

Supplemental Tables: Table S1 (numbers in the second column refer to the SNP ID)

PRIMER A SET

	name	label	sequence	Annealing T (°C)	Expecting size
Primer set A1	6458307-F1	A1F	TCTTTAATACAGATTGGGAAGAGG	59	150 bp
	6458307-R1	A1R	AACTTTCAACTGCCAGGACA	58	
Primer set A2	99472138-F1	A2F	ACAGTTGTGCAACCATCAGC	59.8	165 bp
	9472138-R2	A2R	GACTTTCTGGAAAAGGCAAAA	58.5	
Primer set A3	6596075-F1	A3F	TTGTGTTCAAGCCTCCTTCC	60	171 bp
	6596075-R1	A3R	TCTGAGCTTAGCCTCCCTGA	60.2	
Primer set A4	2544677-F1	A4F	GGAAAACACTGGGAGGGAAT	60	178 bp
	2544677-R1	A4R	CCTGGGTGACAGAGGAAGAC	59	
Primer set A5	6983561-F1	A5F	GGTTCTGTGAAGCGGGTAAA	60.1	177 bp
	6983561-R1	A5R	TCATGGACCACAAATTTCCA	59.8	
Primer set A6	16901979-F	A6F	GTGGGGTCTTTGTTGTGGAG	60	188 bp
	16901979-R	A6R	TGTCAGAGCGGTTGAATGA	60	
Primer set A7	672888-F	A7F	GCCATGTCTAACTGGGCATT	60	153 bp
	672888-R	A7R	GCTGAGTGATGCTGGCAATA	60	
Primer set A8	13281615-F	A8F	GACACGTGGAATTTACTCTTTTGA	59.6	168 bp
	13281615-R	A8R	GCCAAGCCTACACTTCTCTT	59.7	
Primer set A9	10505477-F	A9F	CCGTGGGAAACAAAGTCTTC	59.6	185 bp
	10505477-R	A9R	TTCCAACCTGAAACACACACA	60	
Primer set A10	10808556-F1	A10F	CTCCATAGAGCCTGCAGAGG	60	150 bp
	10808556-R1	A10R	TTATTCGTCCCTCTGTTTTATGG	59.4	
Primer set A11	6983267-F	A11F	TCCTTTGAGCTCAGCAGATG	59.6	154 bp
	6983267-R	A11R	TGAGAACTTGCTGGGTTCC	60	
Primer set A12	7014346-F	A12F	GCTTGCAGCTTCTGCCTAAT	59.8	160 bp
	7014346-R	A12R	AACTTTTGGGGAGGCTGTTT	60	
Primer set A13	7000448-F	A13F	AGGCTCCTTAGGGAAGGTGA	60	165 bp
	7000448-R	A13R	GAGATTGTGCCACTGCACTC	59.4	
Primer set A14	1447295-F	A14F	GAGTTGCACGCCAGACACTA	60	173 bp
	1447295-R	A14R	AGGGGTTCTGTTGCTTTTT	60	
Primer set A15	2820037-F	A15F	AGTGATTGCTCTAATTGCCAAG	58	191 bp
	2820037-R	A15R	GCGCATGAGGTCTATGTTGA	59	

Primer set A16	889312-F	A16F	GGCCATCTGTTTTACCAACC	59	151 bp
	889312-R	A16R	TGGGAAGGAGTCGTTGAGTT	59	
Primer set A17	1937506-F	A17F	CGGGAAAGTAAAAATTGTTATCTCATT	61	156 bp
	1937506-F	A17R	GAGGACCAATCCTTTGGACA	60	
Primer set A18	1937506-F	A18F	AAAGAGGTAACCCAGGGAACA	59	151 bp
	1937506-F	A18R	CATAAGCCTTCGCTGACTCC	60	
Primer set A19	1937506-F	A19F	TGAGCCAGGACATCAGAAAG	59	189 bp
	1937506-F	A19R	CCATCCCTGTGAGTCATCCT	59	
Primer set A20	1937506-F	A20F	TTCTCTCCAGATTGATACACAGC	58.5	166 bp
	1937506-F	A20R	AATGCCTTGCCAATACCAC	59	
Primer set A21	1937506-F	A21F	TCACAGGAAAATTGAGCAGAAA	59.9	178 bp
	1937506-F	A21R	ATGTGCAATGCCAAGAATGA	60	
Primer set A22	1937506-F	A22F	GTAGCCCCACTTCGCCAAT	62	116 bp
	1937506-F	A22R	TCCCTATCGCAGAGGAAAAA	59.8	
Primer set A23	1937506-F	A23F	AACGGTCAGACGCAAACAGT	60	196 bp
	1937506-F	A23R	GGCAGCTCCTCATTCTAAA	60	
Primer set A24	1937506-F	A24F	GACCAAATTGAAGAATTGGTTTG	59	174 bp
	1937506-F	A24R	ACTTGAGCTCGATCCACAGC	60	
Primer set A25	1937506-F	A25F	TCAATCCCCATATGCACAGA	59	153 bp
	1937506-F	A25R	ATGACATGCTCTCACGATGG	59	
Primer set A26	1937506-F	A26F	TGGCAGTCCAAGCTACTAAGAA	59	177 bp
	1937506-F	A26R	TGCTGCATGGTAAATTTTTG	57	
Primer set A27	1937506-F	A27F	GGGAAACGAAGGATGAAAGA	59	123 bp
	1937506-F	A27R	TTCTGGTTGATTTCCCTTC	59	
Primer set A28	1937506-F	A28F	CCATGAGCCTATCACACTCG	59	154 bp
	1937506-F	A28R	TGCCGATATTTCCGATTTTC	59.9	
Primer set A29	1937506-F	A29F	ATGTTTCATCAGTGGTCACAAATA	57	123 bp
	1937506-F	A29R	GGCTCATGGTAGGTCGTCAT	60	

Supplemental Tables: Table S2 (numbers in the first column refer to the SNP ID)

Primers Set B

	Primer sequence		Expecting size	Annealing T
Primer set B1 10186922	Forward F	AGCTCTGACTCCCAACTCCA	236 bp	60
	Reverse R	CGACAGATGGCTACAAAGCA		60
Primer set B2 11159647	Forward F	GCTCACTACCTGGGTGCAAT	166 bp	60
	Reverse R	TTGTCAGCATTTCAGATTTC		57
Primer set B3 2609653	Forward F	TGTGCACAAGAGCATTGTTTT	203 bp	59.4
	Reverse R	CCAGGATCATCCATGTTGTG		59.8
Primer set B4 7570682	Forward F	GAGTGATGGAGTGGCATAGG	213 bp	58
	Reverse R	AACCCCTACATGCTTCCTT		59.2
Primer set B5 13387042	Forward F	CCCTGTTTTGTTGCAGTGAA	172 bp	59.7
	Reverse R	ACGGAGCACTCTCAACATCC		60
Primer set B6 2291533	Forward F	CAGAAGCAGCAGCAGGTACA	158 bp	59
	Reverse R	AAGCTACTGGCCCAAAGACA		60.1
Primer set B7 2822558	Forward F	TATCGACAAAAGTTTTCCACTG	157 bp	59.4
	Reverse R	CCCTGCTAACACTGCTGGAC		60
Primer set B8 10795668	Forward F	GGCATTGCGTTCATTCTGA	215 bp	59
	Reverse R	AGCGAGACTCCGTCTGAAAA		60
Primer set B9 4779584	Forward F	AGCTGCTATAAGATGGGCTGA	181 bp	59
	Reverse R	TGCCACTGCTAAAAGCCATT		60
Primer set B10 10757274	Forward F	GTTTCTGCACATGGTGATGG	250 bp	60
	Reverse R	CTGCCTCACTCTCCAGTTCC		60
Primer set B11 10757278	Forward F	CAAACAGCCAATTTGTGGAG	182 bp	59.2
	Reverse R	GGCGTTACAATTAAGAGAGAGAGA		59.5
Primer set B12 1333049	Forward F	TCTGCTTCATATCCAACTTGTG	182 bp	59
	Reverse R	TGCTTCTGCATACTTTTGTCAAC		59
Primer set B13 2383206	Forward F	GGCCCGATGATTTTCAGTTA	170 bp	59
	Reverse R	GACATAGCTCTACAGCTGGGAAT		59
Primer set B14 2383207	Forward F	ACTTAGCCCTTGGGACCATT	156 bp	59.8
	Reverse R	AAGAAGCTAAGAGAATGTTGAGCA		58.9
Primer set B15 383830	Forward F	GACCCCTGATGTAACTACTCTTTG	193 bp	59.2
	Reverse R	GCTGGTGGGTTTCTGTAGGA		60

