

Table S1. Primers used in this study.

Gene	Primer name	Sequence (5'-3')	Genbank No.	Purposes
<i>CaAP2/ERF064</i>	CDS-F	GGGGTACCATGGACTCAACTCCTTCTTC	XM_016712649.1	Transient expression
	CDS-R	GCTCTAGACCATGGACTAAAATAAGTAG		
	C1-F	GGGGTACCATGTCGTACCGAGGTGTTAG		
	C3-F	GGGGTACCATGAGACAGTTAGAGAGT		
	N2-R	GCTCTAGACACTGGGAAATTCAGTA		
	N1-R	GCTCTAGACTTCTTCTTACCGGGT		
	AD-F	CGGGATCCATGGACTCAACTCCTTC		Yeast one hybrid
	AD-R	CCGCTCGAGTTACCATGGACTAAAATA		
	BD-CDS-F	TCCCCCGGGATGGACTCAACTCCTT		
	BD-C1-F	TCCCCCGGGGTCGTACCGAGGTGTTAG		Transcriptional activity analysis
	BD-C3-F	TCCCCCGGGGGAGACAGTTAGAGAGT		
	BD-N1-R	AACTGCAGTTACTTCTTCTTACCGGGT		
	BD-N2-R	AACTGCAGTTACACTGGGAAATTCAGTA		
	BD-CDS-R	AACTGCAGTTACCATGGACTAAAATAAG		
	OE-F	GCTCTAGAAATGGACTCAACTCCTTCTTC		Over-expression
	OE-R	GGGGTACCTTACCATGGACTAAAATAAGTA		
	qRT-F	CAACTCCTTCTTCTTGCTCTTC		qRT-PCR
	qRT-R	CGCCTCCTAACACCTCGGTA		
<i>CaAP2/ERF049</i>	VIGS-F	GCTCTAGACACATGGACCAAGACTGTTCTC	KJ690096.1	VIGS
	VIGS-R	GGGGTACCTTACCATGGACTAAAATAAGTA		
<i>CaAP2/ERF109</i>	CDS-F	GGGGTACCATGGTTCCAACCTACCAAAGT	XM_016717675.1	Transient expression
	CDS-R	GCTCTAGAGAGCGCCAAGAAATTCTC		
<i>StERF1B-l</i>	CDS-F	GGGGTACCATGTCTGGGCAACTCATCAAG	XM_006354438.2	Transient expression
	CDS-R	GCTCTAGATGATGGAGTCATTAGAAGCT		
<i>SITSRF1</i>	CDS-F	GGGGTACCATGGATTCTTCTTCTTGTTTC	AAN32899.1	Transient expression
	CDS-R	GCTCTAGACCATGGACTAAAATAAGTTG		

<i>NbERF1B-l</i>	CDS-F	GGGGTACC	ATGGATTCTTCTTCTTGTT	Niben101scf07761g02006.1	Transient expression
	CDS-R	GCTCTAGAC	CATGGTAGAAAAGCTTCATTAC		
<i>NbCD1</i>	CDS-F	GGGGTACC	ATGGCGCCGAAAGAAAAAGG	AB196362.1	Transient expression
	CDS-R	GCTCTAGAC	ATGTTTTCCGGCGGAGGAAG		
<i>PcINF1</i>	CDS-F	GGGGTACC	ATGAACCTCCGTGCTCTGTT	JX948084.1	Transient expression
	CDS-R	GCTCTAGAT	TACAGCGACGCGCACGTG		
	promoter-F	CCCAAGCTT	TGTGCATTATTAGAACTTGTGGGT		Tobacco transformation
	CDS-R	CGGGATCC	GACATCAGTTGGAAGTTCC		
<i>CaBPR1</i>	pHIS-F1	CCGGAATT	CGGGTCAATGTAGTACTCC	AY560589.1	Yeast one hybrid
	pHIS-R	CGACGCGT	CTTGAATGAATGGGTTGC		
	qRT-F	CAGGATG	CAACACTCTGGTGG		qRT-PCR
	qRT-R	ATCAAAGG	CCGGTTGGTC		
<i>CaPO2</i>	qRT-F	TGATTGCT	TTTGTTCAAGGTT	DQ489711.1	qRT-PCR
	qRT-R	ATGATGGAC	CTCCAACGAGA		
<i>CaSAR82</i>	qRT-F	CAGGGAGAT	GAAATTCTGAGGC	AF313766.1	qRT-PCR
	qRT-R	CATATGAAC	CTCTATGGATTTCTG		
<i>CaUBI3</i>	qRT-F	TGTCCATC	TGCTCTCTGTTG	AY486137.1	qRT-PCR
	qRT-R	CACCCCAAG	CACAATAAGAC		
<i>GUS</i>	qRT-F	CTCATTAC	GCGCAAAGTGTGG		qRT-PCR
	qRT-R	CATTACGCT	GCGATGGATTC		
<i>NbPR3</i>	qRT-F	GACAACAAG	CCATCTTCCCA	X51425.1	qRT-PCR
	qRT-R	ACAGTCCA	AAGTTTTCCCCAG		
<i>NbPR4</i>	qRT-F	TGATGGTGG	CAATGGCGGCG	X58547.1	qRT-PCR
	qRT-R	GTTCTGTTC	TCTGTTCGT		
<i>NbPR1b</i>	qRT-F	ATGGGATA	CTCCAAAACAT	X66942.1	qRT-PCR
	qRT-R	CACCAGCGG	CGTTGAGTTGA		
<i>NbEF1α</i>	qRT-F	CGTGAGCGT	GGTATCACCATT	AY206004.1	qRT-PCR
	qRT-R	GTGAAAGCA	AGCAATGCGTG		

