Additional file 9

Primer combinations and annealing temperatures (T_a) of candidate genes.

Experiment	Candidate Gene	Primer	T_a (°C)
QTL 1	Vrille	PC19 Forward: 5'CGACCCAAATGACTACTCTCCT PC19 Reverse: 5' CGTCAGCTTACTCCTCTTGGTT	58
		PC34 Forward: 5' ACCGGCTCATAATTGATCGTT PC34 Reverse: 5' GTCGGTTGCAAAAACTGAATGTC	58
		PC38 Forward: 5' CGG GGC AAC CGA CAA AAA AAT PC38 Reverse: 5' GCGTTCAATAAAAAGGACGCGGATCA	58
		EBOX1 Forward: 5' GATCCGCGTCCTTTTTATTGAAC EBOX1 Reverse: 5'CGAAAGCATCACTCAACACAATG	58
Structure analysis of *Vrille*	Vrille	PC8 Forward: 5'GTCCGCCGAAACATGGTYGCMG PC8 Reverse: 5' GDACTGAACCGGGDGGTTCG	61 -50
		PC19 Forward: 5'CGACCCAAATGACTACTCTCCT PC19 Reverse: 5' CGTCAGCTTACTCCTCTTGGTT	58
		PC21 Forward: 5'CCCTACCAGGAGAGGCTACC PC21 Forward: 5' TCAGTGCTCGWGCSMGCGSG	58
		PC34 Forward: 5' ACCGGCTCATAATTGATCGTT PC34 Reverse: 5' GTCGGTTGCAAAAACTGAATGTC	58
		PC38 Forward: 5' CGG GGC AAC CGA CAA AAA AAT PC38 Reverse: 5' GCGTTCAATAAAAAGGACGCGGATCA	58
		CDS+5' Forward: 5' TGTCACGTGTTTCAAGCATGGTA CDS+5' Reverse: 5' TGTTCTGGTGCATCATGTTCTTC	58
		EBOXBCD Forward: 5' ATTTCACGTTCTTCGATCAC EBOXBCD Reverse: 5' TAAATGCAAATGCACAGAAC	55
		EBOXDE Forward: 5' CTAATCGCGGTTCTAATGAC EBOXDE Reverse: 5' CATTCGAAACTTAAGGTTGC	55
		EBOXFGH Forward: 5' GCAACCTTAAGTTTCGAATG EBOXFGH Reverse: ACGGTGACGACACTCTAAAT	55

		EBOXI Forward: 5’ GATCCGCGTCCTTTTTATTGAAC EBOXI Reverse: 5’CGAAAGCATCACTCAACACAATG	58
		EBOXJ Forward: 5’ ACCGGCTCATAATTGATCGTT EBOXJ Reverse: 5’GCGGATTTCTTCCGTTACAA	58
		EBOXK Forward: 5’ TGTCACGTGTTTCAAGCATGGTA EBOXK Reverse: 5’GTCGGTTGCAAAAACTGAATGTC	58
		DNAwalk1 TSP1: 5’GCGTCAGCTTACTCCTCTTGGTT DNAwalk1 TSP2: 5’GCTGTGCTTTGAGTACGTGGTTC DNAwalk1 TSP3: 5’GCGCTGTCCAAAGAACTCCTTGC	65 65 66
		DNAwalk2 TSP1: 5’TGAGCCGGTAATACAGGAAGTGTAA DNAwalk2 TSP2: 5’TGCCTATTGTGGCGACTTAGTTTGAT DNAwalk2 TSP3: 5’GCGTTCAATAAAAAGGACGCGGATCA	64.1 64.4 66.2
Expression analysis	Vrille	Forward: 5’ CTGTGCTTTGAGTACGTGGTTC Reverse: 5’ GCAAACAGAGGGAGTTCATACC	58
	eIF1α	Forward: 5’AGGAGTTGCGTCGTGGTTAC Reverse: 5’ CTTTGATTTCGGCGAACTTG	58