family E member 1	P05121	PAI1_HUMAN	5054	√	√	√
<i>SETBP1</i>	SET-binding protein 1	Q9Y6X0	SETBP_HUMAN	26040	√	√	■
<i>SGCD</i>	Sarcoglycan delta	Q92629	SGCD_HUMAN	6444	√	√	■

<i>SIPA1L1</i>	Signal-induced proliferation-associated 1 like 1	O43166	SI1L1_HUMAN	26037	√	√	■
<i>SLC12A9</i>	Solute carrier family 12 member 9	Q9BXP2	S12A9_HUMAN	56996	√	√	√
<i>SLC19A2</i>	Solute carrier family 19 member 2	O60779	S19A2_HUMAN	10560	√	√	■
<i>SLC25A26</i>	Solute carrier family 25 member 26	Q70HW3	SAMC_HUMAN	115286	√	√	■
<i>SLC4A4</i>	Solute carrier family 4 member 4	Q9Y6R1	S4A4_HUMAN	8671	√	√	■
<i>SLMAP</i>	Sarcolemma-associated protein	Q14BN4	SLMAP_HUMAN	7871	√	√	√



<i>SMAD3</i>	SMAD family member 3	P84022	SMAD3_HUMAN	4088	√	√	√
<i>SMAD6</i>	SMAD family member 6	O43541	SMAD6_HUMAN	4091	√	√	■
<i>SMARCD1</i>	SWI/SNF-related, matrix-associated actin-dependent regulator of chromatin, subfamily a, containing DEAD/H box 1	Q9H4L7	SMRCD_HUMAN	56916	√	√	■
<i>SNTA1</i>	Syntrophin alpha 1	Q13424	SNTA1_HUMAN	6640	√	√	√
<i>SOX5</i>	SRY-box 5	P35711	SOX5_HUMAN	6660	√	√	■
<i>SP3</i>	Sp3 transcription factor	Q02447	SP3_HUMAN	6670	√	√	√

<i>SPATS2L</i>	Spermatogenesis-associated serine rich 2 like	Q9NUQ6	SPS2L_HUMAN	26010	√	√	√
<i>SREBF2</i>	Sterol regulatory element binding transcription factor 2	Q12772	SRBP2_HUMAN	6721	√	√	√
<i>SRRT</i>	Serrate, RNA effector molecule	Q9BXP5	SRRT_HUMAN	51593	√	√	■
<i>STK11</i>	Serine/threonine kinase 11	Q15831	STK11_HUMAN	6794	√	√	√
<i>STRN</i>	Striatin, calmodulin-binding protein	O43815	STRN_HUMAN	6801	√	√	■
<i>SYT10</i>	Synaptotagmin 10	Q6XYQ8	SYT10_HUMAN	341359	√	√	■
<i>TAZ</i>	Tafazzin	Q16635	TAZ_HUMAN	6901	√	√	■

<i>TBX3</i>	T-box 3	O15119	TBX3_HUMAN	6926	√	√	■
<i>TBX5</i>	T-box 5	Q99593	TBX5_HUMAN	6910	√	√	■
<i>TCAP</i>	Titin-cap	O15273	TELT_HUMAN	8557	√	√	√
<i>TFPI</i>	Tissue factor pathway inhibitor	P10646	TFPI1_HUMAN	7035	√	√	√
<i>TGFB3</i>	Transforming growth factor beta 3	P10600	TGFB3_HUMAN	7043	√	√	■
<i>TGFB2</i>	Transforming growth factor beta 2	P61812	TGFB2_HUMAN	7042	√	√	√
<i>TGFBRI</i>	Transforming growth factor beta receptor 1	P36897	TGFR1_HUMAN	7046	√	√	■
<i>TGFBR2</i>	Transforming growth factor beta receptor 2	P37173	TGFR2_HUMAN	7048	√	√	■

<i>THBD</i>	Thrombomodulin	P07204	TRBM_HUMAN	7056	√	√	√
<i>TLR4</i>	Toll like receptor 4	O00206	TLR4_HUMAN	7099	√	√	■
<i>TMEM43</i>	Transmembrane protein 43	Q9BTV4	TMM43_HUMAN	79188	√	√	√
<i>TMPO</i>	Thymopoietin	P42166	LAP2A_HUMAN	7112	√	√	√
<i>TMPO</i>	Thymopoietin	P42167	LAP2B_HUMAN	7112	√	√	√
<i>TNNC1</i>	Troponin C1, slow skeletal and cardiac type	P63316	TNNC1_HUMAN	7134	√	√	√
<i>TNNI3</i>	Troponin I3, cardiac type	P19429	TNNI3_HUMAN	7137	√	√	√
<i>TNNI3</i>	Troponin I	P45379	TNNT2_HUMAN	7125	√	√	√
<i>TNNI3K</i>	TNNI3 interacting kinase	Q59H18	TNI3K_HUMAN	51086	√	√	√
<i>TNNT2</i>	Troponin T2, cardiac type	P45379	TNNT2_HUMAN	7139	√	√	√

<i>TPM1</i>	Tropomyosin 1	P09493	TPM1_HUMAN	7168	√	√	√
<i>TPM2</i>	Tropomyosin 2	P07951	TPM2_HUMAN	7169	√	√	√
<i>TPM3</i>	Tropomyosin 3	P06753	TPM3_HUMAN	7170	√	√	√
<i>TPM4</i>	Tropomyosin 4	P67936	TPM4_HUMAN	7171	√	√	√
<i>TRDN</i>	Triadin	Q13061	TRDN_HUMAN	10345	√	√	√
<i>TRPM7</i>	Transient receptor potential cation channel subfamily M member 7	Q96QT4	TRPM7_HUMAN	54822	√	√	■
<i>TTN</i>	Titin	Q8WZ42	TITIN_HUMAN	7273	√	√	√
<i>TTR</i>	Transthyretin	P02766	TTHY_HUMAN	7276	√	√	■
<i>USP50</i>	Ubiquitin-specific peptidase 50	Q70EL3	UBP50_HUMAN	373509	√	√	■

<i>VEGFA</i>	Vascular endothelial growth factor A	P15692	VEGFA_HUMAN	7422	√	√	■
<i>VEGFB</i>	Vascular endothelial growth factor B	P49765	VEGFB_HUMAN	7423	√	√	√
<i>VTI1A</i>	Vesicle transport through interaction with t-SNAREs 1A	Q96AJ9	VTI1A_HUMAN	143187	√	√	■
<i>WDSUB1</i>	WD repeat, sterile alpha motif and U-box domain containing 1	Q8N9V3	WSDU1_HUMAN	151525	√	√	■
<i>WNT11</i>	Wnt family member 11	O96014	WNT11_HUMAN	7481	√	√	■
<i>ZFHX3</i>	Zinc finger homeobox 3	Q15911	ZFHX3_HUMAN	463	√	√	√

<i>ZFPM2</i>	Zinc finger protein, FOG family member 2	Q8WW38	FOG2_HUMAN	23414	√	√	√
<i>ADRB1</i>	Adrenoceptor beta 1	P08588	ADRB1_HUMAN	153	√	√	√

<sup>a</sup> SCD-related genes gene set.

<sup>b</sup>mRNA expression of each gene in normal human heart was searched from three different database

<sup>c</sup> GTEx (Genotype-Tissue Expression) database: <https://gtexportal.org/home/topExpressedGenePage>

<sup>d</sup>BioGPS: <http://biogps.org/#goto=welcome>

<sup>e</sup>SAGE(Serial Analysis of Gene Expression): <https://www.genecards.org/>