

## **Supplementary data**

**Supplementary Table S1.** Primers used for RACE.

**Supplementary Table S2.** Primers used for quantitative real-time PCR analysis.

**Supplementary Table S3.** Primers used for fusing GFP.

**Supplementary Table S4.** Primers used for Y1H assay.

**Supplementary Table S5.** Primers used for transient expression assay.

**Supplementary Table S6.** Primers used for Y2H analysis.

**Supplementary Table S7.** Primers used for BiFC assays.

**Supplementary Table S8.** Sequence similarities among the different *MaERFs* genes.

**Supplementary Figure S1.** Schematic analysis of MaERFs with ERF domains and EAR repressor domains.

**Supplementary Figure S2.** Amino acid sequence alignment of the MaERFs proteins.

**Supplementary Figure S3.** Phylogenetic tree of ERFs.

**Supplementary Figure S4.** Subcellular localization of MaERFs in tobacco leaves.

**Supplementary Figure S5.** Expressions of *MaERFs* genes in banana fruit peel with four different ripening treatments.

**Supplementary Figure S6.** Expressions of *MaERFs* genes in banana fruit pulp with four different ripening treatments.

**Supplementary Table S1.** Primers used for RACE.

<b>Name</b>	<b>Sequences(5'-3')</b>
<i>MaERF4-3RACE1</i>	GGCGGATTGCGACGAATTGAAG
<i>MaERF4-3RACE2</i>	CCCCAACGAGATCGGGTGCT
<i>MaERF6-3RACE1</i>	CACCTTCGACACCGCCGAG
<i>MaERF6-3RACE2</i>	TTCCTCCGTCTTCTCCGCTC
<i>MaERF7-3RACE1</i>	CCGACTTCATTCTCAACGC
<i>MaERF7-3RACE2</i>	CTTCATTCTCAACGCAACCATC
<i>MaERF8-3RACE1</i>	ATGTCAATCCTTGCTCCTATCG
<i>MaERF8-3RACE2</i>	GTTCTCCCTACCCATACTTT
<i>MaERF11-3RACE1</i>	TCTCCGAGGGCGAAGAACAG
<i>MaERF11-3RACE2</i>	AAGGCTAAGACCAACTTCCCAATC
<i>MaERF13-3RACE1</i>	GAAACAAGCAAAGCGGTCAAGTCT
<i>MaERF13-3RACE2</i>	CTGTTCTTCTCGTCCTTGGTG
<i>MaERF14-3RACE1</i>	AGACCAATTTTCCCTCCTTACC
<i>MaERF14-3RACE2</i>	CTATCACCAACATCAGCACCAC
<i>MaERF2-5RACE1</i>	TCACTCTCCTTTGCTTCTTGC
<i>MaERF2-5RACE2</i>	CTCCTCAAATACTCTGTTCCC
<i>MaERF5-5RACE1</i>	ACGGAGTTGATGATGAAGATACA
<i>MaERF5-5RACE2</i>	CGTTCTCGGGGAAGTTGAGTTTG
<i>MaERF10-5RACE1</i>	CACTCGGAGACATCGCAAGAAC
<i>MaERF10-5RACE2</i>	CAACCCTCGCTACTGCTTTCCCA
<i>MaERF11-5RACE1</i>	GCGGTGAAGATTGGGAAGTTGG
<i>MaERF11-5RACE2</i>	CGGTGAAGATTGGGAAGTTGGTC
<i>MaERF14-5RACE1</i>	GGGGGTTGACCTGCTTCCTA
<i>MaERF14-5RACE2</i>	GCGGACGGTAAGGAGGGAAAAT
<i>MaERF15-5RACE1</i>	CGAGGACAGGTAAATACTACAGGAC
<i>MaERF15-5RACE2</i>	GCTCTCCACCGCCAAACCC

**Supplementary Table S2.** Primers used for quantitative real-time PCR analysis.

<b>Name</b>	<b>Forward primer(5'-3')</b>	<b>Reverse primer(5'-3')</b>
<i>MaERF1</i>	GGAGAGTGTGGTGGAGTTGG	CGAGGATTGAGAGTTGCGGTT
<i>MaERF2</i>	GCAAGAAAGCAAAGGAGAGT	GAGAAGGATTGGAAGAAGTC
<i>MaERF3</i>	CTACAGCCCCCGAGACAAC	TGGTCACTCCTCCACAAAAAC
<i>MaERF4</i>	TCGGTTTGCCCCTTGACGC	GGTGACTTGAGCACATCCCAG
<i>MaERF5</i>	GACGGAGCAGCAGACGAACT	GGCGAGAAAGAACACTGGAGC
<i>MaERF6</i>	TTCCTCCGTCTTCTCCGCTC	GGGGATTTGGTCAACTCTGC
<i>MaERF7</i>	AGGAGGGGACAGCAGCAGAT	CGGTCAAGGAGACGAATGGG
<i>MaERF8</i>	TGTCAATCCTTGCTCCTATCG	CAGTCCTCCAAAATCCTTCATC
<i>MaERF9</i>	AGACCTTCTCCAGTCACCCA	GAGCAATCTACTTGACTTCCACC
<i>MaERF10</i>	CGTTTACAGAGTGCCTCGGA	CTCGGATGGAGGAGACAGGT
<i>MaERF11</i>	TGGGTTCAAGGGAATCGGG	TGTTTCGTGGGTTCTGTCAAG
<i>MaERF12</i>	CCACCAGCCGACGATGACT	ATAGAACGGAACGACCAAAAGG
<i>MaERF13</i>	CAGCACCTCCCTCCCTTCA	CTGTGGCAGTCGCTTTCCGC
<i>MaERF14</i>	GGACGACCTCCACGATACG	TGAGAGTAGATAGGCGAAACGG
<i>MaERF15</i>	GAAGCGGTGAAGATGGTGGT	GCGAGGAAAGGGCATAATAG

