

Additional data:**Table S1. Primers used in this study.**

Primer	Sequence (5'-3')	Notes
RT-MdFLP-F	GACTACGCAGTTGTTTCTG	qRT-PCR
RT-MdFLP-R	TATAGACTTTGGAGAAGGG	
RT-MdoMYB148-F	CCAAACCATTCCAGCCTAC	qRT-PCR
RT-MdoMYB148-R	GCGGAAAATATCGGCGAGC	
RT-MdARF19-F	CTGGAAACTTGTATATGTG	qRT-PCR
RT-MdARF19-R	CGAGGCTGCAGAGTTATC	
RT-MdARF7-F	GGGATTGAAGGGCAACTAG	qRT-PCR
RT-MdARF7-R	CCACTGGCAGTTCCGCTAG	
RT-MdPIN3-F	GGCCGAAGAAGAAAGATAG	qRT-PCR
RT-MdPIN3-R	CCTTTCGATGCAGCAGCAC	
RT-MdPIN10-F	GGTGGCACGTTCAAATGCC	qRT-PCR
RT-MdPIN10-R	GGCAACATGCAAGAGAGTG	
18S r RNA-F	GGGTTCGATTCCGGAGAGG	qRT-PCR
18S r RNA-R	CCGTGTCAGGATTGGGTAAT	
GUS-F	ACTTCTGGCCTGGCAGGAGAAAC	qRT-PCR
GUS-R	CTTGCGAGGTCGAAAATCGGC	
35S-F	TCCCACTGAATCAAAGGCCATGGAGTC	Gene cloning
35S::MdFLP-F	GGATCCATGCCGCAGGAGGAGTCAAAGAAGA AG(BamHI)	
35S::MdFLP-R	GTCGACTTATAGACTTTGGAGAAGGGATCG(S all)	pCAMBIA1300
35S::MdARF19-F	CTCGAGATGAAGGTTCCCAACAAATGGGTTTAT GG(XhoI)	Gene cloning
35S::MdARF19-R	GTCGACTTACCGATTAAACGAGGCTGCAGAG(SalI)	pCAMBIA1300
35S::MdFLP-GFP-F	AATGCCGCAGGAGGAGTCAAAGAAGAAG	Gene cloning
35S::MdFLP-GFP-R	TAGACTTTGGAGAAGGGATCGTTTG	pCXSNGFP
35S::MdPIN3-GFP-F	AATGAAATTAAACAGCCCARAACAACAAAAC CCG	Gene cloning
35S::MdPIN3-GFP-R	GAGCCCGAGAAGGATATAGTAGAGTATTGTT ATG	pCXSNGFP
35S::MdPIN10-GFP-F	AATGATCACATTATCCGACTTCTACCACGTC	Gene cloning
35S::MdPIN10-GFP-R	TAGCCCCAACAAAATGTAGTAAACAAGCG	pCXSNGFP

MdFLP-RNAi-F	GGATCCTTGGCAGCAGCCTGATTTATAC(Bam HI)	Gene cloning
MdFLP-RNAi-R1	GTCGACCCTTCAATAGGAATTGACTGTG(SalI)	
MdFLP-RNAi-R2	GTCGACGGTACCCCTTCAATAGGAATTGACTG TG(SalI KpnI)	pUCCRNAi
proMdFLP-GUS-F	AAGCTTCTTGTGATAAGAACAAATTGGGGAA AATC(HindIII)	Promoter cloning
proMdFLP-GUS-R	GGATCCTTGGGTTTTTAATTTACCTCTCTCTC (BamHI)	pCAMBIA1300
proMdPIN3-GUS-F	AAGCTTCTGAGTTCATTTTATAAAGGACCC(Hi ndIII)	Promoter cloning
proMdPIN3-GUS-R	GGATCCGAGTATTAGAGTGGGAGAGATGGAG (BamHI)	pCAMBIA1300
proMdPIN10-GUS-F	GTCGACTCCACAATAGAATTATTGGGAAG(SalI)	Promoter cloning
proMdPIN10-GUS-R	CCCGGGCTTGGTGACCGGTGAAAACCCAAAT C(SmaI)	pCAMBIA1300
AD-MdFLP-F	GGCCATTACGGCCATGCCGCAGGAGGAGTCA AAGAAGAAG(SfiI)	pGADT7
AD-MdFLP-R	GGCCGAGGCGGCCTTATAGACTTTGGAGAAG GGATCGTTTG(SfiI)	
AD-MdARF19-F	GGCCATTACGGCCATGAAGGTTCCCACAAAT GGGTTTATGG(SfiI)	pGADT7
AD-MdARF19-R	GGCCGAGGCGGCCTTACCGATTAAACGAGGC TGCAGAG(SfiI)	
proMdFLP-F	CCCGGGCTTGTGATAAGAACAAATGGGGAA AATC(SmaI)	pHIS2
proMdFLP-R	GAGCTCTTGGGTTTTTAATTTACCTCTCTCTC (SacI)	
proMdFLPAuxRE1-F	GAGCTCGTATTATGCAACTTGGTTTTGATAAA GGGATCATCTGGGAGCGTCAGAGAGAGACAG AGA(SacI)	pHIS2
proMdFLPAuxRE1-R	ACGCGTTCTCTGTCTCTCTGACGCTCCCAG ATGATCCCTTTATCAAAACCAAGTTGCATAAT AC(MluI)	
proMdFLPAuxRE1mu tant -F	GAGCTCGTATTATGCAACTTGGTTTTGATAAA GGGATCATCTGGGAGCGTCAGAGACAGACAG AGA(SacI)	pHIS2
proMdFLPAuxRE1mu tant -R	ACGCGTTCTCTGTCTGTCTCTGACGCTCCCAG ATGATCCCTTTATCAAAACCAAGTTGCATAAT AC(MluI)	
proMdFLPAuxRE2-F	GAGCTCGAGAGAGACAGAGAGAGAGTGAGA GTGAGGAGTGAGAACTGTGAGATAGCTAGA GAGAG(SacI)	pHIS2