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3
4

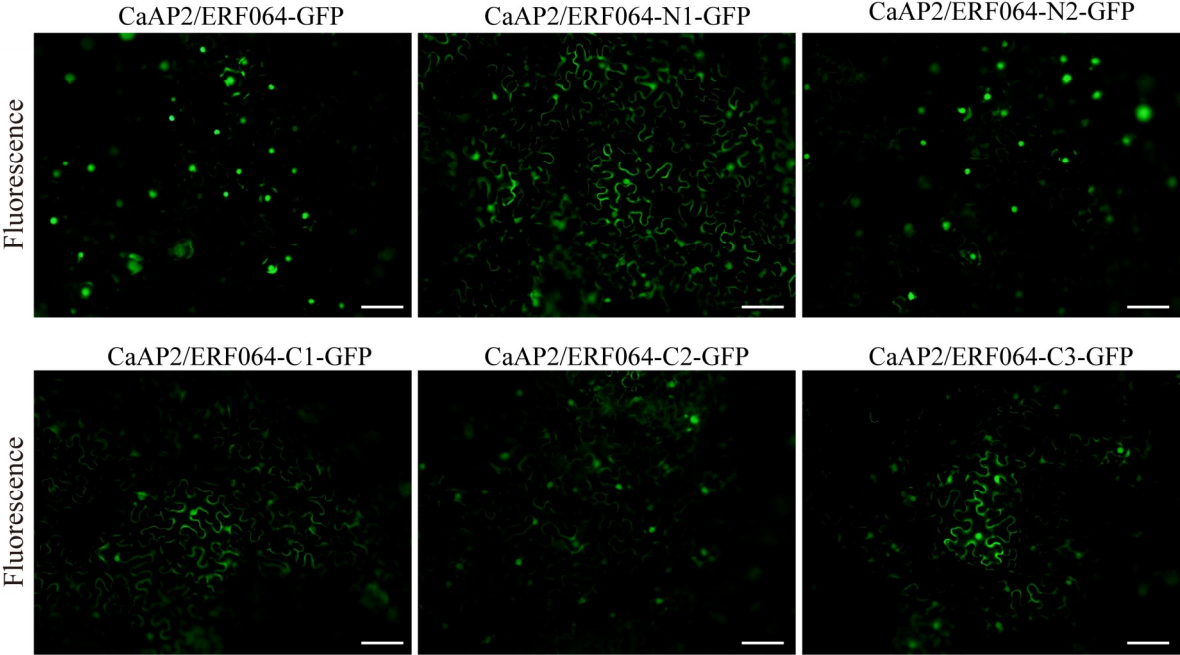


Figure S1. Localization of deletion mutants of CaAP2/ERF064 protein in *N. benthamiana* epidermal cells. Scale bar represent 100 μ m.

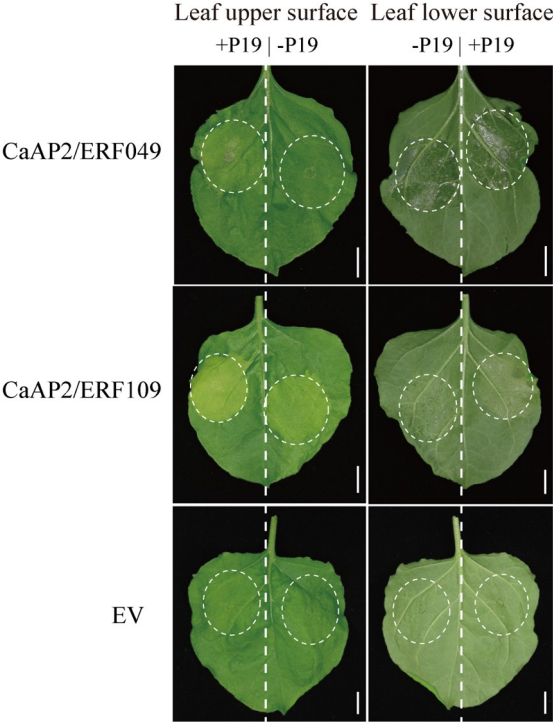


Figure S2. Transient over-expression of *CaAP2/ERF049* and *CaAP2/ERF109* in *N. benthamiana*. EV was short for empty vector. The photograph was taken at 7 days post infiltration. Scale bar represent 1 cm.

