

Appendix A Primers used in this study.

Primer name	Sequence (5'-3')
For ZmPHYB1 promoter cloning	
Pro-ZmPHYB1-F	GGCCAGTGCCAAGCTTAAACGCAACCGAGAAAGGC
Pro-ZmPHYB1-R	CCGGGGATCCTCTAGAGGCGGGGTTGGGGGAGAC
For plant transformation and subcellular localization	
ZmPHYB1-F	CCGAGCAGCAGATCGCCGCTTCTCTCCCGCATCCAGCGC
ZmPHYB1-R	CTCGCCCTTGCTCACCATGACGATTTCTCTACCAGCTGCTGG
ZmPHYB1-Y98-F	CAACCCCGCCTCTAGAATGGCGTCGGGCAGCCGC
ZmPHYB1-Y98-R	GGCGGCGATCTGCTGCTCGG
ZmPHYB1-Y359-F	CTGTGCATGACACCCGTGTGGAGC
ZmPHYB1-Y359-R	GCTCCACACGGGTGTCATGCACAGTTCATGGCGAACATGGGGTCAATT
For RT-qPCR assays	
ZmPHYB1-qF	GTCATATTGCGTGACTCCTTC
ZmPHYB1-qR	TGTCTCTATCAACCGAACCATCT
ACT2-qF	AAATCACAGCACTTGACCAAGC
ACT2-qR	GGCCTTGGAGATCCACATCTGC
Tublin 5-qF	GCCGTTGCCGAGGTGTTC
Tublin 5-qR	GTCTTCTCAAGAGCAGCCAAGT
For BiFC assays	
ZmPHYB1-CE-F	CGATAGTACTGTCGACATGGCGTCGGGCAGCCGCG
ZmPHYB1-CE-R	TACCCTCGAGGTCGACGACGATTTCTCTACCAGCTGCTGGA
ZmPIF3.1-NE-F	CGATAGTACTGTCGACATGTCCGACAGCAACGACTT
ZmPIF3.1-NE-R	TACCCTCGAGGTCGACTTTTTGTAGTATTTGTGGATCTCC
ZmPIF4.1-NE-F	CGATAGTACTGTCGACATGCAGACAGCGATCGAGCA
ZmPIF4.1-NE-R	TACCCTCGAGGTCGACGGCTTGCCATAGTTTTTCGC
ZmPIF5.1-NE-F	CGATAGTACTGTCGACATGGACGGCAATGCGAGGT
ZmPIF5.1-NE-R	TACCCTCGAGGTCGACAACTCTATGTAAAGTTGGTGGTTGCC
For LCI assays	
ZmPHYB1-nLUC-F	CGGGGGACGAGCTCGGTACCATGGCGTCGGGCAGCCGCG
ZmPHYB1-nLUC-R	ACGAGATCTGGTCGACGACGATTTCTCTACCAGCTGCTGGA
ZmPIF3.1-cLUC-F	ACGCGTCCCGGGGCGGTACCATGTCCGACAGCAACGACTT
ZmPIF3.1-cLUC-R	AGCTCTGCAGGTCGACCTATTTTTGTAGTATTTGTGGATCTCC
ZmPIF4.1-cLUC-F	ACGCGTCCCGGGGCGGTACCATGCAGACAGCGATCGAGCA
ZmPIF4.1-cLUC-R	AGCTCTGCAGGTCGACTCAGGCTTGCCATAGTTTTTCGC
ZmPIF5.1-cLUC-F	ACGCGTCCCGGGGCGGTACCATGGACGGCAATGCGAGGT
ZmPIF5.1-cLUC-R	AGCTCTGCAGGTCGACCTAACTCTATGTAAAGTTGGTGGTTGCC