SUPPLEMENTS

Supplement 1. Genomic sequences of the *Arabidopsis thaliana* SNP loci analyzed in the study (30nt from each side of the SNP position). Loci 1-138 form the *A. thaliana* SNP genotyping kit. Loci A-H were used during development of the LDR-TaqMan kit in the initial test experiments. Sequences of loci 1-138 and A-F were selected from the MASC-SNP database (http://www.mpiz-koeln.mpg.de/masc/) and are polymorphic for accessions Col-0 and C24. Loci "G" and "H" are polymorphic for accessions Columbia (Col-0) and Landsberg *erecta* (L*er*) [Cho et al., 1999].

Locus	Chromosome position, Mbp	MASC number	Genomic sequence
			Chromosome I
1	0.85	MASC03692	CCCCAAAGTTCGTAGATGAAAATGGTAACA C GAGGACTTAAAACAAGAAAGTTCCTCGCAA (Col-0) CCCCAAAGTTCGTAGATGAAAATGGTAACA A GAGGACTTAAAACAAGAAAGTTCCTCGCAA (C24)
2	2.04	MASC06796	ATAGTTTGGTCTTTTATATATCACAGATTG T AGACAGGCATTACTCAAAGTGAAGCCATGT (Col-0) ATAGTTTGGTCTTTTATATATCACAGATTG C AGACAGGCATTACTCAAAGTGAAGCCATGT (C24)
3	2.69	MASC02113	TTTTCGAAAATTACACCAGATTCACCAAAC G CGACGCGCCTCTTCCTTCTTGGTCTTCCTC (Col-0) TTTTCGAAAATTACACCAGATTCACCAAAC C CGACGCGCCTCTTCCTTCTTGGTCTTCCTC (C24)
4	4.10	MASC07144	CAGAAGCAAGAGACAAAGTCATGGACGAAG G AGACACACATTTCATGTTGGTTTGTAGTAT (Col-0) NNNNNGCAAGAGACAAAGTCATNGACGAAG A AGACACACATTTCATGTTGGTTTGTAGTAT (C24)
5	5.40	MASC00817	AGTTGAGACCCTCTCTGGTGTCCTCGCCGG A TCTCTTGTATCCGGTGTTCAGGTAAAGTAT (Col-0) AGTTGAGACCCTCTCTGGTGTCCTCGCCGG C TCTCTTGTATCCGGTGTTCAGATCGCCATA (C24)
6	6.82	MASC06752	ACCTGGTTCCACCGACGCTTACAGTTATCC T CTAAAGAGTTGCAAATACATATTCATGCTC (Col-0) ACCTGGTTCCACCGACGCTTACAGTTATCC A CTAAAGAGTTGCAAATACATATTCATGCTC (C24)
7	7.83	MASC02593	TTTAGAAGGTAAAGACAAATGTGCTCTTGA T GGGAAACAAACCATCAAATCTGCTGAGTAA (Col-0) TTTAGAAGGTAAAGACAAATGTGCTCTTGA A GGGAAACAAACCATCAAATCTGCTGAGTAA (C24)
8	8.69	MASC07163	AAGCCAAAGGTTAGGACAAAGGTAGCAACA A ATCAGTATTCAGAATTGGAGATGACATCGT (Col-0) AAGCCAAAGGGTAGNANAATGGTAGCAACA C ATCAGTATTCAGAANNNNAGATGACATCGT (C24)
9	9.84	MASC06722	TATTTCAGAGTTGTGTAGTGTAGTTGCAAG T GGCGGTTGGATCTTTCACTATCTTGTTGGA (Col-0) TATTTCAGAGTTGTGTAGTGTAGTTGCAAG C GGCGGTTGGATCTTTCACTATCTTGTTGGA (C24)
10	10.70	MASC02175	TCGAAGACCATTGAACTGAGGCAATGTAGT C ATCATAGTGCTAGCCATTTTCTTAGTTGAT (Col-0) TCGAAGACCATTGAACTGAGGCAATGTAGT T ATCATAGTGCTAGCCATTTTCTTAGTTGAT (C24)
11	11.91	MASC04228	TTAAAAATGGGATAACATTTTAGTGCATAA C AAAGTTTTAGACTTAAGGTTGAAAAAACGA (Col-0) TTAAAAATGGGATAACATTTTAGTGCATAA G AAAGTTTTAGACTTAAGGTTGAAAAAACGA (C24)
12	13.07	MASC00364	GACGACTGATTCCGCGAATTTCGGAGCGAC G GTGAATGCGGTTCGAGACGTCGACGCAGTG (Col-0) GACGACTGATTCAGCGAATTTCGGAGCGAC A GTGAATGCGGTTCGAGACGTCGACGCAGTG (C24)
13	15.37	MASC04127	GAGCATCTTACAGCAGCTCAAACTTCAAAT A TCGTAGTGCTGAGCATTAAGTACCTGCGAT (Col-0) GAGCATCTTACAGCAGCTCAAACTTCAAAT G TCGTAGTGCTGAGCATTAAGTACCTGCGAT (C24)
14	16.35	MASC06782	TTGAGAGATACCTTGTTCTTTGAGACCGAG G GCAGATCGGACGTTTTTGCCGGGAGGAATG (Col-0) AAACAATGGACCTTGTTCTTTGAGACCGAG A GCAGATCGGACGTTTTTGCCGGGAGGAATG (C24)
15	17.48	MASC03340	CCAAATATGCTGACCTAAATATTTTCAGAC G GATCAAATGGGCCGCGTTGTAAACGACCTA (Col-0) CCAAATATGCTGACCTAAATATTTTCAGAC A GATCAAATGGGCCGCGTTGTAAACGACCTA (C24)
A	17.66	MASC05011	GACAAACAAGAGAAGCGGAGAAAGTGAGAC G GTAAGGATCTCTCCGGTGTCGGCTTTTGTT (Col-0) GACAAACAAGAGAAGCGGAGAAAGTGANAC A GTAAGGATCTCTCCGGTGTCGGCTNNNNNN(C24)
16	18.21	MASC06866	TGGCCGGTCCTCTTCTGGCAAATCCGGCTT T TACAAGCGGTTTTGGCCGGCTTTTATCCTT (Col-0) TGGCCGGTCCTCTTCTGGCAAATCCGGCTT C TACAAGCGGTTTTGGCCGGCTTTTATCCTT (C24)
17	18.72	MASC06707	CCTACCGCCAAGATATGCCGTAACTGAGTT T GCTATTTAACCAGCAACTGTATCTATGTCG (Col-0) CCTACCGCCAGGATATGCCGTAACTGAGTT C GCTATTTAACCAGCAACTGTATCTATGTCG (C24)
18	19.76	MASC00330	TCCTCCCACCTCATCAAGCTTCGTCAGGAA T GTCCACTCGGATGTCACCGTATCGTAGGAG (Col-0) TCCTCCCACCTCATCAAGCTTCGTCAGGAA C GTCCACTCGGATGTCACCGTATCGTAGGAG (C24)
19	20.62	MASC06991	GTTCAGCAAGAGACAAGTGTTCATCTCACC G GTCTCGTTAAAAGATCGGGAAGAGAGGAGG (Col-0) AGAGCGCAAGAGACAAGTGTGCATCTCACC C GNCTCGTTAAAAGATNNGGAAGAGAGGAGG (C24)
20	20.75	MASC07052	GTCGTGATGTCACTTAACCATCATCAACCC T TCGAATTAGTTCCTAGAAACCTATTATATC (Col-0) GNCGTNGTGTCACTNNNNNNTCATCAACCC A TCGAATTAGTNNNNNNNNNNNTNNNNNNNN (C24)
21	21.93	MASC04194	TGATTTCTAAGCCACTGTGAGTGCCCTTGA C TTGATTATATATTCGGATTGTGTTGTTTTC (Col-0) TGATTTCTAAGCCACTGTGAGTGCCCTTGA T TTGATTATATATTCGGATTGTGTTGTTTTC (C24)
22	23.17	MASC02688	AGCAGAACGAAGAGAGTAACGAACGATGAC T GGTTTACTTTCAAATTCAGAGAAGAAGGAA (Col-0) AGCAGAACGAAGAGAGTAACGAACGATGAC C GGTTTACTTTCAAATTCAGAGAAGAAGGAA (C24)
23	23.83	MASC00381	AATCTCTGCAACTGCCTCTTCGGTTTTCAG G ATTAAGGAATTGTATTGATCAGCTTGAGTG (Col-0) AATCTCTGCAACTGCCTCTTCGGTTTTCAG A ATTAAGGAATTGTATTGATCAGCTTGAGTG (C24)

B	23.83	MASC06750	CGAAAGATGGTGAGTTTTTGAGACACAACT A GGATATTTCTTAATGGTTTGTGCCACTAAT (Col-0) CGAAAGATGGTGAGTTTTTGAGACACAACT G GGATATTTCTTAATGGTTTGTTGCCACTAA (C24)
24	24.31	MASC06880	AGAGGCCTTTTCAGATTGTATTATTAGTAC C AATACCAAAGGTTTCAATAAAGGTCAAACA (Col-0) NNNNNNNNNNNNNNNNNNTATTATTAGTAC A AATACCAAAGGTTTCAATAAAGGTCAAACA (C24)
25	25.41	MASC06750	CGAAAGATGGTGAGTTTTTGAGACACAACT A GGATATTTCTTAATGGTTTGTGCCACTAAT (Col-0) CGAAAGATGGTGAGTTTTTGAGACACAACT G GGATATTTCTTAATGGTTTGTTGCCACTAA (C24)
26	26.79	MASC00629	GTACCAAGCTCTCAAGATGTCTCTCGGTGT A TTCACCGCTTTCAGCATCGGTGTTGGGGTT (Col-0) GTACCAAGCTCTCAAGATGTCTCTCGGTGT C TTCACCGCTTTCAGCATCGGTGTTGGGGTT (C24)
27	28.02	MASC07087	AGAGTCAATCCATGTTATTGTTCTTGGTTT C TCTGCTGCTGTCATTACAGACGTTGATATC (Col-0) NNANNCAATCCATGTTATTGTTCTTGGTTT T TCTGCTNNNGTCATTACAGACGTTGATATC (C24)
28	29.09	MASC07132	ATCGGCTTGGGCTTACACGGTGGCGCAATT T AGCTGGCCGTTCCAGTGGAGTCAGCGGGTC (Col-0) ATCGGCTTGGGCTTACACGGTGGCGCAATT G AGCTGGCCGTTCCAGTGGAGTCAGCGGGTC (C24)
Chromosome II			
29	0.55	MASC00780	ATCTCATCTCCAGCTTCCTCTTTCGATATC G TCTCGTCCTTGTTGTTGTTTCTGCTACCAC (Col-0) ATCTCATCTCCAGCTTCCTCTTTCGATATC A TCTCGTCCTTGTTGTTGTTTCTNNNNCCAC (C24)
30	1.40	MASC06840	GCTCGTTGGCTTCACCGCGACATAAACACC C TGTGGGTTATTCACCTTGACGGTATACATC (Col-0) GCTTGTTGGCTTCACCGCGACATAAACACC A TGTGGGTTATTCACCTTGACGGTATACATC (C24)
31	1.83	MASC05644	ATTGAAGACCCAACTGCTCGTTTAGCTAGT C TATCGGCACATCTATTTTGTTGGCGAGGTT (Col-0) GTTGAAGACCCAACTGCTCGTTTAGCTAGT G TATCGGCACATCTATTTTGTTGGTGAGATT (C24)
32	2.99	MASC05961	TGTTTCCGCTTTCTTGTGTTGATGACAAAT G AGACAAAGCTTGAACCCTTGAGAGGTGCAA (Col-0) TGTTTCCGCTTTCTTGTGTTGATGACAAAT T AGACAAAGCTTGAACCCTTGAGAGGTGCAA (C24)
33	3.53	MASC05803	CCTAGCCATCTCTTCTACTCTCAAATCACT A ATAAGGTTCAAATTACCCTAGAACTACTCT (Col-0) CCTAGCCATCTCTTCTACTCTCAAATCACT G ATAAGGTCCAAATTACCCTAGAACTACTCT (C24)
34	4.26	MASC00334	GGTAAGGAGAAGCTGAAGAGCAACAGGGAC A TAAAGATTGAGGTCAAGAGCTTTGAGCTTG (Col-0) AGTAAGGAGAAGCTGAAGAGCAACAGGAAC G TAAAGATTGAGGTCAAGAGCTTTGAGCTTG (C24)
35	5.49	MASC00325	CTCGATATGTACCTCATTCACATTTCCTAG G TGTCCAATTCTGAAAACCTTTCCAGCCACT (Col-0) GAGAAGTTGCAACTCATTCACATTTCCTAG A TGTCCAATTCTGAAAACCTTTCCAGCCACT (C24)
36	6.90	MASC06802	CAAAAGGAAAGAATGGCAAAAGCTATGGAG C TTTGGGTGGGAGAGATGAAGAAGATGAGTG (Col-0) CAAGAAGAAAGAATGGCAAAAGCTATGGAG G TTTGGCTGGGAGAGATGAAGAAGATGAGTN (C24)
37	7.84	MASC05754	ATGGTGTGGCTCCCTGAAAAATTGAGGTCA A ATTATGATAAACCCGTTATTAAGGTTCAAC (Col-0) NNNNNNNNNNNNNNNNAAAAATTGAGGTCA G ATTATGATAAACCCGTTATTAAGGTTCAAC (C24)
38	8.85	MASC06950	TTAAGCAAGACATGACTTTGATCACACAGC T TAGGCGTTTTATACGTCTTTTGTTTCTCCC (Col-0) TTAAGCAAGACATGACTTTGATCACACAGC A TAGGCGTTTTATACGTCTTTTGTTTCTCCC (C24)
39	9.90	MASC02456	TCTTGCATCCGTAACAGAGTTTGACAATGA T GATAAAGTTAGCTGTGCCGATTCCTGGGCT (Col-0) TCTTGCATCCGTAACAGAGTTTGACAATGA C GATAAAGTTAGCTGTGCCGATTCCTGGGCT (C24)
40	10.88	MASC02949	TTCCGCATCCACAAAACCACATACAAAAGA T CACCAGCAACAAAGCCTATGGCAGCATTTG (Col-0) TTCCGCATCCACAAAACCACATACAAAAGA A CACCAGCAACAAAGCCTATGGCAGCATTTG (C24)
41	11.84	MASC02006	CGTACTTGGTCTAACTTCGACGTATCCCCA A GCTTCGGATCCATCGGAGTTAATTTTTCTT (Col-0) TGCTTTTGGTCTAACTTCGACGTATCCCCA T GCTTCGGATCCATCGGAGTTACTTTTTCTT (C24)
42	12.71	MASC02493	CTAGAATAGTCAAGGTACACAAGGCTGGGT A TCTGAAAGCAACATTTGTAAGCCTCATAAC (Col-0) CTAGAATAGTCAAGGTACACAAGGCTGGGT G TCTGAAAGCAACATTTGTAAGCCTCATAAC (C24)
43	12.97	MASC06704	GGGGGAAAGTAAACACACATGAAAATAGTT T TTAGTCTTTACTTAACAATTACAAGAAACT (Col-0) GGGGGAAAGTAAACACACATGAAAATAGTT C TTAGTCTTTACTTAACAATTACAAGAAACT (C24)
44	13.73	MASC02513	TCAAGATGGACACCATTGTCAATAATAGGA C TAGAACTGAACGAATGGGTCGGTCTTTGGT (Col-0) TCAAGATGGACACCATTGTCAATAATAGGA T TAGAACTGAACGAATGGGTCGGTCTTTGGT (C24)
45	14.47	MASC02138	CGGCCGAATCACCATGCGCAAAGCCTCCAA G CCCACCGGTCCATCCGGCAGCCCATGGTAC (Col-0) CGGCCGAATCACCATGCGCAAAGCCTCCAA A CCCACCGGTCCATCCGGCAGCCCATGGTAC (C24)
46	14.98	MASC02033	TTGGGAGTCGGAGTTAGTCCCGGAAACGTC T CCGGAAGTACTACCAAAATGAAGCTGATTG (Col-0) TTGGGAGTCGGAGTTAGTCCCGGAAACGTC C CCGGAAGTACTACCAAAATGAAGCTGATTG (C24)
47	16.08	MASC02203	GGCTACGTGCTCCAAGGTGGTGTCATTCCC C CAGCGTGTTGCTCCGGCGTTAAAAACCTCA (Col-0) GGCTACGTGCTCCAAGGTGGTGTCATTCCC A CAGCGTGTTGCTCCGGCGTTAAAAACCTCA (C24)
48	16.69	MASC02122	GAAATTCCGGTCAAGATTCTCCCACATCGC C GGATCCTCTCCCTGCTCTGCCTCCTCCGCC (Col-0) GAAATTCCGGTCAAGATTCTCCCACATCGC T GGATCCTCTCCCTGCTCTGCCTCCTCCGCC (C24)
49	17.27	MASC07056	ATCAGGCTTTGGAAAGAATGGTGAGATGGT T AAGAAATCAAGTGGAAACAGGAGCCCGAGA (Col-0) ATTTGGCTTTGGAAAGAATGGTGAGANGGT G AANNAATCANNNNNAAACAGGAGCCCNNNN (C24)
50	18.38	MASC00371	TAGTTACTCTGGTGGTGGTCCAGGATCATA C TACTGAATGTGAGTGTGTTTGGTTCCTTCC (Col-0) TAGTTACTCTGGTGGTGGTCCAGGATCATA T TACTGAATAATTTCACATGACCGAGGCTGC (C24)
51	19.49	MASC02585	CAACAACCCTTAGCACTTTCCGTTTCAAGC C TAGAGGGATTTTGCCGCCTGCCGATCCGAT (Col-0) CAACAACCCTTAGCACTTTCCGTTTCAAGC T TNGAGGGATTTTGCCGCCTGCCGATCCGAT (C24)
Chromosome III			
52	0.66	MASC03427	TTATGTTATTGCAGCAGATTGATGTTCTTG A GTCAGTGATAAGTGTATTGCCATATGAATT (Col-0) TTATGTTATTGCAGCAGATTGATGTTCTTG T GTCAGTGATAAGTGTATTGCCATATGAATT (C24)
53	1.51	MASC04687	CGGCTTTTCTATAAAACCTCGGGGATTAGA C CGGTTTCGGCCTAGGATTAACCCCGGTTAT (Col-0)

