

Figure S1. Generation of transgenic lines expressing Trx-h2 and its point-mutant variant, Trx-h2(G/A), in *trx-h2* background, resulting in Trx-h2-YFP^{OE}/*trx-h2* and Trx-h2(G/A)-YFP^{OE}/*trx-h2* plants. **A.** A schematic diagram of *trx-h2* knock-out genomic structure (SALK_079507). T-DNA is inserted at the third exon of Trx-h2. **B.** Schematic diagrams of DNA constructs for the generation of overexpression lines of YFP-tag fusions of Trx-h2 and Trx-h2(G/A). The genes are expressed under the control of the CaMV 35S promoter and octopine synthase (OCS) terminator. **C.** Expression levels of Trx-h2 protein in the transgenic Arabidopsis analyzed by western blot with anti-GFP antibody. Rbc L stained with Ponceau S was used as loading controls. **D.** Biotin-labeled Trx-h2-myristate was examined from the plants of Trx-h2-YFP^{OE}/*trx-h2* and Trx-h2(G/A)-YFP^{OE}/*trx-h2* by western blotting.

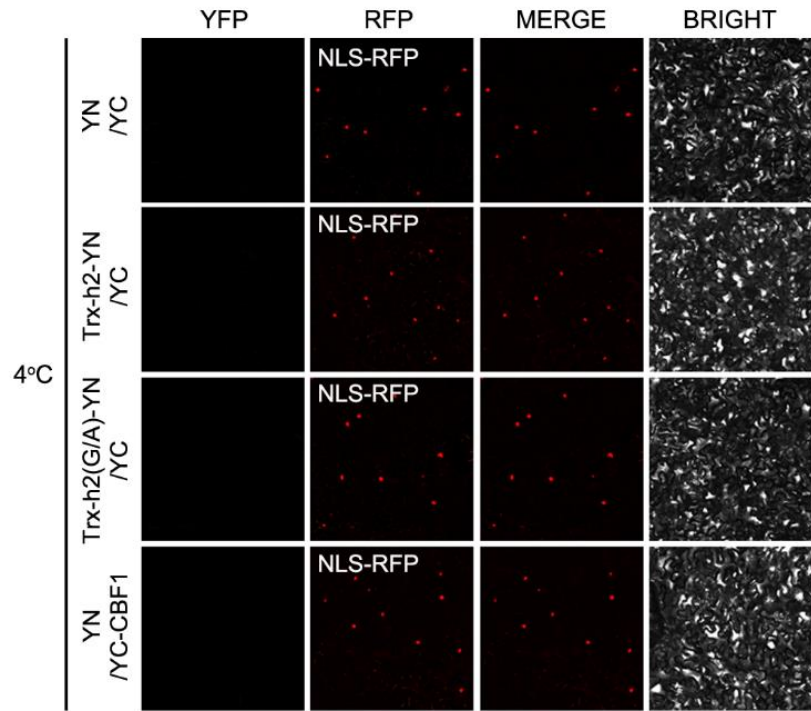


Figure S2. Interaction of Trx-h2 with YFP as negative controls in BiFC assay. BiFC assay performed by co-expressing YN and YC vectors, Trx-h2-YN or Trx-h2(G/A)-YN and YC vector, and YN vector and YC-CBF1 in *N. benthamiana* leaves. Samples were incubated at 4°C for 6 h. YFP-signals analyzed under the confocal microscopy were merged with that of NLS-RFP used as a nuclear marker (Merge).

Table S1. List of primers used in this study.

Accession Number	Primer name	Primer sequence (5'→3')
<i>Plasmid construction</i>		
<i>At5G39950</i>	Trx-h2 F	ATCGATATGGGAGGAGCTTTATCAACT
	Trx-h2 R	TCTAGATGCTCTGAGTTTGCTAACTTTCTT
	Trx-h2 attB1 F	AAAAAGCAGGCCATATGGGAGGAGCTTTATCAAC
	Trx-h2 attB2 R	AGAAAGCTGGGTATGCTCTGAGTTTGCTAA
	Trx-h2(G/A) F	ATCGATATGGCAGGAGCTTTATCAAC
	Trx-h2(G/A) attB1 F	AAAAAGCAGGCCATATGGCAGGAGCTTTATCAAC
<i>At4G25490</i>	CBF1 F	GAATTCATGAACTCATTTTCAGCT
	CBF1 R	AAGCTTTTAGTAACTCCAAAGCGA
	CBF1 attB1 F	AAAAAGCAGGCCATATGAACTCATTTTCAG
	CBF1 attB1 R	AGAAAGCTGGGTAGTAACTCCAAAGCG
	attB1	GGGGACAAGTTTGTACAAAAAAGCAGGCCAT
	attB2	GGGGACCACTTTGTACAAGAAAGCTGGGT
<i>EMSA assay</i>		
	CRT/DRE F	ATTCATGGCCGACCTGCTTTTT
	CRT/DRE R	AAAAAGCAGGTCGGCCATGAAAT
<i>Quantitative real-time PCR (qRT-PCR)</i>		
<i>At4G05320</i>	UBQ10_qF	GGCCTTGTATAATCCCTGATGAATAAG
	UBQ10_qR	AAAGAGATAACAGGAACGGAAACATAGT
<i>AT3G18780</i>	ACT2_qF	CTTGACCAAGCAGCATGAA
	ACT2_qR	CCGATCCAGACACTGTACTTCCTT
<i>AT2G42450</i>	COR15a_qF	AACGAGGCCACAAAGAAAGC
	COR15a_qR	CAGCTTCTTTACCCAATGTATCTGC-
<i>AT5G52310</i>	RD29A_qF	GAAAGGAGGAGGAGGAATGG
	RD29A_qR	AACCAGCCAGATGATTTTGG
<i>AT5G15960</i>	KIN1_qF	TGGAGCTGGAGCACAAACA
	KIN1_qR	GACCCGAATCGCTACTTGTTT
<i>AT1G09350</i>	GOLS3_qF	GGAGTGGTTGGTCTGGCTAA
	GOLS3_qR	TTGGTTATCCGGTGGGTAAA