

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

| Assay                    | Primer sequence (5'-3')                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Restriction Site               |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Full length cloning      | <i>MaWRKY70-F</i> : ATGTCGTCGTCCCCCACG<br><i>MaWRKY70-R</i> : CTACAGGAAGAAACAATCAGAGTC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                |
| Subcellular localization | <i>MaWRKY70- GFP-F</i> : ATCTAGAGCAGTCGACGGTACCATGTCGTCTGTCCCCCACG<br><i>MaWRKY70- GFP -R</i> : CTCCTCGCCCTTGCTCACCATCAGGAAGAAACAATCAGAGTC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <i>Bam</i> H I<br><i>Kpn</i> I |
| RT-qPCR                  | <i>MaEIF5A-qF</i> : ACACCAAAGATGATCTGAGGCT<br><i>MaEIF5A-qR</i> : AAGGAACACCAGGGCAACAGT<br><i>MaWRKY70-qF</i> : CTCAGGTTATCATCTCAGCC<br><i>MaWRKY70-qR</i> : TTTTGAGAGAAGGATGTGGG<br><i>MaLOX1-qF</i> : CATA CGCCACGAGGACTCTGTT<br><i>MaLOX1-qR</i> : TGCCGAGTACACTTTGCTTACA<br><i>MaLOX1-2-qF</i> : AGGAGTTTGCTCGGGAGATGCT<br><i>MaLOX1-2-qR</i> : CTCGATGTGGGCTGCTGTGATT<br><i>MaLOX3.1-qF</i> : CGACCGAGCGACCTCCTCTTCT<br><i>MaLOX3.1-qR</i> : GTCACAGCCGCCTGGACCTTAA<br><i>MaLOX3.2-qF</i> : TGGCAGGCATCAATCCC GTTAA<br><i>MaLOX3.2-qR</i> : GGTGCGAGTGCCGTAGGCTTTT<br><i>MaLOX4-qF</i> : ACCAAGCGAATCTTCTTCAGCA<br><i>MaLOX4-qR</i> : CCAAGTCATTGTAGGTGGCGTA |                                |
| Promoter isolation       | <i>MaLOX1 pro-F</i> : CTATGAGTCAAGTAACAA<br><i>MaLOX1 pro-R</i> : CATCTTCGGTTCTCTTTTTCCT<br><i>MaLOX1-2 pro-F</i> : ATGAAATCTAAGGCAAACC<br><i>MaLOX1-2 pro-R</i> : CATCGTTGTCTCTACCGTAATGG<br><i>MaLOX3.1 pro-F</i> : TGCTCCTACCATAAGTTCC<br><i>MaLOX3.1 pro-R</i> : CATGGAAGCGAGCGAGTG<br><i>MaLOX3.2 pro-F</i> : CATACTACGCAACAGCTA<br><i>MaLOX3.2 pro-R</i> : CATCCAATATCGTCCCCTTCC<br><i>MaLOX4 pro-F</i> : GATGCGTCCTTTGGT<br><i>MaLOX4 pro-R</i> : CATTCCCTCCCTTCTTTTCT                                                                                                                                                                                     |                                |
| Y2H assay                | <i>MaWRKY70-pGBKT7-F</i> : ATGGCCATGGAGGCCGAATTCATGTCGTCTGTCCCCCACG<br><i>MaWRKY70-pGBKT7-R</i> : TGCGGCCGCTGCAGGTGACGCAGGAAGAAACAATCAGAGTC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <i>Eco</i> R I<br><i>Sal</i> I |

