

Supplemental Table SII. Complete list of all evaluated genes.

Gene	Full name
ABCC9	ATP-binding cassette, sub-family C (CFTR/MRP), member 9
ABCG5	ATP-binding cassette, sub-family G (WHITE), member 5
ABCG8	ATP-binding cassette, sub-family G (WHITE), member 8
ACADVL	acyl-Coenzyme A dehydrogenase, very long chain
ACTA1	actin, alpha 1, skeletal muscle
ACTA2	actin, alpha 2, smooth muscle, aorta
ACTC1	actin, alpha, cardiac muscle 1
ACTN2	actinin, alpha 2
AGL	amylo-1, 6-glucosidase, 4-alpha-glucanotransferase
AKAP9	A kinase (PRKA) anchor protein (yotiao) 9
ALMS1	Alstrom syndrome 1
ANK2	ankyrin 2, neuronal
ANKRD1	ankyrin repeat domain 1 (cardiac muscle)
APOA4	apolipoprotein A-IV
APOA5	apolipoprotein A-V
APOB	apolipoprotein B (including Ag(x) antigen)
APOC2	apolipoprotein C-II
APOE	hypothetical LOC100129500; apolipoprotein E
ATP5E	ATP Synthase F1 Subunit Epsilon
ATG5	Autophagy Related 5
BAG3	BCL2-associated athanogene 3
BECN1	Beclin 1, Autophagy Related
BRAF	v-raf murine sarcoma viral oncogene homolog B1
CACNA1C	calcium channel, voltage-dependent, L type, alpha 1C subunit
CACNA2D1	calcium channel, voltage-dependent, alpha 2/delta subunit 1
CACNB2	calcium channel, voltage-dependent, beta 2 subunit
CALM1	calmodulin 1 (phosphorylase kinase, delta)
CALM2	calmodulin 2 (phosphorylase kinase, delta)
CALR3	calreticulin 3
CAPN1	Calpain 1, (Mu/l) Large Subunit

CASQ2	calsequestrin 2 (cardiac muscle)
CAV3	caveolin 3
CBL	Cas-Br-M (murine) ecotropic retroviral transforming sequence
CBS	cystathionine-beta-synthase
CETP	cholesteryl ester transfer protein, plasma
COA5	Cytochrome C Oxidase Assembly Factor 5
COL3A1	collagen, type III, alpha 1
COL5A1	collagen, type V, alpha 1
COL5A2	collagen, type V, alpha 2
COX15	COX15 homolog, cytochrome c oxidase assembly protein (yeast)
CREB3L3	cAMP responsive element binding protein 3-like 3
CRELD1	cysteine-rich with EGF-like domains 1
CRYAB	crystallin, alpha B
CSRP3	cysteine and glycine-rich protein 3 (cardiac LIM protein)
CTF1	cardiotrophin 1
CTNNA3	catenin (cadherin-associated protein), alpha 3
DES	desmin
DMD	dystrophin
DMPK	dystrophia myotonica-protein kinase
DNAJC19	DnaJ Heat Shock Protein Family (Hsp40) Member C19
DNM1L	dynamin 1-like
DOLK	dolichol kinase
DPP6	dipeptidyl-peptidase 6
DSC2	desmocollin 2
DSG2	desmoglein 2
DSP	desmoplakin
DTNA	dystrobrevin, alpha
EFEMP2	EGF-containing fibulin-like extracellular matrix protein 2
ELN	elastin
EMD	emerin
EMILIN1	elastin microfibril interfacser 1
EYA4	eyes absent homolog 4 (Drosophila)
FBN1	fibrillin 1