**Supplementary Table S3.** Primers used for fusing GFP.

<b>Name</b>	<b>Sequences(5'-3')</b>	<b>Restriction Site</b>
<i>MaERF1-GFPFor</i>	GGACTCTAGAggatccGATGGATTACTCTCTCCTTTC	<i>BamH I</i>
<i>MaERF1-GFPRev</i>	TGCTCACCAaagcttCCACGGCCTGGCAAACCC	<i>Hind III</i>
<i>MaERF4-GFPFor</i>	GGACTCTAGAggatccGATGGAGGCATCCATCGGCTT	<i>BamH I</i>
<i>MaERF4-GFPRev</i>	TGCTCACCAaagcttGCTCACGGTGACTTGAGC	<i>Hind III</i>
<i>MaERF5-GFPFor</i>	GGACTCTAGAggatccGATGTGTCACAACGTGGCGAA	<i>BamH I</i>
<i>MaERF5-GFPRev</i>	TGCTCACCAaagcttGCTGCCTGAAGAAGATGGAGG	<i>Hind III</i>
<i>MaERF9-GFPFor</i>	GGACTCTAGAggatccGATGGTGAAGAGCAAGATCAGAGGG	<i>BamH I</i>
<i>MaERF9-GFPRev</i>	TGCTCACCAaagcttGCAGAAGCTCCACAGATGGAT	<i>Hind III</i>
<i>MaERF11-GFPFor</i>	GGACTCTAGAggatccGATGTCTCCGAGGGCGAAGAACA	<i>BamH I</i>
<i>MaERF11-GFPRev</i>	TGCTCACCAaagcttAGCCACCTCCGGCGGC	<i>Hind III</i>
<i>MaACO1-GFPFor</i>	GGACTCTAGAggatccGATGGCGATTCCGGTCATCGATTT	<i>BamH I</i>
<i>MaACO1-GFPRev</i>	TGCTCACCAaagcttAATAGCTCTGACTGCCTCAAATC	<i>Hind III</i>
<i>MaACS1-GFPFor</i>	GGACTCTAGAggatccGATGAGGATCTACGGCGATGA	<i>BamH I</i>
<i>MaACS1-GFPRev</i>	TGCTCACCAaagcttGGTGGCGGCTTGAACGAGA	<i>Hind III</i>

**Supplementary Table S4.** Primers used for Y1H assay.

<b>Name</b>	<b>Sequences(5'-3')</b>	<b>Restriction Site</b>
<i>MaACO1-pAbAiFor</i>	TTGAATTCGAGCTCggtaccTATAGATTATTAGCTTTAAGGAT	<i>Kpn I</i>
<i>MaACO1-pAbAiRev</i>	ATGCCTCGAGggtcgacGTCAACTAAGAAATTAATGGACAG	<i>Sal I</i>
<i>MaACS1-pAbAiFor</i>	TTGAATTCGAGCTCggtaccCTCGAAAGTGGACCTCCGTT	<i>Kpn I</i>
<i>MaACS1-pAbAiRev</i>	ATGCCTCGAGggtcgacGTGACCCGTTATCTCAGGTAC	<i>Sal I</i>

**Supplementary Table S5.** Primers used for transient expression assay.

<b>Name</b>	<b>Sequences(5'-3')</b>	<b>Restriction Site</b>
<i>MaACO1-101For</i>	ATGCCTGCAGgtcgacTATAGATTATTAGCTTTAAGGAT	<i>Sal I</i>
<i>MaACO1-101Rev</i>	GACCACCCGGgatccGTCAACTAAGAAATTAATGG	<i>BamH I</i>
<i>MaACS1-101For</i>	ATGCCTGCAGgtcgacCTCGAAAGTGGACCTCCGTT	<i>Sal I</i>
<i>MaACS1-101Rev</i>	GACCACCCGGgatccGTGACCCGTTATCTCAGGTAC	<i>BamH I</i>
<i>MaERF9-1300For</i>	ggatccATGGTGAAGAGCAAGATCAGAG	<i>BamH I</i>
<i>MaERF9-1300Rev</i>	GgtcgacGCAGAAGCTCCACAGATGGAT	<i>Sal I</i>
<i>MaERF11-1300For</i>	ggatccATGTCTCCGAGGGCGAAGAAC	<i>BamH I</i>
<i>MaERF11-1300Rev</i>	GgtcgacAGCCACCTCCGGCGGCG	<i>Sal I</i>

**Supplementary Table S6.** Primers used for Y2H assay.

<b>Name</b>	<b>Sequences(5'-3')</b>	<b>Restriction Site</b>
<i>MaERF9-ADFor</i>	GGAGGCCAGTgaattcATGGTGAAGAGCAAGATCAGAG	<i>EcoR I</i>
<i>MaERF9-ADRev</i>	CGAGCTCGATggatccGCAGAAGCTCCACAGATGGA	<i>BamH I</i>
<i>MaERF11-ADFor</i>	GGAGGCCAGTgaattcATGTCTCCGAGGGCGAAGAA	<i>EcoR I</i>
<i>MaERF11-ADRev</i>	CGAGCTCGATggatccTCAAGCCACCTCCGGCG	<i>BamH I</i>
<i>MaACO1-DBDFor</i>	CATGGAGGCCgaattcATGGCGATTCCGGTCATCGATTT	<i>EcoR I</i>
<i>MaACO1-DBDRev</i>	GCCGCTGCAGgtcgacGTCAAATAGCTCTGACTGCCTCAA	<i>Sal I</i>
<i>MaACS1-DBDFor</i>	CATGGAGGCCgaattcATGAGGATCTACGGCGAGGA	<i>EcoR I</i>
<i>MaACS1-DBDRev</i>	GCCGCTGCAGgtcgacGTCAGGTGGCGGCTTGAACG	<i>Sal I</i>

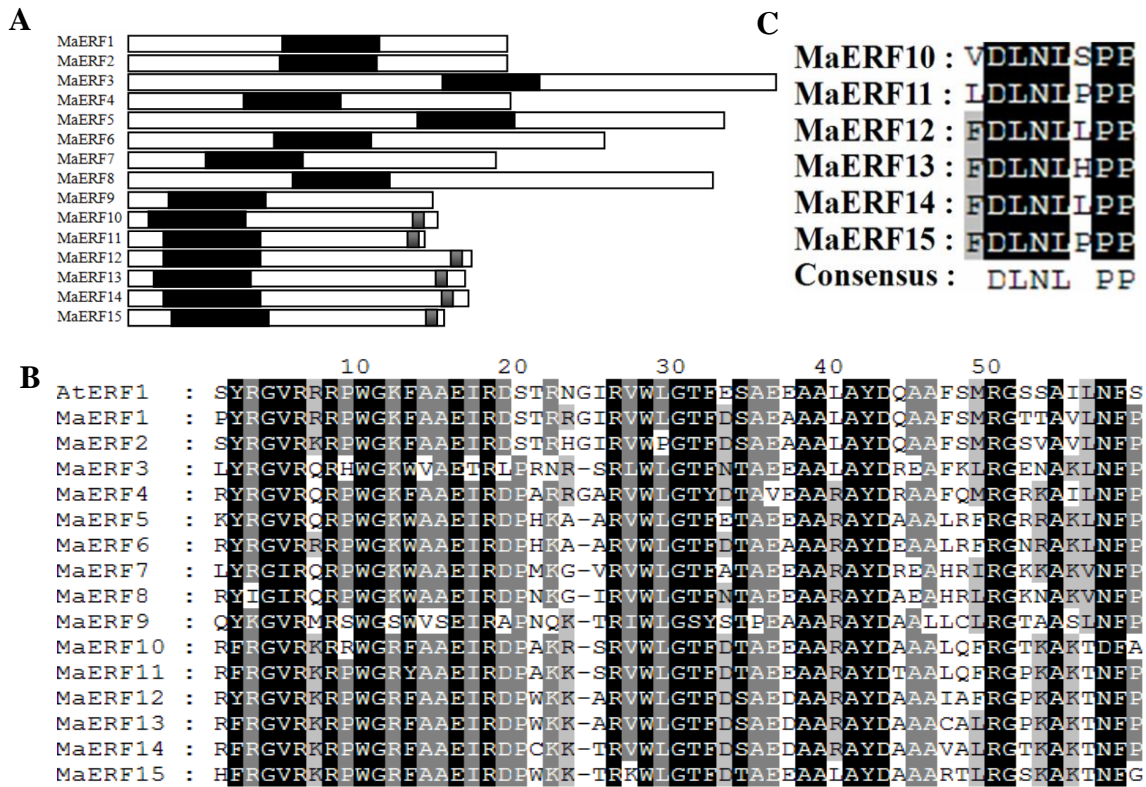
**Supplementary Table S7.** Primers used for BiFC assays.