|                                                   |                                                                             |                 |
|---------------------------------------------------|-----------------------------------------------------------------------------|-----------------|
| <b>EMSA assay</b>                                 | <i>MaWRKY70-pGEX-F</i> : GTTCCGCGTGGATCCCCGGAATTCATGTCGTCGTCCCCACG          | <i>EcoR</i> I   |
|                                                   | <i>MaWRKY70-pGEX-R</i> : TCAGTCACGATGCGGCCGCTCGAGCTACAGGAAGAAACAATCAGAGTC   | <i>Xho</i> I    |
|                                                   | <i>MaLOX1 probe-F</i> : TGGAGTCTATAGAGTCAAAAGATAATATCA                      |                 |
|                                                   | <i>MaLOX1 probe-R</i> : TGATATTATCTTTTGA CTCTATAGACTCCA                     |                 |
|                                                   | <i>MaLOX1-2 probe-F</i> : TCTCGTGTGCTGCTGACTAGGCTCGCCTAT                    |                 |
|                                                   | <i>MaLOX1-2 probe-R</i> : ATAGGCGAGCCTAGTCAGCAGCACACGAGA                    |                 |
|                                                   | <i>MaLOX3.1 probe-F</i> : GATCAATGTCTCGGTCAATTCCTCCGTAGA                    |                 |
|                                                   | <i>MaLOX3.1 probe-R</i> : TCTACGGAGGAATTGACCGAGACATTGATC                    |                 |
|                                                   | <i>MaLOX3.2 probe-F</i> : ATGGATGTTGCAGGTCAAATACGTAGATAA                    |                 |
|                                                   | <i>MaLOX3.2 probe-R</i> : TTATCTACGTATTTGACCTGCAACATCCAT                    |                 |
|                                                   | <i>MaLOX4 probe-F</i> : TTTTCCTCACGGTTGACTTTGTCTACCAT                       |                 |
|                                                   | <i>MaLOX4 probe-R</i> : ATGGTAGAACAAGTCAACCGTGAGGAAAA                       |                 |
| <b>Dual-luciferase transient expression assay</b> | <i>MaWRKY70-BD-62SK-F</i> : CGCCGTCTAGAACTAGTGGATCCATGTCGTCGTCCCCACG        | <i>Bam</i> H I  |
|                                                   | <i>MaWRKY70-BD-62SK-R</i> : TCGATAAGCTTGATATCGAATTCCTACAGGAAGAAACAATCAGAGTC | <i>EcoR</i> I   |
|                                                   | <i>MaWRKY70-62SK-F</i> : GGCCGCTCTAGAACTAGTGGATCCATGTCGTCGTCCCCACG          | <i>Bam</i> H I  |
|                                                   | <i>MaWRKY70-62SK-R</i> : ATCGATAAGCTTGATATCGAATTCAGGAAGAAACAATCAGAGTC       | <i>Hind</i> III |
|                                                   | <i>MaLOX1pro-LUC-F</i> : CACTATAGGGCGAATTGGGTACCCTATGAGTCAAGTAA             | <i>Bam</i> H I  |
|                                                   | <i>MaLOX1pro-LUC-R</i> : TTTATGTTTTTGCGTCTTCCATCATCTTCGGTTCTCTTTTCCT        | <i>Hind</i> III |
|                                                   | <i>MaLOX1-2pro-LUC-F</i> : CACTATAGGGCGAATTGGGTACCATGAAATCTAAGGCAAACC       | <i>Bam</i> H I  |
|                                                   | <i>MaLOX1-2pro-LUC-R</i> : TTTATGTTTTTGCGTCTTCCATCATCGTTGTCTCTACCGTAATGG    | <i>Hind</i> III |
|                                                   | <i>MaLOX3.1pro-LUC-F</i> : CACTATAGGGCGAATTGGGTACCTGCTCCTACCATAAGT          | <i>Bam</i> H I  |
|                                                   | <i>MaLOX3.1pro-LUC-R</i> : TTTATGTTTTTGCGTCTTCCATCATGGAAGCGAGCGAGTG         | <i>Hind</i> III |
|                                                   | <i>MaLOX3.2pro-LUC-F</i> : CACTATAGGGCGAATTGGGTACCCATACCTACGCAACAGCTA       | <i>Bam</i> H I  |
|                                                   | <i>MaLOX3.2pro-LUC-R</i> : TTTATGTTTTTGCGTCTTCCATCATCCAATATCGTCCCCCTTC      | <i>Hind</i> III |
|                                                   | <i>MaLOX4pro-LUC-F</i> : CACTATAGGGCGAATTGGGTACCGATGCGTCCTTTGGT             | <i>Bam</i> H I  |
|                                                   | <i>MaLOX4pro-LUC-R</i> : TTTATGTTTTTGCGTCTTCCATCATTCCTCCCTTCTTTTCT          | <i>Hind</i> III |

**Supplementary Text S1.** The *cis*-elements of WRKY TFs in the nucleotide sequences of *MaLOX1*, *MaLOX1-2*, *MaLOX3.1*, *MaLOX3.2* and *MaLOX4* promoters. *cis*-elements of WRKY TFs were underlined. The probe nucleotide sequence used in EMSA assay is indicated in bold. Translation start site (ATG) was shown in yellow.