proMdFLPAuxRE2-R	ACGCGTCTCTCTCTAGCTATCTCACAGTTTCTC ACTCCTCACTCTCACTCTCTCTGTCTCTCTC(Mlul)	
proMdFLPAuxRE2mu tant -F	GAGCTCGAGACAGACAGAGAGAGAGTGAGA GTGAGGAGTGAGAACTGTGAGATAGCTAGA GAGAG(SacI)	pHIS2
proMdFLPAuxRE2mu tant -R	ACGCGTCTCTCTCTAGCTATCTCACAGTTTCTC ACTCCTCACTCTCACTCTCTCTGTCTGTCTC (Mlul)	
proMdPIN3-F	GAGCTCCTGAGTTCATTTTATAAAGGACCC(Sa cl)	pHIS2
proMdPIN3-R	ACGCGTGAGTATTAGAGTGGGAGAGATGGAG (Mlul)	
proMdPIN10-F	GAATTCTCCACAATAGAATTATTGGGAAG(Eco RI)	pHIS2
proMdPIN10-R	GAGCTCCTTGGTGACCGGTGAAAACCCAAAT C(SacI)	
MdFLP-GST-F	GGATCCATGCCGCAGGAGGAGTCAAAGAAGA AG(BamHI)	EMSA
MdFLP-GST-R	GTCGACCTAGACTTTGGAGAAGGGATCGTTTG C(SalI)	
MdPIN3-F	GCTGTGGCCGCTGCCGGAGCCGGGGCGGAAG ATGACAGAG	probe
MdPIN3-R	CTCTGTCATCTTCCGCCCCGGCTCCGGCAGCG GCCACAGC	
muMdPIN3-F	GCTGTGGCCGCTGCCGGTGCCGGGGCGGAAG ATGACAGAG	mutant probe
muMdPIN3-R	CTCTGTCATCTTCCGCCCCGGCACCGGCAGCG GCCACAGC	
MdPIN10-F	TTCTGAGACCCGAAAAGCCGAGTGTGTTGGG GACTGTAAG	probe
MdPIN10-R	CTTACAGTCCCCAACACACTCGGCTTTTCGGG TCTCAGAA	
MdPIN10-F	TTCTGAGACCCGAAATGCCGAGTGTGTTGGG GACTGTAAG	mutant probe
MdPIN10-R	CTTACAGTCCCCAACACACTCGGCATTTTCGGG TCTCAGAA	
MdPIN3-a-F	GCTCCAGACTTTGAACAGG	ChIP-PCR
MdPIN3-a-R	CACAGCGGAATCGCCGAAG	
MdPIN3-b-F	CAAGACCGACAGTTTCTCC	ChIP-PCR
MdPIN3-b-R	CAATAGGGCTCGGATTTGGCG	
MdPIN3-c-F	CTCGAACGAATTCAGGGAC	ChIP-PCR

MdPIN3-c-R	CCGCATTGCTCTCTACAG	
MdPIN10-d-F	GCGTTTGGCATAGCTAGGA	ChIP-PCR
MdPIN10-d-R	CCATTTGTATTATAACAC	
MdPIN10-e-F	CATATATGTAATCAAATACC	ChIP-PCR
MdPIN10-e-R	AGCAAGCATGCACTTACAG	
MdPIN10-f-F	GCAACTCTCAACGCTCTATTC	ChIP-PCR
MdPIN10-f-R	CCCAAATCAGGAAAGTTAATTC	

Table S2. Accession numbers.

gene	protein function annotation	accession number
<i>MdFLP</i>	R2R3-MYB transcription factor	NCBI: XP_017192102.1
<i>MdoMYB148</i>	R2R3-MYB transcription factor	GDR: MDP0000210970
<i>MdMYB88</i>	R2R3-MYB transcription factor	NCBI: KY569647
<i>MdMYB124</i>	R2R3-MYB transcription factor	NCBI: KY569648
<i>MdARF7</i>	Auxin response factor	NCBI: XP_008388980.1
<i>MdARF19</i>	Auxin response factor	NCBI: XP_008337825.1
<i>MdPIN3</i>	PIN-FORMED(PIN) protein	NCBI: XP_008363929.1
<i>MdPIN10</i>	PIN-FORMED(PIN) protein	GDR: MDP0000138035