<b>Name</b>	<b>Sequences(5'-3')</b>	<b>Restriction Site</b>
<i>MaACO1-BiFCFor</i>	CGCCACTAGTggatccATGGCGATTCCGGTCATCG	<i>BamH I</i>
<i>MaACO1-BiFCRev</i>	TAGCCTCGAggtcgaCAATAGCTCTGACTGCCTCAAATC	<i>Sal I</i>
<i>MaACS1-BiFCFor</i>	CGCCACTAGTggatccATGAGGATCTACGGCGATGAG	<i>BamH I</i>
<i>MaACS1-BiFCRev</i>	TAGCCTCGAggtcgaCGGTGGCGGCTTGAACGAGA	<i>Sal I</i>
<i>MaERF9-BiFCFor</i>	CGCCACTAGTggatccATGGTGAAGAGCAAGATCAGAG	<i>BamH I</i>
<i>MaERF9-BiFCRev</i>	TAGCCTCGAggtcgaCGCAGAAGCTCCACAGATGGAT	<i>Sal I</i>
<i>MaERF11-BiFCFor</i>	CGCCACTAGTggatccATGTCTCCGAGGGCGAAGAAC	<i>BamH I</i>
<i>MaERF11-BiFCRev</i>	TAGCCTCGAggtcgaCAGCCACCTCCGGCGGCG	<i>Sal I</i>



**Supplementary Table S8.** Sequence similarities among the different *MaERFs* genes. Numbers indicate percentage homology at the amino acid level.

	MaERF1	MaERF2	MaERF3	MaERF4	MaERF5	MaERF6	MaERF7	MaERF8	MaERF9	MaERF10	MaERF11	MaERF12	MaERF13	MaERF14	MaERF15
MaERF1	100%														
MaERF2	69.9%	100%													
MaERF3	23.6%	21.5%	100%												
MaERF4	31.5%	32.0%	24.7%	100%											
MaERF5	23.4%	22.9%	20.9%	25.9%	100%										
MaERF6	26.2%	24.6%	18.0%	26.3%	42.2%	100%									
MaERF7	27.1%	25.8%	22.7%	28.4%	26.4%	24.3%	100%								
MaERF8	23.5%	22.6%	19.9%	27.0%	24.2%	23.2%	48.6%	100%							
MaERF9	24.1%	23.6%	25.5%	24.0%	24.5%	23.4%	22.5%	24.4%	100%						
MaERF10	30.3%	28.9%	27.2%	28.7%	32.8%	30.0%	31.5%	31.7%	21.4%	100%					
MaERF11	32.0%	31.5%	26.8%	31.5%	31.8%	33.0%	30.1%	29.9%	23.0%	61.7%	100%				
MaERF12	29.4%	29.3%	21.7%	30.0%	30.1%	28.9%	24.7%	26.5%	22.6%	38.9%	40.8%	100%			
MaERF13	32.4%	29.6%	21.6%	28.9%	30.2%	30.9%	25.0%	27.6%	24.4%	39.7%	40.9%	75.9%	100%		
MaERF14	29.0%	27.7%	22.4%	26.7%	29.6%	27.0%	24.7%	24.5%	27.0%	39.7%	39.9%	69.2%	72.6%	100%	
MaERF15	29.0%	28.5%	23.2%	29.0%	27.3%	27.0%	26.9%	28.5%	22.2%	36.5%	39.9%	45.3%	45.6%	44.3%	100%