Supplemental Tables: Table S3 (rs numbers in the first column refer to the SNP ID)

Primers Set_C

	Primer sequence		Expecting size	Annealing T
Primer set C1 rs7250581	Forward F	CTCCAAAAGCCAGGAGAATG	214 bp	59.8
	Reverse R	CCCGTGTGGCTGCATATTA		60
Primer set C 2 rs10733113	Forward F	CACAGTCTGTTACAAGGGTGGGA	187 bp	60
	Reverse R	TACTTCTTGCGGCCTGTCTT		60
Primer set C3 rs10761659	Forward F	GGATTCTTCGCATGATGAGG	244 bp	60
	Reverse R	AGTCAAAGAGGAGGGCGTTT		60
Primer set C4 rs10883365	Forward F	GAAGGCCGCATAAGACGTTA	235 bp	60
	Reverse R	CGTGTCTCTTCCAGCGCTAT		60.6
Primer set C5 rs17234657	Forward F	AGTGCTGAAGCGGAATTGAG	215 bp	60
	Reverse R	ATGAGCAGCAATGGTCACAG		59.7
Primer set C6 rs55646866	Forward F	AGAGTCCTCAGCCTCGTCAG	243 bp	60
	Reverse R	CGAGAAAGCAAGCTTCAGGT		59.8
Primer set C7 rs6672995	Forward F	AGGGTTCCTGGCTCCTACAG	190 bp	60
	Reverse R	CAGAGGGTTGGGTTCCAGTA		60.1
Primer set C8 ss107635144	Forward F	GCGTGGTGAGGTGACTACTG	165 bp	59
	Reverse R	AAGAAAACACAAGTGAGGCACA		60
Primer set C9 rs12037606	Forward F	CTGGCAGAGGATTTGAGACA	173 bp	59
	Reverse R	AGGTAGCTCAGCTGTTTCATGG		59.3
Primer set C10 rs6601764	Forward F	ACCAGTGGTCCAACCCACTA	221 bp	60
	Reverse R	TCACCATCTGGAAGGCTTTT		59.2
Primer set C11 rs7807268	Forward F	GGAGGACAGGTTGGAGAACA	190 bp	59.8
	Reverse R	AAGGGACTGGAAGGGTGATT		59.4
Primer set C12 rs6957669	Forward F	CTAGGCGTTTGCATTTCATCC	223 bp	59.6
	Reverse R	TGACGCAAAGACTGAAAGGA		60
Primer set C13 rs12970134	Forward F	GGTGGTGACTACTGCCCTTG	203 bp	59.4
	Reverse R	CAGTGTGGAGACATGCTTGC		60.3
Primer set C14 rs17782313	Forward F	CTTGGAAGCAGGAAAACCAG	180 bp	59.7
	Reverse R	GCTACCTCAATCCCAGATGC		59.2
Primer set C15 rs1859962	Forward F	CCCGGAAGGCAAATAACAAT	166 bp	60.1
	Reverse R	TTGGGAAATTTAGCCCCATT		59.5
Primer set C16 rs983085	Forward F	GGAATTGTACACCATCACCAA	154 bp	59.6
	Reverse R	TTTGTCAAATGCTTTTCTCCA		59.7

Primer set for C13 did not generate the expected product

Supplemental Tables: Table S4 (rs numbers in the second column refer to the SNP ID)

PRIMER SET D

PRIMER D SET

	name	LABEL	SEQUENCE	Expecting size	Annealing T	total U937	total BJ1
Primer set D1	rs10490072-F	D1F	TGCAAGCTCCAAGAGAGTGA	174	59.9		
	rs10490072-R	D1R	AGGCCCGTGTCTGTAATAA		59.5		
Primer set D2	rs1153188-F	D2F	GAAGATGGTCTGAATGGCAAA	150	60.1		
	rs1153188-R	D2R	TGTTTCGTCCACTGGATCTG		59.7		
Primer set D3	rs13071168-F	D3F	CCCACATCCAGACTTCTGCT	217	60.3		
	rs13071168-R	D3R	AGCTGTTTGGCTTTGGTGAT		59.7		
Primer set D4	rs17036101-F	D4F	ATTAGGGGCCAGGAAAGAAA	213	59.9		
	rs17036101-R	D4R	TGCCTGGCATTAAAAATCT		57.4		
Primer set D5	rs17705177-F	D5F	TCAGTTTCCTTCCCCAGAAA	170	59.6		
	rs17705177-R	D5R	GCACGTTCTGCACGTTGTAT		59.8		
Primer set D6	rs358806-F	D6F	ACTTTCTGGAGGGCAGTTTG	183	59.3		
	rs358806-R	D6R	GCTCATCATTTTAAAGTGGTACGA A		60.7		
Primer set D7	rs5015480-F	D7F	GCTCACCTAGGGAAGTGTTTC	172	60.1		
	rs5015480-R	D7R	GCCACATTGTAGGTGCTCAA		59.7		
Primer set D8	rs7020996-F	D8F	CATTGTGGGGGAAAGTCTGT	171	59.8		
	rs7020996-R	D8R	TCCTCAATGTTCAACCCCTTA		59.4		
Primer set D9	rs7659604-F	D9F	GCAATGTGTTAGGGTAGAGAAC A	203	59.6		
	rs7659604-R	D9R	TGAACAGCCTCTCTTGGAGAA		60.1		
Primer set D10	rs2716914-F	D10F	CGAACCAGAGGGCATAAGAG	150	59.8		
	rs2716914-R	D10R	CAAGATCATGGGCTTCACAA		59.6		
Primer set D11	rs2733359-F	D11F	GAGGGTTGTGACGGTCAACT	165	60		
	rs2733359-R	D11R	CCAGCTTGAATACATGCAA		59.7		
Primer set D12	rs35658367-F	D12F	GAAGAATTTGGCAGTGAGC	199	59.8		
	rs35658367-R	D12R	ATCCATGGCCATTTCATTAT		60		
Primer set D13	rs3926687-F	D13F	GGCAAGGAGGCAGAACAGT	150	60.4		
	rs3926687-R	D13R	GGGGGAAATGAATTGTCAAA		59.6		
Primer set D14	rs4790796-F	D14F	AGGTGGTGTGGTTTTGTCC	205	59.7		
	rs4790796-R	D14R	AAGACTTCAGCCTCTAAAACAAGA A		59.2		
Primer set D15	rs4790797-F	D15F	GGAGCTCTTTGCAAACCTGTG	151	58.6		
	rs4790797-R	D15R	AAGACTTCAGCCTCTAAAACAAGA A		59.2		
Primer set D16	rs7223628-F	D16F	TCATCAGGGAAGAAGAGAGAGAA	167	59.6		