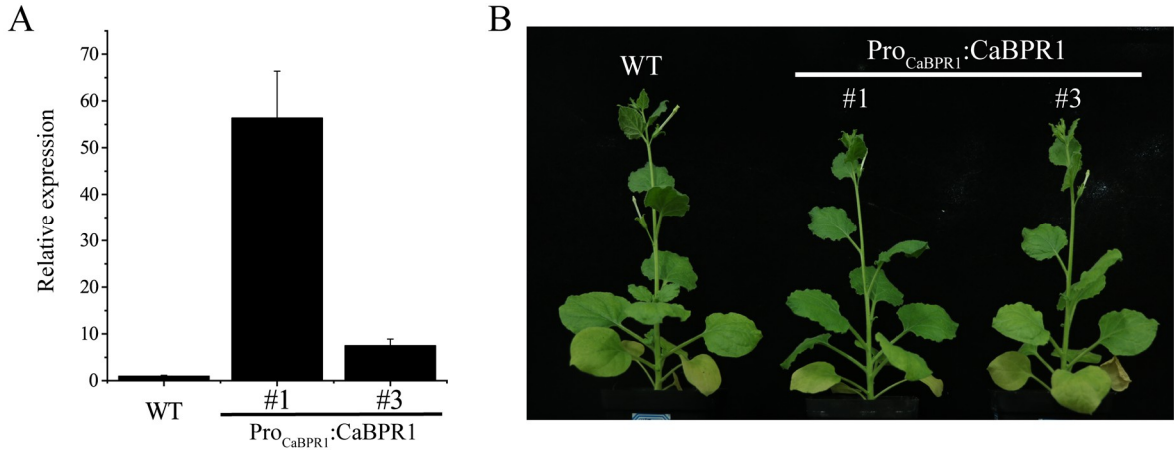


Figure S3. Detection of Pro_{CaBPR1}:CaBPR1 transgenic tobacco plants. (A) Expression analysis of *CaBPR1* in Pro_{CaBPR1}:CaBPR1 transgenic tobacco plants. (B) Phenotypes of WT and Pro_{CaBPR1}:CaBPR1 transgenic plants.



Figure S4. Phenotype of *CaPDS*-silenced pepper plants at 6 weeks post infiltration.

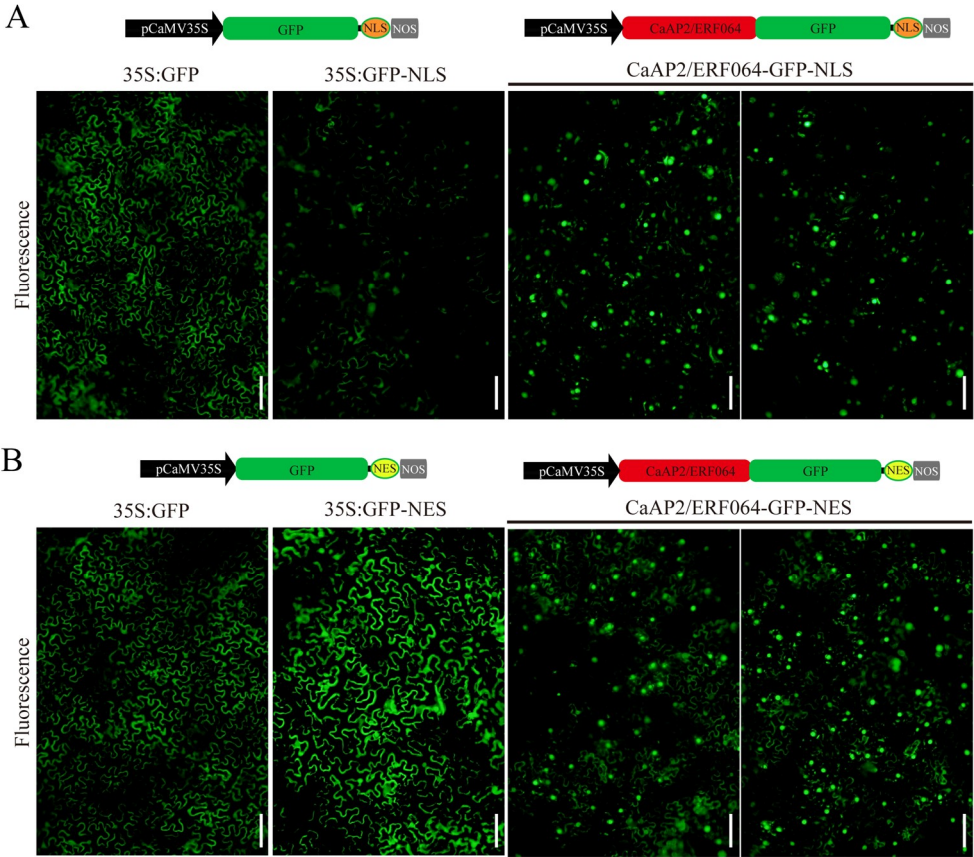


Figure S5. Localization of CaAP2/ERF064 proteins in *N. benthamiana* epidermal cells. (A) and (B) Localization of CaAP2/ERF064-GFP-NLS and CaAP2/ERF064-GFP-NES proteins in tobacco. The Scale bar represents 100 μm.