

Supplementary Material

***Arabidopsis* cysteine-rich trans-membrane module (CYSTM) small proteins play a protective role mainly against heat and UV stresses**

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Table S1 Forward and reverse primers used in the study

Table S2 Expression level of *Atlg05340* in *Arabidopsis* mutant line Salk_129236 under normal growth conditions. All the values closer to 1 means that the expression level is same as that of WT, the values smaller than 1 or larger than 1 indicate lower and higher gene expression respectively.

Fig. S1 Schematic presentation of the gene *Atlg05340* including the different T-DNA inserts of the lines used in this study. Area marked in blue is the untranslated region of the gene, green bars represents the coding sequences of the gene, introns are represented by black line and insert site is represented by red marks with their accession numbers.

Fig. S2 Effect of temperature on PSII efficiency. WT and Salk_129236 plants were exposed for 30 min to increasing temperature. The PSII efficiency was measured on the 4th or 5th leaf following two hours after treatments. Results are an average \pm SE of 5 plants for each line.

Table S1 Forward and reverse primers used in the study

Germplasm/ Seed stock No.	Primers	Usage
<i>Atlg05340</i> Full length	LP: 5'-TGGTTCGGTAGCTCAGGGTA-3' RP: 5'-AAATGTCCAGGGCACAACAG-3'	qRT-PCR
<i>Atlg05340</i> primers located upstream of insertion S-129236	LP: 5'-TGGTTCGGTAGCTCAGGGTA-3 RP: 5'-GCAACACATGGCCGCAAGA-3	qRT-PCR

Table S2 Expression level of *Atlg05340* in *Arabidopsis* mutant line Salk_129236 under normal growth conditions. All the values closer to 1 means that the expression level is same as that of WT, the values smaller than 1 or larger than 1 indicate lower and higher gene expression respectively.

Primers/ line	WT	<i>Atlg05340</i>
<i>Atlg05340</i> (full length)	1	0.145±0.003
<i>Atlg05340</i> (Upstream of insertion)	1	0.89±0.047

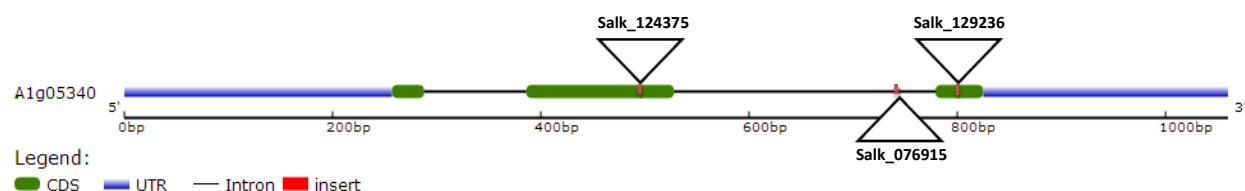


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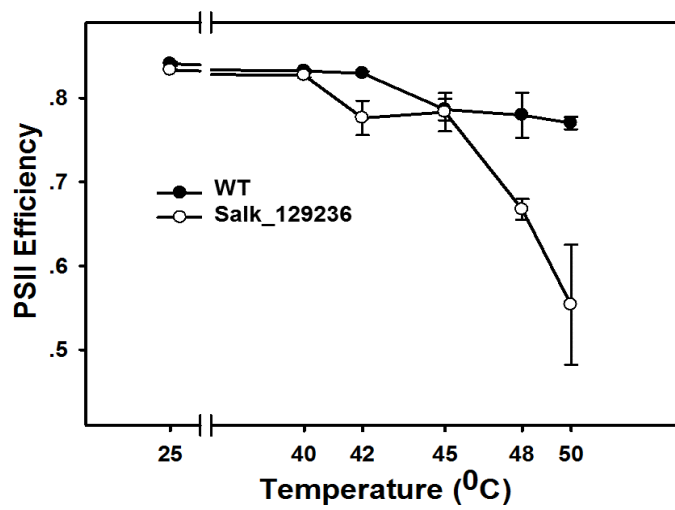


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