

**Table S1** List of primers used in this study.

Primer Name	PrimerSequence (5'→3')	Purpose
<i>MdWRKY46</i> -F	ATGGATTCTAGTAAGAGCTGGG	full-length cDNA of <i>MdWRKY46</i>
<i>MdWRKY46</i> -R	TTATAAGAAAAATCCTGGGCA	full-length cDNA of <i>MdWRKY46</i>
<i>MdWRKY46</i> -2F	GAGCTCGGTACCCGGGGATCCATGGATTCTAGTAAGAGCTGGG	subcellular localization
<i>MdWRKY46</i> -2R	GCCCTTGCTCACCATGTCGACTAAGAAAAATCCTGGGCAGTC	subcellular localization
<i>MdWRKY46</i> -qF	CAAGCCAGATGAGAAACA	qPCR
<i>MdWRKY46</i> -qR	TCAAACGGGAAATAGGAG	qPCR
<i>Actin</i> -F	ACACGGGGAGGTAGTGACAA	qPCR
<i>Actin</i> -R	CCTCCAATGGATCCTCGTTA	qPCR
<i>AtKIN1</i> -F	AGCACAAACAGGCGGGAAG	qPCR
<i>AtKIN1</i> -R	GTGGTGTTCTCTGTTTGATCCA	qPCR
<i>AtRD29A</i> -F	GTGCCGACGGGATTTGACG	qPCR
<i>AtRD29A</i> -R	CCCCAAGAAATCAAACAA	qPCR
<i>AtCOR47A</i> -F	ACAGAGGAATCACCAGCGACG	qPCR
<i>AtCOR47A</i> -R	CGTTGTTCTTGTA CTCTCAGCCAT	qPCR
<i>AtDREB2A</i> -F	TGGAGAATGGTGCGGAAGA	qPCR
<i>AtDREB2A</i> -R	CTCCACTCTGATCATAAACTGCCAT	qPCR
<i>AtERD10</i> -F	AACACCGTTCCAGAGCAGG	qPCR
<i>AtERD10</i> -R	CGGTGTTCTTGTA CTCTTGCCAT	qPCR
<i>AtRD29B</i> -F	CGGTGTTCTTGTA CTCTTGCCAT	qPCR
<i>AtRD29B</i> -R	GAAGGAGACGCAACAAGGG	qPCR
<i>MdWRKY46</i> -hF	GAGCTCGGTACCCGGGGATCCATGGATTCTAGTAAGAGCTGGG	homologous recombination
<i>MdWRKY46</i> -hR	TGCCTGCAGGTCGACTCTAGATAAGAAAAATCCTGGGCAGTC	homologous recombination

**Table S2.** The PCR reaction system of *MbWRKY46*

Component	Volume
cDNA	1.5 µL
<i>MbWRKY46</i> -F	1.0 µL
<i>MbWRKY46</i> -R	1.0 µL
2×Easy Taq® PCR SuperMix	12.5 µL
dd H <sub>2</sub> O	9.0 µL
Total Volume	25 µL

**Table S3.** PCR reaction conditions

Step	Temperature	Time
Pre denaturation	95 °C	5 min
Denaturation	95 °C	45 s
Annealing	55 °C	1 min
Extend	72°C	5 min