

Table 1 Suppl. Sequences of primers. Underlined letters indicate restriction sites.

Function	Primer	Sequence (5'-3')
Gene and genome gene clone	<i>MpWRKY6a-S</i>	ATGGACAAAGGATGGGGGCT
	<i>MpWRKY6a-A</i>	TTAATTTCCCGGGAAGCTGCCTG
Gene and genome gene clone	<i>MpWRKY6b-S</i>	ATGGACAAAGGATGGGGGCT
	<i>MpWRKY6b-A</i>	TTAATTTCCCGGGAACCA
<i>MpWRKY6a</i> promoter clone	P- <i>MpWRKY6a-S</i>	TGGAGTCGTAATTACAGTCGAT
	P- <i>MpWRKY6a-A</i>	GAGCCCCCATCCTTTGTC
<i>MpWRKY6b</i> promoter clone	P- <i>MpWRKY6b-S</i>	GAGACTAAGCCACTGCTTCTC
	P- <i>MpWRKY6b-A</i>	GGTGAGCCCCCATCCTTTG
<i>MpPHO1</i> promoter clone	P- <i>MpPHO1-S</i>	TCTCTTGTGTCTCCGACCAT
	P- <i>MpPHO1-A</i>	CAAGGGCAGCAACCTATGAAG
Vector construction	pET32a- <i>MpWRKY6a-S</i>	CCCAAGCTTGCATGGACAAAGGATGGGGGC
	pET32a- <i>MpWRKY6a-A</i>	CCGCTCGAGATTTCCCGGGAAGCTGCTAA
Vector construction	pET32a- <i>MpWRKY6b-S</i>	CCCAAGCTTGCATGGACAAAGGATGGGGGC
	pET32a- <i>MpWRKY6b-A</i>	CCGCTCGAGATTTCCCGGGAACCCTAATC
Vector construction	GFP- <i>MpWRKY6a-S</i>	CCCAAGCTTATGGACAAAGGATGGG
	GFP- <i>MpWRKY6a-A</i>	ACGCGTCGACATTTCCCGGGAAG
Vector construction	GFP- <i>MpWRKY6b-S</i>	CCCAAGCTTATGGACAAAGGATGGG
	GFP- <i>MpWRKY6b-A</i>	ACGCGTCGACATTTCCCGGGAACCCTAATC
Vector construction	pAbAi-p <i>MpPHO1-S</i>	CGGGGTACCTCTCTTGTGTCTCCGACCAT
	pAbAi-p <i>MpPHO1-A</i>	CAGCTCGAGCAAGGGCAGCAACCTATGAAG
Mutation of <i>MpPHO1</i> promoter	M-1-S	TATAAACCAAAATGTGTGATAAGACTTGCTCGCTACTCCTTCG
	M-1-A	CGAAGGAGTAGCGAGCAAGTCTTTTCAACACATTTGGTTTATA
Mutation of <i>MpPHO1</i> promoter	M-2-S	GAAATTCGTTCAAAGTTGATTGCATGTTTTCTGGGC
	M-2-A	GCCCAGGAAAACATGCAATCAACTTTGAACGAATTC
Vector construction	pGADT7- <i>MpWRKY6a-S</i>	CCCATCGATACATGGACAAAGGATGGGGGC
	pGADT7- <i>MpWRKY6a-A</i>	CCGCTCGAGTTAATTTCCCGGGAAGCTGC
Vector construction	pGBDT7- <i>MpWRKY6a-S</i>	CCGGCCATGGAGGGCCATGGACAAAGGATGGGGGC
	pGBDT7- <i>MpWRKY6a-A</i>	ACGCGTCGACTTAATTTCCCGGGAAGCTGC
Vector construction	pDEST32- <i>MpWRKY6b-S</i>	GGGGACAAGTTTGTACAAAAAAGCAGGCTTCATGGACAAAGG --ATGGGGGC
	pDEST32- <i>MpWRKY6b-A</i>	GGGGACCACTTTGTACAAGAAAGCGGGTCTTAATTTCCCGGG A--AGCTGC
Vector construction	pWR306- <i>MpWRKY6b-S</i>	ACGCGTCGACATGGACAAAGGATGGGG
	pWR306- <i>MpWRKY6b-A</i>	CGGGGTACCTTAATTTCCCGGGAAGCTG
RT-qPCR	RT- <i>MpWRKY6a-S</i>	CAGACGGGGATGCTACGG
	RT- <i>MpWRKY6a-S</i>	GGCGAGGCTAATGG-TGGTG
RT-qPCR	RT- <i>MpWRKY6b-S</i>	CACCGCTGCTGTTGGACAT
	RT- <i>MpWRKY6b-A</i>	TGTGCAAGACGATGTTTGATG
RT-qPCR	EF-S	ATTCAAGTATGCCTGGGTGC
	EF-A	CAGTCAGCCTGTGATGTTCC
RT-qPCR	<i>tublin8-S</i>	ATAACCGTTTCAAATTCCTCTCTCTC
	<i>tublin8-A</i>	TGCAAATCGTTCTCTCCTTG