			CGGCTTTTCTATAAAACCTCGGGGATTAGA T CGGTTTCGGCCTAGGATTAACCCCGGTTAT (C24)
54	2.33	MASC03739	AGAAAAGTTTAAAGAATCTGATAAGAAGAA G AATAGCGGATAACAACATGACAATACAATT (Col-0) NGAAAAGTTTAAAGAATCTGATAAGAAGAA T AATAGCGGANNNNAACATNNNAATACAATT (C24)
55	2.89	MASC06761	AGACATCTAAAAGATATGATCAAAACAAAC A CAAAAGACAATGATCGGCTAAAAGATAAGC (Col-0) AGACATCTAAAAGATATGATCAAAACAAAC G CAAAAGACAATGATCGGCTAAAAGATAAGC (C24)
56	3.58	MASC00562	AACGGTGTGTGATACTTCAGGTACCAAAGC G GATGAATCAAAGGCAACAGGAGATGGCTTG (Col-0) AACGGTGTGTGATACTTCAGGTACCAAAGC A GATGAATCAAAGGCAACAGGAGATGGCTTG (C24)
57	4.23	MASC04486	TATCAAAAGAACAAAAGGATTTTGGATAAA C TTAAATCTGTTAACAGCATGAAAAATTAAT (Col-0) TATCAAAAGAACAAAAGGATTTTGGATAAA T TTAAATCTGTTAACAGCATGAAAAATTAAT (C24)
58	4.82	MASC04506	AGCATCTATCAGATACTATCCAGTCCTATA A TCTAAATATGATTCTCACAAAGCAAGTCTT (Col-0) AGCATCTATCAGATACTATCCAGTCCTATA G TCTAAATATGATTCTCACAAAGCAAGTCTT (C24)
59	5.68	MASC01310	AGGTGTCGACAATGTCAACAACCTTTTGAG T AGAGTCATCAACACCTTCATCCTCACCACC (Col-0) AGGTGTCGACAATGTCAACAACCTTTTGAG C AGAGTCATCAACACCTTCATCCTCACCACC (C24)
60	6.57	MASC04279	AATAAATGTTATGACCTTACTATGGAGATT G TATCGATCACATTTCTTGAACACTTGATTT (Col-0) AATAAATGTTATGACCTTACTATGGAGATT A TATCGATCACATTTCTTGAACACTTGATTT (C24)
61	7.41	MASC04554	GAAATATATCATTAACGCTCTAATATTGTT C ATTAGAAACTCAGATATCAACCCCATATTT (Col-0) NNNNNNNNNNNNNAACGCTCTAATATTGTT G ATTAGAAACTCAGATATNNNNCCCATNNTT (C24)
62	8.51	MASC01228	TGGACTGGTTCTTCGGCGTAAAATAAGTAT A GCTAAAGACAATCAACGAGTTTTCCGGATT (Col-0) TGGACTGGTTCTTCGGCGTAAAATAAGTAT T GCTAAAGACAATCAACGAGTTTTCCGGATT (C24)
63	9.54	MASC06970	GGAAAAAGTGGATATCGATCTCAGCTAGCT A GCTGACTTATGTGGTTTGGTTGGTAAGAAA (Col-0) GGAAAAAGTGGATATCGATCTCAGCTAGCT T GCTGACTTATGTGGTTTGGTTGGCAAGAAA (C24)
64	10,44	MASC01418	ATCGATCAAAGGGTATTTCTGGACACCGGA C TTGCATCTTCTGGTATCAGAATACATCCCC (Col-0) ATCGATCAAAGGGTATTTCTGGACACCGGA G TTGCATCTTCTGGTGTCAGAATACATCCCC (C24)
65	10.91	MASC01389	TCTTCCTCTGCTGAATCAAGACGCTCTACT T CCTCAGCTAGCGGGTTTCTTAGGACGCAAG (Col-0) TCTTCCTCTGCTGAATCAAGACGCTCTACT G CCTCAGCTAGCGGGTTTCTTAGGACGCAAG (C24)
66	11.05	MASC04551	CGATGTTTAAAACGGGTAATTTGAAATTGT A ACAGGGAAAGGGAAATGCAAGAGTTAAACC (Col-0) CGATGTTTAAAACGGGTAATTTGAAATTGT G ACAGGGAAAGGGAAATGCAAGAGTTAAACC (C24)
67	14,3	MASC05047	GATTGGTTTCTATCGAATTGAATTTATAAA C CGATTTAACCCAAATTTATGGGGAAATAGA (Col-0) GATTGGTTTCTATCGAATTGAATTTATAAA A CGATTTAACCCAAATTTATGGGGAAATAGA (C24)
68	12.53	MASC04262	GTCAGAATTCTCTTATCAAGTAGAGTAACA A AAAGTGATGAGAAAACAGAAGAATAAGGTG (Col-0) GTCAGAATTCTCTTATCAAGTAGAGTAACA G AAAGTGATGAGAAAACAGAAGAATAAGGTG (C24)
69	14.95	MASC03581	AATCTGCGAAAAAAAAAGAAGGAAAAAATAT T GATCTCATCTAATTTGATTAACACAGATGA (Col-0) AATCTGCGAAAAAAAAAGAAGGAAAAAATAT C GATCTCATCTAATTGATTAACACAGATGAT (C24)
70	15.61	MASC01016	TGAATGTACTGAAGTTAGAGCGCTTTTTGA G CTTTCTCTTGTTGATCAAAGTGGTAAAGGG (Col-0) NNNNNNNNCTGAAGTTAGAGCGCTTTTTGA T CTTTCTCTTGTTGATCAAAGTGGTAAAGGG (C24)
71	16.17	MASC01173	TGAGCTTCTATTGAAAGAAGTGAGTGGTAA A GACATTGCTGAGCTGATTGCTTCTGGTAGG (Col-0) TGAGCTTCTATTGAAAGAAGTGAGTGGTAA G GACATTGCTGAGCTGATTGCTTCTGGTAGG (C24)
72	16.17	MASC01172	CGTTTTGGGCGGAAACGCTAATCCTTCTGC T GATAATATCAAAGATATCATCGGAGCTGGT (Col-0) CGTTTTGGGCGGAAACGCTAATCCTTCTGC A GATAATATCAAAGATATCATCGGAGCTGTT (C24)
73	17.25	MASC06941	GGTTCAGAATTATCCGCCACCAACATCCGT C GTCGCTTTTTCTCCTCCCATTCTTCCCATA (Col-0) GGTTCAGAATTATCCGCCACCAACATCCGT T GTCGCTTTTTCTCCTCCCATTCTTCCCATA (C24)
74	17.98	MASC00949	CAACAAGATCATCACAAAGAGCTTCAGCTT T TACCTTCTCCACCGTCTACCGAATCTCCGG (Col-0) CAACAAGATCATCACAAAGAGCTTCAGCTT C TACCTTCTCCACCGTCTACCGAATCTCCGG (C24)
75	18.69	MASC06897	AGAGAAACCGAGACGTCATCATGGATTGAC G ACACAGAAGAAGCAAGAGATTAAGGAAGCT (Col-0) AGNNNNNNNNNNNNNNNNNNNATGGATTGAC T ACACAGAAGAAGCAAGAGATTAAGGAAGCT (C24)
76	19.69	MASC02511	GCAGTAACTTTGGCTCTACGACCATTCCAC G TGAAACAGCCTGCTTTTGTTGATGACAACC (Col-0) GCAGTAACTTTGGCTCTACGACCATTCCAC T TGAAACAGCCTGCTTTTGTTGATGACAACC (C24)
77	21.72	MASC07382	GTGCTAAACTCCGTGGAAAGAAGTAGAAGT G TAGAACAAAGCTCTTAAAGGTAACAACAAA (Col-0) GTGCTNNACTCCGTGGAAAGAAGTAGAAGT T TNNNNNNNNNCNNNNNNNNNNNNCAACAAA (C24)
78	22.16	MASC06869	TAAAGTTATTTTTGATTCGTAATAACCTTA C TTTGATGAATCAACAAAAACATCAGTTTGA (Col-0) TAAAGTTATTTTTGATTCGTAATAACCTTA T TTTGATGAATCAACAAAAACATCAGTNNNN (C24)
79	22.63	MASC04925	GAAGGCATGTATCCTATTTAGCATTTCTTT T AACTCTGCCATTTTTCTCCAACACTTGGTC (Col-0) GAAGGCATGTATCCTATTTAGCATTTCTTT C AACTCTGCCATTTTTCTCCAACACTTGGTC (C24)
80	23.23	MASC01018	CCCATCCCCGGTTTCTTCGCCTTTCCTTGA T GCAGCTCTTAGTTTACGTTGTTCTTCTTTG (Col-0) CTCATCCCCGGTTTCTTCGCCTTTCCTTGA G GCAGCTCTTAGTTTACGTTGTTCTTCTTTG (C24)
Chromosome IV			
C	0.04	MASC02820	AGTTGTGGTAATAACAAAGGTAAGAGGGGT T AGCCATAGGAGCTCCAATCTGAGAGTGAGG (Col-0) AGTTGTGGTAATAACAAAGGTAAGAGGGGT C AGCCATAGGAGCTCCAATCTGAGAGTGAGG (C24)
D	0.50	MASC02948	TATCTTCAACATCACATCTGTTATTTCCTC G ATAGTCGCCTTTCGGTTCTCCTCATAGTTC (Col-0) TATCTTCAACATCACATCTGTTATTTCCTC C ATAGTCGCCTTTCGGTTCTNNNNATAGTTC (C24)
81	0.54	MASC09031	ATCTCCTCTGAGAGTGACAGCAATCCCAAG A GGTTGATCTTCCCTGATCTTGAAAGTAGCA (Col-0) ATCTCCTCTGAGAGTNNNNNNNNNNNCAAG T GGTTGATCTTCCCTGATCTTGAAAGNNGCA (C24)
82	1.60	MASC02898	CTAGACGAGTTTCACTTCTTGACTGGAAAA A CATCGAAGAGAATTGTGACGAACCATTCGC (Col-0)