	rs7223628-R	D16R	TGGAGCAGTTAAGGGAACTGT		60.2		
Primer set D17	rs8182352-F	D17F	AACCGTGCTGTCTCAGCATA	158	59.5		
	rs8182352-R	D17R	CAGTGTGTTTGACGGAGGAG		59.3		
Primer set D18	rs8182354-F	D18F	TGCAAATGAGATTTGGCTGT	187	59.3		
	rs8182354-R	D18R	GAGATGTGGCCTTACAAGGTG		59.6		
Primer set D19	rs878329	D19F	TCCACTCAACTCCCTCAACC	150	60.1		
	rs878329	D19R	AGCCAAGTTCTTGATCTGC		59.4		
Primer set D20	rs11761231	D20F	AAGGCATGCAGAGCTTTTGT	215	60		
	rs11761231	D20R	CAGCCCTGCCAATTACAGAC		60.7		
Primer set D21	rs11162922	D21F	TTTGTGATATCTTCTGTTTGGTA	213	57.1		
	rs11162922	D21R	CATGGGGAGAGAAAATACTCTGA		59.6		
Primer set D22	rs2837960	D22F	TGTTGCTGAGACCCTCAGTG	177	60		
	rs2837960	D22R	AGTCAAGCAGTAGCCCAGGA		60		
Primer set D23	rs6920220	D23F	TGCTACGGCAGCGTAACATA	193	60.4		
	rs6920220	D23R	GAAGCATAAATTTGCCTCATCA		59.2		
Primer set D24	rs743777	D24F	GCCTCCTGTGCTTTCTCACT	170	59.6		
	rs743777	D24R	GCCTCAGAGAGAATCGGATG		59.9		
Primer set D25	rs6679677	D25F	ATTTTTCAGGTGCCCTGTTG	188	60		
	rs6679677	D25R	GGGTTTCTCATTTAATCCTCACA		59.4		
Primer set D26	rs12141187	D26F	TCAGCATCAGTCACCTCAGC	179	60.1		
	rs12141187	D26R	TCTTGGGGACATTGCTG		60.7		
Primer set D27	rs2644577	D27F	AATCTGGGCATAGCCAACAG	166	60.1		
	rs2644577	D27R	AGGCAAGGAGGGTTGTTCTT		60.1		
Primer set D28	rs4132958	D28F	TAGACACAGGCCTGCACAAA	222	60.4		
	rs4132958	D28R	GAGCTGGTATGCCCATCTACA		60.1		
Primer set D29	rs4950437	D29F	TTTTAATGCCCCATGAATATG	103	58.7		
	rs4950437	D29R	GGTTTCTGAGGTTGCACACA		59.7		
Primer set D30	rs6684174	D30F	CCAGAGTGGAAATCAGCAGGT	234	60.3		
	rs6684174	D30R	CGGCGCAGACTTTCTTTTAT		59.5		
Primer set D31	rs8029320	D31F	TGCATAAGCCAATTCCTTGC	209	61.1		
	rs8029320	D31R	AAATCGTTTGCTTGGGTGAG		60.1		
Primer set D32	rs952477	D32F	GCCTTCATGCCCTGACTTC	151	60.8		
	rs952477	D32R	GGCTTAAGGCAAATGGAATC		58.6		
Primer set D33	rs10798269	D33F	TGGACCATTTGAGGTGATGA	227	59.9		
	rs10798269	D33R	GAGAGACCTCCAGGGAAACC		60		
Primer set D34	rs12537284	D34F	AGGTTGCAGTGAGCCAAGAT	243	59.9		
	rs12537284	D34R	AATACGTAAGCGTGGGGTTG		59.9		
Primer set D35	rs729302	D35F	TGAAGCCCTGCTGAGAAAGT	155	60.1		

	rs729302	D35R	TCCTACTGGGTGGACTCTGG		60.1		
Primer set D36	rs11171739	D36F	GGAGGGACCAATCAACAGTC	163	59.4		
	rs11171739	D36R	CTACCTACCCTCCCCACAT		60.1		
Primer set D37	rs11052552	D37F	TCCCTTAAGGCATAAGACAGC	241	58.5		
	rs11052552	D37R	TGAGGCTGCAGTGAGCTATG		60.3		

Supplemental Tables: Table S5 (rs numbers in the second column refer to the SNP ID)

PRIMER SET E

	name	LABEL	SEQUENCE	Expected size	Annealing T
Primer set E1	Rs7716600F	E1F	TGTGAACTTGATGGCAACCA	223	60
	Rs7716600R	E1R	TCTTCCTTTTCACCATCTTCC		58.2
Primer set E2	Rs11249433	E2F	TTGGAAACATGGAATCCAAAA	150	60.2
	Rs11249433	E2R	ATATCTGTTGGAAAACCTTTAGCC		59
Primer set E3	Rs3803662	E3F	TTGTCATCCAAAGCACCAAC	227	59.5
	Rs3803662	E3R	CCTGGTGTGTCCACAAAGA		59.6
Primer set E4	Rs393152	E4F	CCTACTGCCTTGAATCTGC	237	59.8
	Rs393152	E4R	GTCTCCGCTGACCTAACAGC		60
Primer set E5	Rs1491923	E5F	CTGCACCTTTGGCTTTTAGG	197	59.9
	Rs1491923	E5R	CCCTCTTCCCAACACACAT		59.8
Primer set E6	Rs2736098	E6F	CGTGGTTTCTGTGTGGTGTC	190	59.4
	Rs2736098	E6R	CCTTGTCGCCTGAGGAGTAG		59.9
Primer set E7	Rs801114	E7F	CTCCCAGTGCATCATTTTC	152	60.5
	Rs801114	E7R	AGCCACTTCTCCACAGAGG		59.5
Primer set E8	Rs2151280	E8F	ACTCGATGGCCCTCAAAG	150	60.2
	Rs2151280	E8R	CCCATTCTCAGAATTTTCATCA		59
Primer set E9	Rs4636294	E9F	GGGTTGAGCCAGATCTTCAA	173	60.2
	Rs4636294	E9R	GGGATGTAACAGGGAAACGA		59.8
Primer set E10	Rs823128	E10F	ACTGGCTTTGGGTTGTTTAC	190	60
	Rs823128	E10R	AGATGCCAAATAATTCCACCA		59.3
Primer set E11	Rs947211	E11F	AAAGGCCAGGGAAAGAAGAC	224	59.7
	Rs947211	E11R	ATGGCCTATGGGTGCAATAA		60.2
Primer set E12	Rs27360990	E12F	ATGTCTGCCTTTGCATCAGA	214	60
	Rs27360990	D12R	CTGTCAACTCTGCCAATGTGA		60
Primer set E13	rs12418451	E13F	GTAAGGGAGTGCTGCTCCTG	236	60
	rs12418451	D13R	ACACACACACATCGCTGGAT		60
Primer set E14	rs10896449	E14F	agcagaatgtggaaggatgg	205	60.1
	rs10896449	D14R	ccaaggttcagcctcatctc		59.8

Supplemental Tables: Table S6 (rs numbers refer to the SNP ID)

A26: rs9469220

ATAAATTACCATTCAAACCTGCC[A/G]GTAGAAATATAAAATTGTAAGGAATAAATTCCACAAAAAATACAGTGTTTTAATTACAAAAATTTACCATG
CAGCA

TGGCAGTCCAAGCTACTAAGAAGCACAAATAAAATATATAGTAGCAGGGGGAGATGGGAAGGGTGAGAGAATGTAGGATAAATTACCATTCAA
CTGCC[A/G]GTAGAAATATA

TGGCAGTCCAAGCTACTAAGAAGCACAAATAAAATATATAGTAGCAGGGGGAGATGGGAAGGGTGAGAGAATGTAGGATAAATTACCATTCAA
CTGCC[A/G]GTAGAAATATAAAATTGTAAGGAATAAATTCCACAAAAAATACAGTGTTTTAATTACAAAAATTTACCATGCAGCA

A29: rs9270986

ATGTTTCATCAGTGGTCACAAATATAATGTATCTAAAATAGGGACAGTAAGAAATTACTGGGCATAACTAG[A/C]AGGTGCCATGGGATGTGCCTG
GAAAGCTTCTCATGACGACCTACCATGAGCC

ATGTTTCATCAGTGGTCACAAATATAATGTATCTAAAATAGGGACAGTAAGAAATTACTGGGCATAACTAG [A/C]

A25: rs6457617

TAGTCA[C/T]ATCTGCTCATGGACTCAACAAACAGTAATTGAGTCCACTGACTGCATTTTCGGAAATCCACACTCATGATCTTCCTCTG

A28: rs615672

GTGGTTAGGAAAA[C/G]AGAAATAAGAAACAACAGCAGAATGCACCGTCAGGTACTTTGGAAGTCACAGAAGGGAAAAGGGCAGG

A18: rs4242382

CCCAGGGAACATTTTGTCCCTCTAGTTATCTTCCC[A/G]CAGGCCCATCAAGAATCAGGCAGTAGGTGAAAAAGAAACACAGAGAACCTAGGAA
CACAATAG

A13: rs7000448

GAGCAGAGGAGCAG[C/T]ATTTTTGAGAATCTGGCCAATATGGAAAGATTTGCTGACATATTCAGATTTGAGACTTTTTTTTTTTTTAGACGGAGTT
TTGCTCTTGCCACTCAGGCTGGAGTGCAGTGGCACAATCTC