Table 2 Suppl. Predicted *cis*-acting elements in *MpWRKY6a* promoter. Location of first nucleotide 5' upstream of start codon is designated as -1 position.

<i>Cis</i> -acting elements	Sequence	Position	Function
ABRE	CACGTG	+769, +714	abscisic acid response
ARE	TGGTTT	-36, -208	anaerobic induction
ATCT Motif	AATCTAATCT	+944, -966	light response
Box 4	ATTAAT	+495, +665, +1141	light response
Box W1	TTGACC	-135	fungal elicitor response
CGTCA -Motif	CGTCA	+203, +1132, -837, -382, -849	MeJA response
G Box	CACGTT	-106, +713, +441	light response
MBS	CGGTCA	+165	MYB binding site
MBS	CAACTG	+408, -231	MYB binding site; drought-inducibility
P Box	CCTTTTG	+419	gibberellin response
circadian	CAANNNNATC	-997	circadian control
W Box	TGAC	+56, -155, +216, +383, -409, +659, +823, -836	WRKY binding site

Table 3 Suppl. Predicted *cis*-acting elements in *MpWRKY6b* promoter. Location of first nucleotide 5' upstream of start codon is designated as -1 position.

<i>Cis</i> -acting elements	Sequence	Position	Function
ABRE	CACGTG	+123, +325	abscisic response
ACE	AAAACGTTTA	-349	light response
ARE	TGGTTT	+77	anaerobic induction
ATCT Motif	AATCTAATCT	+944, -966	light response
Box 4	ATTAAT	+336, +713, +1148	light response
Box II	TGGTAATAA	-547	light response
CGTCA -Motif	CGTCA	+60, +120, +826, -872, -884	MeJA response
LTR	CCGAAA	-310	low temperature response
MBS	CGGTCA	+22, -768	MYB binding site
TC-rich repeats	ATTTTCTTCA	+1100	defense and stress response
TGA element	AACGAC	-435	auxin response
WUN motif	TCATTACGAA	+232	wound response
circadian	CAANNNNATC	-997	circadian control
W Box	TGAC	+12, +73, +804, +858, +873, +885	WRKY binding site

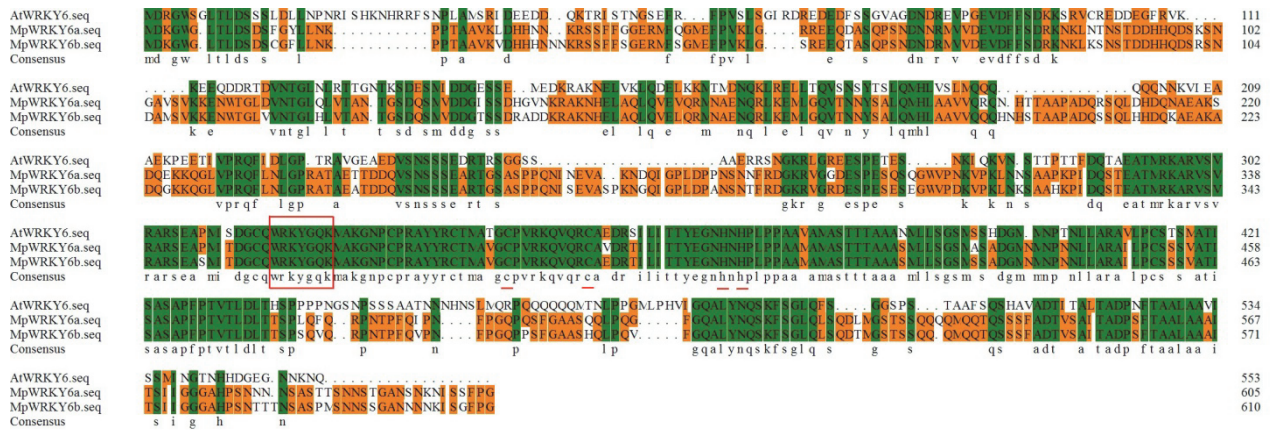


Fig. 1 Suppl. Amino acid sequence alignment of MpWRKY6a, MpWRKY6b, and AtWRKY6, showing WRKY domain (red boxes) and novel zinc finger structure, CX₅CX₂₃HXH (red lines).