**Figure S1.** Schematic analysis of MaERFs with ERF domains and EAR repressor domains. (A) Location of ERF domains (black bars) and EAR repressor domains (gray bars). (B) Comparison of ERF domains by deduced amino acids. Identical and similar amino acids are indicated by black and grey shading, respectively. (C) Comparison of EAR repressor domains by deduced amino acids. Identical and similar amino acids are indicated by black and grey shading, respectively.

```

MaERF1 : -----MDYSLSFHSHNQEHSSSESTYSPRS : 25
MaERF2 : -----MDYYL-FDSLNHHSPESSSTGSPFP : 24
MaERF3 : MEKSDGGGRQKGVQRTSVQPRPLKIRSDRRHQYSSSTSTSSSSSSQCSNSNPVSSSFGPPVSSSSTLYSKPIFPFASAGSSRAVVDLTLSPPARSSLHHQPPFQWQQMISFGRHHPHQIR : 125
MaERF4 : -----MEASIGFDDS : 10
MaERF5 : -----MCHNVANPHQLPDDSPAEGSDGAPLSYHRAQEI STIVSALAHVMASERRPRQVGMVDSVSVSSSSSSSSSSSSSLSCISSSYSPPSLGGQGGGASSQNRVH : 105
MaERF6 : -----MEYERSVMVSAHVHVAGGR----- : 41
MaERF7 : -----MCGGAIISDFIP----- : 21
MaERF8 : -----MCGGAIISDFIPLATVASRRVMAEHLWPGLEKSKQTTGRRRRGVEVP : 47
MaERF9 : ----- : -
MaERF10 : ----- : -
MaERF11 : ----- : -
MaERF12 : ----- : -
MaERF13 : ----- : -
MaERF14 : ----- : -
MaERF15 : ----- : -

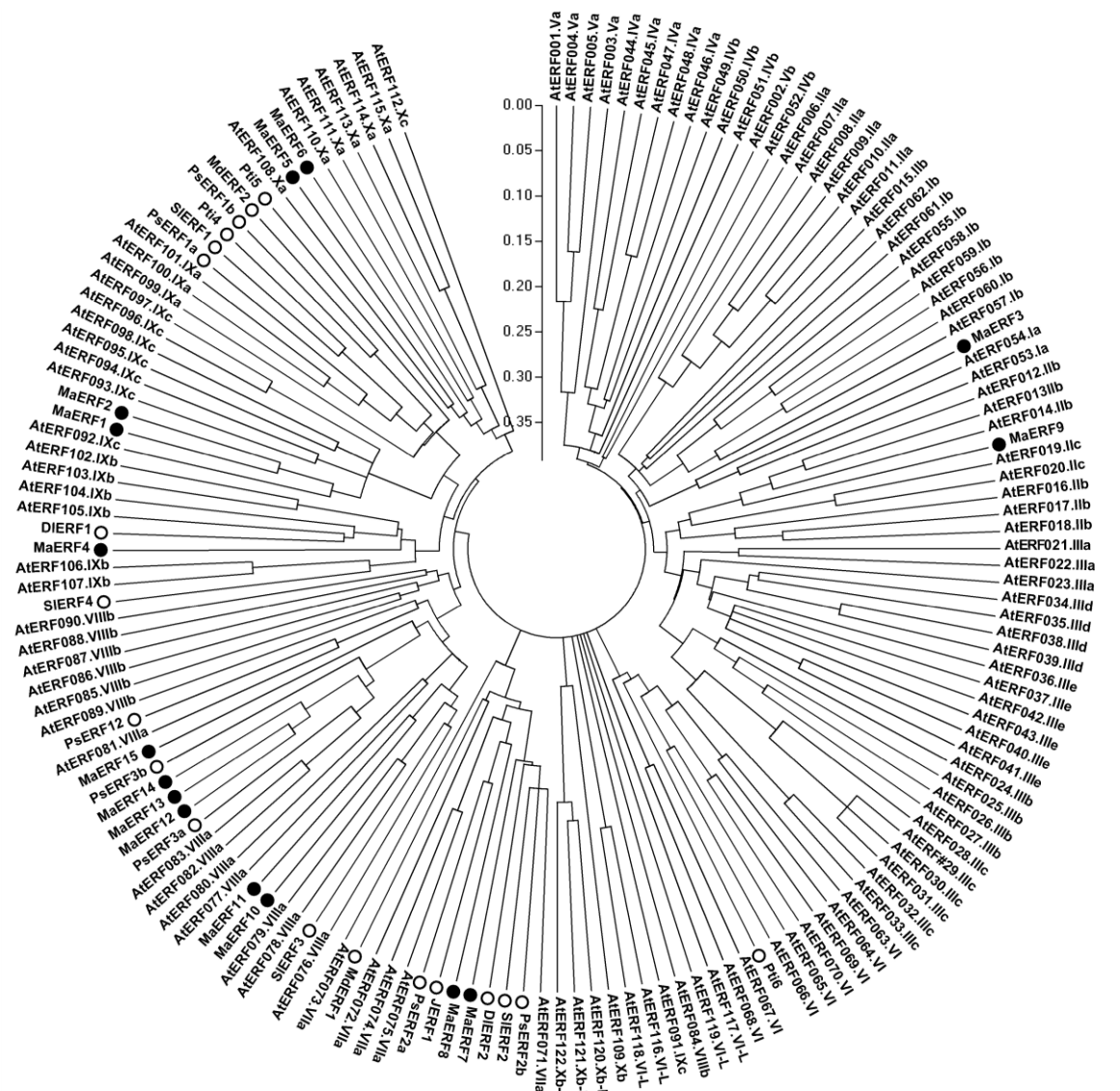
MaERF1 : SATDGFGLVCPDKPLPFDENDPEEMLLLSMLAEASGKAASSSSSEVLDSRSPRPKEEVEESRSKVGHDTKGKELRGGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 150
MaERF2 : FFWTVGLFLYPDVLPFNIDDEEMLLGMLAEASGKASSS--SEACD-RSVIRAKEEVDSDRSKAADBP-EKSYRGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 145
MaERF3 : TYPPSPFFMTTEAAAATQQQLQHRVYQEQYLLRYWSEALNLNPRARMVMAMSRPLHPSLCLPRLLPPIPTPAKLYRGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 249
MaERF4 : TLDLIRQCLLGLDLPQDPSGLAPAFPCDGAACRFPEP-----ALGRRPSLTI SVPRPVGAADCDLKRIRGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 124
MaERF5 : RVPSPPDLALRHQGLGFARYGDASPDVAVTQYFQGGPLPLLYGVVPAAMAEPS PASSNPEAEERSEPRRIRGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 229
MaERF6 : EAAS-----ELHASFGDFGRSS--SSAASADATEQT-----AAPAAEAAAAMAGTEQGER-----VRYRGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 140
MaERF7 : DPD-----HL-LSASD-----LWPDFHPSVSTQDKVPR--KRGRKNLYGIRGIRGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 106
MaERF8 : DDDDDDDDFEADFQEFSDETQVDFEDGVHFGGSEA-----PPPRDGSPKSVYLDGLATKSSKRRKRNLYGIRGIRGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 160
MaERF9 : -----MVKSKIRGDLDSVPRSSAAAAAKKQYRGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 76
MaERF10 : -----MSPSAAR-----GELRETRFGRVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 63
MaERF11 : -----MSPRAKNSEGGEGGETKEMRERGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 70
MaERF12 : -----MRKGR-APAVAAAAA-----AMTVEVRYGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 70
MaERF13 : -----MRKGR-VPAAAAA-----VRETRFGRVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 65
MaERF14 : -----MRKGRGSAHPDAEV-----GGAAGTRFGRVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 71