> *MaLOX1* (Ma06\_t26850)

CTATGAGTCAAGTAACAAGCAGTTTGTGAATGAGGAGTTGAGAAGAAAGATTTTCGGCAACATCTCAGAATAATTCACAGGCACTTA  
TCTTAGAGAACAAAGGAAGGTCAAAGTCTAGAAGCAGTTCACGCATAAGTAGAAGCAAGTCAAGATCAAGAAAAGATATTATTTGC  
TATAATTGTAGTGAGAAAGGATATTACAAGAACCAATGTAAGCAACCTAAGAAGAGCAAGAAAAAGGGAAAAAAAGTGGAGTCTA  
TAGAGTCAAAAGATAATATCAACTAGACCTAAGAGGTATACACCACGGGGCAAAATCAATTAAATGAAATAACAATCAAATAAAT  
ATCAAGATATATGTGGAAAACCCCTCCAATGAAGGGTAAAAACCACGGGGCAAACTAGAGATAATCCACTATGAGAATAATGAATA  
TACAAATCTCAATCTCTTACCCTAAACCCTAGCAACAATCACAAGAGAATAACTAGGATACAAGGATCACATCACTGCCTACAATAA  
TTGAGAACGTAGCCACCACACCCCTCTTAATGTTAATTAGTGTAGGTTAAGAGGGGGTGAGCTATGGGCTGCCCCAAGCCTACTATG  
GGCTGAATTTGTGGACTGCCAATCTAAGAATATGAGCCTAAGAATTTAATAAAATTTAAATATGCAAACAATTTTGTACCATTAAAGC  
ATGTAGATTATTTTTATGTCTTAAAAGAGCATGGTTTCAATGCAACATATGTGCATTAAGACAATCCAGACAAATGTAATGCACAATG  
TATTAAGACAAAAAATCATCTAGATGATAAGTAATTTTTCTACTAATTTAGAAATGTAGTTAAAAGTCTAAGTTAACATAACACTTA  
CTAAAATCGCTGCAATTAGTCATTTATAAACTAAGTCTAAGTATTTGTTTGTATCATTGTTATATTTATTTTGTGTGGAAAAGATATACA  
ACTAAGTCTCGCGCAGATGACACATAAATCAGAGTTCACATTGGACCGCGATTGGCGGCCATGTGAAACGCATGGATGCTCAATTATTT  
GCGTTATCCGCACATTGAAACAGTGATCAGGGAGTGGGTCCCACAAAACACCTATTTAATTCAGTGGACCCAACCACGTAAATATT  
TGGGGAAGCATTTATGGACACGAGAAACCCGTGCTTGTTTCGACACGCAGGCGGATGCTCTGCATCAATAAATACCACCTCCGCTGCAA  
TCGATCTCACTGCAACGTTCACTCTCTTAGCTATTAGTCGTCGCTATCCACTGTGTTACAGGAAAAAGAGAACCGAAGATG

> *MaLOX1-2* (Ma09\_t19140)