			CTAGACGAGTTTCACTTCTTGACTGGAAAA T CATCGAAGAGAATTGTGACGAACCATTCGC (C24)
83	2.19	MASC05039	GTGTTTGTTTTTGTGAGAGAAACTGTTGGA T GACACATCACTATACTAAGAAAGTCTTGTT (Col-0) GTGTTTGTTTTTGTGAGAGAAACTGTTGGA C GACACATCACTATACTAAGAAAGTCTTGTT (C24)
84	2.98	MASC03713	ACAACCCAACCCATAACAATAAACGTTAGT T AAGCAACAAGCAACAAGCAATCAATATGCA (Col-0) ACAACCCAACCCATAACAATAAACGTTAGT C AAGTAACAAGCAACAAGCAATCAATATGCA (C24)
85	4.15	MASC06447	CGCTAACTTTATAGAAACAATGTCACCTTA - CAATTACTCAGCCATAATCAACACTCTTTC (Col-0) CGCTAACTTTATAGAAACAATGTCACCTTA A CAATTACTCAGCCATAATCAACACTCTTTC (C24)
E	4.15	MASC04672	TATGCACCATCTATCTCTGTTTTCAGAATA T ATCTCCAGCTATCAATTAAAACCCCAAAAA (Col-0) TATGCACCATCTATCTCTGTTTTCAGAATA C ATCTCCAGCTATCAATTAAAACCCCAAAAA (C24)
86	4.89	MASC02334	TGGAGCTACCAACCCAGCAGCTTCTGAGCC T GGAACTATCCGTGGGGACTTTGCTATTGAC (Col-0) TGGAGCTACCAACCCAGCAGCTTCTGAGCC G GGAACTATCCGTGGGGACTTTGCTATTGAC (C24)
F	5.09	MASC02658	TTGCGGTGGAACAGCAAAATGTTTCTAGTC G ACAACCTTGTTCAGATGTTTCGCTTCTTCT (Col-0) TTGCGGTGGAACAGCAAAATGTNTCTAGTC C ACAACCTTGTTCAGATGTTTCGCTTCTTCT (C24)
87	5.38	MASC01708	AGAAAAAGCCAGCTCCTGCTAAGTCCAAGG C TGTCTCTGAGACTAGCGATGAGCTCGCCAA (Col-0) AGAAAAAGCCAGCTCCTGCTAAGTCCAAGG T TGTCTCTGAGACTAGCGATGAGCTCGCCAA (C24)
88	5.77	MASC01786	TGCATCAAGGATCAAAGTTCTTCAAGCGCA A GACGATATTGTCAATGCCATGAAAGACCAA (Col-0) TGCATCAAGGATCAAAGTTCTTCAAGCGCA G GACGATATTGTCAATGCCATGAAAGACCAA (C24)
89	6.76	MASC03091	CTCATAGGTCATGCCAACCTTGAGAAGCTT C GACCTAGGAATCGCAAGTGCTTTGTCTCCT (Col-0) CTCATAGGTCATGCCAACCTTGAGAAGCTT G GACCTAGGAATCGCAAGTGCTTTGTCTCCT (C24)
90	7.26	MASC00932	AGCATTATATCTGGTGGATTCTTCCTTTTC G CAATCTTTATCCTTGGCCCTCACGTCATGC (Col-0) AGCATTATATCTGGTGGATTCTTCCTTTGC A CAATCTTTATNCTTGGCCCNCACGTCATGC (C24)
91	7.54	MASC06765	TTTCTATTTCGTGAGGAATTCATTTTGAGC G TTTTGTTATCGTGTTTTTTAGTTTCTAGGG (Col-0) TTTCTATTTCGTGAGGAATTCATTTTGAGC T TTTTGTTATCGTGTTTTTTAGTTTCTAGGG (C24)
92	7.93	MASC03275	AGGACGTGTTCAATGGATCGTGCACAGACA C AGGAAGTCCAAGCTACACATGTTTTCTAGA (Col-0) AGGACGTGTTCAATGGATCGTGCACAGACA G AGGAAGTCCAAGCTACACATGTTTTCNNNN (C24)
93	8.72	MASC03264	TTTGATTTGACAGTGGAGAAGAGAGAGTGG A AAGGTGTATTTATAGGAAAGAGTCAAGTCA (Col-0) TTTGATTTGACAGTGGAGAAGAGAGAGTGG T AAGGTGTATTTATAGGAAAGAGTCAAGTCA (C24)
94	9.58	MASC02545	TTGACTCTTGAGCTGAGTATGAGCCACAAT T TTTTCTTGTGCATCTCGGTTTAGCTTGTAG (Col-0) TTGACTCTTGAGTTGAGTATGAGCCACAAT A TTTTCTTGTGCATCTCGGTTTAGCTTGTAG (C24)
95	10.54	MASC05317	CGCTAACTTCAATAACTGGAATGGCTCTTG C AGTCTCCTTTAGTTGAATACAACTTTAGAG (Col-0) CGCTAACTTCAATAACTGGAATGGCTCTTG T AGTCTCCTTTAGTTGAATACAACTTTAGAG (C24)
96	11.21	MASC03502	TCATTATGAAGAAAGTAAATTTCATGTTGA A TACTCATGGAAAATCATATGATCCTAAGAA (Col-0) TCATTATGAAGAAAGTAAATTTCATGTTGA G TACTCATGGAAAATCATATGATCCTAAGAA (C24)
97	12.19	MASC03074	ACAGCATCTCCACGTTGAAGAGTGCAATGA A CTCCTCTACTTCAATCTCCCATCACTCACT (Col-0) ACAGCATCTCCACGTTGAAGAGTGCAATGA T CTCCTCTACTTCAATCTCCCATCACTCACT (C24)
98	13.23	MASC00134	GCAAGCGCATACGATTTTGATCTGGTTTGC G TTGTACCGGTATGTGACACCTGAGATTGTC (Col-0) NNNNNNNNNTACGATTTTGATCTGGTTTGC A TTGTNNCGGTATGTGACACCTGAGATTGTC (C24)
99	14.25	MASC03981	TAGGAAGGCTGAGCTTCTAGGAGATCCGGC T AGAAGCCTTCAAGGACTCCGGCGTAAGACC (Col-0) TAGGAAGGCTGAGCTTCTAGGAGATCCGGC C AGAAGCCTTCAAGGACTCCGGCGTAAGACC (C24)
100	15.17	MASC01774	TGCACGAGGATCATCAGCGAGTTCATTGAT C CTATTGTTGCGGCTCTCTTGCATGTATGCT (Col-0) TGCACGAGGATCATCAGCGAGTTCATTGAT T CTATTGTTGCGGCTCTCTTGCATGTATGCT (C24)
101	16.33	MASC03234	TCGTGCTACTCGCGGTAGAATACTATGGTG C CAACCAGATGAGTTGGACTGGAAAGAGGTA (Col-0) TCGTGCTACTCGCGGTAGAATACTATGGTG T CAACCAGATGAGTTGGACTGGAAAGAGGTA (C24)
102	17.11	MASC03593	TGAGTTTAGTGTCACAATTCAACTTGATGA A AATTTGGTAGGGAATATGTGCAATTCACTG (Col-0) TGAGTTTAGTGTCACAATTCAACTTGATGA C AATTTGGTAGGGAATATGTGCAATTCACTG (C24)
G		149*	AAGCAAGCGGCGAACATTTAAGACCAAACT G TTGTAAAACGTCGGGAGAAACAGAGAGCGA (Col-0) AAGCAAGCGGCGAACATTTAAGACCAAACT A TTGTAAAACGTCGGGAGAAACAGAGAGCGA (Ler)
H		200*	ATACGACGGAGCTAAATCGAGATCGTTAAA C CCTCCGAAGACTTCACGGTAGTCAAAACCT (Col-0) ATACGACGGAGCTAAATCGAGATCGTTAAA A CCTCCGAAGACTTCACGGTAGTCAAAACCT (Ler)
Chromosome V			
103	0	MASC02357	CCCCTCCCATTGCAAATGCAGCTCCAGCTG T AGTAGTTGCACAAGGGATCAGGGCATCACC (Col-0) CCCCTCCCATTGCAAATGCAGCTCCAGCTG C AGTAGTTGCACAAGGGATCAGGGCATCACC (C24)
104	0.29	MASC02301	CACAAGCCGGAGGAGTGGTAGTGGATCCAA A GTACTGCGCTCCTTACCCTATAGATATGGC (Col-0) CACAAGCCGGAGGAGTGGTAGTGGATCCAA G GTACTGCGCTCCTTACCCTATAGATATGGC (C24)
105	0.97	MASC03527	GCGGTATAAATGTACAGCAATGTAATTAAA T ATAGCTTTCAGTGCATTGCTACAAAGACAT (Col-0) NNNGTATAAATGTACAGCAATNNNNTTAAA C ATNNNNNNCNNNNCNNNNNNNNANNNNNNN (C24)
106	1.26	MASC02659	GGCAGGAAAATGTCCCAGTAGATGAGAGGC C AAATTTGGAGCAAACAACTCTAACGCAATT (Col-0) GGCAGGAAAATGTCCCAGTAGATGAGAGGC T AAATTTGGAGCAAACAACTCTAACGCAATT (C24)
107	1.93	MASC07003	GCATTGACTCTTGACTAGCAATCAAAAGTC A ACGTCACACTTGGTCGGCTGAAAAACAAAC (Col-0) GCATTGACTCTTGACTAGCAATCAAAAGTC T ACGTCACACTTGGTCGNCTGAAANNNNNAT (C24)
108	2.33	MASC06955	CTAATTTCTCATTCTTCAGGTTCAGTTTCA T AATTTAAACAAGATGCAGCTCAAAGTCCCT (Col-0) GTTCTACTACTCTTTTTGGGTTCAGTTTCA G AATTTAAACAAGATNCAGCTCAAAGTCCCT (C24)
109	3.06	MASC07135	CAGGAAATGCTTCTAAGTGTGTCTTGTCTT A TCTGGTTCGTGGTGGTGAGTTTGTTACAAA (Col-0)

			CAGGAAATGCTTCTAAGGTGTCTTGTCTCT C TCTGGTTCGTGGTGGTGAGTTTGTTACAAA (C24)
110	3.76	MASC07027	ATTGCAGTTCATGGCGCTAAACCCTCAATT A CTACCCAATGGGATGCCTGTTCCCTTTGTT (Col-0) ATTGCAGTTCATGGCGCTAAACCCTCAATT G CTACCCAATGGGATGCCTGTTCCCTTTGTT (C24)
111	4.83	MASC01141	ACAAAATCGCCTTGGATTGAGGAAGCTTTC G TCTATTGGAGAAGGAGGAGAAGGTGTCGCT (Col-0) ACAAAATCGCCTTGGATTGAGGAAGCTTTC T TCTATTGGAGAAGGAGGAGAAGGTGTCGCT (C24)
112	5.34	MASC01512	GCCTTATCTTTGGGAGAACGAAAAGCAGTC G TACCTACGCCATGCTGTACTCTTTGGTTTC (Col-0) GCCTTATCTTTGGGAGAACGAAAAGCAGTC A TACCTACGCCATGCTGTACTCTTTGGTTTC (C24)
113	6.46	MASC07146	TCTTCATCAAAACAGACAAGAGTATCAGCA A AATCATGAGAACTCAAGAAGTACTCTCACC (Col-0) TCTTCATCAAAACAGACAAGAGTATCAGCA G AATCATGAGAACTCAAGAAGTACTCTCACC (C24)
114	6.86	MASC02390	ACCATAGTGCGAGAGGTACCACTGCTTGAA C GGAGCAGCATCAACCTGAACAATAGCACTC (Col-0) NNNNNNNNNNNNNNNGTACCACTGCTTGAA A GGNGCAGCATCAACCTGAACAATAGCACTC (C24)
115	7.89	MASC01061	TTGGCGTTGTGGGCTCAAGCTTAGAGATCG A CATGAGGAAAGAGGATTCACATCGCCTCAA (Col-0) TTGGCGTTGTGGGCTCAAGCTTAGAGATCG G CATGAGGAAAGAGGATTCACATCGCCTCAA (C24)
116	8.16	MASC09029	CCATAGGAAGCTGAAGATGAGAAGAATTCC T CGTATCAAATTTCCTCAGAGACATTCTATC (Col-0) NNNNNNGAAGNNNNNNNNNNNNNNNNTCC C CGTATCAAATTTCCTCAGAGACATTCTATC (C24)
117	8.57	MASC04080	CACTTATTGAAACAGTAAGAGAAAGCCCAA T TGAAGATCTAGCCAGCTGCATCATGGTAAC (Col-0) CACTTATTGAAACAGTAAGAGAAAGCCCAA C TGAAGATCTAGCCAGCTGCATCATGGTAAC (C24)
118	9.4	MASC07157	TGCTGTGTATTGTAGCTCTTCTCTATCCCA T AAAAGCCCACTCTTCTTCTTCTTGTCCATG (Col-0) NNCTGTGTATTGTAGCTCTTCTCTATCCCA G AAAAGCCCACTCTTCTTCTTCTTGTCCATG (C24)
119	10.44	MASC02368	CCATGCTTTCTCTAACTGCAACAACTCTCA G TTCCTCCATTTTCACACAATCCAAAACCCA (Col-0) NNNNNNNNNCTCTAACTGCAACAACTCTCA A TTCCTCCATTTTCACACAATCCAAAACCCA (C24)
120	11.03	MASC03957	TTATTCTAAATGGATAAATCATGATCCTTA G CCAAATAGTTTTCCCTCATATTGATTATGG (Col-0) TTATTCTTAATGGATAAATCATGATCCTTA T CCAAATAGTTTTCCCTCATATTGATTATGG (C24)
121	11.85	MASC01174	TTCCTCACTTCTTCTCGATCACCTCGCCGC G ATTTTCCCCGATATGGATAAGCAGGTCCTT (Col-0) TTCCTCACTTCTTCTCGATCACCTCGCCGC A ATTTTCCCCGATATGGATAAGCAGATTCTT (C24)
122	13.41	MASC01463	TTCGTGGTAGCTTTTACTTATTTTTTCCCA G ATTGGTTATTACTACCAATTGGATCTTGTG (Col-0) TTCGTGGTAGCTTTTACTTATTTTTTCCCT T ATTGGTTATTACTACCAATTGGATCTTGTN (C24)
123	13.94	MASC04360	ACATTCTACCTAACCAGGACATTGGTCAGT T ATACTCAAACTGTATTGAACACTTTAATCA (Col-0) ACATTCTACCTAACCAGGACATTGGTCAGT C ATACTCAAACTGTATTGAACACTTTAATCA (C24)
124	14.52	MASC07142	GATGACAGGTCCATTGGAGAGATCAAAAGC C GCATCATTCAACTAAAGAAAACCAAAACTC (Col-0) AATGACGGGTCNATTGGAGAGATCAAAAGC A GCATCATTCAAATCGAGACGAAGATCATTT (C24)
125	15.32	MASC01031	TACACCAGATGCAAACGCTTTCCTAAGGGC A TGTAACATACTCCTTATATATTCTCTATGT (Col-0) TACACCAGATGCAAACGCTTTCCTAAGGGC C TGTAACATACTCCTTATATATTCTCTATGT (C24)
126	16.34	MASC07103	TGTTATGTACACACACATTTTCACTACATT T CTCTCATGAACTGCTCTTATCTTTTTTTTT (Col-0) TGTTATGTACACACACATTTTCACTACATT C CTCTCATGAACTGCTCTTATCTTTTTTTTC (C24)
127	17.39	MASC02529	GCTTGAAGTGTTATCAGGTCATTCGATGAC C GTAAACTGTGTAAGCTGGAACCCGAAAAAT (Col-0) NNNTGNAGTGTTATCAGGTCATTCGATGAC T GTAAACTGTGTAAGCTGGAACCCGAAAAAT (C24)
128	18.42	MASC01225	TTGTCAAATATTTGCAGGAAACAAGATATC G ACACAGACAGGTATAGGAACAGGAATAGCC (Col-0) CTCCATCGTTATCTTCGGAAACAAGATATC A ACACAGACAGGTATAGGAACAGGAATAGCC (C24)
129	19.29	MASC07053	GTACACATAATGCTCCTTTGTTTATTTCTT C ATCTTTCTAATGCCCTATCAATAAGTTTTC (Col-0) GTACACATAATGCTCCTTTGTTTATTTCTT T ATCTTTCTAATGCCCTATCAATAAGTTTTN (C24)
130	20.41	MASC01040	AGAAGAGAGCTTTTCGTACTTGGATGCACC G GTCGAGAGGATTGCAGGAGCTGATGTTCCA (Col-0) AGAAGAGAGCTTTTCGTACTTGGATGCACC A GTCGAGAGGATTGCAGGAGCTGATGTTCCA (C24)
131	21.36	MASC06375	AGAAAACGCTCTTGTAACAAATAATCTTAT T AGGAAAATTCAAACACCCATGTGTCAGATT (Col-0) AGAAAACGCTCTTGTAACAAATAATCTTAT - AGGAAAATTCAAACACCCATGTGTCAGATT (C24)
132	22.18	MASC06718	AGTCTCCCACAGACTTTGTCTTGCCCTGAA G TCTCTAAGCTATAAATATGTCTTTTGCTGT (Col-0) AGTCTCCCACAGACTTTGTCTTGCCCTGAA T TCTCTAAGCTATAAATATGTCTTTTGCTGT (C24)
133	22.94	MASC07081	TAGTCGTCTTCGTCATCTTCATCATTTCTT G ATCGGAAAAAGTTTCTAGCGACGGCTGAAG (Col-0) NNNNNNNNNNNNTCANCTTCATCATTTCTT A ATCGGAAAAAGTTTCTAGCGACGGCTGANN (C24)
134	23.6	MASC07047	AGGCAAAAAAAACATAATTTACATGTTATAT T ATCTTATTTGAACTCTTGCCATTTCTTTTC (Col-0) AGGCAAAAAAAACATAATTTACATGTTATAT C ATCTTATTTGAACTCTTGCCATTTCTTTTC (C24)
135	24.28	MASC07050	CTCTCCGGTCAATATAAAGCAGTTTGGAGG G TTCTTTAATACATTTACCGAATACAGCTTC (Col-0) CTCTCCGGTCAATATAAAGCAGTTTGGAGG A TTCTTTAATACATTTACCGAATACAGCTTC (C24)
136	25.05	MASC06792	TATTCACATTAACTTGTTCCGGATTCTGAT C AAATCTTCTGCTTCTTCTTTAAATAACACT (Col-0) TATTCACATTAACTTGTTCCGGATTCTGAT G AAATCTTCTGCTTCTTCTTTAAATAACACT (C24)
137	25.8	MASC01516	AGAAGAGCTATCCTCGAATGATCCGATAGA A GACGCATGAGCTCTATAATTTCGATCGATC (Col-0) AGAAGAGCTATCCTCGAATGATCCGATAGA G GACGCATGAGCTCTATAATTTCGATCGATC (C24)
138	26.17	MASC07165	GGAGTCTCCAAAGTCACCAATGGCACTACT C GCGATAGAGTAAAGCCTGAGCTTGTGCGGC (Col-0) NNNNNNNCCAAAGTCACCAATGGCACTACT G GCGATAGANNNAAGCCTGAGCNNGTGCGGC (C24)

