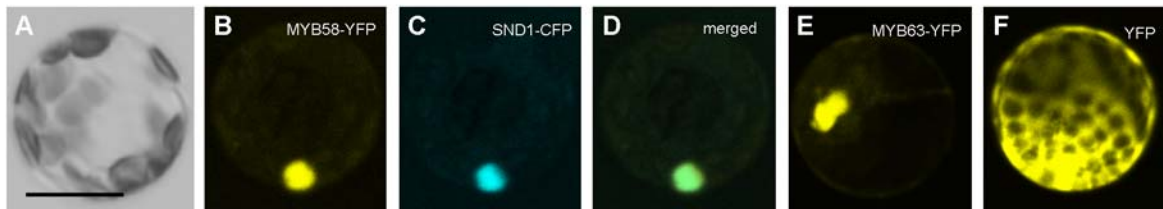


Supplemental Data. Zhou et al. (2008). MYB58 and MYB63 are transcriptional activators of the lignin biosynthetic pathway during secondary cell wall formation in Arabidopsis.



**Supplemental Figure 1.** Subcellular Localization of MYB58 and MYB63.

(A) to (D) An Arabidopsis protoplast expressing MYB58-YFP and SND1-CFP. Differential interference contrast image (A), the MYB58-YFP signal (B), the SND1-cyan fluorescence protein (CFP) signal (C), and their merged signals (D) are shown. Note that MYB58-YFP is co-localized with SND1-CFP in the nucleus.

(E) An Arabidopsis protoplast expressing MYB63-YFP showing the localization of fluorescence signals in the nucleus.

(F) An Arabidopsis protoplast expressing YFP alone showing the presence of fluorescence signals throughout the cytoplasm.

**Supplemental Table 1.** Primers used in this work

Primer name	Primer sequence	Uses
CHS-Q-PCR	5'-acgtcacgtgttgagcagatgg-3' 5'-gaggaacgctgtgcaagacgactg-3'	Real-time quantitative PCR analysis of CHS expression
CHI-Q-PCR	5'-gaaagatgatagatccctgaaacc-3' 5'-ggctagttttcctcaacagagtg-3'	Real-time quantitative PCR analysis of CHI expression
ALDH-Q-PCR	5'-cgaatacggctcttcagcaggaat-3' 5'-attgtgaagaggcataacgacgga-3'	Real-time quantitative PCR analysis of ALDH expression
SMT-Q-PCR	5'-cccattcataactggaggccatg-3' 5'-ataattataggtgaaggtcataagcc-3'	Real-time quantitative PCR analysis of SMT expression
4CL1-P-mAC	5'-aacatttcgaaggaaccaccgtctact ccggtgaattgt-3' 5'-agacgggtgttccttcgaaaatgttagt gttggtttca-3'	Generation of the 4CL1 promoter with the mutated AC element
MYB58-gene	5'-atcaacaatgcgtgcatgcattc-3' 5'-actgataacagagtagacacagtg-3'	Generation of MYB58:GUS
MYB63-gene	5'-tttggacatccgagttttacac-3' 5'-cagccaaagcagactgagactgaa-3'	Generation of MYB63:GUS
MYB58-cDNA	5'-atgggcaaaggaagagcacatgt-3' 5'-atgtatgaggagctcgtactctc-3'	Amplification of the full-length MYB58 cDNA for subsequent generation of MYB58-YFP, MYB58-GAL4, MYB58-OE, MYB58-RNAi, MYB58-MBP, and MYB58-HER
MYB63-cDNA	5'-atggggaaggaagagcacct-3' 5'-atgtatcatgagctcgtattctt-3'	Amplification of the full-length MYB63 cDNA for subsequent generation of MYB63-YFP, MYB63-GAL4, MYB63-OE, MYB63-RNAi, MYB63-MBP, and MYB63-HER
MYB58-Q-PCR	5'-ccagagaacagagctcttcaagag-3' 5'-atgtatgaggagctcgtactctc-3'	Real-time quantitative PCR analysis of MYB58 expression
MYB63-Q-PCR	5'-gaacagctcaggctcaagagcaac-3' 5'-atgtatcatgagctcgtattctt-3'	Real-time quantitative PCR analysis of MYB63 expression
MYB58-DR	5'-atgggcaaaggaagagcacatgt-3' 5'-ttaagcgaacccaaacggagtcttag atccagatccagatgtatgaggagctcgt actctc-3'	Generation of MYB58-DR
MYB63-DR	5'-atggggaaggaagagcacct-3' 5'-ttaagcgaacccaaacggagtcttag atccagatccagatgtatcatgagctcgt attctt-3'	Generation of MYB63-DR