FBN2	fibrillin 2
FHL1	four and a half LIM domains 1
FHL2	four and a half LIM domains 2
FKRP	fukutin related protein
FKTN	fukutin
FLNA	filamin A
FLNC	filamin C
FOXE3	forkhead box E3
FOXRED1	FAD-dependent oxidoreductase domain containing 1
FXN	frataxin
GAA	glucosidase, alpha; acid
GATAD1	GATA zinc finger domain containing 1
GATA4	GATA Binding Protein 4
GCKR	glucokinase (hexokinase 4) regulator
GJA1	gap junction protein alpha 1
GJA5	gap junction protein, alpha 5, 40kDa
GLA	galactosidase, alpha
GLB1	galactosidase, beta 1
GPD1L	glycerol-3-phosphate dehydrogenase 1-like
GPIHBP1	glycosylphosphatidylinositol anchored high density lipoprotein binding protein 1
GUSB	glucuronidase, beta
HADHA	hydroxyacyl-Coenzyme A dehydrogenase, alpha subunit
HCN4	hyperpolarization activated cyclic nucleotide-gated potassium channel 4
HFE	hemochromatosis
HRAS	v-Ha-ras Harvey rat sarcoma viral oncogene homolog
HSPA4	heat shock protein family A (Hsp70) member 4; Heat Shock 70kDa Protein 4
HSPB1	heat shock protein family B (small) member 1; Heat Shock 27kDa Protein 1
HSPB8	heat shock 22kDa protein 8
ILK	integrin-linked kinase
ITGB1BP2	Integrin Beta 1 Binding Protein (Melusin) 2
IRX4	Iroquois Homeobox Protein 4
JAG1	jagged 1 (Alagille syndrome)
JPH2	junctophilin 2

JUP	junction plakoglobin
KCNA5	potassium voltage-gated channel, shaker-related subfamily, member 5
KCND3	potassium voltage-gated channel, Shal-related subfamily, member 3
KCNE1	potassium voltage-gated channel, Isk-related family, member 1
KCNE1L	KCNE1-like
KCNE2	potassium voltage-gated channel, Isk-related family, member 2
KCNE3	potassium voltage-gated channel, Isk-related family, member 3
KCNH2	potassium voltage-gated channel, subfamily H, member 2
KCNJ2	potassium inwardly-rectifying channel, subfamily J, member 2
KCNJ5	potassium inwardly-rectifying channel, subfamily J, member 5
KCNJ8	potassium inwardly-rectifying channel, subfamily J, member 8
KCNQ1	potassium voltage-gated channel, KQT-like subfamily, member 1
KLF10	Kruppel-like factor 10
KRAS	v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog
LAMA2	laminin, alpha 2
LAMA4	laminin, alpha 4
LAMP2	lysosomal-associated membrane protein 2
LDB3	LIM domain binding 3
LDLR	low density lipoprotein receptor
LDLRAP1	low density lipoprotein receptor adaptor protein 1
LMF1	lipase maturation factor 1
LMNA	lamin A/C
LMOD1	leiomodin 1
LOX	lysyl oxidase
LPL	lipoprotein lipase
LTBP2	latent transforming growth factor beta binding protein 2
MAP2K1	mitogen-activated protein kinase kinase 1
MAP2K2	mitogen-activated protein kinase kinase 2 pseudogene
MAT2A	methionine adenosyltransferase 2A
MDM2	MDM2 Proto-Oncogene, E3 Ubiquitin Protein Ligase
MED12	mediator complex subunit 12
MFAP5	microfibrillar associated protein 5
MIB1	mindbomb homolog 1 (Drosophila)

MRPL3	mitochondrial ribosomal protein L3
MURC	muscle-related coiled-coil protein
MYBPC3	myosin binding protein C, cardiac
MYH11	myosin, heavy chain 11, smooth muscle
MYH6	myosin, heavy chain 6, cardiac muscle, alpha
MYH7	myosin, heavy chain 7, cardiac muscle, beta
MYL2	myosin, light chain 2, regulatory, cardiac, slow
MYL3	myosin, light chain 3, alkali; ventricular, skeletal, slow
MYLK	myosin light chain kinase
MYLK2	myosin light chain kinase 2
MYO6	myosin VI
MYOM1	myomesin 1, 185kDa
MYOZ2	myozenin 2
MYPN	myopalladin
NEBL	nebulette
NEXN	nexilin (F actin binding protein)
NKX2-5	NK2 transcription factor related, locus 5 (Drosophila)
NODAL	nodal homolog (mouse)
NOS1AP	nitric oxide synthase 1 (neuronal) adaptor protein
NOTCH1	Notch homolog 1, translocation-associated (Drosophila)
NPPA	natriuretic peptide precursor A
NRAS	neuroblastoma RAS viral (v-ras) oncogene homolog
PCSK9	proprotein convertase subtilisin/kexin type 9
PDLIM3	PDZ and LIM domain 3
PKP2	plakophilin 2
PLN	phospholamban
PLOD1	procollagen-lysine,2-oxoglutarate 5-dioxygenase 1
PRDM16	PR domain containing 16
PRKG1	protein kinase, cGMP-dependent, type I
PRKAG2	protein kinase, AMP-activated, gamma 2 non-catalytic subunit
PRKAR1A	protein kinase, cAMP-dependent, regulatory, type I, alpha
PSEN1	presenilin 1
PSEN2	presenilin 2 (Alzheimer disease 4)