MaERF15 : -----MAVET-----LRLRKEGLGPPAAAAVA-----GGEKEAERGVRRRHWGKFAAEIRLSTRHGIRVWIGTFOSABAAALAYDQAAFMSRG : 78

MaERF1 : TRAVINFE-----VERVRESLGRVKYEEIEIGLSPVVALKRRN-----TLRRKSTSKKAKGREVRT : 206
MaERF2 : SYAVINFE-----VERVQESLNGKCKWKEEKVSPAVALKRRH-----SMRRKWSKKAKESSETSSS : 203
MaERF3 : ENAKINFEHLFLGTGGGSDRGGASCSSSSSPATPEEARPQTIHQQLQRPFP-----FVAFETAGVTATVIGSSSSGDSGASG-----L : 331
MaERF4 : RRKINFE-----HEIGSEQWDAAMTTAAQVLSGKRKREEE-----EAAARAIKRERSPAMEKGG : 181
MaERF5 : RRKINFENVR-----LQPSLSVPLATSN-----SPATSDTIT-----DYLAYTTLLQGGEEHPRPPT : 285
MaERF6 : NRKINFEAEAG-----LRKAPAVTPEAHMESQFFGRHGASGSTAAVAAR-----DYMEYSRLLRGEGEYQRMPTT : 206
MaERF7 : KRKINFEFN-----EVEPEETDNVPE-----CNFVGNFIQPK-----VEKSPVLAASNDCEG : 153
MaERF8 : KRKINFEHTGAASLS-----SRKRSKPTASVIEKPKVLEKLDQNSNYLQDQSELYSTFEMDQELTKPDHNLVPTTIKSSAPLEEAALNFHSDGNSLGYADVFVMEFDAKTPEIMSLAPE : 281
MaERF9 : TAASINFE-----ASLLELLQDPRVMSPKSIQRVAAAAATNAAS-----PSVSDTAEDTELSS : 130
MaERF10 : TRAKINFEAY-----EGPLYAPVAGSVSSSPNSNAESSTPSPKAGAV-----TALLELLELGHASARFSPPH : 127
MaERF11 : PRAKINFE-----IFTAAAGAGTAESSPSSSGSGNTVESSTP-----SAPPLELELGHAAARFPLHA : 129
MaERF12 : PRAKINFE-----CSPSSPPP-VDFPRSPSAARFAFGGRHPPPS-----PPPPQRTCSSLSSTVESFSGP : 131
MaERF13 : PRAKINFE-----LTSSTPPOHLPEFR-PSATRFPLG-HRGHQ-----PPPPQRTSSSSSTVESFCNGP : 124
MaERF14 : TRAKINFE-----SLPSAFPPAPLE-----AAAAHF PFYHQHHP-----PPPPQRTSSSSSTVESFSGP : 129
MaERF15 : SRAKINFE-----YSAADVEIVAAVPEPQIGLSSSPWR-----SGFREPATALN---GRDLFLG----- : 131

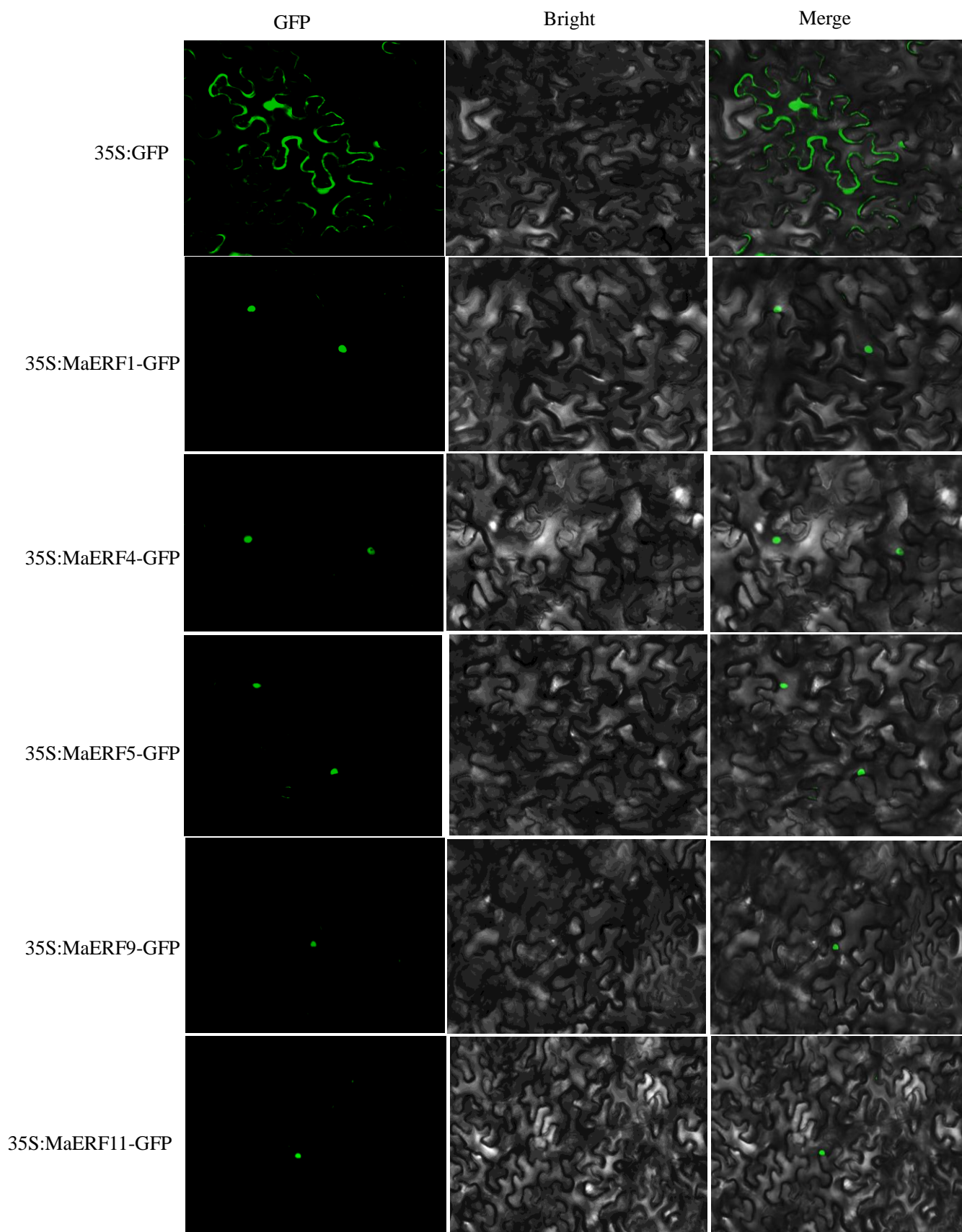
MaERF1 : -----AESVVELEDLGAECLEBELLSTSGFARFW----- : 234
MaERF2 : -----SCGVESVLELEDLGTETELEELLRTSEVANTC----- : 234
MaERF3 : DESGGSEPTAPETTTPEMVWGNATAAAAEWFSWTWGGSSIWDDIDGANSLLHSRFTSFADMDPSNVAPPSAATTTASPDADASSTAGPGPSSSVFLWKE : 432
MaERF4 : -----DGGFVPSMSVCPPTPSWKGVDWEGADTKGIFN-----VPPLSPLSPHSLGCAQVTVS----- : 236
MaERF5 : -----SLLDQMYMS--NYASPFCTVNDGSSLPAPSIPTYSSVVSSSTPYS PFYASSTEQTNWGSVSDI-----ETSMWGSQFPSSSSGS----- : 368
MaERF6 : -----ALLDQMYMSGASAAASPFCTDASLASSSFASAPFPSSPLIYPPSEQQMDYLQPPWKLNLIRHQVTKPOYFFBEPWLTVEVFLPKSI----- : 294
MaERF7 : -----DC---EVR-----RLSEELMAYESYMNFFGI PYMEGGT PAAAAEEGTAADDEVVTGNMEACNPPVSSGEMLWIFDDILPA : 227
MaERF8 : PELFEDGGPHKLRSDISQVELSEELYANE PYMKFLPTPYFEG-----SSDASMDSLFGGELLQG-GVDLWS---FDDLPMEAVTEGI : 361
MaERF9 : -----SMGDGPAMEDS FIDDSINFETFFQS PKCRDYMNLNPLFLFAPQAEEWEGEADITHWSFC----- : 188
MaERF10 : -----REASSAR-----EASVSHHCLALGRAALTMGSVCDRLQASDSVSPAEF-----TMRLEFDVDNLNLPPEVV----- : 191
MaERF11 : -----RPFLLG-----AAPRS-----AAALTGKKGIG--TRVSPVMAAQ-----ARRLEFDLNLNLPPEVA : 183
MaERF12 : -----RITAAA-----PTHVRASHRRRQSNPPPQ-RVLVGEEDCHSDCGSSSVVDDNDGDIASACQPPLFDNLNLPADDHFAVALNL----- : 212
MaERF13 : -----RMPAAAAATPIHLRTAHLGRQANPPPQ-RVLVAGENDCHSDCGSSSVVDDDD-ADVASAYRQLPFDNLNLPEDDLHVTVLR----- : 208
MaERF14 : -----RHPSAAA-----PIHIRPRLRQKQVNPFPVRLVNGDDCHSDCGSSSVVDDDD-GDIVSLCROQLPFDNLNLPSEDDLHDTALRL----- : 210
MaERF15 : -----QDGLAVE-----SGSEFS-----GYRFAVKKVVKVQERRTVAED-----KKKPPCFDNLNLPPEV----- : 185

