

**SUPPLEMENTARY MATERIAL FOR MANUSCRIPT**

**Functional analysis of the pathways for 2-Cys peroxiredoxin reduction  
in *Arabidopsis thaliana* chloroplasts**

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## Legends for Supplementary Figures

**Fig. S1.** A, Schematic representation of the structure of *2cpA* and *2cpB* genes from *Arabidopsis* showing the location of the T-DNA insertions, as previously reported (Kirchsteiger et al., 2009), used for construction of the double mutant. The position of the oligonucleotides used for PCR analysis is marked with arrows. B, PCR analysis of the presence of the T-DNA insertions in genomic DNA isolated from the wild type and homozygous double mutant (Hom) for both insertions. DNA size markers, in kbp, were loaded on the left. T denotes the primer specific for the T-DNA insertion, while a, a', b and b' represent the gene specific primers as shown in A.

**Fig. S2.** A, Schematic representation of the structure of the *Trx x* gene from *Arabidopsis* showing the position of the T-DNA insertion in line SALK\_125897 and the oligonucleotides used for PCR analysis. B, PCR analysis of genomic DNA isolated from wild type and a homozygous line for the T-DNA insertion in the *trxx* gene. DNA size markers, in kbp, are shown on the left. T denotes the primer specific for the DNA insertion, c and d represent the gene specific primers as shown in A.