PTPN11	protein tyrosine phosphatase, non-receptor type 11
RAF1	v-raf-1 murine leukemia viral oncogene homolog 1
RANGRF	RAN guanine nucleotide release factor
RBM20	RNA binding motif protein 20
RIT1	Ras-Like Without CAAX 1
RRAS	Related RAS Viral (R-Ras) Oncogene Homolog
RYR1	ryanodine receptor 1 (skeletal)
RYR2	ryanodine receptor 2 (cardiac)
SALL4	Spalt-Like Transcription Factor 4
SCN1B	sodium channel, voltage-gated, type I, beta
SCN2B	sodium channel, voltage-gated, type II, beta
SCN3B	sodium channel, voltage-gated, type III, beta
SCN4B	sodium channel, voltage-gated, type IV, beta
SCN5A	sodium channel, voltage-gated, type V, alpha subunit
SCN10A	Sodium Channel, Voltage Gated, Type X Alpha Subunit
SCO2	SCO cytochrome oxidase deficient homolog 2 (yeast)
SDHA	succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
SEPN1	selenoprotein N, 1
SGCB	sarcoglycan, beta (43kDa dystrophin-associated glycoprotein)
SGCD	sarcoglycan, delta (35kDa dystrophin-associated glycoprotein)
SGCG	sarcoglycan, gamma (35kDa dystrophin-associated glycoprotein)
SHOC2	soc-2 suppressor of clear homolog (C. elegans)
SKI	SKI proto-oncogene
SLC25A3	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 3
SLC25A4	solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 4
SLC2A10	solute carrier family 2 (facilitated glucose transporter), member 10
SLMAP	sarcolemma associated protein
SMAD2	SMAD family member 2
SMAD3	SMAD family member 3
SMAD4	SMAD family member 4
SNTA1	syntrophin, alpha 1 (dystrophin-associated protein A1, 59kDa, acidic component)
SOS1	son of sevenless homolog 1 (Drosophila)
SOS2	SOS Ras/Rho guanine nucleotide exchange factor 2

SPRED1	sprouty-related, EVH1 domain containing 1
STUB1	STIP1 Homology And U-Box Containing Protein 1, E3 Ubiquitin
SYNE1	spectrin repeat containing, nuclear envelope 1
SYNE2	spectrin repeat containing, nuclear envelope 2
TAZ	tafazzin
TBX20	T-box 20
TBX3	T-box 3
TBX5	T-box 5
TCAP	titin-cap (telethonin)
TGFB2	transforming growth factor, beta 2
TGFB3	transforming growth factor, beta 3
TGFBR1	transforming growth factor, beta receptor 1
TGFBR2	transforming growth factor, beta receptor II (70/80kDa)
TMEM43	transmembrane protein 43
TMEM70	transmembrane protein 70
TMPO	thymopoietin
TNNC1	troponin C type 1 (slow)
TNNI3	troponin I type 3 (cardiac)
TNNT2	troponin T type 2 (cardiac)
TPM1	tropomyosin 1 (alpha)
TRDN	triadin
TRIM54	Tripartite Motif Containing 54
TRIM63	tripartite motif-containing 63
TRPM4	transient receptor potential cation channel, subfamily M, member 4
TSFM	Ts translation elongation factor, mitochondrial
TTN	titin
TTR	transthyretin
TXNRD2	thioredoxin reductase 2
UBE4B	Ubiquitination Factor E4B
UNC45B	Unc-45 Myosin Chaperone B
VCL	vinculin
XK	X-linked Kx blood group (McLeod syndrome)
ZBTB17	zinc finger and BTB domain containing 17

ZFPM2	Zinc Finger Protein, FOG Family Member 2
ZHX3	zinc fingers and homeoboxes 3
ZIC3	Zic family member 3 (odd-paired homolog, Drosophila)