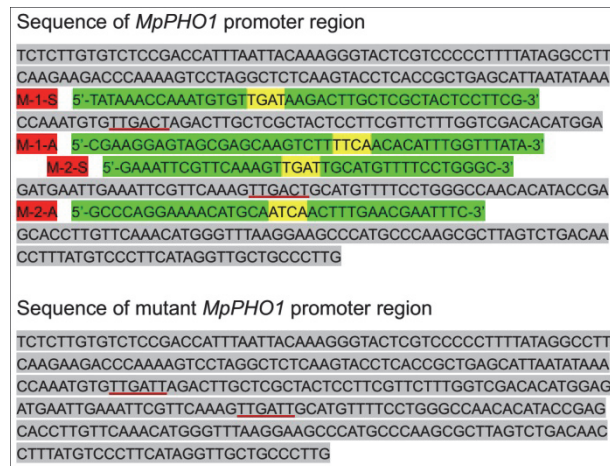


Fig. 2 Suppl. Sequences of *MpPHO1* promoter region and mutant *MpPHO1* promoter region used in yeast one-hybrid assays. Primers used in sequence mutation were listed. M-1-S and M-1-A is one primer pair used in the first W-box mutation. M-2-S and M-2-A is one primer pair used in the second W-box mutation.

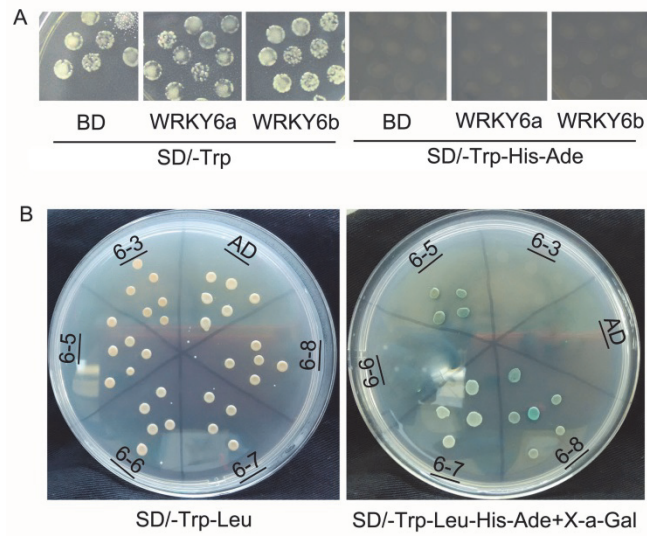


Fig. 3 Suppl. MpWRKY6a interaction proteins screened *via* yeast two-hybrid assays. *A* - All yeast cells, whether transferred with the pGBKT7, p-*MpWRKY6a*-GBKT7, or p-*MpWRKY6b*-GBKT7 vectors, were unable to survive on media that lacked Trp, His, and Ade. *B* - Only lines 6-5, 6-6, and 6-8 survived on SD/-Leu-Trp-His-Ade media with 5-bromo-4-chloro-3-indolyl α -D-galactopyranoside (X- α -gal). Among them, only 6-5 and 6-8 turned blue.

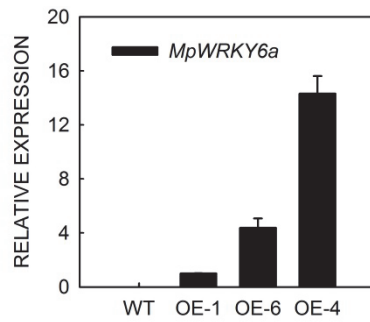


Fig. 4 Suppl. Expression of *MpWRKY6a* in different *Arabidopsis* over-expression lines. Expression levels were calculated relative to expression of *Atubulin8* mRNA. Data represent means \pm SD for 3 replicate samples.