Supplement 2. Sequences of locus-specific oligonucleotides (5'→ 3' oriented) for *A. thaliana* SNP loci analyzed in the study. Loci 1-138 form the *A.thaliana* SNP genotyping kit. Loci A-H were used during development of the LDR-TaqMan kit. 5'- and 3'-end pentanucleotides for preparation of DOs by the ligation-based synthesis are marked bold. DOR_G and DOR_H were prepared by conventional synthesis, so they do not contain overhangs for ligation.

Locus	Chromo-some position Mbp	MASC number	Oligo name	Genomic sequence	Length nt	T anneal. °C
Chromosome I						
1	0.85	MASC03692	#L1_01	**ACGGG**AACTTTCTTGTTTTAAGTCCTCG	28	57.5
			#L2_01	**ACGGG**AACTTTCTTGTTTTAAGTCCTCT	28	54.5
			#R_01	TGTTACCATTTTCATCTACGAACTT**CGGTC**	30	55.0
			#PCR_01r	CGAAGTTCGTAGATGAAAATGGTAACA	27	66.2
2	2.04	MASC06796	#L1_02	**ACGGG**TTCACTTTGAGTAATGCCTGTCTA	29	54.5
			#L2_02	**ACGGG**TTCACTTTGAGTAATGCCTGTCTG	29	57.0
			#R_02	CAATCTGTGATATATAAAAGACCAAACTAT**CGGTC**	35	55.0
			#PCR_02r	GACCGATAGTTTGGTCTTTTATATATCACA	30	64.3
3	2.69	MASC02113	#L1_03	**ACGGG**AATTACACCAGATTCACCAAACG	28	56.5
			#L2_03	**ACGGG**AATTACACCAGATTCACCAAACC	28	55.5
			#R_03	CGACGCGCCTCTTCCTT**CGGTC**	22	60.2
			#PCR_03r	TATCCCGTTAGACCGAAGGAAGA	23	66.2
4	4.10	MASC07144	#L1_04	**ACGGG**AGACAAAGTCATGGACGAAGG	26	57.1
			#L2_04	**ACGGG**AGACAAAGTCATGGACGAAGA	26	55.3
			#R_04	AGACACACATTTCATGTTGGTTTGT**CGGTC**	30	60.0
			#PCR_04r	ACAAACCAACATGAAATGTGTGTCT	25	64.9
5	5.40	MASC00817	#L1_05	**ACGGG**CCTGAACACCGGATACAAGAGAT	28	57.9
			#L2_05	**ACGGG**TCTGAACACCGGATACAAGAGAG	28	58.5
			#R_05	CCGGCGAGGACACCAGAG**CGGTC**	23	61.0
			#PCR_05r	GTTAGACCGCTCTGGTGTCCT	21	64.1
6	6.82	MASC06752	#L1_06	**ACGGG**CACCGACGCTTACAGTTATCCT	27	56.8
			#L2_06	**ACGGG**CACCGACGCTTACAGTTATCCA	27	58.5
			#R_06	CTAAAGAGTTGCAAATACATATTCATGCT**CGGTC**	34	59.7
			#PCR_06r	GAGCATGAATATGTATTTGCAACTCTTTAG	30	65.0
7	7.83	MASC02593	#L1_07	**ACGGG**TAAAGACAAATGTGCTCTTGAT	27	55.2
			#L2_07	**ACGGG**TAAAGACAAATGTGCTCTTGAA	27	56.1
			#R_07	GGGAAACAAACCATCAAATCTGCT**CGGTC**	29	61.0
			#PCR_07r	GCAGATTTGATGGTTTGTTTCCC	23	66.9
8	8.69	MASC07163	#L1_08	**ACGGG**TTAGGACAAAGGTAGCAACAA	26	56.0
			#L2_08	**ACGGG**GTAGGACAATGGTAGCAACAC	26	55.5
			#R_08	ATCAGTATTCAGAATTGGAGATGACAT**CGGTC**	32	62.3
			#PCR_08r	GATGTCATCTCCAATTCTGAATACTGAT	28	64.7
9	9.84	MASC06722	#L1_09	**ACGGG**TGAAAGATCCAACCGCCA	23	57.7
			#L2_09	**ACGGG**TGAAAGATCCAACCGCCG	23	59.7
			#R_09	CTTGCAACTACACTACACAACTCTGAAATA**CGGTC**	35	59.2
			#PCR_09r	TTAGACCGTATTTCAGAGTTGTGTAGTGTA	31	64.2
10	10.70	MASC02175	#L1_10	**ACGGG**CATTGAACTGAGGCAATGTAGTC	28	54.9
			#L2_10	**ACGGG**CATTGAACTGAGGCAATGTAGTT	28	54.6
			#R_10	ATCATAGTGCTAGCCATTTTCTTAGTTGAT**CGGTC**	35	60.0

			#PCR_10r	TCAACTAAGAAAATGGCTAGCACTATGAT	29	65.2
11	11.91	MASC04228	#L1_11	**ACGGG**ATGGGATAACATTTTAGTGCATAAC	30	54.3
			#L2_11	**ACGGG**ATGGGATAACATTTTAGTGCATAAG	30	54.5
			#R_11	AAAGTTTTAGACTTAAGGTTGAAAAAACGA**CGGTC**	35	59.4
			#PCR_11r	CCGTCGTTTTTTCAACCTTAAGTCTA	26	65.5
12	13.07	MASC00364	#L1_12	**ACGGG**CGTCTCGAACCGCATTCACC	25	62.1
			#L2_12	**ACGGG**CGTCTCGAACCGCATTCACT	25	59.5
			#R_12	GTCGCTCCGAAATTCG**CGGTC**	21	64.4
			#PCR_12r	CGCGAATTTCGGAGCGAC	18	68.7
13	15.37	MASC04127	#L1_13	**ACGGG**CTTACAGCAGCTCAAACTTCAAATA	30	55.8
			#L2_13	**ACGGG**CTTACAGCAGCTCAAACTTCAAATG	30	58.1
			#R_13	TCGTAGTGCTGAGCATTAAGTACCT**CGGTC**	30	57.3
			#PCR_13r	CGTTAGACCGAGGTACTTAATGCTCA	26	66.5
14	16.35	MASC06782	#L1_14	**ACGGG**CCTTGTTCTTTGAGACCGAGG	26	57.2
			#L2_14	**ACGGG**CCTTGTTCTTTGAGACCGAGA	26	55.4
			#R_14	GCAGATCGGACGTTTTTGC**CGGTC**	24	58.7
			#PCR_14r	GGCAAAAACGTCCGATCTGC	20	65.1
15	17.48	MASC03340	#L1_15	**ACGGG**TGCTGACCTAAATATTTTCAGACG	29	56.2
			#L2_15	**ACGGG**TGCTGACCTAAATATTTTCAGACA	29	54.5
			#R_15	GATCAAATGGGCCGCGTT**CGGTC**	23	60.2
			#PCR_15r	AACGCGGCCCATTTGAT	17	66.0
A	17.66	MASC05011	#L1_A	**ACGGG**AAGCGGAGAAAGTGAGACG	24	56.0
			#L2_A	**ACGGG**AAGCGGAGAAAGTGAGACA	24	53.9
			#R_A	GTAAGGATCTCTCCGGTGT**CGGTC**	24	60.5
			#PCR_Ar	CGACACCGGAGAGATCCTTAC	21	64.4
16	18.21	MASC06866	#L1_16	**ACGGG**CCAAAACCGCTTGTAA	21	55.5
			#L2_16	**ACGGG**CCAAAACCGCTTGTAG	21	55.1
			#R_16	AAGCCGGATTTGCCAGAAGA**CGGTC**	25	60.3
			#PCR_16r	CTTCTGGCAAATCCGGCTT	19	65.9
17	18.72	MASC06707	#L1_17	**ACGGG**CAAGATATGCCGTAACTGAGTTT	28	54.0
			#L2_17	**ACGGG**CAGGATATGCCGTAACTGAGTTC	28	56.3
			#R_17	GCTATTTAACCAGCAACTGTATCTATG**CGGTC**	32	55.8
			#PCR_17r	CGCATAGATACAGTTGCTGGTTAAATA	27	64.3
18	19.76	MASC00330	#L1_18	**ACGGG**TCATCAAGCTTCGTCAGGAAT	26	55.8
			#L2_18	**ACGGG**TCATCAAGCTTCGTCAGGAAC	26	56.3
			#R_18	GTCCACTCGGATGTCAC**CGGTC**	22	58.1
			#PCR_18r	TAGACCGGTGACATCCGAGT	20	64.1
19	20.62	MASC06991	#L1_19	**ACGGG**AGACAAGTGTTCATCTCACCG	26	55.6
			#L2_19	**ACGGG**ACAAGTGTGCATCTCACCC	24	54.6
			#R_19	GTCTCGTTAAAAGATCGGGAAGAGA**CGGTC**	30	59.8
			#PCR_19r	CTCTTCCCGATCTTTTAACGAGAC	24	64.6
20	20.75	MASC07052	#L1_20	**ACGGG**TCACTTAACCATCATCAACCCT	27	55.5
			#L2_20	**ACGGG**TCACTTAACCATCATCAACCCA	27	57.2
			#R_20	TCGAATTAGTTCCTAGAAACCTATTATAT**CGGTC**	34	55.7
			#PCR_20r	CTATCCCGTTAGACCGATATAATAGGTTTC	31	65.5
21	21.93	MASC04194	#L1_21	**ACGGG**CAACACAATCCGAATATATAATCAAG	31	55.3
			#L2_21	**ACGGG**CAACACAATCCGAATATATAATCAAA	31	56.4
			#R_21	TCAAGGGCACTCACAGTGG**CGGTC**	24	60.9

			#PCR_21r	CCACTGTGAGTGCCCTTGA	19	64.8
22	23.17	MASC02688	#L1_22	**ACGGG**CGAAGAGAGTAACGAACGATGACT	29	53.0
			#L2_22	**ACGGG**CGAAGAGAGTAACGAACGATGACC	29	55.5
			#R_22	GGTTTACTTTCAAATTCAGAGAAGAAGGA**CGGTC**	34	56.2
			#PCR_22r	CGTCCTTCTTCTCTGAATTTGAAAGTA	27	65.0
23	23.83	MASC00381	#L1_23	**ACGGG**AAGCTGATCAATACAATTCCTTAATC	31	55.1
			#L2_23	**ACGGG**AAGCTGATCAATACAATTCCTTAATT	31	54.8
			#R_23	CTGAAAACCGAAGAGGCAGTTG**CGGTC**	27	62.8
			#PCR_23r	CAACTGCCTCTTCGGTTTTCA	24	65.9
B	23.83	MASC06750	#L1_B	**ACGGG**CACAAACCATTAAGAAATATCCT	28	57.5
			#L2_B	**ACGGG**CAACAAACCATTAAGAAATATCCC	29	57.5
			#R_B	AGTTGTGTCTCAAAAACTCACCATCTTT**CGGTC**	33	65.1
			#PCR_Br	CGAAAGATGGTGAGTTTTTGAGACA	25	66.7
24	24.31	MASC06880	#L1_24	**ACGGG**ACCTTTATTGAAACCTTTGGTATTG	30	57.2
			#L2_24	**ACGGG**ACCTTTATTGAAACCTTTGGTATTT	30	56.1
			#R_24	GTACTAATAATACAATCTGAAAAGGCCTCT**CGGTC**	35	57.3
			#PCR_24r	CGAGAGGCCTTTTCAGATTGTATTATTAGTA	31	66.2
25	25.41	MASC06750	#L1_25	**ACGGG**CACAAACCATTAAGAAATATCCT	28	55.1
			#L2_25	**ACGGG**CAACAAACCATTAAGAAATATCCC	29	57.7
			#R_25	AGTTGTGTCTCAAAAACTCACCATCTTT**CGGTC**	33	56.6
			#PCR_25r	CGAAAGATGGTGAGTTTTTGAGACA	25	66.7
26	26.79	MASC00629	#L1_26	**ACGGG**CTCTCAAGATGTCTCTCGGTGTA	28	54.8
			#L2_26	**ACGGG**CTCTCAAGATGTCTCTCGGTGTC	28	55.2
			#R_26	TTCACCGCTTTCAGCAT**CGGTC**	22	63.4
			#PCR_26r	CCGTTAGACCGATGCTGAAAG	21	65.3
27	28.02	MASC07087	#L1_27	**ACGGG**AATCCATGTTATTGTTCTTGGTTTC	30	56.2
			#L2_27	**ACGGG**AATCCATGTTATTGTTCTTGGTTTT	30	55.9
			#R_27	TCTGCTGCTGTCATTACAGACGTT**CGGTC**	29	59.7
			#PCR_27r	CCGAACGTCTGTAATGACAGCA	22	66.8
28	29.09	MASC07132	#L1_28	**ACGGG**ACACGGTGGCGCAATTT	22	56.7
			#L2_28	**ACGGG**ACACGGTGGCGCAATTG	22	58.2
			#R_28	AGCTGGCCGTTCCAGTGG**CGGTC**	23	60.4
			#PCR_28r	CCACTGGAACGGCCAGCT	18	68.5
Chromosome II						
29	0.55	MASC00780	#L1_29	**ACGGG**CAGCTTCCTCTTTCGATATCG	26	55.2
			#L2_29	**ACGGG**CCAGCTTCCTCTTTCGATATCA	27	56.9
			#R_29	TCTCGTCCTTGTTGTTGTTTCTG**CGGTC**	28	61.2
			#PCR_29r	CAGAAACAACAACAAGGACGAGA	23	64.8
30	1.40	MASC06840	#L1_30	**ACGGG**AACCGCGACATAAACACCC	24	55.1
			#L2_30	**ACGGG**AACCGCGACATAAACACCA	24	54.0
			#R_30	TGTGGGTTATTCACCTTGA**CGGTC**	24	61.0
			#PCR_30r	CGTCAAGGTGAATAACCCACA	21	64.2
31	1.83	MASC05644	#L1_31	**ACGGG**CCAACTGCTCGTTTAGCTAGTC	27	54.6
			#L2_31	**ACGGG**CCAACTGCTCGTTTAGCTAGTG	27	55.5
			#R_31	TATCGGCACATCTATTTTGTTGG**CGGTC**	28	57.5
			#PCR_31r	CCAACAAAATAGATGTGCCGATA	23	64.1
32	2.99	MASC05961	#L1_32	**ACGGG**CTTTCTTGTGTTGATGACAAATG	28	57.2
			#L2_32	**ACGGG**CTTTCTTGTGTTGATGACAAATT	28	57.2

