

**Table S1.** Primers and amplification conditions for identifying SNPs.

Name	Primer (5'-3')	Tm(°C)	Production size (bp)	Amplified region
MYF5-1	F:AGGAGCCAGAT-TTCAAGGG R:CCACAG-TCTAAACAGCCAAGC	61	792	Promoter
MYF5-2	F:ACACGAGCCAAGAAA-GAT R:TTACCTAAAC-CAAGGGACA	57	771	Promoter
MYF5-3	F:GCAAGTAAGCG-GATTGGG R:TGGTTAGGTTGGTCGTG	61	729	5'UTR, partial exon1
MYF5-4	F:GAGTGGCTGCTTTCGG R:GTTGCCTTTA-GATGTTAGTGTATG	57	758	Partial exon1, partial intron1
MYF5-5	F:GGATAGTTGGG-TATTGGG R:GA-TAGGGCTGTTACATTCA	57	786	Intron1, partial exon2
MYF5-6	F:CCTTGCGATTGGTGAG R:TGATAAAATGAGCCTG-GAA	60	824	Exon2, intron2, exon3
MYF5-7	F:CAGCACCGATTCTCAG R:ATACCAACAGGACCTAA	60	823	3'UTR

**Table S2.** SNaPshot single base extension primers

Name	Primer (5'-3')	Production size	Amplified region
MYF5-P1	F:CCTGAGCTCGCTAGCCTCGAGTGGTGGTGGTAGAGGTTGTGTCT	1859bp	-1799/+59
MYF5-P2	F:CCTGAGCTCGCTAGCCTCGAGAGTGTGTGAAGTTACTCGGTCG	1257bp	-1197/+59
MYF5-P3	F:CCTGAGCTCGCTAGCCTCGAGAAAGAGAGAAAGCCAGGGGTG	926bp	-866/+59
MYF5-P4	F:CCTGAGCTCGCTAGCCTCGAGGGTGTCAACTGAAATGGGGAGC	574bp	-514/+59
MYF5-P5	F:CCTGAGCTCGCTAGCCTCGAGCGGTGGGATATGCTAATAGTGCG	301bp	-241/+59
MYF5-R	R:CAGTACCGGATTGCCAAGCTTCAGGAGCCGTCGTAGAAGTACTC		

**Table S3.** Homologous recombination primer designed for construction of expression vector

SNP name	Primer (5'-3')	Tm(°C)
SNP1	TTTTTTTTTTTAGAGGGAGAAGGGAGACGA	55
SNP2	TTTTTTTTTTTTTGGGAAAGAGAGAAAGCCAGG	55
SNP3	TTTTTTTTTTTTTTTTTCTCAATAACACAAAGCCTACATA	55
SNP4	TTTTTTTTTTTTTTTTTTTTTTTTTCTCTGTACCTGCTAGGGCTT	58
SNP5	TTTTTTTTTTTTTTTTTTTTTTTTTTTCTACTCTAGGTGCACACTGAA	58
SNP6	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGTATGTCAAGGTCCACTGG	58
SNP7	TATATCTAAAGCAAAGATGAAGGAAAA	60

**Table S4** The primer information of the base mutation of SNP2

Primer name	Sequence (5'-3')	Tm(°C)
Base mutation F	CACAAAGCCTACATAATGGCAATCTG	55
Base mutation R	GGGAGTTATTGTGTTTCGGATGTATT	
Wild type F	CTCGAGTCAACAAACAGGCGCAGAA	55
Wild type R	AAGCTTACAGGAGGGCCAGGTGACCA	