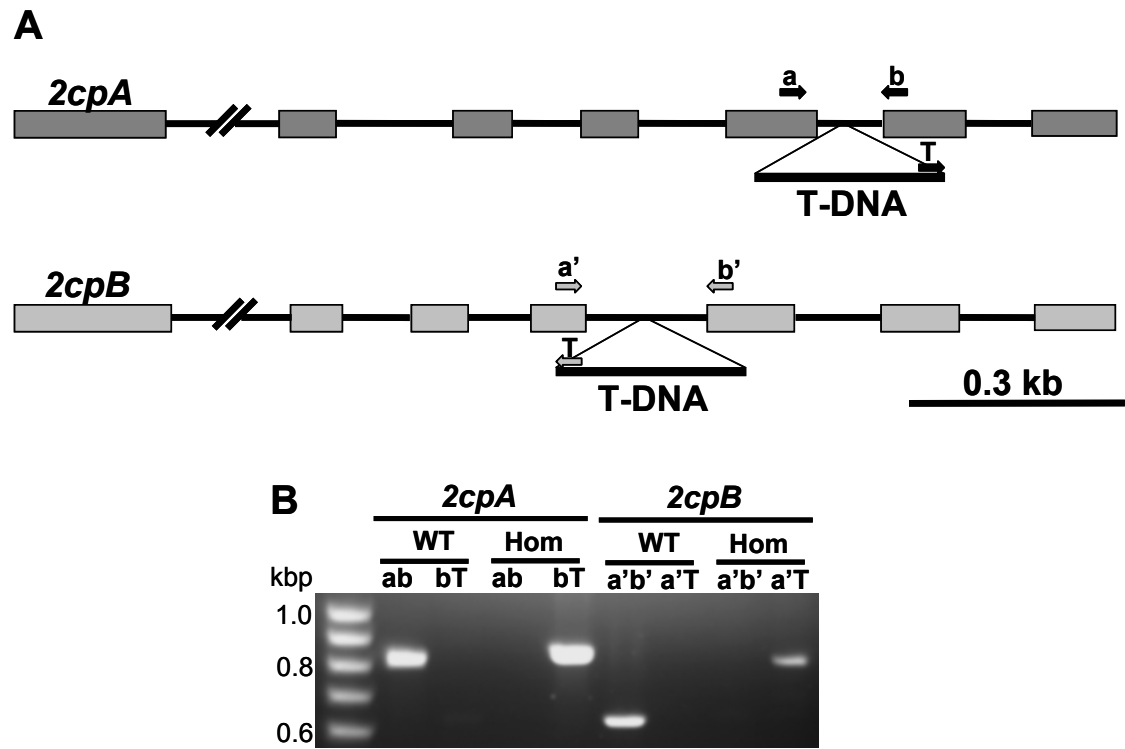


Figure S1

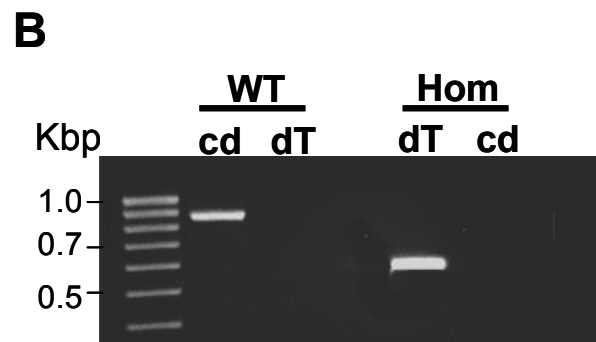
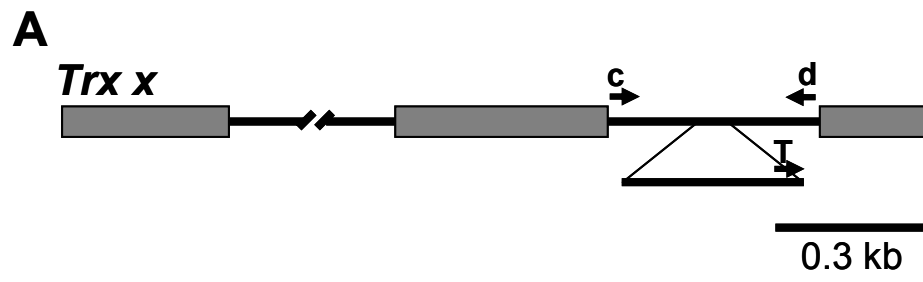


Figure S2

Table S1. Gene-specific oligonucleotides used for qPCR analysis

Gene	Oligonucleotides
<i>Ubiquitin 10</i>	F: 5'-GATCTTTGCCGAAAACAATTGGAGGATGGT-3' R: 5'-CGACTTGTCAATTAGAAAGAAAGAGATAACAGG-3'
<i>2cpA</i>	F: 5'-ACTCTCATCTCTTCTCCC-3' R: 5'-AGGAGAAGAAAGGGTTCGAA-3'
<i>2cpB</i>	F: 5'-CACCACCCTACTCTCTT-3' R: 5'-GGAAGAGGGTATGATTCTGG-3'
<i>Trxx</i>	F: 5'-CTAGTTCGGTGATAAGATGC-3' R: 5'-ATTGAGTTCAAGAGACCATC-3'
<i>NtrC</i>	F: 5'-TCACCAACATGTGGCCC-3' R: 5'-TTCTTCATCTTCACACCCGA-3'
<i>FeSOD1</i>	F: 5'-GCTGTCACCGCAAACACTAC-3' R: 5'-GTAAGTGCTGTGGATAATGTGC-3'
<i>FeSOD2</i>	F: 5'-AAAGAAACGGAAAGAGACGG-3' R: 5'-GATCCGTGCCTAAGATTTGC-3'
<i>FeSOD3</i>	F: 5'-CAGTTAGGGAAAGATGATAGACTC-3' R: 5'-ATCTGCTCAAGAACACCCT-3'
<i>CuZnSOD2</i>	F: 5'-TTGGGAGACCTGGGAACAC-3' R: 5'-TAGTTTTCTCCAACCCCTGCG-3'
<i>APX1</i>	F: 5'-GTCCATTCGGAACAATGAGGTTTGAC-3' R: 5'-GTGGGCACCAGATAAAGCGACAAT-3'
<i>APX3</i>	F: 5'-CCCAAATCACATACGCAGACCTGTA-3' R: 5'-AGTTGTCAAACCTCAGCGGCTCTTG-3'

<i>APX4</i>	F: 5'- CTAATAATCCGGGGGAGCCAATG -3' R: 5'- CTCTGTTGCATCACTCCTTCCAAAAT -3'
<i>APX5</i>	F: 5'- AGCTAAACCGTCCACACAACAAAGGT -3' R: 5'- GTCCCAAAGTGTGACCTCCAGAGAGA -3'
<i>APX6</i>	F: 5'- TGCAAAACGAAATAAGGAAAGTGGTG -3' R: 5'- CACTCAGGGTTTCTGGAGGTAGCTTG -3'
<i>sAPX</i>	F: 5'- TGCTAATGCTGGTCTTGTGAATGCTT -3' R: 5'- CCACTACGTTCTGGCCTAGATCTTCC -3'
<i>tAPX</i>	F: 5'- CAGAATGGGACTTGATGACAAGGAAA -3' R: 5'- ATGCAGCCACATCTTCAGCATACTTC -3'