

Supplement Figure S1-S5:

Unspliced_form_of_CpbZIP11	GGTTTGCAGTCGGGCAGCGCATTGTTGGTCTTCCATAACCA	638
Spliced_form_of_CpbZIP11	GGTTTGCAGTCGGGCAGCGCATTGTTGGTCTTCCATAACCA	640
Consensus	ggtttgcagtcgggcagcgcatttggtgcttccataacca	
Unspliced_form_of_CpbZIP11	AGCAGGAGTCTGCTGTGCTCTTGTGGAATCCCTGCTGTT	678
Spliced_form_of_CpbZIP11	AGCAGGAGTCTGCTGT.....T	657
Consensus	agcaggagtctgctgt.....t	
Unspliced_form_of_CpbZIP11	GGGTTCCCTGCTTTGGTTCTGGGCATCATGTGCCTATTCT	718
Spliced_form_of_CpbZIP11	GGGTTCCCTGCTTTGGTTCTGGGCATCATGTGCCTATTCT	697
Consensus	gggttccctgctttggttctctgggcacatcatgtgcctattc	
Unspliced_form_of_CpbZIP11	ACTCTGCCCACCATGCCCCATTCAATTCTGAAAAGGGTTT	758
Spliced_form_of_CpbZIP11	ACTCTGCCCACCATGCCCCATTCAATTCTGAAAAGGGTTT	737
Consensus	actctgcccaccatgccccattcaattctgaaaagggttt	
Unspliced_form_of_CpbZIP11	CACTGGAAAACGTAGGAAAGAAAAATCCAGGAGTGGCTCT	798
Spliced_form_of_CpbZIP11	CACTGGAAAACGTAGGAAAGAAAAATCCAGGAGTGGCTCT	777
Consensus	cactggaaaacgtaggaaagaaaaatccaggagtggctct	
Unspliced_form_of_CpbZIP11	AGGAGGGTCAAAAAGTAAGATGTTTGGATTCTTGATGGTC	838
Spliced_form_of_CpbZIP11	AGGAGGGTCAAAAAGTAAGATGTTTGGATTCTTGATGGTC	817
Consensus	aggaggggtcaaaaagtaagatgtttggattcttgatggtc	
Unspliced_form_of_CpbZIP11	CAATCATTGTGTAAGAGTAGGAGATGCAAAGCTTCAAGGA	878
Spliced_form_of_CpbZIP11	CAATCATTGTGTAAGAGTAGGAGATGCAAAGCTTCAAGGA	857
Consensus	caatcatttgttaaagagtaggagatgcaaagcttcaagga	
Unspliced_form_of_CpbZIP11	TGAAGATGAAACCGAATTACCTTGTCTTTG	909
Spliced_form_of_CpbZIP11	TGAAGATGAAACCGAATTACCTTGTCTTTG	888
Consensus	tgaagatgaaaccgaattaccttgttctttg	

Figure S1: Sequencing results comparing unspliced and spliced forms of *CpbZIP11*.



Figure S2: Comparative sequence alignment of nucleotides and amino acids between *Arabidopsis* AtZIP60 (D) and CpbZIP11 (D). (A) Amino acid sequence alignment. (B) Nucleotide sequence alignment.

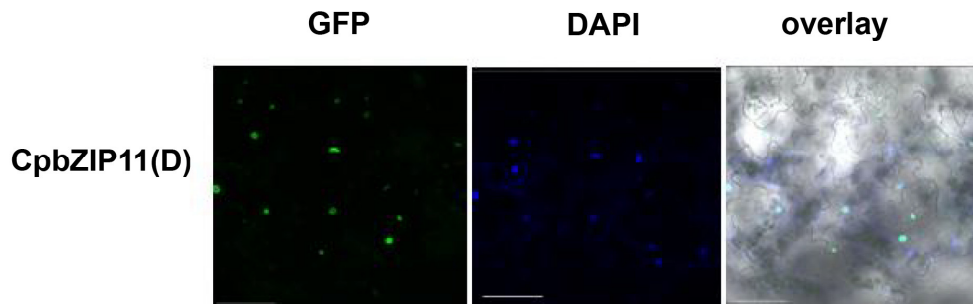


Figure S3: Nuclear localization of the truncated form of *CpbZIP11D* confirmed by DAPI staining. To corroborate the nuclear localization of this truncated form, DAPI staining was executed. DAPI, a stain that binds robustly to adenine–thymine-rich regions in DNA, serves as a primary marker for cell nuclei. Scale bar represents 50 μ m.

