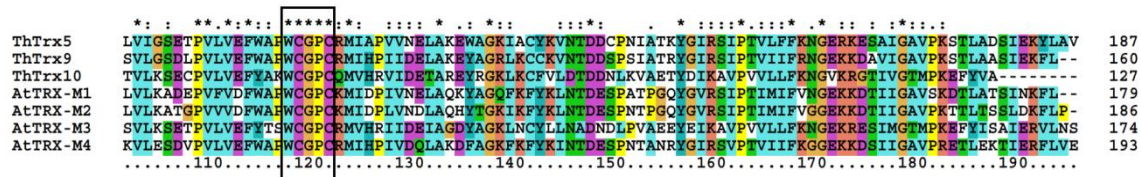
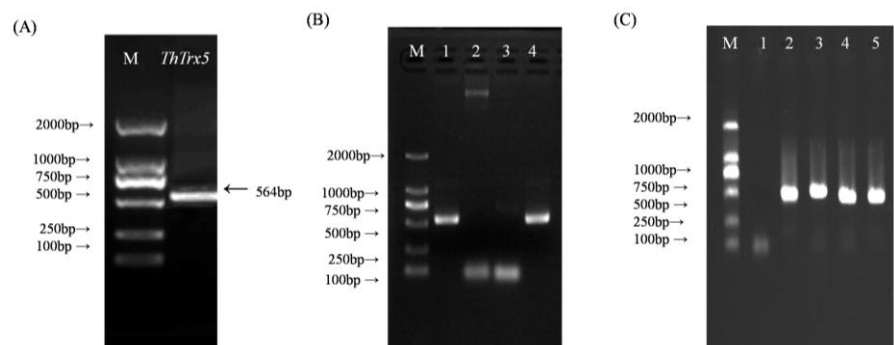


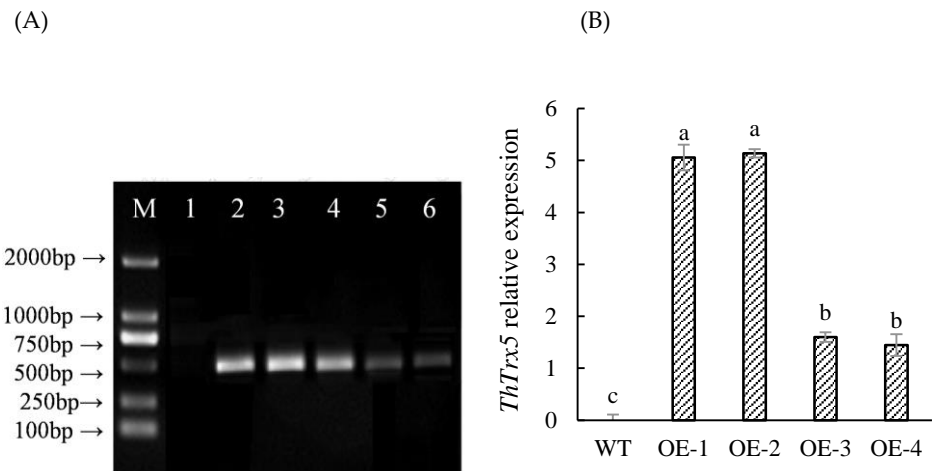
Supplementary data



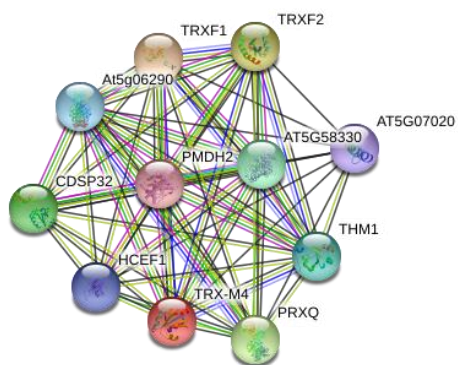
Supplementary Figure S1. Multiple Sequence Alignment of ThTrx Proteins of family I m Subclasses in Tamarix and Arabidopsis. The box highlights the WCGPC domains.



Supplementary Figure S2: *ThTrx5* gene cloning and plant expression vector construction process. (A) PCR amplified fragment of *ThTrx5* gene; (B) PCR detection of *ThTrx5* gene topo reaction M. DL2000 Marker; 1: Positive control; 2: Negative control; 3: Water control; 4: bacterial solution PCR; (C) PCR detection of *ThTrx5* gene LR reaction M: DL2000 Marker; 1: Water control; 2: Positive control; 3-5: bacterial solution PCR.



Supplementary Figure S3 Molecular Detection of Transgenic *Arabidopsis* T3 Plants (A) M: DNA Maker DL2000; 1: water control; 2: positive control; 3-6: transgenic lines; (B) *ThTrx5* relative expression detection.



Supplementary Figure 4. Schematic diagram of predicted AtTHM4 interacting proteins.