ATGAAATCTAAGGCAAACCCTAATTCTTGAGATTGATTGTTTTCTTCAAGTGATGAACTTATAATAATAATTAACAGGGAAAAAGAC  
TCAAGAGTCACGTAAAAGTGTTTCGAGGTAAATTTAGATTATACCTTTTAACGCCTTCTTCTTTCCCCCTTTTAAGCTCGCTCTCAA  
CCACTATTTGTTTTATTTGTGACTTGTTACATCATCTCTTCTCCCTCAAGCTTTTATTGTGAACGTCACAAATGAACCCTATCGCATG  
CCTTCGGCATGTTTACAAGAAAAGCACTATTCTACTCACACTCCAAACTCTTTTTTTTTTTTTTGGCATTTCGTATAAAAACAAGGGTT  
AGATGAAGATTTGTCCGATCCAACCTCGATGAGAAAGACAATCAGACCTGTGTCACCATCGAATTATTAATAATTTTTTTCTTAATATT  
CTATAGATAACTTAAGGATATCTACAAGATTTTCGTCCAATATGGAGCCCACGCTTGTCTTGTGAACGCATCATCACTTCTCGTGTG  
CTGCTGACTAGGCTCGCCTATCAATTTGGACTGAAACATGAGGGTCCAACCTTGGAATTACATACAAACGATCATATTTGTGCAACC  
GAATAGTATTATTTATTATACATGTCAACATGCCTACTACCAATGGTTACATACCTCAAAGAAACATAAAGTAGAGAGAAAGATGAA  
AAGGAGACCATCACGTGATATAACGAGGGAAAGAAAAAAAAAAAAACAAAAACAAAAGAGGGCCATCAAACAGACATTCTCCCCG  
AGGGAGAGGAAAGTGCCAAGAAGATGATGAACGCTCCACCTCCATGCTATATACATCCCCTACTCCATCCCTAACCTCCCCACCAT  
TGACTTCTCCTCCTCTTTCAGTCCTCCCTTCTGCTTCCTTAGCCCCCTCCATTACGGTAGAGACAACGATG

> *MaLOX3.1* (Ma08\_t23400)

TGCTCCTACCATAAGTTCCAAACGAGTTGGAAGTATGTACGTGTTTGGATTCTAAGATGATTCCCTTTTGGCAAAAAATGGATGGGAT  
CCGATCAAAATTAATATTGATAAATATTTATATATTTTTATTATTAAATAAATCACCTTTGCATAAATGGTAGAAAATGATATAAAT  
ATTCATTTTCCCATTTGGCGTCGGATTGGGCTGTGCTCTTATTCCGGTCAACGCGGATCTCCGTCCAAATTAACGAATGGCTTCGAGCG  
CAAAGCATTTGCACGTAAACAGGCGGCTAATCAACGACCTCAAACCTCCATGCCCATTCTACCCTCCCTTTCCCCCATAATGACACG

ACATCAAACAGAGGCAACCAATGGTGGATGATCAATGTCTCGGTCAATTCCTCCGTAGACAGTTGCCAAAGGGATAATTCTTTCTT  
AGTATCAGTCGTAAAAATATTCTTTGAATTGACAAAAAAGCCACATTTTATATGTCTTTATGTATTAGTCGTAGAGGGACCGAATTGGT  
ATTTTGTTCAGCGAGGGCATCGGCGGTCAATTTAACCGATTACAACGTCCATCATTGCCGCGAAGCAGCCCATCTCGCCTTCTTTAT  
GGCAACCGGGAAAAACGTGTGGCCGGCGCCCTAAAAGCGCAAGGATTTCAAGCCCCTGTTTTACCACACCCCCCTCCCCCCTTCTA  
TCGTCCTATAAGAAGCAACGACTCATCCCTCTTCTCCCCCAAAAGGAAGGATAGAAGACCCCCAGCCCTCCTCTGCTTCTCCAAATT  
CCCTTTGTTTTCGTAACCAAGCTCGAGTTTGGAGATAGACGAAGACGCACTCGCTCGCTTCCATG

