Chaperone-like properties of two tobacco plastid thioredoxins

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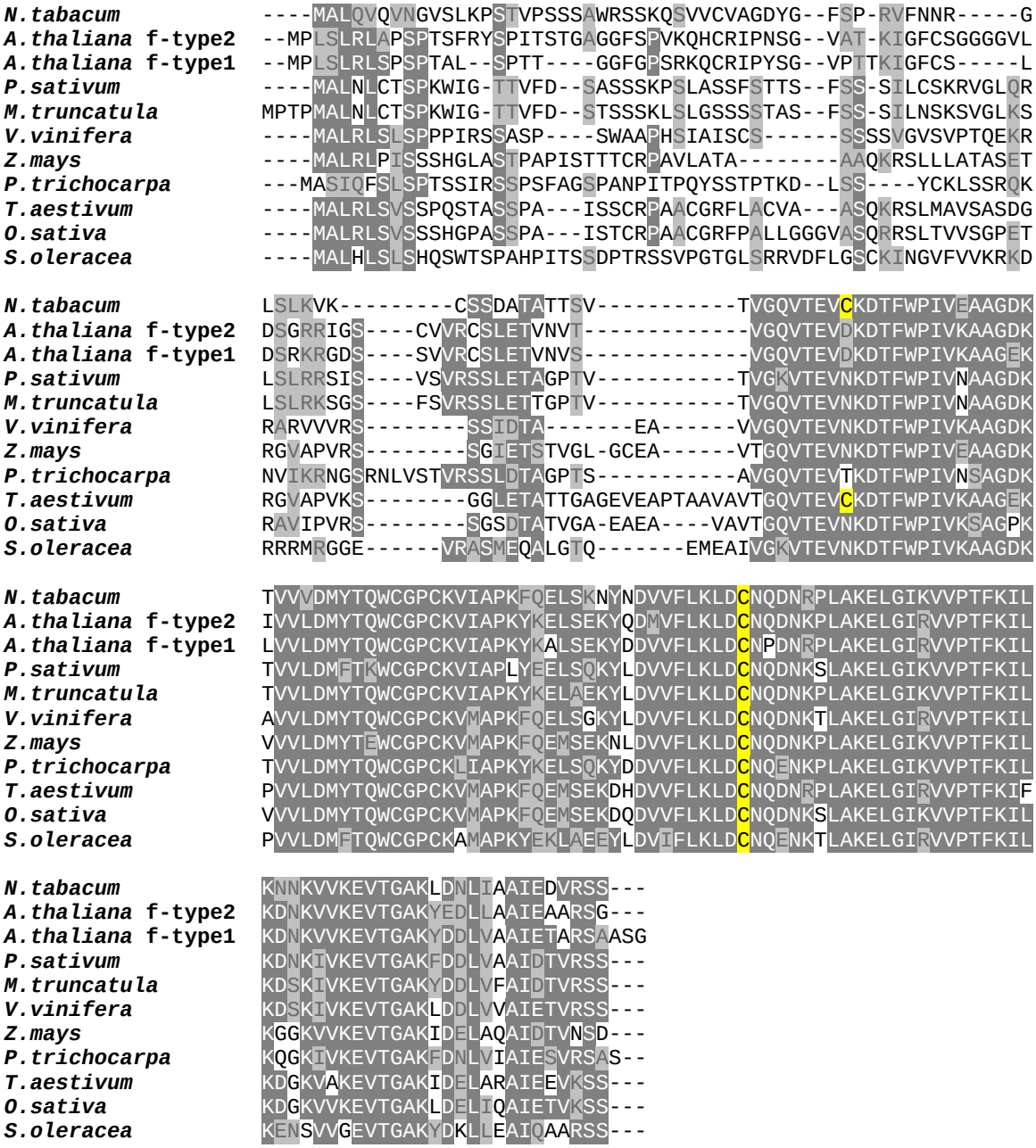

Fig. S1. Alignment of the amino acid sequence of tobacco Trx f with other Trx f proteins from plant sources, using the ClustalW software. Additional non-active cysteine residues are highlighted in a yellow box. The GenBank accessions are as follows: ADQ53451, NP_197144, NP_186922, AAC49357, ACJ83989, XP_002277021, NP_001150158, XP_002325907, CBH32529, NP_001045167, P09856, respectively.

