

Supplementary Table 1. Primers used in this study.

Marker	Functions	Primer sequences (5' → 3')	
		Forward primer	Reverse primer
C65	Construction of vector	TCGGGCTGCAGAATTCAGGTCGA	CGAGAAGCTTGAATTCCATCACTT
		GGTGGTGAGGT	GGGTCCGTCT
C67	Construction of vector	TCGGGCTGCAGAATTCAGGTGGT	CGAGAAGCTTGAATTCAAACCGAG
		GAGGCATGGAGTT	TCATCAATTCCT
C65-GFP	Construction of vector	AGCAGATCTATCGATTCTAGAAT	TCCTTTGCCCATGGCTCTAGAATTC
		GGAGCTCGCCTTGGGG	CTGGGCTCTGTGTT
G65-1	Sequencing of <i>RppM</i>	AGGTCGAGGTGGTGAGGT	TATTGTCCTTTAAGGCATATTTGAT
G65-2	Sequencing of <i>RppM</i>	GACTGTTGTGCTTTTATTTCTA	GATGCTTTAGGCTGATGGGTA
G65-3	Sequencing of <i>RppM</i>	TAAGTTGTCCAAGGATGAAG	AGTTGACTTTGACTATTACTTGCT
G65-4	Sequencing of <i>RppM</i>	TAGAGCTTTTGTGTAAATGCCA	CATCACTTGGGTCCGTCT
Actin	RT-PCR	TCCATCATGAAGTGCACGT	AGTAATCTCCTTGCTCATGC
RT65	RT-PCR	AATGGTGTGCCGTTTCGAG	AGTTGACTTTGACTATTACTTGCT

Supplementary Table 2. Primer sequence of KASP markers KM23 and KM19.

Marker	Primer sequences (5' → 3')		
	Primer_AlleleFAM	Primer_AlleleHEX	Primer_Common
KM23	GAAGGTGACCAAGTTCATGCTCT	GAAGGTCGGAGTCAACGGATTC	GCAGCGCTTCCC
	GAAGCTAYCAATTGGGGCCAC	TGAAGCTAYCAATTGGGGCCAT	TGAAGAAACCAT
KM19	GAAGGTGACCAAGTTCATGCTGC	GAAGGTCGGAGTCAACGGATTG	ACAGGACCTAGA
	CAACAGTATACCTTGGAGGA	CCAACAGTATACCTTGGAGGC	TAATCTAGCG

Supplementary Table 3. The position and SNPs of 24 KASP markers.

Markers	SNP_ID	allele_X	allele_Y	Markers	SNP_ID	allele_X	allele_Y
KM1	45	T	A	KM13	1623	T	G
KM2	64	A	G	KM14	1942	C	G
KM3	358	T	C	KM15	2039	A	G
KM4	522	T	C	KM16	2075	A	C
KM5	818	T	A	KM17	2089	T	C
KM6	818	A	T	KM18	2310	G	A
KM7	1030	C	T	KM19	2451	T	G
KM8	1162	A	C	KM20	2650	C	G
KM9	1209	G	A	KM21	698	G	C
KM10	1360	A	C	KM22	1628	T	C
KM11	1472	A	G	KM23	1726	G	A
KM12	1538	G	C	KM24	1983	C	G