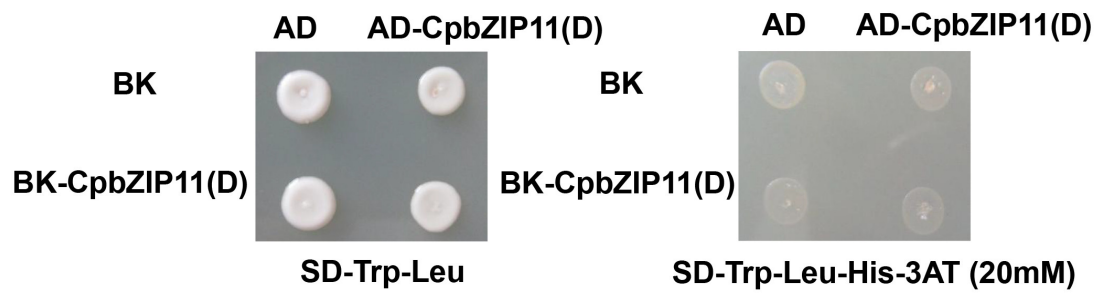


Figure S4: Inability of nuclear form *CpbZIP11(D)* to form homodimers in yeast cells. The cDNA sequence of *CpbZIP11(D)* was cloned into bait vector *pGBKT7* and prey vector *pGADT7*. Upon co-transfection into yeast cells with empty vectors and in the presence of 3-AT to suppress *CpbZIP11(D)* self-activation, it was observed that the homodimer *CpbZIP11(D)* failed to form in yeast.

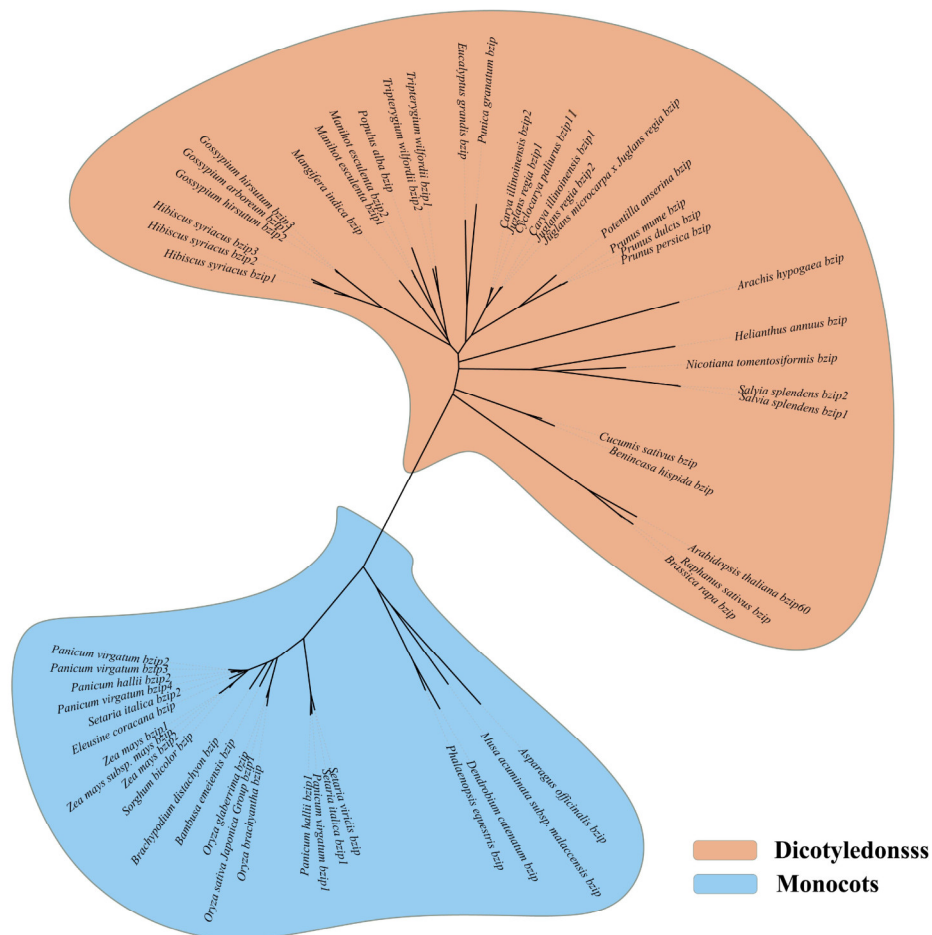


Figure S5: maximum likelihood (ML) phylogenetic analysis of *CpbZIP11* homologous genes among monocots and dicots. Light blue shading represents bZIP family members from monocotyledons, while light brown shading denotes those from dicots.