

SUPPLEMENTAL MATERIAL

Table S1. Primer sequences and PCR conditions for SNP and microsatellites genotyping.

Variants	F/R	Primer Sequence (5' to 3')	PCR conditions
rs9910355	F	ATCACGCCACTGTACTCCAGC	45s,30s,45s (95,60,72) ×
rs9910355	R	GAACACACTGGAAATACAACAGAAGC	30
rs9910355	PEF	GCAGTGAGCCGAGATTGTGC	
rs9910355	PER	TCTGTCACTTAGGCTAAAGTGCAGC	
rs9303504	F	ATCACGCCACTGTACTCCAGC	45s,30s,45s (95,60,72) ×
rs9303504	R	GAACACACTGGAAATACAACAGAAGC	30
rs9303504	PEF	GCTCTGGGCTTTTTTGTTTAATTTTCT	
rs9303504	PER	GCATTAGCAATATACTTCAATTGTCATATTACT	
rs9909004	F	CAAAGTCAGTCATCAGAGAACAGAGCGATC	30s,30s,30s (95,60,72) ×
rs9909004	R	GGTCACATTTTGAGAGGCTGTTTC	30
rs9909004	PEF	GGGGCAGTGGAGCTGAAACAGTGTTAT	
rs9909004	PER	CCCTTTTCCAGTACTGAAAGCAGTG	
rs12601850	F	ACTTTGTATTCAAGTGGCTTTTCTTCC	30s,30s,30s (95,60,72) ×
rs12601850	R	ACTTTGTTCTCGATGACAACTGGTATTC	30
rs12601850	PEF	GGACTCACTGCAACTAATTTTAGGCC	
rs12601850	PER	CTAAACAAAACAAACCCTTACTAGAATGAAATA	
rs17633437	F	GATGCCGTTTGGCAGTTTCTAG	30s,30s,30s (95,60,72) ×
rs17633437	R	GACTGTATATTCAAACCTTGTTGGCTACAA	30
rs17633437	PEF	TTTCATTTGGTCTTCAGGAACAAAATA	
rs17633437	PER	GTTTATGGTTAAAATTGTAAAAGGAAGTTGC	
rs7210446	F	AACCATGACCAACAGGAGCC	45s,30s,45s (95,60,72) ×
rs7210446	R	TCCAAAGTGCTGGGATGACA	30
rs7210446	PEF	GAGATAGGAGACTGAGGTACAAGTTGG	
rs7210446	PER	CTGGCCTACCTCATGATTCCA	
rs2227857	F- cDNA	AGAAATCTGGGACTGGGATCG	30s,30s,20s (95,59,72) ×
rs2227857	R- cDNA	TTCCATGTTTCCTTCCTCGTC	30

rs2227857	PEF	GGCCAGTGGATGGTACAAGTT	
rs2227857	PER	GTAGTACTCACCTTCTTCTTGGTTAAG	
rs2228945	F- cDNA	CTGATGACCAAACACCCAGCC	30s,30s,20s (95,59,72) ×
rs2228945	R- cDNA	CTTTGGGCTTGAATGGTGG	30
rs2228945	PEF	GGGAGAGGGACGTGAGAGA	
rs2228945	PER	ATCCTCCGGAAGAAGGCATG	
15×GCC	F-FAM	CCCGCATCCCCACTCG	30s,30s,30s(95,61,decreas
15×GCC	R	GCGCTCGCGCTTCCTACTC	e1/cycle,72)×8,30s,30s,30
			s(95,53,72) ×28
rs35476409	F-FAM	TTCTCCCCTGTATTGCTAGTCTG	30s,30s,30s (95,60,72) ×
rs35476409	R	CCAAACTCCCTTCACATCCA	35

Table S2. Primers and cloning sites used in reporter plasmid cloning reactions.

