

**Table S5. PCR conditions for recombination assays at hotspots E, F, H, K, T and 5A**

**Hotspot E**

primer	sequence 5'-3'	PCR conditions
<b>1° PCR:</b> E12.4R+2 or E12.4R- with E4.9F	ATTGACCCAGTTTACTACACATAGT ACCCAGTTTACTACACAGT GAGTATGAATGGTGCTCTCCC	25 cycles: 96°C 20 sec, 58°C, 30 sec, 65°C 9 min 25 cycles: 96°C 20 sec, 58°C, 30 sec, 65°C 9 min
<b>2° PCR:</b> E10.6RT or E10.6RC with E5.6F	CAGCCTGGTCAACCTGA AGCCTGGTCAACCTGG TAACCATGCACTGAGCTCCC	38 cycles: 96°C 20 sec, 62°C, 30 sec, 65°C 6 min 38 cycles: 96°C 20 sec, 62°C, 30 sec, 65°C 6 min

**Hotspot F**

primer	sequence 5'-3'	PCR conditions
<b>1° PCR:</b> F4.6FT or F4.6FC with F9.7R	AGGGGATCTGGCTGCCT AGGGGATCTGGCTGCCC ATCCAAATGGCCAATGAGCC	26 cycles: 96°C 20 sec, 63°C 30 sec, 65°C 7 min 26 cycles: 96°C 20 sec, 63°C 30 sec, 65°C 7 min
<b>2° PCR:</b> F4.8FC or	GTCCAGAGTCTTACTTGAC	6 cycles: 96°C 20 sec, 65°C 30 sec, 65°C 6 min; 6 cycles: 96°C 20 sec, 64°C 30 sec, 65°C 6 min; 21 cycles: 96°C 20 sec, 63°C 30 sec, 65°C 6 min
F4.8FT	GTCCAGAGTCTTACTTGAT	6 cycles: 96°C 20 sec, 63°C 30 sec, 65°C 6 min; 6 cycles: 96°C 20 sec, 62°C 30 sec, 65°C 6 min; 21 cycles: 96°C 20 sec, 61°C 30 sec, 65°C 6 min
with 9.5R	AGTACATATATCTGGGGCC	
<b>1° PCR:</b> F3.8aFG or F3.8aFA with F9.7R	GAGYACCAACCCAGTCACG GAGYACCAACCCAGTCACA ATCCAAATGGCCAATGAGCC	25 cycles: 96°C 20 sec, 64°C 30 sec, 65°C 9 min 25 cycles: 96°C 20 sec, 62°C 30 sec, 65°C 9 min
<b>2° PCR:</b> F3.8FT or F3.8FC	ccccCAATGCTACTCTTCTGGAT ccccCAATGCTACTCTTCTGGAC	35 cycles: 96°C 20 sec, 60°C 30 sec, 65°C 7 min 10 cycles: 96°C 20 sec, 65°C 30 sec, 67°C 7 min 25 cycles: 96°C 20 sec, 64°C 30 sec, 65°C 7 min
with 9.5R	AGTACATATATCTGGGGCC	
<b>1° PCR:</b> F13.3RC or F13.3RT with F3.5F	CGTTTGTGGATAGACCAGG CGTTTGTGGATAGACCAGA CAACTCCAGACCTACTGACC	25 cycles: 96°C 20 sec, 63°C 30 sec, 65°C 11 min 25 cycles: 96°C 20 sec, 63°C 30 sec, 65°C 11 min
<b>2° PCR:</b> F13.0RG or F13.0RT with F4.0F	GCCAGCATGGGCAAGACC TGCCAGCATGGGCAAGACA ATTGATCCAAGGTCTGGAGG	35 cycles: 96°C 20 sec, 63°C 30 sec, 65°C 10 min 35 cycles: 96°C 20 sec, 63°C 30 sec, 65°C 10 min

**Hotspot H**

primer	sequence 5'-3'	PCR conditions
<b>1° PCR:</b> H2.0FA or H2.0FG with H12.3R	TCCCAGAGCTACCTCAAA TCCCAGAGCTACCTCAAG ATACACGGCAGGCTTTGCCC	25 cycles: 96°C 20 sec, 61°C, 30 sec, 65°C 11 min 25 cycles: 96°C 20 sec, 62°C, 30 sec, 65°C 11 min
<b>2° PCR:</b> H2.5FA or H2.5FG with H10.3R	GCTCCAGAAGGACCCTCA CTCCAGAAGGACCCTCG ATCTTACTCTTACCCCTAC	35 cycles: 96°C 20 sec, 64°C, 30 sec, 65°C 9 min 35 cycles: 96°C 20 sec, 61°C, 30 sec, 65°C 9 min