A14: rs1447295

TGAGTTGCACGCCAGACACTATACTAGATGATGGGACAACTAAAGGGTAATGAACAGTTCTGTCTCTATGTAAAAATAATAATGATGATGATGAT
GAGATGGGACTTCAATTGAGGAAGTGCCATTGGGGAGGTATGTAAAA[A/C]GTGCTATGGAAAAAAGCAACAGGAACCCCT

A1: rs6458307

TCTTTAATACAGATTGGGAAGAGGATTACTTTTTCTGTCTCAGGTTCTTCAGGATAAAGGATAAAGATTTGGAGATCGTTTAAAAGCTTTTATATAA
ATGCTCATTCA[C/T]TGAGTTCAAATACTTTTAAAATGTCCTGGCAGTTGAAAGTTA

A2: rs9472138

gaacactctgttacctaagcacgttctcctcata[C/T]cgttgtcgtcaatcctaccacggctaccagtcctcaggcagctactaatctatctgctttttctgtgtaatttgcctttccagaaagtc

A5: rs6983561

ATAGAACATATAGCAC[A/C]AAATGATTATATCAATAGAATGCTAATTGCATATCAAGGATATTTGGTATAATACAAATTATTCTACCTTAAACATAT
GGAAATTTGTGGTCCATGA

A7: rs672888

GGGCATTTTCTGTGCTACTATTCTTAAGAGAATTATCTCACTCAATCCTCACTGCAGCTCTAGGAGCTAGATACTGTTATTG[C/T]CACTTTCTTAA
AGGTAAAGAAACACAGATATTAGGCCTATTGCCAGCATCACTCAGCA

A4: rs2544677

TAATCTTTGTCTTTATGAA[C/G]GTCTAGAGGATTCTACCATAAAAATTAGGAAAGATAAGTTAGAAATGTTGAAACATAGAAAGTATTATAACTAGA
ACGCATTTAATACTTGTAttttaattttgagacagtcctcctctgcaccagg

A17: rs1937506

CGGGAAAGTAAAAATTGTTATCTCATTCAATTCAAAAAATTTGATAAAATCAGGCTTGGAAAATGTGATTTATTAGGTGTCAAATAATGAAGTTATA
CCTGTGGAGA[A/G]TATTAGAAGTGAACATTGTAATGGATATGTCCAAAGGATTGGTCCTC

A19: rs7017300

GAGCCAGGACATCAGAAAGAAAATTAAAAACAAAGTGAATACAGTGTGAAGATTGATTTGGGGCAAAGATTTGAAACTAAGACCATGAACAAT
GAGATTCGTTAATGGAGTTTCCCTTTGTATGATGCCTAGA[A/C]CCAGCAACAGGGCAGTTGCAGTGATTTAAGGATGACTCACAGGGATGG

A3: rs6596075

TTGTGTTCAAGCCTCCTTCCATGGGAAGAACCAGCGGTGGACCTGAAGAGCTCTGCCTTCAAACAGATGATTCACTCA[C/G]AACAGGTTGCTG
GTGACTGAACCTCAGTGA

A6: rs16901979

AGTGTGGGGTCTTTGTTGTGGAGCAGTGTTAATGATTTAGCATTACTTAT[A/C]TCTGGCAAATGGTATTTTTGAGATAACATGTTATGGAAGAAA
GTGAACCTGAACCTTGAAGTTTGAAGATCTCGATTGAAGTATC

A23: rs16892766

ACGGTCAGACGCAAACAGTTTCAAGACTATT[A/C]GCTGTAAAGGTTATGCCTTATGTCACCCAAAAGGGTTTTCCCCTAGATTTATAGCACAAA
CTCATGGAAGATTTATTGCCGTCTTAATTTTTTCCCAAATTTAACTTTAMGAACAGTCAGCCTG

A21: rs7837688

ttcacaggaaaattgagcagaagtacaaagagctcctgtatatacccctacccccacacattcacagcctccctcattaccaacattcccac tagagtggtgcattt[G/T]gtacaattgggtctatgttgacagtc
att

A22: rs2542151

TGCTCCTGTCTCCCAAACCTCTAGATGCCAAGTGGGCGCTGTAGCCCCACTTCGCCAATGCCTTGGTTCGGGC

GGGC[G/T]CTTCTGAGACTCTCATTTCCTAATTTCACTAACTTCACACCTTCTTGCTAATTCTGATTATTTTTCTCTGCGATAGGGA

A24: rs6997709

TTGACCAAATTGAAGAATTGGTTTGTCTCACCTAAGTTCTATCAAGCCAAATAAGT[G/T]ATGGGACAGGATGAAAAAGATTTTTCTGACGTGA
AAGGATTTGGGTAGTACCCATTGAATGTTCTCATGGAGATCAAGTCT

A8: rs13281615

GACACGTGGAATTTACTCTTTTGATAAATTGGTAACTATGAATCTCATCAAAGAA[A/G]GCAGAACGCAGATATTCTGAGTAGGGGGTTTGGGG
GAGAAATAAGAGTGATTCTCTATCTGCTGCTAGGGCCATAAGACACTACACCAAGAGGAAGTGTAGGCTTGGCCAGGT

A10: rs10808556

CTCCATAGAGCCTGCAGAGGGCACTAGACTGGGAATTAGAAAACCTGATTTCCCTCCAGCTCCA[C/T]CTCTGACCAATTGCCTGACCCTGGTC
AAATTGCTTAACCTCTTCTATCTCAGCTCCCTATCCATAAAACAGAGGGACGAATAAA

A11: rs6983267

TCCTTTGAGCTCAGCAGATGAAAG[G/T]CACTGAGAAAAGTACAAAGAATTTTTATGTGCTATTGACTTTATTTTATTTTATGTGGGGGAGGGAGC
CGGCCCCAGCTGGAAGCTGCTTCTCTGAATCAAAGGGCAGGAACCCAGCAAGTTTCTCA

A12: rs7014346

GCTTGACGCTTCTGCCTAATGTTGACTTACAGTTCAAGATGGCTTCTGGAGTGCTACC[A/G]TTACATCCATGTTGTAGGCTAGAAGGAAAAGGG
CAATGGCCTGAAGAGGAAGGGAGAGTTCCTGTTA

A15: rs2820037

GTGATTGCTCTAATTGCCAAGTACAGAAAAAGTTACTGGGTGTGTTTCATAGATCTAGTAGCTCTATTGTGAGGTGAATTTTAGTCAGGACTTCAAT
TATCACATAGTTTTCTTGAGCCTCCA[A/T]TCTAAAAGAGAGCCTGTGATTACTCTTTTGTCTTTAGGTATTAACATCAACATAGACCTCATGCGC

A20: rs10090154

ttctccagattgatacacagctttaatgcaattctataaaaactctgcaagattttttgtaa[C/T]atAGCTAAAACAATATTGGAAAAAATAGTGAAGTGGTATTCCAAGGCT
TACTATATGGCCAGAGTAGTCCAGACTGTGGTATTGGCAGAGGCATt

A27: rs660895

CTGTCTGATGGGAGTGAAGATTCTTCTTCAGGAATGGAAGGGGATGCACAGAGTGAAGCCACCCAAACAAAACAAGACTTGTAT[A/G]GCTAT
AGATGGAAGGGAAATCAACCAGGAAATTTTTGG

A16: rs889312

ATGCCCTGCTGGAGAAAGG[A/C]ATGTGCAAATTAAGAGACTACAAATCAGTTTGAAAACCTCAACGACTCCTTCCCA

A9: rs10505477

CCGTGGGAAACAAAGTCTTCCACTGGGCTTATTCTGTGTCATGTGTCACCCTTGTCTATCAAACAGGAAGCCTTAA[C/T]TGGAGATGAAGATTT
AGAAAAGGGCAAAGTCAGTATTGA

rs2670660

CACGCACAAGTGATCTACCAGTCTTTTAAA[A/G]TTCTATTATTAACCCAAACATGCTCTTTTCAATTTCCACAGAACACTGGGTCTAAATTTAGAC
TGGTGATCCTGATGCT

Supplemental Tables: Table S7 (rs numbers refer to the SNP ID)