			#R_32	AGACAAAGCTTGAACCCTTGAGAGG**CGGTC**	30	61.8
			#PCR_32r	CGCCTCTCAAGGGTTCAAG	19	64.5
33	3.53	MASC05803	#L1_33	**ACGGG**TAGTTCTAGGGTAATTTGAACCTTATT	32	54.4
			#L2_33	**ACGGG**AGTTCTAGGGTAATTTGGACCTTATC	31	55.5
			#R_33	AGTGATTTGAGAGTAGAAGAGATGGCTAGG**CGGTC**	35	61.6
			#PCR_33r	CTAGCCATCTCTTCTACTCTCAAATCACT	29	64.6
34	4.26	MASC00334	#L1_34	**ACGGG**CTGAAGAGCAACAGGGACA	24	57.3
			#L2_34	**ACGGG**CTGAAGAGCAACAGGAACG	24	57.0
			#R_34	TAAAGATTGAGGTCAAGAGCTTTGAG**CGGTC**	31	61.1
			#PCR_34r	CGCTCAAAGCTCTTGACCTCA	21	66.4
35	5.49	MASC00325	#L1_35	**ACGGG**AGAAAGGTTTTCAGAATTGGACAC	29	55.4
			#L2_35	**ACGGG**AGAAAGGTTTTCAGAATTGGACAT	29	54.9
			#R_35	CTAGGAAATGTGAATGAGGTACATATCGAG**CGGTC**	35	61.2
			#PCR_35r	CGATATGTACCTCATTCACATTTCCTA	27	64.3
36	6.90	MASC06802	#L1_36	**ACGGG**TTCATCTCTCCCACCCAAAG	25	55.9
			#L2_36	**ACGGG**TTCATCTCTCCCAGCCAAAC	25	56.0
			#R_36	CTCCATAGCTTTTGCCATTCTTT**CGGTC**	28	59.1
			#PCR_36r	GAAAGAATGGCAAAAGCTATGGA	23	64.6
37	7.84	MASC05754	#L1_37	**ACGGG**AACCTTAATAACGGGTTTATCATAATT	32	56.6
			#L2_37	**ACGGG**AACCTTAATAACGGGTTTATCATAATC	32	56.8
			#R_37	TGACCTCAATTTTTCAGGGAGC**CGGTC**	27	62.1
			#PCR_37r	GGCTCCCTGAAAAATTGAGGTC	24	66.4
38	8.85	MASC06950	#L1_38	**ACGGG**AACAAAAGACGTATAAAACGCCTAA	30	56.4
			#L2_38	**ACGGG**AACAAAAGACGTATAAAACGCCTAT	30	55.6
			#R_38	GCTGTGTGATCAAAGTCATGTCTTG**CGGTC**	30	62.7
			#PCR_38r	TAGACCGCAAGACATGACTTTGA	23	65.3
39	9.90	MASC02456	#L1_39	**ACGGG**TCCGTAACAGAGTTTGACAATGAT	29	56.3
			#L2_39	**ACGGG**TCCGTAACAGAGTTTGACAATGAC	29	56.7
			#R_39	GATAAAGTTAGCTGTGCCGATTCCT**CGGTC**	30	59.8
			#PCR_39r	GAGGAATCGGCACAGCTAACT	21	64.0
40	10.88	MASC02949	#L1_40	**ACGGG**TCCACAAAACCACATACAAAAGAT	29	56.1
			#L2_40	**ACGGG**TCCACAAAACCACATACAAAAGAA	29	57.0
			#R_40	CACCAGCAACAAAGCCTATGG**CGGTC**	26	62.3
			#PCR_40r	CCATAGGCTTTGTTGCTGGTG	22	66.1
41	11.84	MASC02006	#L1_41	**ACGGG**CTAACTTCGACGTATCCCCAA	26	55.3
			#L2_41	**ACGGG**CTAACTTCGACGTATCCCCAT	26	54.3
			#R_41	GCTTCGGATCCATCGGAGTTA**CGGTC**	26	59.7
			#PCR_41r	CGTTAGACCGTAACTCCGATGGA	25	67.5
42	12.71	MASC02493	#L1_42	**ACGGG**CTTACAAATGTTGCTTTCAGAT	27	57.4
			#L2_42	**ACGGG**CTTACAAATGTTGCTTTCAGAC	27	57.8
			#R_42	ACCCAGCCTTGTGTACCTTGACTAT**CGGTC**	30	59.9
			#PCR_42r	CCGATAGTCAAGGTACACAAGGCT	24	65.8
43	12.97	MASC06704	#L1_43	**ACGGG**TGGAAAGTAAACACACATGAAAATAGTTT	34	56.3
			#L2_43	**ACGGG**TGGAAAGTAAACACACATGAAAATAGTTC	34	56.6
			#R_43	TTAGTCTTTACTTAACAATTACAAGAAACTAGAAGG**CGGTC**	41	59.1
			#PCR_43r	GTTAGACCGCCTTCTAGTTTCTTGTAA	27	64.1
44	13.73	MASC02513	#L1_44	**ACGGG**ACACCATTGTCAATAATAGGAC	27	55.1
			#L2_44	**ACGGG**ACACCATTGTCAATAATAGGAT	27	54.7

			#R_44	TAGAACTGAACGAATGGGT**CGGTC**	24	62.0
			#PCR_44r	CCGACCCATTCGTTCAGTTCTA	22	66.6
45	14.47	MASC02138	#L1_45	**ACGGG**TGATGGACCGGTGGGC	21	54.2
			#L2_45	**ACGGG**ATGGACCGGTGGGT	19	55.3
			#R_45	TTGGAGGCTTTGCGCATG**CGGTC**	23	60.1
			#PCR_45r	GCGCAAAGCCTCCAA	15	62.0
46	14.98	MASC02033	#L1_46	**ACGGG**TCATTTTGGTAGTACTTCCGGA	27	54.9
			#L2_46	**ACGGG**CATTTTGGTAGTACTTCCGGG	26	54.8
			#R_46	GACGTTTCCGGGACTAACTCCG**CGGTC**	27	62.5
			#PCR_46r	GGAGTTAGTCCCGGAAACGTC	22	65.3
47	16.08	MASC02203	#L1_47	**ACGGG**CAAGGTGGTGTCATTCCCC	24	56.8
			#L2_47	**ACGGG**CAAGGTGGTGTCATTCCCA	24	55.8
			#R_47	CAGCGTGTTGCTCCGGC**CGGTC**	22	60.7
			#PCR_47r	CCGGAGCAACACGCTG	16	65.3
48	16.69	MASC02122	#L1_48	**ACGGG**TAAGATTCTCCCACATCGCC	25	55.8
			#L2_48	**ACGGG**CAAGATTCTCCCACATCGCT	25	56.1
			#R_48	GGATCCTCTCCCTGCTCTG**CGGTC**	24	59.5
			#PCR_48r	CGCAGAGCAGGGAGAGGA	18	66.7
49	17.27	MASC07056	#L1_49	**ACGGG**TGGAAAGAATGGTGAGATGGTT	27	56.8
			#L2_49	**ACGGG**AGGAAAGAATGGTGAGATGGTG	27	55.3
			#R_49	AAGAAATCAAGTGGAAACAGGAGC**CGGTC**	29	61.6
			#PCR_49r	GGCTCCTGTTTCCACTTGATTTC	23	66.4
50	18.38	MASC00371	#L1_50	**ACGGG**TGGTGGTCCAGGATCATAC	24	57.3
			#L2_50	**ACGGG**TGGTGGTCCAGGATCATAT	24	56.8
			#R_50	TACTGAATGTGAGTGTGTTTGGTTC**CGGTC**	30	59.9
			#PCR_50r	GGAACCAAACACACTCACATTCA	23	65.5
51	19.49	MASC02585	#L1_51	**ACGGG**CGGCAAAATCCCTCTAG	22	54.3
			#L2_51	**ACGGG**CGGCAAAATCCCTCTAA	22	54.7
			#R_51	GCTTGAAACGGAAAGTGCTAAGG**CGGTC**	28	60.0
			#PCR_51r	GCCTTAGCACTTTCCGTTTCAA	22	65.8
Chromosome III						
52	0.66	MASC03427	#L1_52	**ACGGG**TGCAGCAGATTGATGTTCTTGA	27	57.8
			#L2_52	**ACGGG**TGCAGCAGATTGATGTTCTTGT	27	56.8
			#R_52	GTCAGTGATAAGTGTATTGCCATATGAAT**CGGTC**	34	58.6
			#PCR_52r	ATTCATATGGCAATACACTTATCACTGAC	30	64.3
53	1.51	MASC04687	#L1_53	**ACGGG**TCTATAAAACCTCGGGGATTAGA	28	55.7
			#L2_53	**ACGGG**TCTATAAAACCTCGGGGATTAGAT	29	55.3
			#R_53	CGGTTTCGGCCTAGGATTAA**CGGTC**	25	58.4
			#PCR_53r	ACCGTTAATCCTAGGCCGAAAC	22	65.5
54	2.33	MASC03739	#L1_54	**ACGGG**TGTCATGTTGTTATCCGCTATTC	28	55.3
			#L2_54	**ACGGG**TTGTCATGTTGTTATCCGCTATTA	29	55.1
			#R_54	TTCTTCTTATCAGATTCTTTAAACTTTTCT**CGGTC**	35	55.6
			#PCR_54r	GACCGAGAAAAGTTTAAAGAATCTGATAAG	30	64.6
55	2.89	MASC06761	#L1_55	**ACGGG**CATCTAAAAGATATGATCAAAACAAACA	33	55.9
			#L2_55	**ACGGG**ATCTAAAAGATATGATCAAAACAAACG	32	55.2
			#R_55	CAAAAGACAATGATCGGCTAAAAGA**CGGTC**	30	59.4
			#PCR_55r	TCTTTTAGCCGATCATTGTCTTTTG	25	65.5
56	3.58	MASC00562	#L1_56	**ACGGG**TGATACTTCAGGTACCAAAGCG	27	55.7

			#L2_56	**ACGGG**TGATACTTCAGGTACCAAAGCA	27	54.6
			#R_56	GATGAATCAAAGGCAACAGGAGATG**CGGTC**	30	61.9
			#PCR_56r	ATCTCCTGTTGCCTTTGATTCA	22	64.2
	4.23	MASC04486	#L1_57	**ACGGG**AAGAACAAAAGGATTTTGGATAAAC	30	55.0
57			#L2_57	**ACGGG**AAGAACAAAAGGATTTTGGATAAAT	30	54.6
			#R_57	TTAAATCTGTTAACAGCATGAAAAATTAAT**CGGTC**	35	57.2
			#PCR_57r	TAGACCGATTAATTTTTCATGCTGTTAA	28	64.7
			#L1_58	**ACGGG**CTTGCTTTGTGAGAATCATATTTAGAT	32	55.3
58	4.82	MASC04506	#L2_58	**ACGGG**CTTGCTTTGTGAGAATCATATTTAGAC	32	55.7
			#R_58	TATAGGACTGGATAGTATCTGATAGATG**CGGTC**	33	55.7
			#PCR_58r	ACCGCATCTATCAGATACTATCCAGTC	27	64.8
			#L1_59	**ACGGG**ACAATGTCAACAACCTTTTGAGT	28	55.8
59	5.68	MASC01310	#L2_59	**ACGGG**CAATGTCAACAACCTTTTGAGC	27	55.8
			#R_59	AGAGTCATCAACACCTTCATCCTCA**CGGTC**	30	59.3
			#PCR_59r	TGAGGATGAAGGTGTTGATGACTCT	25	66.6
			#L1_60	**ACGGG**AGTGTTCAAGAAATGTGATCGATAC	30	55.1
60	6.57	MASC04279	#L2_60	**ACGGG**AGTGTTCAAGAAATGTGATCGATAT	30	54.6
			#R_60	AATCTCCATAGTAAGGTCATAACATTTATT**CGGTC**	35	55.7
			#PCR_60r	CCGAATAAATGTTATGACCTTACTATGGA	29	65.0
			#L1_61	**ACGGG**GTTGATATCTGAGTTTCTAATG	27	55.9
61	7.41	MASC04554	#L2_61	**ACGGG**GTTGATATCTGAGTTTCTAATC	27	55.2
			#R_61	AACAATATTAGAGCGTTAATGATATATTT**CGGTC**	34	54.2
			#PCR_61r	CGTTAGACCGAAATATATCATTAACGCTC	29	66.3
			#L1_62	**ACGGG**TTCTTCGGCGTAAAATAAGTATA	28	56.0
62	8.51	MASC01228	#L2_62	**ACGGG**TTCTTCGGCGTAAAATAAGTATT	28	57.1
			#R_62	GCTAAAGACAATCAACGAGTTTTC**CGGTC**	29	64.5
			#PCR_62r	GGAAAACTCGTTGATTGTCTTTAGC	25	64.4
			#L1_63	**ACGGG**CAACCAAACCACATAAGTCAGCT	28	56.7
63	9.54	MASC06970	#L2_63	**ACGGG**AACCAAACCACATAAGTCAGCA	27	55.7
			#R_63	AGCTAGCTGAGATCGATATCCACTTTT**CGGTC**	32	59.9
			#PCR_63r	CGAAAAGTGGATATCGATCTCAGCTA	26	66.7
			#L1_64	**ACGGG**TATTCTGATACCAGAAGATGCAAG	29	54.9
64	10.44	MASC01418	#L2_64	**ACGGG**ATTCTGACACCAGAAGATGCAAC	28	56.7
			#R_64	TCCGGTGTCCAGAAATACCCTT**CGGTC**	27	60.2
			#PCR_64r	GACCGAAGGGTATTTCTGGACA	22	65.6
			#L1_65	**ACGGG**TGCTGAATCAAGACGCTCTACTT	28	56.8
65	10.91	MASC01389	#L2_65	**ACGGG**TGCTGAATCAAGACGCTCTACTG	28	58.1
			#R_65	CCTCAGCTAGCGGGTTTCTTAGG**CGGTC**	28	61.2
			#PCR_65r	CCGCCTAAGAAACCCGCTAG	20	66.3
			#L1_66	**ACGGG**TTAAAACGGGTAATTTGAAATTGTA	30	55.0
66	11.05	MASC04551	#L2_66	**ACGGG**AAAACGGGTAATTTGAAATTGTG	28	55.8
			#R_66	ACAGGGAAAGGGAAATGCAAGA**CGGTC**	27	60.5
			#PCR_66r	CTTGCATTTCCCTTTCCCTGT	21	65.7
			#L1_67	**ACGGG**TTTCTATCGAATTGAATTTATAAAC	30	54.2
67	14.3	MASC05047	#L2_67	**ACGGG**TTTCTATCGAATTGAATTTATAAAA	30	54.6
			#R_67	CGATTTAACCCAAATTTATGGGGA**CGGTC**	29	60.6
			#PCR_67r	CCGTTAGACCGTCCCCATAA	20	65.2
68	12.53	MASC04262	#L1_68	**ACGGG**TCAGAATTCTCTTATCAAGTAGAGTAACAA	35	56.5