```

**Figure S2.** Amino acid sequence alignment of the MaERF proteins. Identical and similar amino acids were presented by black and gray shading, respectively. Gaps were introduced to optimize alignment.

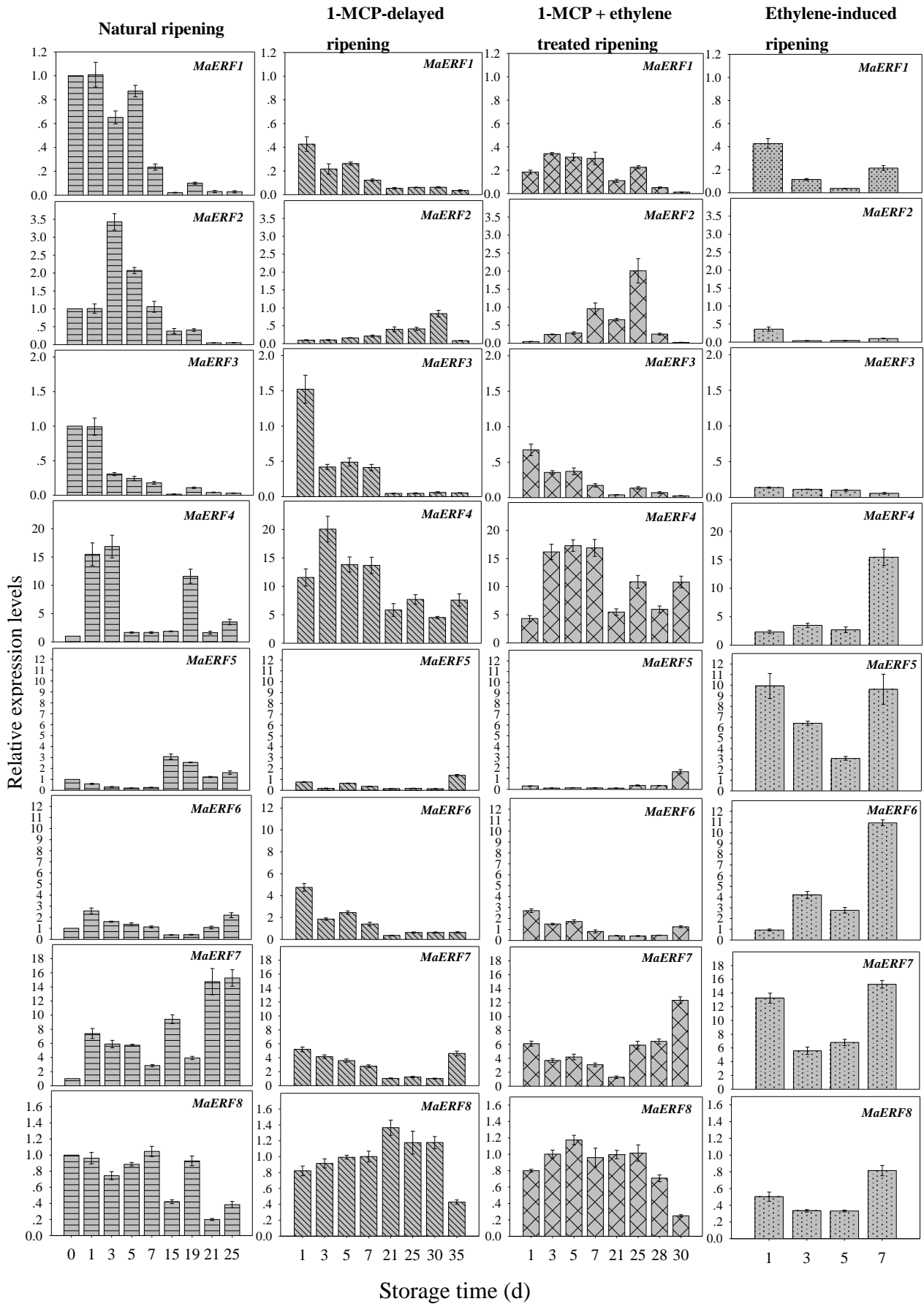


**Figure S3.** Phylogenetic tree of ERFs. Fifteen banana MaERFs (black circles) were aligned with the Arabidopsis ERF family and other fruit ERFs (white circles). The amino acid sequences were obtained from The Arabidopsis Information Resource or the National Center for Biotechnology Information database. Multiple alignment was carried using CLUSTALW and the phylogenetic tree was constructed with MEGA5.0 using a bootstrap test of phylogeny with minimum evolution test and default parameters.