B1: rs10186922

CAGCTCTGACTCCCAACTCCACACCCCCATGACTTCTTCTCTCCAACCTGTGCTGGGCTGACATCGGTTTCACCTCGCCCATGGTTCCCAAG
ATGATC[A/G]TGGACATGCAGTCGCATAGCAGAGTCATCTCTCATGCGGGCTGCCTGACACGGATGTCTTCTTGGTCTTTTTGCATGTATAGA
AGACATGCTCCTGACTG

B2: rs11159647

tgctcactacctgggtgCAATATACTCATATAGCAAAGCTGCACAT[A/G]TATCTAACATAACATTGAAATTTTAAAAATAGGACATTTTaatacaaaattagattaa
aagtaattactattagcgaataaagtcaaacatttagaaaatctgaaaaatgctgacaa

B3: rs2609653

TGTGCAACAAGAGCATTGTTTTCTAGCATATACTTATTTTAACTatttttagaagca[C/T]ttcgcatttggaaaagtgaataaacctaatgttcatcaatggatgaatggaaaaagaa
actgtgtactgtatatacaatggaatattatacggctctaaaaaagaatgggatcctgccatctgtcacaacatggatgatcct

B4: rs7570682

AGTGATGGAGTGGCATAGGTAATTTCTGGAATGACTGAAGTAAATATAATCAGCTCACTTTAAAATGAATTTTTTCAGTATAAAGTAACTCTCTGG
AA[A/G]TTGACATGAAGTTTGATCAGAAATTAAGGCAGAAAGGTATGTGAAACAGTAGAAACTGTAGATATGAGTAAAAAAGTGGGTGGCAAG
GGATAAGGAAGCATGTAGGG

B5: rs13387042

CAGAAAAGAGGCAATGGA[A/G]GCTACAGAAAACCAAGGATTTCTTGTGGAATCGAATCTTCTTCAATCTTCTTACCACACTAGTGGATCTC
CCTGTGGGAGGGATGTTGAGAGTGCTCCGTGTTTTT

B6: rs2291533

TTTTTAATTTATCTTCTCATGGTTCTTCTTGGATATCCTCTGGAAGTGTGTAAGACTGAAGAATTTTCATCCCCAGAACTCAC[A/G]TGTT
GAAGCTCAGCATGTCTTTGGCCAGTAGCTT

B7: rs2822558

TTCTCGACAAAAGTTTTCCACTGGGAAATTATTAACCTGATGTCAGCAACTCATGGACTTGACA[A/G]CAAACCTCAATCTCTCTGGTCTGCC
CTTTCAAATCCTAATGGCCGTATATCTCTTTGGCAAGAGCTGGGTCCAGCAGTGTAGCAGGG

B8: rs10795668

TTGTTTTCAGGAGTTTTCTATCTATGAGCAGCAGCAGAAAAGAGAAAAAGTTAGATTCTTA[A/G]ATTCCATGATTTTATATTTCCACCAAGGTACAA
GTATTTCTACTTTTCTACCTGATTGTCTCTACTTTCTCCATGTGTAAtttctttctttctttctttT Cagacggagtctcgt

B9: rs4779584

AGCTGCTATAAGATGGGCTGAGTTAGAAAAACCTAACAGCCCATCCTAATAGACTGAATGTTCTATTGTTTGATGAATGTTATGTGCCAGTAGAA
CTTGTTGATAAGCCATTCTTC[C/T]GAACAGAAACCAATAACTATAYACACAGGAAACAAAAATTTGTAAATGGCTTTTAGCAGTGGCAA

B10: rs10757274

AGCTTCTCCCCCGTGGGTCAAATCTAAGCTGAGTGTG[A/G]GACATAATTGAAATTCCTAGATAGATAGGAGATAGGGGTAGGGAATTTCTAAT
CAGAGGGAATAGCACATGTAAGGCAACAATACAGTGCATCTGGGAAAGCTATACAATTTATTGTTATAGGACAAATGTTGGGGAATGTTGAGA
GATGGAAGTGGAGAGTGAGGCG

B11: rs10757278

GTTAAGTTAGTTGAACTGAACTGAGGCCAGACAGGGCTGTGGGACAAAGTCAAGGTGTGGTCATTCCGGTA[A/G]GCAGCGATGCAGAATCAA
GACAGAGTAGTTTCTCCTTCTCTCTCTCTTTAATTGTAACG

B12: rs1333049

TCTGCTTCATATTTCAACTTGTGTATGACACTTCTTAGGCTATCATTTTATTCCAAATTTATGGTCACTACCCTACTGTCTTCTCATACTAACCA
TATGATCAACAGTT[C/G]AAAAGCAGCCACTCGCAGAGGTAAGCAAGATATATGGTAAACTGTGTTGACAAAAGTATGCAGAAGCA

B13: rs2383206

TGGCCCGATGATTTTCAGTTAACCAAATTTCTCCCTTACTATCCTGGTTGCCCTTCTGTCTTTTCTTAGAAATGTTATTGTAGT[A/G]TTTGAAG
ATGGCCTGAATCCTGAACCCCCATCTTCAATGAGCACCAAATGTAATTATAGATTCCAGCTGTAGAGCTATGTCAG

B14: rs2383207

ATACTTAGCCCTTGGGACCAATTTTTACTCCTGTTGGATCCCTTC[A/G]GCTAAGCATGATTATTTACTATTTTTCAGCTATTAGTTATGTCTTGT
GAAAAAGTATGAAAAGAGCTGCCAATAAATTAGAGTGTATGCTCAACATTCTTACTTCTT

B15: rs383830

cctgATGTAAACTACTCTTTGTTCAACCCCTAGTAGTACAAATATGATACTTTATTTTACTGTTACTCATGTTGCCTTGAAAACCTCCTGTGTTCTGTT
ATCTTTGAATGTGAGCTAGT[A/T]ACTTTATTTTAAATTTTTGGAAGTCTGTGGGTGTAATTT

C1: rs7250581

CTCCAAAAGCCAGGAGAATGGGAGGGAAGTGAGGGTTGAAAAATTACCTATCAGGTAGAGTGTTCACTGTTTCGGGAGGTGGGTTTGCTAGAAG
CTCAATCCCAACCATTAC[A/G]CTATATGCCTATGTAACAAACACACACATATACTTAAAAATTTGTTTTAAAAACCCAAATTTCTGGCTTCTCCTGAA
AAAAATATAATATGCAGCCACACGGG

C2: rs10733113

CACAGTCTGTTACAAGGGTGGAATGAATTGTTTCTTGTAAGCACTCAGAACAATGAGTGGCACAGAGTGATACATGTTGAGGGCTTTTTGTTGT
TGTTGTTGTTGAT[A/G]TATTGTCTCAGCACCCCTATTATATTTTTACATGGAGGGGATAAAAAAATCTTTCTTAAGACAGGCCGCAAGAAGTA

C3: rs10761659

ACTGAAAGTGCTCCTTACAAATGAACACTTAAATTCAGGAGCACTTTCAGTTAAAGCAAAGGAGTTAAAGCAAAGACTTTGGGAGTCAGTATCA
AATAAAGATCATCTCTCAAAC[A/G]TAACAGAAGGAAAACAGGAATTAATTTATTTTACACTTTTTAGAAACGCCCTCCTCTTTGACT

C4: rs10883365

GCCGCATAAGACGTTACTTAAACATGTTACTTAAACAAGACTGCAGTAAACGTTTCTTTCCAAGTGAGAAAGGTCTTTTTCGTTCTCAGACGGTTT
GAAGGT[A/G]TTTTGTGCCAACGTGACCCCCGGGGAGATTTGGAGGAAGCTTCTACGTCCTAGGAGGCTGAGATCCCACGGAGCCGGTTTACG
GTTGAGAGCAGACAGTTTCGAGTAGATAGCGCTGGAAGAGACACGAA

C5: rs17234657

AGTGCTGAAGCGGAATTGAGCTCCTTAAGTTTTGTACATCATGTTTTTTAGGTTCCCACTGAGCTGATTTTTGGCCATGATTCACACATATCTCT
CCTCCAAGGCTCCTCTCAAAAGCATTTCCCTCCAGTCACGTT[G/T]TCAAATAGCTTCTCATTCCCTGTATGCCTGTGTGTGCATGGCCTCATCT
CACTTTGCTGTGACCATTGCTGCTCAT