			#L2_68	**ACGGG**TCAGAATTCTCTTATCAAGTAGAGTAACAG	35	56.2
			#R_68	AAAGTGATGAGAAAACAGAAGAATAAGGTG**CGGTC**	35	60.3
			#PCR_68r	GCACCTTATTCTTCTGTTTTCTCATCA	27	65.8
69	14.95	MASC03581	#L1_69	**ACGGG**CTGTGTTAATCAAATTAGATGAGATCA	32	54.6
			#L2_69	**ACGGG**CTGTGTTAATCAATTAGATGAGATCG	31	55.0
			#R_69	ATATTTTTTCCTTCTTTTTTTTCGCAGA**CGGTC**	33	60.6
			#PCR_69r	CGTCTGCGAAAAAAAAGAAGGA	22	65.8
70	15.61	MASC01016	#L1_70	**ACGGG**CTGAAGTTAGAGCGCTTTTTGAG	28	56.3
			#L2_70	**ACGGG**CTGAAGTTAGAGCGCTTTTTGAT	28	55.7
			#R_70	CTTTCTCTTGTTGATCAAAGTGGTAAAGG**CGGTC**	34	61.4
			#PCR_70r	TAGACCGCCTTTACCACTTTGATC	24	65.6
71	16.17	MASC01173	#L1_71	**ACGGG**CAATCAGCTCAGCAATGTCT	25	56.4
			#L2_71	**ACGGG**CAATCAGCTCAGCAATGTCC	25	59.1
			#R_71	TTACCACTCACTTCTTTCAATAGAAG**CGGTC**	31	57.3
			#PCR_71r	CGCTTCTATTGAAAGAAGTGAGTGGTA	27	65.8
72	16.17	MASC01172	#L1_72	**ACGGG**AAACGCTAATCCTTCTGCT	24	56.1
			#L2_72	**ACGGG**AAACGCTAATCCTTCTGCA	24	57.8
			#R_72	GATAATATCAAAGATATCATCGGAGCTG**CGGTC**	33	58.4
			#PCR_72r	GCAGCTCCGATGATATCTTTGA	22	64.8
73	17.25	MASC06941	#L1_73	**ACGGG**AGGAGAAAAAGCGACG	21	58.1
			#L2_73	**ACGGG**AGGAGAAAAAGCGACA	21	56.2
			#R_73	ACGGATGTTGGTGGCGGAT**CGGTC**	24	61.7
			#PCR_73r	TTAGACCGATCCGCCACC	18	65.6
74	17.98	MASC00949	#L1_74	**ACGGG**CGGTAGACGGTGGAGAAGGTAA	27	58.8
			#L2_74	**ACGGG**CGGTAGACGGTGGAGAAGGTAG	27	58.5
			#R_74	AAGCTGAAGCTCTTTGTGATGATCTT**CGGTC**	31	59.7
			#PCR_74r	CGAAGATCATCACAAAGAGCTTCA	24	66.1
75	18.69	MASC06897	#L1_75	**ACGGG**CCTTAATCTCTTGCTTCTTCTGTGTC	31	57.7
			#L2_75	**ACGGG**CCTTAATCTCTTGCTTCTTCTGTGTA	31	56.2
			#R_75	GTCAATCCATGATGACGTCT**CGGTC**	25	62.1
			#PCR_75r	CGAGACGTCATCATGGATTGAC	22	66.3
76	19.69	MASC02511	#L1_76	**ACGGG**AACAAAAGCAGGCTGTTTCAC	26	55.5
			#L2_76	**ACGGG**AACAAAAGCAGGCTGTTTCAA	26	56.1
			#R_76	GTGGAATGGTCGTAGAGCCAAAG**CGGTC**	28	60.5
			#PCR_76r	TTTGGCTCTACGACCATTCCA	21	66.1
77	21.72	MASC07382	#L1_77	**ACGGG**TTGTTACCTTTAAGAGCTTTGTTCTAC	32	55.7
			#L2_77	**ACGGG**TTGTTACCTTTAAGAGCTTTGTTCTAA	32	55.3
			#R_77	ACTTCTACTTCTTTCCACGGAGTTTAG**CGGTC**	32	60.5
			#PCR_77r	GCTAAACTCCGTGGAAAGAAGTAGA	25	64.2
78	22.16	MASC06869	#L1_78	**ACGGG**TGATGTTTTTGTTGATTCATCAAAG	30	56.7
			#L2_78	**ACGGG**TGATGTTTTTGTTGATTCATCAAAA	30	57.1
			#R_78	TAAGGTTATTACGAATCAAAAATAACTTTA**CGGTC**	35	55.1
			#PCR_78r	CCGTTAGACCGTAAAGTTATTTTTGATTC	29	65.5
79	22.63	MASC04925	#L1_79	**ACGGG**TTGGAGAAAAATGGCAGAGTTA	27	56.1
			#L2_79	**ACGGG**TGGAGAAAAATGGCAGAGTTG	26	56.3
			#R_79	AAAGAAATGCTAAATAGGATACATGCCTT**CGGTC**	34	61.1
			#PCR_79r	CGAAGGCATGTATCCTATTTAGCA	24	64.4
80	23.23	MASC01018	#L1_80	**ACGGG**AACAACGTAAACTAAGAGCTGCA	28	56.5

			#L2_80	**ACGGG**AACAACGTAAACTAAGAGCTGCC	28	57.2
			#R_80	TCAAGGAAAGGCGAAGAAAC**CGGTC**	25	59.0
			#PCR_80r	GGTTTCTTCGCCTTTCCTTGA	21	65.9
Chromosome IV						
A	0.04	MASC02820	#L1_A	**ACGGG**AGATTGGAGCTCCTATGGCTA	26	54.2
			#L2_A	**ACGGG**AGATTGGAGCTCCTATGGCTG	26	56.8
			#R_A	ACCCCTCTTACCTTTGTTATTACCACA**CGGTC**	30	60.0
			#PCR_Ar	TGTGGTAATAACAAAGGTAAGAGGGGT	27	65.7
B	0.50	MASC02948	#L1_B	**ACGGG**AACCGAAAGGCGACTATC	23	53.2
			#L2_B	**ACGGG**AACCGAAAGGCGACTATG	23	54.2
			#R_B	GAGGAAATAACAGATGTGATGTTGAAGAT**CGGTC**	34	59.8
			#PCR_Br	TCTTCAACATCACATCTGTTATTTCCTC	28	65.6
81	0.54	MASC09031	#L1_81	**ACGGG**CAAGATCAGGGAAGATCAACCT	27	55.7
			#L2_81	**ACGGG**AAGATCAGGGAAGATCAACCA	26	54.5
			#R_81	CTTGGGATTGCTGTCACTCTCAG**CGGTC**	28	59.6
			#PCR_81r	TGAGAGTGACAGCAATCCCAA	21	65.4
82	1.60	MASC02898	#L1_82	**ACGGG**AGTTTCACTTCTTGACTGGAAAAA	29	56.7
			#L2_82	**ACGGG**AGTTTCACTTCTTGACTGGAAAAT	29	55.8
			#R_82	CATCGAAGAGAATTGTGACGAAC**CGGTC**	28	60.5
			#PCR_82r	GTTCGTCACAATTCTCTTCGATG	23	64.3
83	2.19	MASC05039	#L1_83	**ACGGG**CAAGACTTTCTTAGTATAGTGATGTGTCA	34	55.4
			#L2_83	**ACGGG**CAAGACTTTCTTAGTATAGTGATGTGTCG	34	57.0
			#R_83	TCCAACAGTTTCTCTCACAAAAACAAA**CGGTC**	32	61.5
			#PCR_83r	TGTTTTTGTGAGAGAAACTGTTGGA	25	65.2
84	2.98	MASC03713	#L1_84	**ACGGG**TTGCTTGTTGCTTGTTGCTTA	26	55.8
			#L2_84	**ACGGG**ATTGCTTGTTGCTTGTTACTTG	27	55.3
			#R_84	ACTAACGTTTATTGTTATGGGTTGGGTT**CGGTC**	33	60.8
			#PCR_84r	CGAACCCAACCCATAACAATAAAC	24	65.3
85	4.15_	MASC06447	#L1_85	**ACGGG**TAGTGTTGATTATGGCTGAGTAATTG	31	55.2
			#L2_85	**ACGGG**TGTGTTGATTATGGCTGAGTAATTGT	31	55.1
			#R_85	TAAGGTGACATTGTTTCTATAAAGTTAG**CGGTC**	33	59.3
			#PCR_85r	GACCGCTAACTTTATAGAAACAATGTCA	28	64.6
C	4.15	MASC04672	#L1_C	**ACGGG**TTTTAATTGATAGCTGGAGATA	27	55.8
			#L2_C	**ACGGG**TTTTAATTGATAGCTGGAGATG	27	58.0
			#R_C	TATTCTGAAAACAGAGATAGATGGTGCA**CGGTC**	33	60.1
			#PCR_Cr	TGCACCATCTATCTCTGTTTTCAGAATA	28	66.0
86	4.89	MASC02334	#L1_86	**ACGGG**TCCCCACGGATAGTTCCA	23	56.4
			#L2_86	CGGGTCCCCACGGATAGTTCCC	22	57.4
			#R_86	GGCTCAGAAGCTGCTGGGTT**CGGTC**	25	60.2
			#PCR_86r	CGAACCCAGCAGCTTCTGA	19	66.3
D	5.09	MASC02658	#L1_D	**ACGGG**AACAGCAAAATGTTTCTAGTCG	27	57.8
			#L2_D	**ACGGG**AACAGCAAAATGTTTCTAGTCC	27	56.9
			#R_D	ACAACCTTGTTCAGATGTTTCGCTT**CGGTC**	27	62.4
			#PCR_Dr	CGAAGCGAAACATCTGAACAAG	22	65.4
87	5.38	MASC01708	#L1_87	**ACGGG**ACTCATCGCTAGTCTCAGAGACAG	29	54.6
			#L2_87	**ACGGG**ACTCATCGCTAGTCTCAGAGACAA	29	55.0
			#R_87	CCTTGGACTTAGCAGGAGCTGG**CGGTC**	27	64.0
			#PCR_87r	CCAGCTCCTGCTAAGTCCAAG	21	

88	5.77	MASC01786	#L1_88	**ACGGG**CATGGCATTGACAATATCGTCT	27	55.9
			#L2_88	**ACGGG**ATGGCATTGACAATATCGTCC	26	55.7
			#R_88	TGCGCTTGAAGAACTTTGATC**CGGTC**	26	60.0
			#PCR_88r	CGGATCAAAGTTCTTCAAGCG	21	65.4
89	6.76	MASC03091	#L1_89	**ACGGG**TCACTTGCGATTCCTAGGTCG	26	56.7
			#L2_89	**ACGGG**TCACTTGCGATTCCTAGGTCC	26	55.6
			#R_89	AAGCTTCTCAAGGTTGGCATGA**CGGTC**	27	60.3
			#PCR_89r	CGTCATGCCAACCTTGAGA	19	64.6
90	7.26	MASC00932	#L1_90	**ACGGG**TGGTGGATTCTTCCTTTTCG	25	56.0
			#L2_90	**ACGGG**TGGTGGATTCTTCCTTTGCA	25	57.4
			#R_90	CAATCTTTATCCTTGGCCCTCA**CGGTC**	27	63.4
			#PCR_90r	TGAGGGCCAAGGATAAAGATTG	22	65.5
91	7.54	MASC06765	#L1_91	**ACGGG**TGAGGAATTCATTTTGAGCG	25	55.8
			#L2_91	**ACGGG**CGTGAGGAATTCATTTTGAGCT	27	56.8
			#R_91	TTTTGTTATCGTGTTTTTTAGTTTCTAGGG**CGGTC**	35	60.1
			#PCR_91r	CGCCCTAGAAACTAAAAAACACG	23	64.1
92	7.93	MASC03275	#L1_92	**ACGGG**CATGTGTAGCTTGGACTTCCTG	27	55.8
			#L2_92	**ACGGG**CATGTGTAGCTTGGACTTCCTC	27	54.9
			#R_92	TGTCTGTGCACGATCCATTGAA**CGGTC**	27	61.5
			#PCR_92r	CCGTTAGACCGTTCAATGGAT	22	64.3
93	8.72	MASC03264	#L1_93	**ACGGG**ACAGTGGAGAAGAGAGAGTGGA	27	56.0
			#L2_93	**ACGGG**ACAGTGGAGAAGAGAGAGTGGT	27	55.0
			#R_93	AAGGTGTATTTATAGGAAAGAGTCAAGTCA**CGGTC**	35	58.3
			#PCR_93r	TGACTTGACTCTTTCCTATAAATACACCTT	30	63.6
94	9.58	MASC02545	#L1_94	**ACGGG**AGCTGAGTATGAGCCACAATT	26	54.6
			#L2_94	**ACGGG**TTGAGTTGAGTATGAGCCACAATA	29	55.1
			#R_94	TTTTCTTGTGCATCTCGGTTTAG**CGGTC**	28	60.3
			#PCR_94r	GCTAAACCGAGATGCACAAGAA	22	64.8
95	10.54	MASC05317	#L1_95	**ACGGG**AATAACTGGAATGGCTCTTGC	26	54.5
			#L2_95	**ACGGG**CAATAACTGGAATGGCTCTTGT	27	54.5
			#R_95	AGTCTCCTTTAGTTGAATACAACTTTAGAG**CGGTC**	35	55.9
			#PCR_95r	CGCTCTAAAGTTGTATTCAACTAAAGGA	28	64.0
96	11.21	MASC03502	#L1_96	**ACGGG**ATCATATGATTTTCCATGAGTAT	28	54.0
			#L2_96	**ACGGG**ATCATATGATTTTCCATGAGTAC	28	54.4
			#R_96	TCAACATGAAATTTACTTTCTTCATAATGA**CGGTC**	35	58.5
			#PCR_96r	CGTTAGACCGTCATTATGAAGAAAGTAA	28	64.5
97	12.19	MASC03074	#L1_97	**ACGGG**ATGGGAGATTGAAGTAGAGGAGT	28	55.5
			#L2_97	**ACGGG**ATGGGAGATTGAAGTAGAGGAGA	28	56.4
			#R_97	TCATTGCACTCTTCAACGTGGA**CGGTC**	27	59.9
			#PCR_97r	CCACGTTGAAGAGTGCAATGA	22	65.7
98	13.23	MASC00134	#L1_98	**ACGGG**AGGTGTCACATACCGGTACAAC	27	54.8
			#L2_98	**ACGGG**AGGTGTCACATACCGGTACAAT	27	54.4
			#R_98	GCAAACCAGATCAAAATCGTATG**CGGTC**	28	64.1
			#PCR_98r	CGCATACGATTTTGATCTGGTT	22	64.3
99	14.25	MASC03981	#L1_99	**ACGGG**CGGAGTCCTTGAAGGCTTCTA	26	57.0
			#L2_99	**ACGGG**AGGAGTCCTTGAAGGCTTCTG	26	54.9
			#R_99	GCCGGATCTCCTAGAAGCTCAG**CGGTC**	27	63.3
			#PCR_99r	AGACCGCTGAGCTTCTAGGAGA	23	65.2