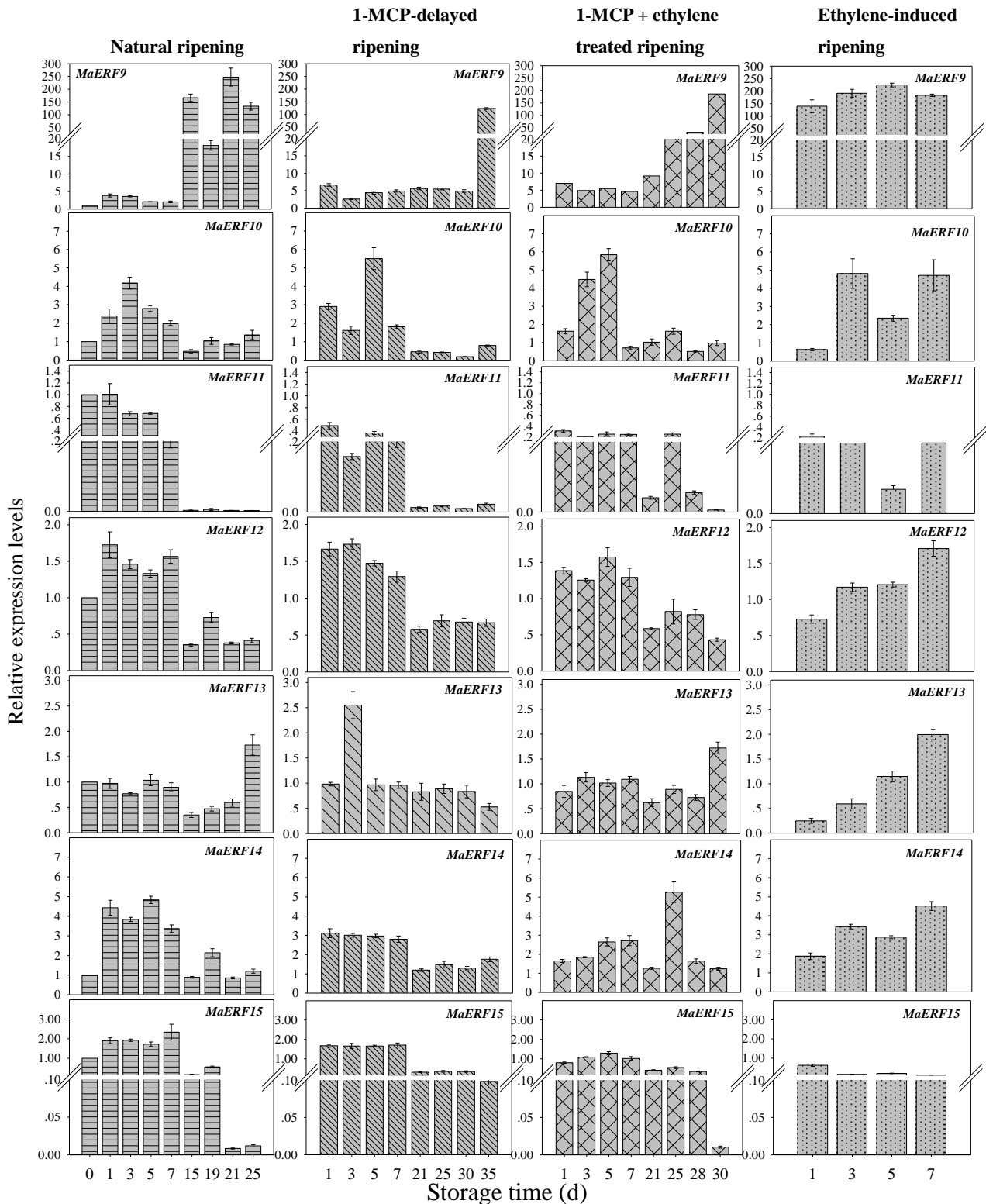


**Figure S4.** Subcellular localization of MaERFs in tobacco leaves. Leaves were transiently transformed with MaERF–GFP constructs or GFP vector through *Agrobacterium* transfection.

GFP fluorescence was observed with a fluorescence microscope. Images were taken in a dark field for green fluorescence, while the outline of the cell and the merged were photographed in a bright field.