C6: rs55646866

AGAGTCTCAGCCTCGTCAGTTATTCCTTCTAGTGCTGGGGACGAAGGGAAGAGGAGGAGAAGGAGCTGGGACCCAGCAGTGATGGGCCTAT
GGGAGGGAGGATA[C/T]GGCTGCACAGCCCTCAGCGCGTGGCTCAGGCAGGGTCAGCCCTCTGCACATGCCTCCCCCTACCACCACACAC
GTCATCGCCTTTTTATGTGGTCTGACTTTTTAGATTTTTCAACCTGAAGCTTGCTTTCTC

C7: rs6672995

AGGGTTCCTGGCTCCTACAGAAGACTTGCTTTAGGACTGAAGGCTATATTGCAGTCTGTGTTGGCCTTAGTCGCGGAGGGACATTTAA[A/G]GAT
GGACTTACTAGAAATGCTCTTCATATCCAGGAACACACAGCACATTTCTCTGATGGGCTGCTGGGACCTTACCATTTACTGGAACCCAACCT
CTGA

C8: ss107635144

ACTAGAGTGTGTGATTGAGGTAAAGCATGAGACCTGAACTGGCTTCAACACCAGGCT[C/T]GGTCACTCATGCCATGTGTCTTTGAGCAGGTTAC
TTAACCTATCTGTGCCTCACTTGTGTTTTCTT

C9: rs12037606

TCTTAGTACATACGTTCCAAAT[A/G]TGAATCAGCTGTGATAAAGCTTGTCAAAACACTAACTTAGTCTTAGACTGGGAACAGTACTAAAATAAAG
GGAATGTTAGATGTTGCATACCATGAACAGCTGAGCTACCT

C10: rs6601764

ATGGTTTTGAGCTTTCAGAGGTGACAGGAGT[C/T]AAGTAAGTGAAGTTATGATGTAAGCACACTTGAATGCTCCTTTAATCTTTAGAGCGGGGG
CCACTGATCTTTGTTAATTTCCACAAAATCTCTGCAAAGCCGCTTCTTCTGGATTACTCAGAAAAGCCTTCCAGATTGGTGA

C11: rs7807268

CTCTCTCTCTAAATGCCTTGGGACCATCATGTCTAACCTTCGCTACAGACATTGGTGAG[C/G]JACAGCTTAGGCCATGGTGATGTTCACTGT
AGTGTCCAAACAGGAGGAAATCACCTTCCAGTCCCTT

C12: rs6957669

TGGTGGTGATTACTGCCCTTGTCTGGGGTGCACACAGATGCATCTGGGAGGATCTGGAAGGGGCCTGCCCTCTTGAGCTTGGAGCTCCCTCAT
ATG[A/G]JTCCACAGTGAGGACACAGTCATTGTTGGTTAGAGACTGGGACTCAAGTTGTAGGCTCCTTTCAGTCTTTGCGTCA

C13: rs12970134

ACTGACTCTTACCAAACAAAGCATGA[A/G]CAAACAAAGATTTATCAGAAGGGTG

C14: rs17782313

CTTGGAAGCAGGAAAACCAGAATATATGTGAGCATCTTTAATGACTACAACATTATAGAAGTTTAAAGCAGGAGAGATTGTATCC[C/T]GATGGAA
ATGACAAGAAAAGCTTCAGGGGGAAGGTGACATTTAAGTTGGAATATTATTGAGGAGTATCATTTTAGCATCTGGGATTGAGGTAGC

C15: rs1859962

TCACAAAGAACACCTTGGACCAGTTCTTGATATAAATAAGAGGCTGCAGACTTTTCCAAATCCCTGCCCGTG[G/T]GATGAACACTTTAAAGGTCC
CAAGATTTCTAATAATGGGGCTAAATTTCCAAAATGTG

C16: rs983085

ggaattgtacaccatcaccaaatatggcatataccaggtatgtgaggctgggtcaatattgaaaaccagtcactgtaatacacctt[A/G]ttaacaaactaaggatgaaaaatgtacatgatcataacaatcaatg
gagaaaaagcatttgacaaaa

D1: rs10490072

**TTTGAAATGCAAGCTCCAAGAGAGTGAAGCCCCAGCCTGCACTGCCTTACTTTGT
GCAGAGAATGCTTCTTTGGTTATGTATATACATGC[C/T]TGCTTATTCTAATCCATGC
CTTTATTACGAAATTCATCTAATGTTGTGGCCAAATGGCAATAAAATAATATTATTAC
AGGACACGGGCCT**

D2: rs1153188

**GAAGATGGTCTGAATGGCAAAATGGATAAAATTTAAATCAAACTAGTGAAGTGA
ATAGCAAGGTGAGAAGTTCTTCTGAA[A/T]TGCAGTATAAAAGATAAAAAGAAATAC
AAAGAAAAAGTCATGAAGGACAGATCCAGTGGACGAAACA**

D3: rs13071168

**CCCACATCCAGACTTCTGCTCTGATTCTCACTTCCACTCACCACACGTACCCATCT
GTTACCCAAAATCACACTGCTGTTCACACCAGAAGTCCCTCCTCTACGATCA[A/G]A
TTCCTAATCCCAATTTCTACTCACACACCTCGTGGGAGGCCAACACCTTCTTCTGG
TTCTTCATTCTCTTCTCCTCCCCAGGGCTGACCATCACCAAAGCCAAACAGCT**

D5: rs17705177

**TCAGTTTCCTTCCCCAGAAAATTGTATATCTTGTAGGGTTATTGTGAAGATTAAGT
GGAATGTGCATGCAAAAGTACTTTGCAAACCAAAAGCTCTAGGTTGG[A/T]GTAAA
TAACTGAACTTTTAAAAAAAATTTACTTTAAGTTCTGGGATACAACGTGCAGAACGT
GC**

D6: rs358806

**actttctggagggcagtttgcaatATTTGTCAAATTTTGAATGTGCGTGGGCTTTGACCGAA
TAACTCTACTCACAAGGATATGTTCTAAAAAGAAAAACACACACGTACATGTGCAGT
ACAAACAGCAAACTCAATATTCAA[A/C]GTTCAATAAAATTCGTACCACTTTAAAT
GATGAGC**

D7: rs5015480

**GCTCACCCCTAGGGAAGTGTTCTTAGGGAAGCATTCTAATATTTCCAGCTGTCCAT
ATATTTTCAAACAAATAATAGGGTATTGAAGTAACTCGAATGTTGATTATA[C/T]GTT
TTCTATCAAATTATTCAAGTattcattcagaaaatatttattgagcacctacaatgtggc**

D8: rs7020996

**CATTGTGGGGGAAAGTCTGTCTTTAGAAAAGAAATGTAACTGGGCAAGTAGTCTC
ATCAGTTAAATGATTTCTTGTGACATAAGGTGAGGAAAAGAAGAA[C/T]AACTTTT
GGGAAAAGTAACTGTGAGAATACAAGGGAAGAAGAAAAATAAGGGGTTGAACATT
GAGGA**

D9: rs7659604

**GCAAATGTGTTAGGGTAGAGAACATTTTAATGTTATTATCCTAAAAGGAATCTTTAG
ACTGATAAAAGCTATGGTATTTAACTGTCATGGCTATAATGGCCTTAGCTATAACTT[
C/T]TGAATCTCAGTGGGAATGGTAGGGGAATAACTGTATTGCACAACCTGGTAACTT
ACCTTTTCTGATATTTCTCCAAGAGAGGCTGTTCA**

D11: rs2733359

**GAGGGTTGTGACGGTCAACTGTTTTTGTACACATCTTCGATTATTC[C/T]TCCTGTTT
TCAGCCTCATTCTCTCGTTCTAGGCCATCCTAAAGTACCTGTCATCTCTACGTCTGT
GGCCTTCTCTGGGCTCCACTAGGCATGTCCCCTTGCATGTATTCCAAGCTGG**

D15: rs4790797

**GGAGCTCTTTGCAAACCTGTGAAATTCTGTGTACTTTGAGGGAGAATAATTGTTAATA
TTTATTAACATT[A/G]TATTGTATGATTTAACCTTCATAATAATGGTTTTCTATACAG
AACCATTTTTTATTCTTGTTTTAGAGGCTGAAGTCTT**