SNPs	F/R	Primer Sequence (5' to 3')	Cloning sites
rs9910355/rs9303504	F	TTTCTCTATCGATAGGTACCATCACGCCACTGTACTCCAGC	KpnI
rs9910355/rs9303504	R	ACGCGTAAGAGCTCGGTACCGAACACACTGGAAATACAACAGAAGC	
rs9909004	F	CTAGCCCGGGCTCGAGTGAAAAGTATACCAGGGCAAG	XhoI
rs9909004	R	GATCGCAGATCTCGAGCCCCTCAAATCCAGTGACG	
rs12601850	F	TTTCTCTATCGATAGGTACC GGGTTTGGGAAACAAGGCTTC	KpnI
rs12601850	R	ACGCGTAAGAGCTCGGTACCGCCAGATGGGAAATGGAACC	
rs17633437	F	TTTCTCTATCGATAGGTACCGGCATATGAAGCGACTGTGCTC	KpnI
rs17633437	R	ACGCGTAAGAGCTCGGTACCCTTGGGGGGAAAAAATCTTG	
rs7210446	F	CTAGCCCGGGCTCGAGAACCATGACCAACAGGAGCC	XhoI
rs7210446	R	GATCGCAGATCTCGAGTCCAAAGTGCTGGGATGACA	

Table S3. Chromatin state and histone marks for candidate SNPs in heart and other tissues.

SNP	Chromatin state (core 15 state model) as enhancer	Active enhancer mark (H3K4me1+H3K29ac)	Poised enhancer mark (H3K4me1 only)
rs9910355	heart tissues, IMR90 cell and T-cells	other 5 tissues/cells, not in heart	left ventricle and other 7 tissues/cells
rs9303504	heart tissues, IMR90 cell and T-cells	other 5 tissues/cells, not in heart	left ventricle and other 9 tissues/cells
rs9909004	most of the tissues/cells studied, not in heart	most of the tissues/cells studied, not in heart	left ventricle and most of the tissues/cells studied
rs12601850	most of the tissues/cells studied, not in heart	most of the tissues/cells studied, not in heart	most of the tissues/cells studied, not in heart
rs17633437	most of the tissues/cells studied, not in heart	most of the tissues/cells studied, not in heart	most of the tissues/cells studied, not in heart
rs7210446	most of the tissues/cells studied, not in heart	most of the tissues/cells studied, not in heart	most of the tissues/cells studied, right ventricle
rs9910577	other 7 tissues/cells, not in heart	other 6 tissues/cells, not in heart	other 9 tissues/cells, not in heart
rs9890911	T-cells	T-cells, not in heart	left ventricle and other 9 tissues/cells
rs9912468	none	other 3 tissues/cells, not in heart	other 5 tissues/cells, not in heart
rs11867573	other 3 tissues/cells, not in heart	other 3 tissues/cells, not in heart	other 11 tissues/cells, not in heart
rs8071250	T-cells	other 4 tissues/cells, not in heart	other 10 tissues/cells, not in heart
rs9892651	other 4 tissues/cells, not in heart	other 11 tissues/cells, not in heart	other 14 tissues/cells, not in heart
rs11079650	T-cells and Colon	other 4 tissues/cells, not in heart	other 9 tissues/cells, not in heart

rs4577128	other 4 tissues/cells, not in heart	other 2 tissues/cells, not in heart	most of the tissues/cells studied, not in heart
rs9893075	T-cells	other 5 tissues/cells, not in heart	other 6 tissues/cells, not in heart
rs11658550	T-cells	other 4 tissues/cells, not in heart	other 7 tissues/cells, not in heart
rs11658630	T-cells	other 5 tissues/cells, not in heart	other 6 tissues/cells, not in heart
rs12940610	T-cells	other 4 tissues/cells, not in heart	most of the tissues/cells studied, not in heart
rs4335805	T-cells	T-cells	most of the tissues/cells studied, not in heart
rs4328478	T-cells and fetal Kidney	T-cells	most of the tissues/cells studied, not in heart
rs7406054	T-cells	other 5 tissues/cells, not in heart	other 7 tissues/cells, not in heart
rs7406066	T-cells	other 4 tissues/cells, not in heart	other 8 tissues/cells, not in heart
rs35183571	other 10 tissues/cells, not in heart	other 8 tissues/cells, not in heart	most of the tissues/cells studied, not in heart
rs12944131	other 4 tissues/cells, not in heart	other 3 tissues/cells, not in heart	most of the tissues/cells studied, not in heart

Data are from Haploreg v4.1.