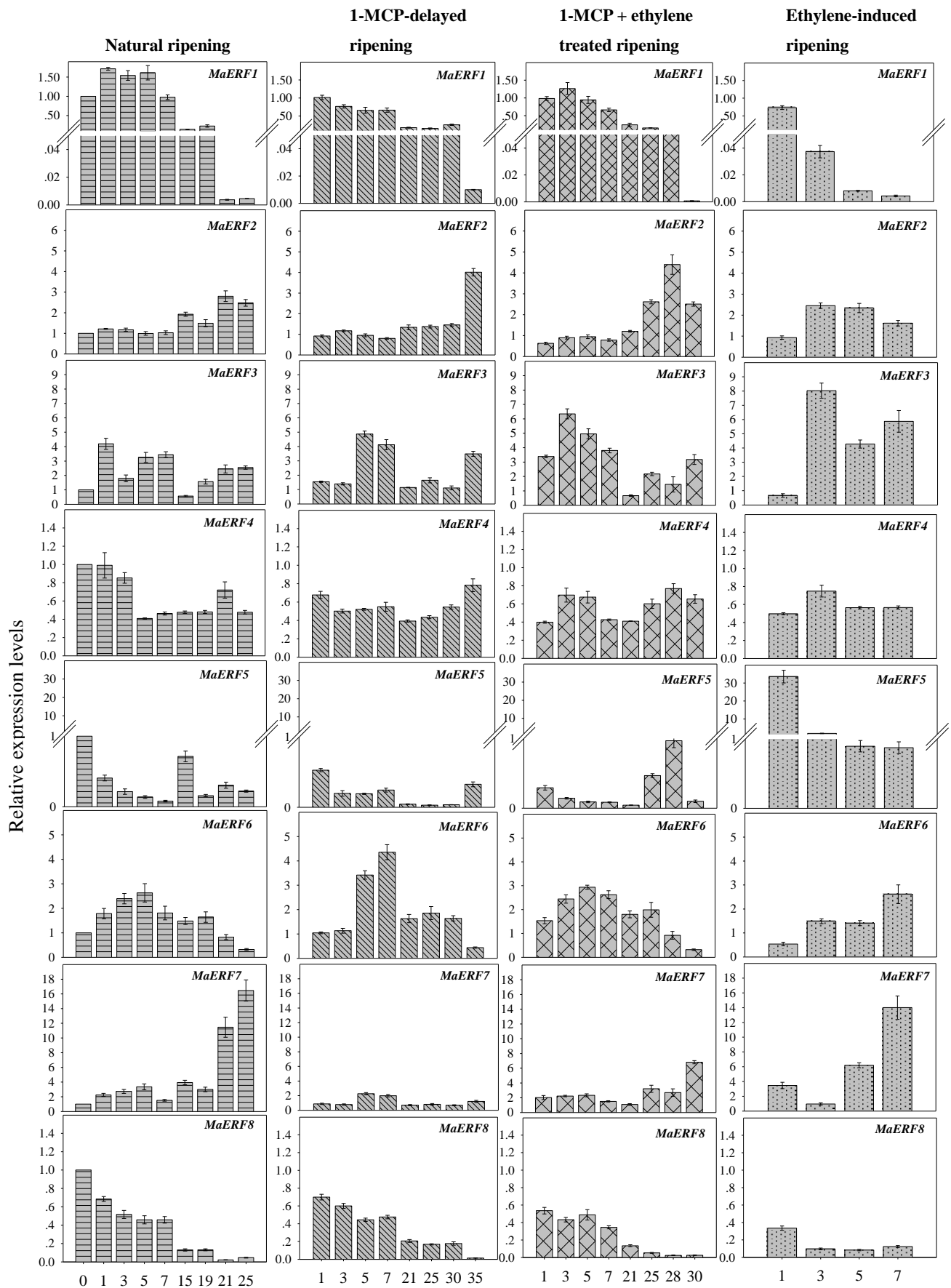


Continued

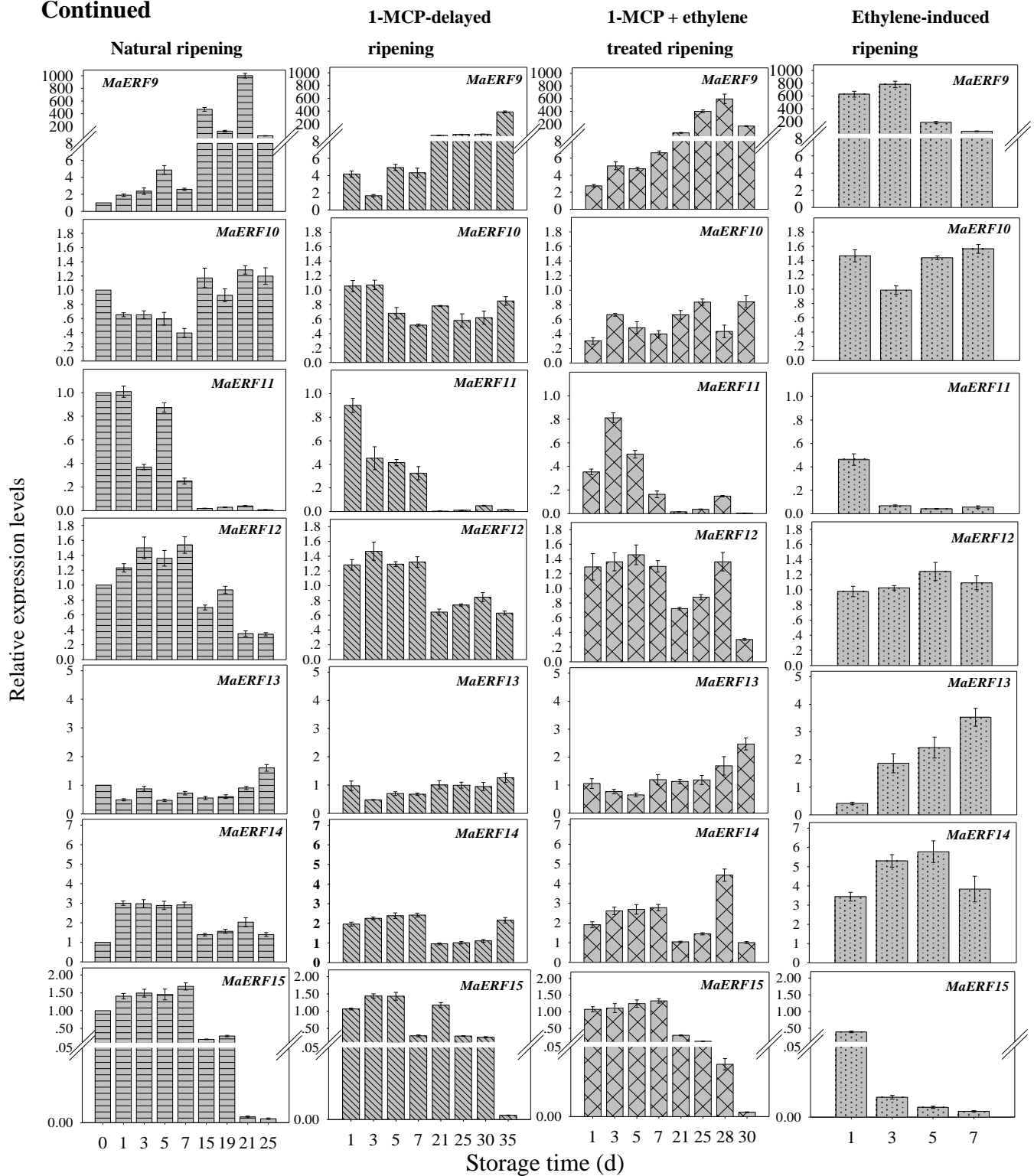


**Figure S5.** Expressions of *MaERFs* genes in banana fruit peel with four different ripening treatments, including natural (control), ethylene-induced, 1-MCP-delayed and combination of 1-MCP + ethylene treated ripening. Expression levels of each gene are expressed as a ratio relative to the harvest time (0 d of control), which was set at 1. Each value represents the means of three replicates, and vertical bars indicate the S.E.





Continued



**Figure S6.** Expression of *MaERFs* genes in banana fruit pulp with four different ripening treatments, including natural (control), ethylene-induced, 1-MCP-delayed and combination of 1-MCP + ethylene treated ripening. Expression levels of each gene are expressed as a ratio relative to the harvest time (0 d of control), which was set at 1. Each value represents the means of three replicates, and vertical bars indicate the S.E.