**Hotspot K**

primer	sequence 5'-3'	PCR conditions
<b>1° PCR:</b> K11.7RC or K11.7RT with K4.4F	TGAAGGTAGAATTGGCCG GTGAAGGTAGAATTGGCCA CACATGTCAGCACACATTGCCC	25 cycles: 95°C 20 sec, 59.5°C 30 sec, 65°C 9 min 25 cycles: 95°C 20 sec, 60°C 30 sec, 65°C 9 min
<b>2° PCR:</b> K10.9RA or K10.9RG with K4.5F	CCCCCCCCCTTAATTTTTAAACT CCCCCCCCCTTAATTTTTAAACC GCGAGGAGTCTTAAACTCCC	38 cycles: 95°C 20 sec, 60°C 30 sec, 65°C 8 min 38 cycles: 95°C 20 sec, 60°C 30 sec, 65°C 8 min
<b>1° PCR:</b> K2.9FC K2.9FT2 with K10.8R	CCAGGTCCCCTGTCTC GTTCAGGTCCCCTGTCTT CTTGCTGAAGCCTCTCCC	28 cycles: 95°C 20 sec, 62°C 30 sec, 65°C 9 min 25 cycles: 95°C 20 sec, 63°C 30 sec, 65°C 9 min

<b>2° PCR:</b>		
K3.2FC2 or	ccccGAAAAACAGCACATCAGAC	10 cycles: 95°C 20 sec, 61°C 30 sec, 65°C 9 min; 25 cycles: 95°C 20 sec, 60°C 30 sec, 65°C 9 min 10 cycles: 95°C 20 sec, 61°C 30 sec, 65°C 9 min; 25 cycles: 95°C 20 sec, 60°C 30 sec, 65°C 9 min
K3.2FG2	ccccGAAAAACAGCACATCAGAG	
with K10.8R	CTTGGCTGAAGCCTCTCCC	

**Hotspot T**

<b>primer</b>	<b>sequence 5'-3'</b>	<b>PCR conditions</b>
<b>1° PCR:</b>		
T10.8RC or	ccccCTTTGTTTTCTGTCTTCTG	25 cycles: 96°C 20 sec, 62°C, 30 sec, 65°C 11 min
T10.8RT	ccccCTTTGTTTTCTGTCTTCTA	25 cycles: 96°C 20 sec, 58°C, 30 sec, 65°C 11 min
with T1.1F	GGCCCAACATACATTGGCTC	
<b>2° PCR:</b>		
T9.6+ or	ccccGCAATTTTCATGTATCTC	35 cycles: 96°C 20 sec, 58°C, 30 sec, 65°C 9.5 min
T9.6-	ccccTGCAATTTTCATGTACTC	35 cycles: 96°C 20 sec, 58°C, 30 sec, 65°C 9.5 min
with T1.3F	GAGGACAGTCCTGGCTGTG	

**Hotspot 5A**

<b>primer</b>	<b>sequence 5'-3'</b>	<b>PCR conditions</b>
<b>1° PCR:</b>		
5A9.9aRG or	CTTGTGATCTCACAGCAC	25 cycles: 96°C 20 sec, 55°C, 30 sec, 65°C 7.5 min
5A9.9aRC	CTTGTGATCTCACAGCAG	25 cycles: 96°C 20 sec, 55°C, 30 sec, 65°C 7.5 min
with 5A3.6F	AGCTGACATGGCCAAGTTCC	
<b>2° PCR:</b>		
5A9.9RC or	TCTCACAGCACAGGTTGG	32 cycles: 96°C 20 sec, 58°C, 30 sec, 65°C 7.5 min
5A9.9RG	TCTCACAGCAGAGGTTGC	32 cycles: 96°C 20 sec, 55°C, 30 sec, 65°C 7.5 min
with 5A3.7F	CCTGGCGAATAGCTCTTTCC	