100	15.17	MASC01774	#L1_100	**ACGGG**AAGAGAGCCGCAACAATAGG	25	55.5
			#L2_100	**ACGGG**AAGAGAGCCGCAACAATAGA	25	53.7
			#R_100	ATCAATGAACTCGCTGATGATC**CGGTC**	27	58.8
			#PCR_100r	GGATCATCAGCGAGTTCATTG	21	64.1
101	16.33	MASC03234	#L1_101	**ACGGG**ACGCGGTAGAATACTATGGTGC	27	55.9
			#L2_101	**ACGGG**CTCGCGGTAGAATACTATGGTGT	28	56.0
			#R_101	CAACCAGATGAGTTGGACTGGAAA**CGGTC**	29	60.9
			#PCR_101r	TCCAGTCCAACTCATCTGGTTG	22	65.9
102	17.11	MASC03593	#L1_102	**ACGGG**TAGTGTCACAATTCAACTTGATGAA	30	55.0
			#L2_102	**ACGGG**TAGTGTCACAATTCAACTTGATGAC	30	54.5
			#R_102	AATTTGGTAGGGAATATGTGCAATT**CGGTC**	30	59.2
			#PCR_102r	GAATTGCACATATTCCCTACCAAA	24	64.1
G		149*	#L1_G	**ACGGG**CGGCGAACATTTAAGACCAAACTG	29	65.2
			#L2_G	**ACGGG**CGGCGAACATTTAAGACCAAACTA	29	63.0
			DOR_G	TTGTAAAACGTCGGGAGAAACAGAGAGGTCTAACGGGATAGCGTG	45	63.4
			#PCR_G	TCTCTGTTTCTCCCGACGTTTTACAA	26	68.8
			#template	GCCGCTTGTAAATTCTGGTTTGATAACATTTTGCAGCCCTCTTTGTCTCT	50	
H		200*	#L1_H	**ACGGG**AGCTAAATCGAGATCGTTAAAC	27	56.3
			#L2_H	**ACGGG**AGCTAAATCGAGATCGTTAAAA	27	56.8
			DOR_H	CCTCCGAAGACTTCACGGTAGTCAGTCTAACGGGATAGCGTG	42	62.3
			#PCR_H	CGGTTTTGACTACCGTGAAGTCT	23	64.8
Chromosome V						
103	0	MASC02357	#L1_103	**ACGGG**CCTGATCCCTTGTGCAACTACTA	28	56.8
			#L2_103	**ACGGG**CTGATCCCTTGTGCAACTACTG	27	55.8
			#R_103	CAGCTGGAGCTGCATTTGCA**CGGTC**	25	61.8
			#PCR_103r	ACCGTGCAAATGCAGCTC	19	64.8
104	0.29	MASC02301	#L1_104	**ACGGG**TGAGGAGTGGTAGTGGATCCAAA	28	56.4
			#L2_104	**ACGGG**TGAGGAGTGGTAGTGGATCCAAG	28	56.0
			#R_104	GTACTGCGCTCCTTACCCTATAGATATG**CGGTC**	33	59.6
			#PCR_104r	CCGCATATCTATAGGGTAAGGAGC	24	64.2
105	0.97	MASC03527	#L1_105	**ACGGG**TGTAGCAATGCACTGAAAGCTATA	29	55.6
			#L2_105	**ACGGG**TAGCAATGCACTGAAAGCTATG	27	55.4
			#R_105	TTTAATTACATTGCTGTACATTTATAC**CGGTC**	32	57.1
			#PCR_105r	CCGGTATAAATGTACAGCAATGTAATTAAA	30	64.7
106	1.26	MASC02659	#L1_106	**ACGGG**TAGAGTTGTTTGCTCCAAATTTG	28	54.9
			#L2_106	**ACGGG**TTAGAGTTGTTTGCTCCAAATTTA	29	54.8
			#R_106	GCCTCTCATCTACTGGGACATTTT**CGGTC**	29	60.0
			#PCR_106r	AAAATGTCCCAGTAGATGAGAGGC	24	65.0
107	1.93	MASC07003	#L1_107	**ACGGG**CCGACCAAGTGTGACGTT	23	57.8
			#L2_107	**ACGGG**CCGACCAAGTGTGACGTA	23	56.3
			#R_107	GACTTTTGATTGCTAGTCAAGAGTCAATG**CGGTC**	34	63.2
			#PCR_107r	CATTGACTCTTGACTAGCAATCAAAAG	27	64.5
108	2.33	MASC06955	#L1_108	**ACGGG**TTGAGCTGCATCTTGTTTAAATTA	29	54.8
			#L2_108	**ACGGG**TGAGCTGCATCTTGTTTAAATTC	28	54.9
			#R_108	TGAAACTGAACCTGAAGAATGAGAAAT**CGGTC**	32	59.3
			#PCR_108r	TTCTCATTCTTCAGGTTCAGTTTCA	25	64.5
109	3.06	MASC07135	#L1_109	**ACGGG**AATGCTTCTAAGTGTGTCTTGTCTTA	31	54.5

			#L2_109	**ACGGG**TGCTTCTAAGGTGTCTTGTCTCTC	29	55.5
			#R_109	TCTGGTTCGTGGTGGTGAGTTT**CGGTC**	27	60.1
			#PCR_109r	CTCACCACCACGAACCAGA	19	64.6
			#L1_110	**ACGGG**AGGCATCCCATTGGGTAGT	24	55.1
110	3.76	MASC07027	#L2_110	**ACGGG**CATCCCATTGGGTAGC	21	57.0
			#R_110	AATTGAGGGTTTAGCGCCATGA**CGGTC**	27	61.3
			#PCR_110r	CATGGCGCTAAACCCTCAA	19	65.5
			#L1_111	**ACGGG**TCTTGGATTGAGGAAGCTTTCG	27	57.4
111	4.83	MASC01141	#L2_111	**ACGGG**TCCTTGGATTGAGGAAGCTTTCT	28	57.4
			#R_111	TCTATTGGAGAAGGAGGAGAAGGTG**CGGTC**	30	59.8
			#PCR_111r	CACCTTCTCCTCCTTCTCCAATAG	24	64.7
			#L1_112	**ACGGG**AGAACGAAAAGCAGTCG	22	58.2
112	5.34	MASC01512	#L2_112	**ACGGG**AGAACGAAAAGCAGTCA	22	56.3
			#R_112	TACCTACGCCATGCTGTACTCTTTG**CGGTC**	30	60.3
			#PCR_112r	AAAGAGTACAGCATGGCGTAGGTA	24	64.3
			#L1_113	**ACGGG**AGAGTACTTCTTGAGTTCTCATGATTT	32	55.8
113	6.46	MASC07146	#L2_113	**ACGGG**AGAGTACTTCTTGAGTTCTCATGATTT	32	56.1
			#R_113	TGCTGATACTCTTGTCTGTTTTGATGA**CGGTC**	32	59.9
			#PCR_113r	CATCAAAACAGACAAGAGTATCAGCA	26	64.8
			#L1_114	**ACGGG**ACAGGTTGATGCTGCTCCG	24	57.0
114	6.86	MASC02390	#L2_114	**ACGGG**TCAGGTTGATGCTGCTCCT	24	55.1
			#R_114	TTCAAGCAGTGGTACCTCTCG**CGGTC**	26	60.1
			#PCR_114r	GCGAGAGGTACCACTGCTTGA	21	66.2
			#L1_115	**ACGGG**TGTGAATCCTCTTTCCTCATGT	27	54.6
115	7.89	MASC01061	#L2_115	**ACGGG**TGAATCCTCTTTCCTCATGC	25	54.7
			#R_115	CGATCTCTAAGCTTGAGCCCACA**CGGTC**	28	61.4
			#PCR_115r	ACCGTGTGGGCTCAAGC	18	64.8
			#L1_116	**ACGGG**TAAGCTGAAGATGAGAAGAATTCCT	30	57.3
116	8.16	MASC09029	#L2_116	**ACGGG**TAGCTGAAGATGAGAAGAATTCCC	29	56.6
			#R_116	CGTATCAAATTTCCTCAGAGACATTCTAT**CGGTC**	34	60.6
			#PCR_116r	GACCGATAGAATGTCTCTGAGGAAA	26	65.0
			#L1_117	**ACGGG**AAACAGTAAGAGAAAGCCCAAT	27	54.5
117	8.57	MASC04080	#L2_117	**ACGGG**AAACAGTAAGAGAAAGCCCAAC	27	54.9
			#R_117	TGAAGATCTAGCCAGCTGCATCA**CGGTC**	28	60.7
			#PCR_117r	CGTTAGACCGTGATGCAGC	19	64.1
			#L1_118	**ACGGG**TGTATTGTAGCTCTTCTCTATCCCAT	31	56.3
118	9.4	MASC07157	#L2_118	**ACGGG**TGTATTGTAGCTCTTCTCTATCCCAG	31	56.9
			#R_118	AAAAGCCCACTCTTCTTCTTCTTGT**CGGTC**	30	60.3
			#PCR_118r	CGTTAGACCGACAAGAAGAAGAAGA	25	65.2
			#L1_119	**ACGGG**TTTCTCTAACTGCAACAACTCTCAG	30	55.7
119	10.44	MASC02368	#L2_119	**ACGGG**TTTCTCTAACTGCAACAACTCTCAA	30	56.1
			#R_119	TTCCTCCATTTTCACACAATCCAA**CGGTC**	29	61.0
			#PCR_119r	GGATTGTGTGAAAATGGAGGAA	22	64.3
			#L1_120	**ACGGG**TCTAAATGGATAAATCATGATCCTTAG	32	55.1
120	11.03	MASC03957	#L2_120	**ACGGG**TCTTAATGGATAAATCATGATCCTTAT	32	54.6
			#R_120	CCAAATAGTTTTCCCTCATATTGATTATGG**CGGTC**	35	61.7
			#PCR_120r	CGCCATAATCAATATGAGGGAA	22	64.1
121	11.85	MASC01174	#L1_121	**ACGGG**TCTTATCCATATCGGGGAAAATC	28	55.2

			#L2_121	**ACGGG**TCTTATCCATATCGGGGAAAATT	28	54.8
			#R_121	GCGGCGAGGTGATCGAGA**CGGTC**	23	61.6
			#PCR_121r	CGTTAGACCGTCTCGATCACC	21	65.4
122	13.41	MASC01463	#L1_122	**ACGGG**TGGTAGCTTTTACTTATTTTTTCCCAG	32	55.8
			#L2_122	**ACGGG**TGGTAGCTTTTACTTATTTTTTCCCTT	32	54.9
			#R_122	ATTGGTTATTACTACCAATTGGATCTTGTG**CGGTC**	35	57.4
			#PCR_122r	CGTTAGACCGCACAAGATCCA	21	66.8
123	13.94	MASC04360	#L1_123	**ACGGG**TGATTAAAGTGTTCAATACAGTTTGAGTATA	36	56.9
			#L2_123	**ACGGG**ATTAAAGTGTTCAATACAGTTTGAGTATG	34	56.1
			#R_123	ACTGACCAATGTCCTGGTTAGGTAGA**CGGTC**	31	59.9
			#PCR_123r	CTACCTAACCAGGACATTGGTCAGT	25	64.7
124	14.52	MASC07142	#L1_124	**ACGGG**TGTTTTCTTTAGTTGAATGATGCG	29	54.4
			#L2_124	**ACGGG**TTTTCTTTAGTTGAATGATGCT	27	54.5
			#R_124	GCTTTTGATCTCTCCAATGGACCT**CGGTC**	29	60.5
			#PCR_124r	CGAGGTCCATTGGAGAGATCA	21	66.0
125	15.32	MASC01031	#L1_125	**ACGGG**AAACATAGAGAATATATAAGGAGTATGTTACAT	38	55.4
			#L2_125	**ACGGG**AAACATAGAGAATATATAAGGAGTATGTTACAG	38	55.9
			#R_125	GCCCTTAGGAAAGCGTTTGCA**CGGTC**	26	62.0
			#PCR_125r	CGTGCAAACGCTTTCCTAAG	20	64.2
126	16.34	MASC07103	#L1_126	**ACGGG**AAAGATAAGAGCAGTTCATGAGAGA	30	54.4
			#L2_126	**ACGGG**AAGATAAGAGCAGTTCATGAGAGG	29	54.6
			#R_126	AATGTAGTGAAAATGTGTGTGTACATAACA**CGGTC**	35	57.9
			#PCR_126r	CCGTGTTATGTACACACACATTTTCA	26	
127	17.39	MASC02529	#L1_127	**ACGGG**TGGTTCCAGCTTACACAGTTTACG	29	56.5
			#L2_127	**ACGGG**TGGTTCCAGCTTACACAGTTTACA	29	54.6
			#R_127	GTCATCGAATGACCTGATAACACTTCA**CGGTC**	32	61.1
			#PCR_127r	TGAAGTGTTATCAGGTCATTCGATG	25	65.5
128	18.42	MASC01225	#L1_128	**ACGGG**ATATTTGCAGGAAACAAGATATCG	29	55.2
			#L2_128	**ACGGG**AATATTTGCAGGAAACAAGATATCA	30	54.9
			#R_128	ACACAGACAGGTATAGGAACAGGAATAG**CGGTC**	33	61.0
			#PCR_128r	CGCTATTCCTGTTCCTATACCTGTC	25	64.3
129	19.29	MASC07053	#L1_129	**ACGGG**CATAATGCTCCTTTGTTTATTTCTTC	31	55.6
			#L2_129	**ACGGG**CATAATGCTCCTTTGTTTATTTCTTT	31	55.3
			#R_129	ATCTTTCTAATGCCCTATCAATAAGTTTT**CGGTC**	34	58.8
			#PCR_129r	GACCGAAAACTTATTGATAGGGCA	24	65.4
130	20.41	MASC01040	#L1_130	**ACGGG**ACCTGCAATCCTCTCGACC	24	54.8
			#L2_130	**ACGGG**TCTCCTGCAATCCTCTCGACT	26	55.3
			#R_130	GGTGCATCCAAGTACGAAAAGCT**CGGTC**	28	61.8
			#PCR_130r	ACCGAGCTTTTCGTACTTGGAT	22	
131	21.36	MASC06375	#L1_131	**ACGGG**AAACGCTCTTGTAACAAATAATCTTATT	33	55.6
			#L2_131	**ACGGG**TAAAACGCTCTTGTAACAAATAATCTTAT	34	55.6
			#R_131	AGGAAAATTCAAACACCCATGTGT**CGGTC**	29	60.8
			#PCR_131r	ACCGACACATGGGTGTTTGA	20	66.0
132	22.18	MASC06718	#L1_132	**ACGGG**AGCAAAAGACATATTTATAGCTTAGAGAC	34	54.9
			#L2_132	**ACGGG**CAAAAGACATATTTATAGCTTAGAGAA	32	54.4
			#R_132	TTCAGGGCAAGACAAAGTCTGTG**CGGTC**	28	60.0
			#PCR_132r	ACAGACTTTGTCTTGCCCTGAA	22	64.5
133	22.94	MASC07081	#L1_133	**ACGGG**CGCTAGAAACTTTTTCCGATC	26	54.4