D16: rs7223628

tcacaggggaagaagagagagaaagaaatgaaaataaacacagcttgcagcacattggcattaacatgagatcag
ctgctctctgacca[C/T]ttcctcatagttggttggtgcctattgtcttagaatcacactgaccctagattacagttcccttaa
ctgctcca

D17: rs8182352

aaccgtgctgtctcagcatattggtctgttctgcacaACCAAAGCTGTAACACTTCTGCTTTCTCT
GGGTTCAGCCCAGCAGAACCATAATGTGGAAATTTCAACTGGGCTGCCTCTGTC
[C/T]TTGGGCATATGCCTCCTCCTCCGTCAAACACACTG

D18: rs8182354

TGCAAATGAGATTTGGCTGTAAACCTCTAAACTCATCTCCTTCTGTTCCCTTACCTTC
TACCTTGCTCTTTACTTCTTATCATTCTAAGATAAATTCCC[C/T]TTTAGAGTTTCTGG
TCTTGAAATTACCCTTCTATTTTTGCTATATTGCCTGTGGTCTCCCTTTTTAAC**CACCT**
TGTAAGGCCACATCTC

D20: rs11761231

AAGGCATGCAGAGCTTTTGTGTTCAAAGAATTCTGTCTTTTTCTCCCTAAAGCCAT
TGCATTTGTTTCAAATCTACGTGTGACTACATTTGGAGATAAGTAGCC[C/T]TTTTCA
GACCTTCTTGATTTCAAACACAGATTTGGTCTGCACGTTCTCATGATAAGACAGAG
AAGGAGACCATGGAAATATTTTGCCT**GTCTGTAATTGGCAGGGCTG**

D23: rs6920220

TGCTACGGCAGCGTAACATAGTAGGTGAAGTACCCATTGATAAATTATATTTTATCT
GCTTCCATCTGTTAGCAGGTAACCTTCTCCACTAAAA[A/G]GATATGGTTCTGTAGAA
CAATGGCATATGCAGACAGTGATCTGTTATTCCACTATTCTCTTAAGCTATCAATCA
GATT**GATGAGGCAAATTTATGCTTC**

D25: rs6679677

ATTTTTCAGGTGCCCTGTTGGAAACTATTCAGTGCTTCCTGCGGCTACCAGCGAAC
AAGGTCTGAATCCTTGCTCCCAA[A/C]CAATAATCTGTGATCTTAAGCAATTTATTCA
ACTAACAAgcctgtttctcacctgtattatggagatagtcaccttctaaggatgtgaggattaaatgagaaaccc

D26: rs12141187

TCAGCATCAGTCACCTCAGCCAGGTCCCTGAATCACAGCCAAGCCTAGATGAGTG
GTATTATTGACCATGATAATGGGAGGATGAATGGTGGCTATGACTG[C/T]CTGCTGC
AATCAACCTTTAGGATGGCCAGAAATTCTGATTTGGCCAGCCCTTGGCCCAGAC**AG**
CAATGTCCCAAGA

D28: rs4132958

TAGACACAGGCCTGCACAAAGAGCTTGCAATCTATAGATGGATCAGTTGTCATTAT
ATAAAGCTCCATATCTTCATTATCAAAGCAGCTATGCTGAATGC[C/T]CTTCTCTGA
AAGATTGTAAGCAAGCTCTGCAGAACCTGGGCAGGCCAGGGTGAGCCTTGCTCTG
TGGAGATTATAACAGAAAATAAAAAATAAAGGAAAT**GTAGATGGGCATACCAGCTC**

D32: rs952477

GCCTTCATGCCCTGACTTCAGTGGGAGAGAATTAGGCATGGTTGGTAGTGGATTC
CCTCTCCTTTTCTCCTGTCC[A/G]TGGAGGCTATTGTTCCAAGCCCACCACAAGAGT
TCTTAAGCCTGGGATCCCAGAAG**GATTCCATTTGCCTTAAGCC**

D33: rs10798269

TGGACCATTTGAGGTGATGAGCCTGACCCTCTAAAAAAGGTTAAGCAATTTAATG
GGTGAGGAAGTTTTTTTGAAGCCTATATCCCAACCAGTTCCCCAGGGCAG[A/G]T
AGATTTGTAAGGAGAAAAGGAGGAGAGATTGGTGCACCTCAAGAAATCTAGATATT
CTTCAGGTAACAAACAAGAAAGCAGACACAGGTGAATGCTTT**GGTTTCCCTGGAG**
GTCTCTC

D35: rs729302

TGAAGCCCTGCTGAGAAAGTACTGGGTCCCTATTGGAACCCACTCTCTGCACATC
TGGAAATCTTTGGAAATAGACCAGAGACCAGGGTGCAGGTGTGCCATGGGACAAG
GTGAAGAC[**A/C**]CAGGATCACCTACACACC**AGAGTCCACCCAGTAGGA**

D36: rs11171739

GGAGGGACCAATCAACAGTCTTATAAGTAGATACAACAGTGTATAAACAAGGAAA
CCAAGGAAGATTTTTCTC[**C/T**]TTCAGAACTCGGACCCTGAATACCAGGTTGAGCTG
GAGCTGAGTGAGTAATAAAATGAAAGGCCCTT**AATGTGGGGGAGGGTAGGTAG**

Supplemental Tables: Table S9 (rs numbers refer to the SNP ID)

E1 rs7716600

TGTGAACTTGTATGGCAACCAAAATGATCAATATATGAAGTGAAGTAGGCATAACACTAAGAAGA
AACTAAAAAACTTATAATGATAGTTGAGTGTGTTAACCCATCTCTTTTGGAAACAGAGTAGCAGACAAGAAT
ATTATAGGAAGatgtgcacatgtacc[**A/C**]caaagcttaaagtacaattaaaaaaaaaagaaTATTATA**GGAAGATGGTGA**
AAAGGAAGAG

E2 rs11249433

TTGGAAACATGGATCCAAAACTGTGAAAGAAAAAGCAGAGAAAGCAGGGCTGGGTTTAA[**C/T**]T
TTGGAGTTCCTTGGTTGCTTCTCCTTAGCACAGTGACTCATTGATATCATCTTTAATTTCTCT**GGCTAA**
AGGTTTTCCAACAGATAT

E3 rs3803662

TTGTCATCCAAAGCACCAACTATGAGAGATATCTATGTGCAATGGTATATAGATCTGTCATAGAA
GGGTTTAATTATATCTGCCTAATGATTTTCTCCTTAATGCCTCTATAGCTGTC[**C/T**]CTTAGCGAAGAAT
AAAAGTGTGGACTGACCCCCACCCATTTGCGAAGAAAGTACTGGGTCTTCAGCTTTCATTGTTTCAGCCGG
TGG**TCTTTGTGGACAACACCAGG**

E4 rs393152

CCTACTGCCTTGAATCTGCTGAAGACCAAGCCCCTGCCCCCAAGCCATGGCAAAGAAGGAGG
GAAGGAAGCAAAGGTGCCAGCGGGGACAACCTCGGGGAGGGGCGAGGTGCCAGGGGCCAGGAAGGC
CAAGCAGCATGTGGCAGGGCAGCATCAGGTGACTCCCAAGAAGGAATGAGGAGAGGAT[**A/G**]TGAGGAA
AGAGCCACAGCACAGAGGCCT**GCTGTTAGGTCAGCGGAGAC**

E5 rs1491923

TCTGCACCTTTGGCTTTTAGGAATc[**C/T**]ACTTTGCTCTGGCATTCTCCTAATTTTCTAGAAAATTA
TTGGTCTATTTTCATAATTTTATCTTCATTTCCCTAAATCCCAAAATATTGATATTTCCCAAGGGTTTATTTTGA
CACTTTTCCCTTCTTGCTTGAGATCAATGATTCTTAATTA**ATGTGTGTTGGGAAAGAGGG**

E6 rs2736098

CGTGGTTTCTGTGTGGTGTCACCTGCCAGACCCGCCGAAGAAGCCACCTCTTTGGAGGGTGCGC
TCTCTGGCACGCGCCACTCCCACCCATCCGTGGGCCGCCAGCACCACGC[**A/G**]GGCCCCCATCCACAT
CGCGGCCACCACGTCCCTGGGACACGCCTTGCCCCGGTGTACGCCGAGACCAAGCACTTCCT**CTAC**
TCCTCAGGCGACAAGG

