

**S1 Table.** PCR and Single Base Extension (SBE) primer sequences and reaction condition for Multiplex R.

<b>PCR*</b>			
Marker	SNP	PCR Forward Primer (5'-3')	PCR Reverse Primer (5'-3')
M269	T>C	CATGCCTAGCCTCATTCCTC	CTGGATGGTCACGATCTCCT
L23	G>A	ACACAGTGAAACCCCGTCTC	AAGATTGTGGGGACAAAGGA
U106	C>T	TCCTGAATAGCAAATCCCAAAG	AATGGCAGAGGTAGGAGGAAAT
U152	G>A	GAAACATTCCACGCTTGAGG	AGCCTCTTTGGCTTCCAT
S116	C>A	TCAGTCAGGGCAAATCTGAA	GGTGGAGTTGGGGCTAAAGT
M529	C>G	GCCCCCAAAACAACAGAATA	GGAAGCATTCAGAACAGGT
M153	T>A	TTCTCAGACACCAATGGCTTA	TCTGACTTGGAAAGGGGAAA
M167	C>T	GAGGCTGGGCCAAGTTAAG	CTTCCTCGAACCACTACCA
M207	A>G	CGTTACAACATGGGCAAA	TCCTCTCTGAAATGCCGAAT
<b>SNaPshot**</b>			
Y-SNP	***	SBE Primer (5'-3')	Concentration in the reaction ( $\mu$ M)
M269	For	GTCTGACAAGGAATGATCAGGGTTGGTTAAT	0.12
L23	For	GCGACAGAGCGAGACTCT	0.16
U106	Rev	TCTGACAATAGCAAATCCCAAAGCTCCA	0.12
U152	Rev	CAAGGATAAGAAAAATGAGTATTGTGAAAATA	0.08
S116	Rev	GAAAGTCTGACAAGAGTTGGGGCTAAAGTGAAG	0.04
M529	For	AATAACAAACCGCTCTCAGACA	0.04
M153	Rev	AAAGCTCAAAGGGTATGTGAACA	0.04
M167 (SRY2627)	For	AAGCCCCACAGGGTGC	0.04
M207	For	AACAAATGTAAGTCAAGCAAGAAATTAA	0.10
SBE fragment size (bp)			

\*PCR was carried out in 10  $\mu$ l containing: 5 $\mu$ l Qiagen® multiplex PCR kit, 0.2 $\mu$ M of each primer and 5-10 ng DNA. Thermocycling conditions: denaturation at 95°C for 15 min; 35 cycles at 94°C for 30s, 60°C for 90s and 72°C for 60s; final extension of 72°C, 10 min. Prior to SNaPshot reaction, 1  $\mu$ l of the PCR product was purified with 0.5  $\mu$ l of Exo-SAP-it (USB), incubated at 37°C for 15 min, and followed by an enzyme inactivation at 85°C for 15 min. \*\*SNaPshot was carried out in 5  $\mu$ l reaction containing 1  $\mu$ l of SNaPshot™ Multiplex Ready Mix (Applied Biosystems), 1.5  $\mu$ l of purified PCR product and extension primers. The reactions were submitted to 25 cycles of 96°C for 10 s, 50°C for 5 s and 60°C for 30 s. Final products were purified with 1  $\mu$ l of SAP (USB) at 37°C for 1 h, followed by a denaturing step of 85°C for 15 min. The single-base extension products were run on an ABI 3130 Genetic Analyzer (Applied Biosystems), and the analysis was performed with GeneMapper® Software v4.0. \*\*\*Annealing of the SBE primers in forward or reverse sequence direction.