			#L2_133	**ACGGG**CGCTAGAAACTTTTTCCGATT	26	54.1
			#R_133	AAGAAATGATGAAGATGACGAAGA**CGGTC**	29	62.4
			#PCR_133r	CGTCTTCGTCATCTTCATCATTTC	24	65.3
134	23.6	MASC07047	#L1_134	**ACGGG**AAATGGCAAGAGTTCAAATAAGATA	30	56.0
			#L2_134	**ACGGG**AATGGCAAGAGTTCAAATAAGATG	29	55.3
			#R_134	ATATAACATGTAAATTATGTTTTTTTGCCTTTG**CGGTC**	38	62.2
			#PCR_134r	CCGCAAAGGCAAAAAAACATA	21	65.1
135	24.28	MASC07050	#L1_135	**ACGGG**TTCAATATAAAGCAGTTTGGAGGG	29	56.0
			#L2_135	**ACGGG**AGTCAATATAAAGCAGTTTGGAGGA	31	55.3
			#R_135	TTCTTTAATACATTTACCGAATACAGCTTCA**CGGTC**	36	58.6
			#PCR_135r	TGAAGCTGTATTCGGTAAATGTATTAAAGA	30	64.3
136	25.05	MASC06792	#L1_136	**ACGGG**TTATTTAAAGAAGAAGCAGAAGATTTG	32	55.8
			#L2_136	**ACGGG**TTATTTAAAGAAGAAGCAGAAGATTTC	32	55.1
			#R_136	ATCAGAATCCGGAACAAGTTAATGTG**CGGTC**	31	60.2
			#PCR_136r	CCGCACATTAACTTGTTCCG	20	64.8
137	25.8	MASC01516	#L1_137	**ACGGG**ACGAAATTATAGAGCTCATGCGTCT	30	57.6
			#L2_137	**ACGGG**TGAAATTATAGAGCTCATGCGTCC	29	55.7
			#R_137	TCTATCGGATCATTCGAGGATAGCTCA**CGGTC**	32	61.6
			#PCR_137r	GCTATCCTCGAATGATCCGATAG	23	64.2
138	26.17	MASC07165	#L1_138	**ACGGG**AAAGTCACCAATGGCACTACTC	27	54.4
			#L2_138	**ACGGG**AAAGTCACCAATGGCACTACTG	27	55.3
			#R_138	GCGATAGAGTAAAGCCTGAGCTTGT**CGGTC**	30	60.1
			#PCR_138r	CCGACAAGCTCAGGCTTTACT	21	64.1

Supplement 3. Fluorescence values for "one tube – one locus" SNP-genotyping. “One tube – one locus” SNP-genotyping was performed on 50ng of *A. thaliana* genomic DNA for loci: "1"-"14", "17", "18", "20"-"22", "26"-"28", and "A"-"H". Genotyping was performed either on homozygous (Col-0 or C24) or heterozygous (Col-0/C24) DNA (Col-0, L*er* or Col-0/L*er* for loci "G" and "H"). "k" is the control without DNA.

Locus	Col-0		C24		Col-0/C24	
	Fam	Tet	Fam	Tet	Fam	Tet
1	2.47	0.16	0.34	2.10	2.37	2.14
2	2.40	0.19	0.35	2.15	1.90	2.42
3	2.60	0.12	0.35	2.14	2.44	1.95
4	2.89	0.12	0.39	2.46	2.83	2.10
5	2.69	0.14	0.50	2.34	2.58	2.43
6	2.39	0.19	0.37	2.27	2.28	2.32
7	2.56	0.21	0.31	2.34	2.48	2.55
8	2.62	0.33	0.36	2.51	2.86	2.51
9	2.48	0.18	0.34	2.13	2.29	1.97
10	2.68	0.21	0.47	2.24	2.31	2.09
11	2.57	0.12	0.32	2.13	2.19	2.11
12	2.81	0.23	0.37	2.31	2.55	2.17
13	2.55	0.13	0.30	2.45	2.18	2.38
14	2.43	0.26	0.34	2.27	2.19	2.36
A	2.64	0.22	0.51	2.27	2.77	1.61
17	2.46	0.36	0.27	2.55	2.23	2.54
18	2.69	0.30	0.35	2.38	2.37	2.03
20	2.54	0.13	0.33	1.88	2.50	1.13
21	2.73	0.17	0.47	2.19	2.52	1.58
22	2.68	0.17	0.34	2.32	2.34	2.12
B	2.59	0.19	0.28	2.23	2.35	2.03
26	2.61	0.32	0.29	2.55	2.30	2.35
27	2.37	0.51	0.25	2.53	2.03	2.06
28	2.45	0.17	0.34	2.44	2.29	2.38
G	n/a	n/a	n/a	n/a	2.50	0.19
H	2.39	0.17	n/a	n/a	2.87	0.18
C	2.23	0.22	n/a	n/a	2.04	1.95
D	2.53	0.19	0.36	2.22	2.07	2.30
E	2.38	0.46	n/a	n/a	2.04	2.35
F	2.65	0.25	n/a	n/a	1.98	2.34
k	0.23	0.16	0.21	0.18	0.23	0.21

Supplement 4. Fluorescence values for the "one tube – many loci" SNP-genotyping. “One tube – many loci” SNP-genotyping was performed on 50ng of *A. thaliana* genomic DNA for loci: "1"-"14", "17", "18", "20"-"22", "26"-"28", "A"-"H". Genotyping was performed either on homozygous (Col-0 or C24) or heterozygous (Col-0/C24) DNA. “k” is the control without ligation (amplification was performed with common PCR primers).

Locus	Col		C24		Col/C24	
	Fam	Tet	Fam	Tet	Fam	Tet
1	2.99	0.06	0.65	3.18	2.96	2.36
2	3.68	0.61	0.82	3.38	2.82	3.06
3	2.07	0.19	0.52	2.15	1.94	1.52
4	4.04	-0.08	0.69	3.73	4.25	2.66
5	3.76	0.02	0.76	3.50	3.24	3.20
6	3.73	-0.06	0.69	3.42	3.32	2.92
7	3.92	0.48	0.62	3.67	3.52	3.30
8	4.04	0.68	0.64	3.64	3.10	3.15
9	2.16	0.01	0.45	2.50	2.04	1.73
10	3.40	-0.01	0.83	3.10	3.20	2.12
11	3.44	-0.05	0.58	3.25	2.93	2.52
12	4.00	-0.11	0.76	3.52	4.23	2.10
13	3.41	-0.11	0.55	3.46	2.93	2.85
14	3.81	-0.03	0.70	3.67	3.55	2.93
A	3.77	-0.02	1.15	3.32	4.03	0.91
17	3.49	0.23	0.59	3.73	2.89	3.49
18	3.59	0.07	0.59	3.34	2.99	2.67
20	3.26	-0.05	0.64	2.97	3.47	1.47
21	3.51	0.00	1.00	3.29	3.75	2.12
22	3.36	-0.05	0.56	3.32	3.08	2.72
B	3.77	-0.09	0.55	3.45	3.48	2.72
26	3.80	0.05	0.61	3.72	3.39	3.15
27	3.62	0.01	0.67	3.72	3.24	2.88
28	3.12	0.06	0.51	3.59	2.47	2.96
G	0.78	2.04	0.52	2.08	0.58	2.04
H	5.60	-0.17	5.10	0.00	4.65	0.00
C	2.68	0.02	0.52	2.98	1.63	1.99
D	2.90	0.58	0.61	2.99	2.20	2.45
E	3.65	0.01	0.65	3.49	2.29	3.27
F	3.75	-0.06	0.60	3.57	3.41	2.69
k	0.82	0.07	0.22	0.65	0.60	0.42

Supplement 5. Genomic sequences of human SNP loci analyzed in the study (30nt from each side of the SNP). 32nt deletion in CCR5 gene is in parentheses.

Gene	Genomic sequence
LCT (–13910 C/T)	TGCGCTGGCAATACAGATAAGATAATGTAG C CCCTGGCCTCAAAGGAACTCTCCTCCTTAG TGCGCTGGCAATACAGATAAGATAATGTAG T CCCTGGCCTCAAAGGAACTCTCCTCCTTAG
CCR5 (+/delta32)	ATTACACCTGCAGCTCTCATTTTCCATACA (GTCAGTATCAATTCTGGAAGAATTTCCAGACA) TTAAAGATAGTCATCTTGGGGCTGGTCCTG
SDF1 (-801 G/A)	CTCACCCCCTTCTCCATCCACATGGGAGCC G GGTCTGCCTCTTCTGGGAGGGCAGCAGGG CTCACCCCCTTCTCCATCCACATGGGAGCC A GGTCTGCCTCTTCTGGGAGGGCAGCAGGG
RANTES (-403 G/A)	TAACATCCTTCCATGGATGAGGGAAAGGAG G TAAGATCTGTAATGAATAAGCAGGAACTTT TAACATCCTTCCATGGATGAGGGAAAGGAG A TAAGATCTGTAATGAATAAGCAGGAACTTT
APOE (3932 T/C)	TCCTCCGCGATGCCGATGACCTGCAGAAGC T GCCTGGCAGTGTACCAGGCCGGGGCCCGCG TCCTCCGCGATGCCGATGACCTGCAGAAGC C GCCTGGCAGTGTACCAGGCCGGGGCCCGCG
FAAH (385 C/A)	GCTGACTGTGAGACTCAGCTGTCTCAGGCC C CAAGGCAGGGCCTGCTCTATGGCGTCCCTG GCTGACTGTGAGACTCAGCTGTCTCAGGCC A CAAGGCAGGGCCTGCTCTATGGCGTCCCTG
AGT (M174T)	CTGATAGCCAGGCCCAGCTGCTGCTGTCCA C GGTGGTGGGCGTGTTCACAGCCCCAGGCCT CTGATAGCCAGGCCCAGCTGCTGCTGTCCA T GGTGGTGGGCGTGTTCACAGCCCCAGGCCT
AGT (M235T)	TGACAGGATGGAAGACTGGCTGCTCCCTGA T GGGAGCCAGTGTGGACAGCACCCTGGCTTT TGACAGGATGGAAGACTGGCTGCTCCCTGA C GGGAGCCAGTGTGGACAGCACCCTGGCTTT
MTHFR (A222V)	AGCACTTGAAGGAGAAGGTGTCTGCGGGAG C CGATTTCATCATCACGCAGCTTTTCTTTGA AGCACTTGAAGGAGAAGGTGTCTGCGGGAG T CGATTTCATCATCACGCAGCTTTTCTTTGA

Supplement 6. Sequences of locus-specific oligonucleotides (5'→3'oriented) for human SNP loci analyzed in the study. 5'- and 3'-end pentanucleotides for preparation of DOs by the ligation-based synthesis are marked bold.

Locus	Oligo name	Genomic sequence	Length, nt	$T_{annealing}$, °C
LCT (–13910 C/T)	#L1_h01	**ACGGG**CTGGCAATACAGATAAGATAATGTAGC	32	55.4
	#L2_h01	**ACGGG**CTGGCAATACAGATAAGATAATGTAGT	32	56.4
	#R_h01	CCCTGGCCTCAAAGGAACTCT**CGGTC**	26	61.4
	#PCR_h01r	CGTTAGACCGAGAGTTCCTTTGAG	24	65.7
CCR5 (+/delta32)	#L1_h03	**ACGGG**AAATTCTTCCAGAATTGATACTGAC	30	58.4
	#L2_h03	**ACGGG**CAGCCCCAAGATGACTATCTTTAA	29	57.3
	#R_h03	TGTATGGAAAATGAGAGCTGCAGG**CGGTC**	29	61.1
	#PCR_h03r	TGCAGCTCTCATTTTCCATACA	22	64.1
SDF1 (-801 G/A)	#L1_h02	**ACGGG**CATCCACATGGGAGCCG	22	57.4
	#L2_h02	**ACGGG**CATCCACATGGGAGCCA	22	55.1
	#R_h02	GGTCTGCCTCTTCTGGGAGGT**CGGTC**	26	59.4
	#PCR_h02r	GACCTCCCAGAAGAGGCAGA	20	65.4
RANTES (-403 G/A)	#L1_h04	**ACGGG**TTCCTGCTTATTCATTACAGATCTTAC	32	55.3
	#L2_h04	**ACGGG**TTCCTGCTTATTCATTACAGATCTTAT	32	54.9
	#R_h04	CTCCTTTCCCTCATCCATGGAA**CGGTC**	27	60.8
	#PCR_h04r	CCATGGATGAGGGAAAGGAG	20	65.2
ApoE (3932 C/T)	#L1_h05	**ACGGG**CGGACATGGAGGACGTGT	23	55.8
	#L2_h05	**ACGGG**TGGACATGGAGGACGTGC	23	53.5
	#R_h05	GCGGCCGCCTGGTGCAGA**CGGTC**	23	67.8
	#PCR_h05r	CGTTAGACCGTCTGCACCA	19	64.6
FAAH (385C/A)	#L1_h06	**ACGGG**TCTCAGCTGTCTCAGGCCC	24	55.0
	#L2_h06	**ACGGG**TCTCAGCTGTCTCAGGCCA	24	53.9
	#R_h06	CAAGGCAGGGCCTGCTCTATG**CGGTC**	26	62.6
	#PCR_h06r	CCGTTAGACCGCATAGAGCA	20	64.7
AGT (M174T)	#L1_h07	**ACGGG**TCCAGCTGCTGCTGTCCAC	24	57.2
	#L2_h07	**ACGGG**TCCAGCTGCTGCTGTCCAT	24	56.6
	#R_h07	GGTGGTGGGCGTGTTCACA**CGGTC**	24	62.0
	#PCR_h07r	CCCGTTAGACCGTGTGAACA	20	65.5
AGT (M235T)	#L1_h08	**ACGGG**TGACTGGCTGCTCCCTGAT	24	54.3
	#L2_h08	**ACGGG**TGACTGGCTGCTCCCTGAC	24	54.8
	#R_h08	GGGAGCCAGTGTGGACAG**CGGTC**	23	59.9
	#PCR_h08r	GTTAGACCGCTGTCCACACTG	21	64.3
MTHFR (A222V)	#L1_h09	**ACGGG**TAAGGTGTCTGCGGGAGC	23	55.3
	#L2_h09	**ACGGG**AAGGTGTCTGCGGGAGT	22	54.2
	#R_h09	CGATTTCATCATCACGCAGCTT**CGGTC**	27	60.8
	#PCR_h09r	GAAGCTGCGTGATGATGAAATC	22	65.3