E7 rs801114

CTCCCCAGTGCATCATTTCAGTTTTGTCTTTACTTTCAAAGAAAGCTGTCTTTCTGACACTGCAT
TCTGCCCTTTCTGACCCA[**G/T**]GTCCCATATTTAAAGGCTTCACATAGACTATATAATCCAAGTTATC**CCT**
CTGTGGAGAAAGTGGCT

E8 rs2151280

actcgatggccctcaaaag[**C/T**]gaaacaagctactatcaggacctatagaaaaagtttgccaacctctACACTGTAGTATGCC
TTAAGGATTTTTAGAAGATTGAGTATGATAAACACTTTCAAAGAA**TGATGAAATTCTGAGAAATG**
GG

E9 rs4636294

GGTTGAGCCAGATCTTCAAGACTTAAAAGGATTTAAGTCC[**A/G**]ATAGTAAAAGGAGCGAAGG
GAATTCTAGTAAAAGGGAACAGCTTGAGGAATGACCTAGAGACATGACAGTGATCTTTGGAGAAATGGCA
GTTAGACAGACATTCTGTCTAC**TCGTTTCCCTGTTACATCCC**

E10 rs823128

ACTGGCTTTGGGTTGTTACAGT[**A/G**]GGATACAAATTCCTGCTTCATCTCTTAATAGTTAGGTGA
ACTGTGTAGTACTTTTTTATCCTAACCTCAGGCCTAACATATGAAATGAGGATAACATATGCCTTTAAGA
GTTGTGCATGATTTTGAAATATGTATAAAGTACC**TGGTGAATTATTTGGCATCT**

E11 rs947211

AAAGGCCAGGGAAAGAAGACAGGAAAAAAGTGAAAACATAAGAGAAAAATTTGCTTCA[**A/G**]AG
AACTGGTTGTGTGGTTCCCAACTGTCCATATGGCACAGGAAAGTCTCATCTGTGAAACAAAATAAAGTTCC
CTTCCAACACAGACATGACTGTTCTAATTTCTATGTTATTTCAACTCTCTAGGAGGTGAGAAAAGCAGAAA
TTATTGCACCCTAGGCCAT

E12 rs2736990

ATGTCTGCCTTTGCATCAGATAATGGCTTACAAGTTAATCTCCTCTTGCTCCCTGTTACACACATA
TACA[C/T]CTTCTTCCTAAACAGCTCATAAGGTGAAAGAAAGACTCAGATTTCTGACTATGTAATTGATAAT
ATCACACGGACTGCCTGCTCATCATCTGCTAG**TCACATTGGCAGAGTTGACAG**

E13 rs12418451

GTAAGGGAGTGCTGCTCCTGGACCTGCTCCTGAGAATGGCTCCTGGGAGTGATGTAGGTGACT
GATTGATGGGGTGGGACGAAGCTGGGCAGAGGCTTGGGTAGCTGGGACTGTAACAGTTATGTGAGAGGA
AGCGGGAATCTGAGAGAGTTGCC[A/G]GGGCAAATGTAGGCCCCAGCCCTGGTTCAGGGGACAGC
CCAGGGATAGTCACCAGGG**ATCCAGCGATGTGTGTGTGT**

E14 rs10896449

agcagaatgtggaaggatgggcaggagttgtctaagagaagagtgtggcaatagaagggcaccctgggccacaggaacaacatagc
tgaaagatgaggagtcaagaaatattctggcaccatgggtactattagcagtttaactttacaggagctgaaa[A/G]ttaagaaggggaatgtcaag
agatgaggctgaacctgg

Supplemental Tables: Table S10 (rs numbers refer to the SNP ID)

Table 1. Chromatin state maps of 43 IDAGL

Diseases/Traits/Map Features	LDL TC	HDL TG	HDL TC	LDL TC	LDL TC	LDL TC	TG HDL	CAD	CAD	T2D	T2D	T2D	T1D	T1D	RA	RA	RA	UC	CD	CD	CD	CD	CD	CD	PC CRC	PC CRC	NLP1	BC	PD	PD	PD	PD	SCZH	Longevity	Longevity	Longevity	T2D	CD	CD	BC	BC	MEL	RA	HT	HDL	Disease/Trait/Map Feature	Percent Coverage									
																																																rs127	rs484	rs581	rs439	rs442	rs551	rs104	rs238	rs727
SNP	74	6914	080	401	0638	720	2034	206	8	0596	1	7	0986	4677	9677	572	777	895	9220	7	2995	6	2660	3287	6	0880	312	128	6990	152	7	6860	0638	3807	2138	5	1764	3662	1592	6294	0	6098	5436	score	SNP											
transRNA								1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	32	transRNA	74.419								
Enhancer Function	1																								1	1																				3	Enhancer Function	6.9767								
H3K4Me1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	42	H3K4Me1	97.674						
H3K4Me3	1	1	1	1	0	1	1	1	0	1	1	0	0	0	1	1	1	0	0	0	1	1	0	0	0	0	1	0	0	1	0	1	0	1	0	1	0	1	1	1	1	1	0	0	1	1	1	1	1	26	H3K4Me3	60.465				
H3K36Me3	1	1	1	1	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	23	H3K36Me3	53.488						
H3K27me3	1	1	0	1	0	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	0	0	0	1	0	1	1	1	0	1	0	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	30	H3K27me3	69.767				
Polycmb	1	1	1	1	0	1	0	1	0	0	0	0	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	31	Polycmb	72.093					
NFKB				1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12	NFKB	27.907					
STAT1	1			1				1												1	1					1	1								1													11	STAT1	25.581						
HEY1	1	1	1	1	1	1																						1			1																		9	HEY1	20.93					
JUND	1	1	1	1	1	1				1	1																																						9	JUND	20.93					
e-JUN	1			1	1	1	1			1																																								8	e-JUN	18.605				
p300	1	1		1							1															1	1																								7	p300	16.279			
BAF166	1			1	1																																													7	BAF166	16.279				
FOSL2	1	1	1	1	1	1																											1																7	FOSL2	16.279					
TAF1				1												1	1																																	6	TAF1	13.953				
CEBP	1	1	1																							1	1																								5	CEBP	11.628			
e-FOS																																																			5	e-FOS	11.628			
Rad21				1																							1	1																								5	Rad21	11.628		
CTCF				1																																																5	CTCF	11.628		
PU.1	1													1																																						4	PU.1	9.3023		
BATF				1																																																	4	BATF	9.3023	
IRF4													1																																								3	IRF4	6.9767	
EBF																																																						2	EBF	4.6512
HNF4A	1	1																									1	1																									4	HNF4A	9.3023	
RXRA				1	1																																																4	RXRA	9.3023	
e-MYC	1			1																																																		3	e-MYC	6.9767
MAX	1			1																																																		3	MAX	6.9767
BAF170				1	1																																																3	BAF170	6.9767	
Brg1				1	1																																																2	Brg1	4.6512	
Ini1	1			1																																																	2	Ini1	4.6512	
OR	1																																																					3	OR	6.9767
Chromatin state score	19	12	9	22	2	14	4	6	6	4	8	5	4	3	5	5	9	15	5	5	4	4	7	10	11	5	4	7	5	6	4	8	3	8	3	5	5	5	5	5	3	2	4	5												
Phenotype	Blood Lipids	Blood Lipids	Blood Lipids	Blood Lipids	Blood Lipids	Blood Lipids	Blood Lipids	CAD	CAD	T2D	T2D	T2D	T1D	T1D	RA	RA	RA	UC	CD	CD	CD	CD	CD	CD	PC	PC	NLP	BC	PD	PD	PD	PD	SCZH	Longevity	Longevity	Longevity	T2D	CD	CD	BC	BC	MEL	RA	HT	HDL											

Legend: LDL, low density lipoproteins; TC, total cholesterol; HDL, high density lipoproteins; TG, triglycerids; CAD, coronary artery disease; T2D, type 2 diabetes; T1D, type 1 diabetes; RA, rheumatoid arthritis; UC, ulcerative colitis; CD, Crohn's disease; PC, prostate cancer; CRC, colorectal cancer; SCZH, schizophrenia; BC, breast cancer; PD, Parkinson's disease; MEL, melanoma; HT, hypertension.

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