> ***MaLOX3.2 (Ma09\_t15420)***

CATACCTACGCAACAGCTAATAAGTTCGATACACGTGGCTTCCTATTCCCTTAGCTTTGGAATCATGTGGGTATTATGCCCTTTATAA  
ACCCACCCAAATTGTTGTCCTCCCATCGGTTATTTGATATCCATCAATTAATTATTATCATTATGACGTCGGAATCCCATCCGAGCGTC  
GGAGGACGGTGTGGCGAATTGGGCTGCGTTACATACGTTTAGGTGTTTGACCACACGTGTGGCGGATGTGGGTCAACACGGATCTCC  
GTTCAAAGTGAAGGAATCGCACGAAGGCAAAAACCATTTCGCACGTGGAGCAGGTGGGGGCGCCCTGCCCTATTCAATTCGGACCCCA  
CCAAGTTCGCATGCCCTCAATTCTTTCACCATATGACAGTGGTCTCCCCCATTAACCTCAGTGGGTGAGAGGCGACGTGGCCACCATCA  
CACGCTCCCAAAGCTACTTTGTTATGTATACTTTTTCTCTTTTCTTGCCACGTCAGCACGGTGTGAATAACGAGTTACTTGTGCGG  
AACACCAGCAATGATTGATTACTGCTTACGTGGAATATTCAGGAATATCTGGCAATTTACCTACTTGGCATCAGATTGAATCCGTTT  
GGGTTCGGTTCGAAATCATTCTACTCGATTCAATTTTGATTTTGACCGGTTCAATTTTCGGTTCAAGCCGTGGGGGGTCACTGGGATT  
CCTCCGCGAAGAGCACACATGTTTTTGCCAGCACGCGTGTGCGAAGAACACGACCGCATCACATACTGTAATCGTTTCCAGCA  
CCTGAACGCACTCGCCTTCCCCCTTCTTTGCTTCACCATTTATGGATGTTGCAGGTCAAATACGTAGATAAAAAGCTAAGATTTT  
TCCGAGCTAAATAAATCATATTATCCTTTTACACTTGGGATAATGGAAACCCATACGATTTCTACATGTTCTGTTTGTGTTCCGTCATG  
CTTACGGGACTGGATTGGTATTTAAGGATTGTGGTGGGCATCGGCGGTCTTTGAAACGGACGTCGTTGCCGCGAAGCTGCCATTG  
GCCCTTATTTATCGCGAGGGAGAAAGCGTGTCCGTGTTGCAATGCCATTTTACCCACTCGCCAGCCCCCTATATAGTAGGACTTGCCC  
ACCTTCCCCTGTTTCGACCAAGGAGAGTCACCAAAGAAGGGGAGGAATTCAAGCGGACAGGAAACCAAGTCTTGCGCTTCTGCCCAA  
AAATCTACTGTTTCCATCGGGAAGTCGAGATTTTGGGAAGGGGACGATATTGGATG

> ***MaLOX4 (Ma10\_t17560)***

GATGCGTCCTTTGGTTAAGCTTTTATTATTTGTGATAGCTATGCATCGACGAAGATAAAGATGAATATCCTCGTTTCACTTTCAATTTCT  
ATATTTTCAAACCTCTACTCACGAAATTAACGATCACTCGTTGTCATACAAGAAATGTATGAAAAAGGATTAGAGTGCATAGTCTTCTC  
CCTTTAAATCGAAGATTTGGGTGACAACAACGGGAAGCTACTTAGGCGAGTCATTAAAGAATTAGACTTCCGATGACTTCAATTATT  
ATAGAGAAATTTCCGTATTTAAATGATCGAAAAGAAGATAGTAAGTGGCATTACACCACTCATTAGTTTGTGGTTGAGATAATAAA  
TGATAAGTTTTATGTCATAAAAAATAACACCACGAATTCGTTTTTTTACTTGAACGTCACGAGATCGCCATGTCCCTTTATTGGAGAA  
ATTGACTTGGCAGATCGAACTCAACAATCACACCAAGCAAGATTGAATTCATTGATGTTGTCTGTGAGCAACTAAAAACATGATA  
GCAAGAATCAAACAAACAAGTTTGATATCTCCTCCTGTCTTATGAAGTACCTACGATGAGGAAATCATCCCCATCATGTTCCAATGA  
TCGAGTTGCGGGATTCAGTGTGAAAGTAGTACTGCTTCTGCCATTGATATGCCATTTGAACACCACAGATGGGCATGCCGGTCTTCG  
AGCTGCAGAAAATGAACCCCACTACCTGGAAACATCCTTCTTTTCTCCTCACGGTTGACTTTGTTCTACCATCACGCAATCGATCACA

CCCGTACAGCATGTGTTTATGAGCTATAAACGCCAAGAAATCAAACAAGAAACGTGCACGAGGTAGAAAAGTAGAAACCAAGGGGC  
CGCCTGCCGCCCCCTCCCTTCTTATATTTGTCAACCCATCCTTAGATCACACCGCAATAATTCTTGTCGCAACAAAACAGAGCAGGAAG  
AAGAAGAAAGCTCCCCCCCCCCTTCTTCTCCTGAAACTTTGCTCGAGTGACTACTTTGATCTTTAGGAAGAAAAGAAGGGAGGGA

ATG