Table S1. Oligo primer sequences used for gene amplification and qRT-PCR to determine the gene expression of *Malus* cultivars 'Royalty' and 'Flame'.

Accession Number	Gene	Primer sequence (5'-3') for gene amplification	Primer sequence (5'-3') for qRT-PCR
MF062705	*McAPK*-F	ATGGCTCCGAAAGCGAATGC	CCAAAGAGCCGTGACTATG
	McAPK-R	TCATTGTGCGGAGGTGGAG	TGCCCCTTGAGGAAACTGT
MF062706	*McEF-alpha*-F	ATGGGTAAGGAGAAGTTCCACATC	AAGGGCAAGGTATGATGAAA
	McEF-alpha-R	TCACTTCTTCTTAGCTGCGGC	AAATGGGGACAAAGGGGA
MF062707	*McFIE*-F	ATGGCGGCAAAGTTCGCTT	CATTGCTTGTGGCTGGAGGA
	McFIE-R	TTAACAACTTTCCATAGCATCCCA	ACACTTAGGACTTCATTGCGGT
MF062708	*McMSI*-F	ATGGGCAAAGACGACGAAG	TTATTGCCACAAAGACCGT
	McMSI-R	CTAAGGCTTTGCCGGTTCTT	GAACCACTGAGTAAATGACCC
MF136604	*McSPL1*-F	ATGGAAATGGGCTCGAGTTCT	GGCTGCGAGGTAGATCTGAG
	McSPL1-R	TGACCAGTGCATCTGCTGAC	TGCCACGCGTAGACAGTATG
MF136605	*McSPL2*-F	ATGGACTGGAACTTGAAAGCAGC	CATGCCTCGTTGATGGATGC
	McSPL2-R	CTACTGCCAATGAAAAGGAAGTGT	GGTTCTGGTTGAGGCTTCCT
MF136606	*McSPL3*-F	ATGGAATCAGGCAGAGGTCATGG	GGGAGAAGATCTGGAGGGTCT
	McSPL3-R	TTATTGTAGGGAGGTCTTCCGACGC	GCCGGCGACAACTCCTTTTA
MF136607	*McSPL4*-F	ATGGAGGGCAAAAACTTTGAAGGAAG	CTTGTCAAGCGGAAAGGTGC
	McSPL4-R	TTATCTGATCTGACAATGCTTGGA	TCCATAAGGTTCGCCTGAGC
MF136608	*McSPL5*-F	ATGGAGGGAATGAGTAAGTTG	ATGAGACAGTGTCAGGCGGA
	McSPL5-R	TTATCTGATATGGAAATGCTTGT	CTCGTCGTTCGTTGTGTCCT
MF152949	*McMYB26*-F	ATGGGACATCACTCATGCTG	TCCTGCATTTGCCACCTTTTC
	McMYB26-R	ATGAGCGTTAAAGTTTGTGTCG	TGGAAGCGTAATTGGTCTGGT
MF062709	*McMYB32*-F	ATGGGAAGGTCTCCTTGCTG	TCCTTCGATGTGGGAAGAGC
	McMYB32-R	TCATTTCATCTCCAAGCTTCTGT	GTTGTGGGGTCAATCCCTCT
MF152951	*McMYB103*-F	ATGGGTCGGATTCCATGCTG	GATGGTCGTTGATTGCAGCG
	McMYB103-R	TACTGCTCATCGTTGTCATTGTG	TCGTCCTTAAAGCAGCCGAG
MF152950	*McSERK2*-F	ATGGAGAGAAAGGTTGGGAATTCAG	CTCGGAAGCGAATTGCACTG
	McSERK2-R	CCTTGGACCGGATAACTCAAC	CCAATTGTGCCACGTACAGC
MF152952	*McSERK3/5*-F	ATGACGTCCTCCGCCTCTGTTTC	CTTTCAGCCAAACCATCGCC
	McSERK3/5-R	TCAATTCTGAAAGACAGTGAGACAC	GGCTTTTGATCTTGCTCGGC
DQ341382	*Mc18S*-F		ACCACGGGGAGGTAGTGACAA
	Mc18S-R		CCTCCAATGGATCCTCGTTA