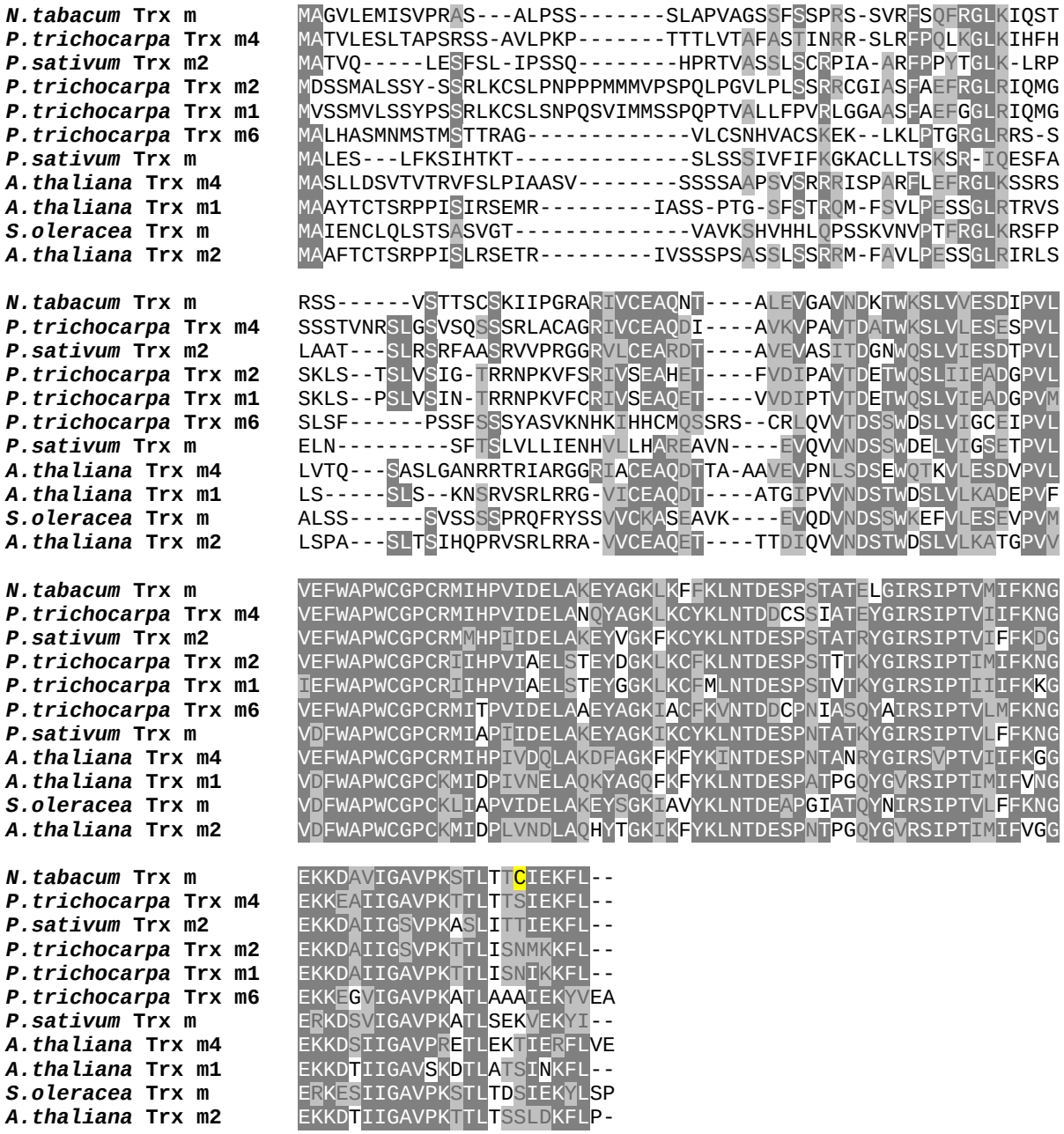

Fig. S2. Alignment of the amino acid sequence of tobacco Trx m with other Trx m proteins from plant sources, using the ClustalW software. The additional non-active cysteine residue is highlighted in a yellow box. The GenBank accessions are as follows: ADQ53450, EEE97513, CAC69854, EEF00430, XP_002330680, XP_002328471, CAA53900, NP_188155, NP_849585, P07591, NP_192261, respectively.

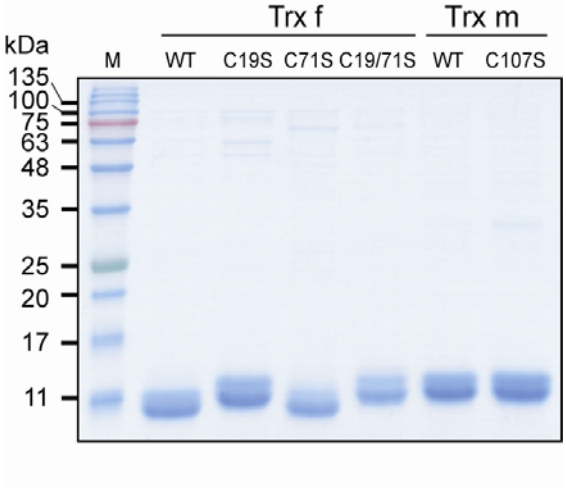

Fig. S3. SDS-PAGE analysis of purified tobacco Trx f, Trx m and mutant proteins expressed in E. coli. The eluates of the purified proteins obtained from the soluble fraction of E. coli BLR (DE3) transformed with the corresponding pET-Trx construct were loaded onto SDS-PAGE (13% acrylamide) gels and stained with Coomassie Brilliant Blue R-250. His-tagged proteins were purified by Ni-NTA affinity chromatography. M, protein marker.

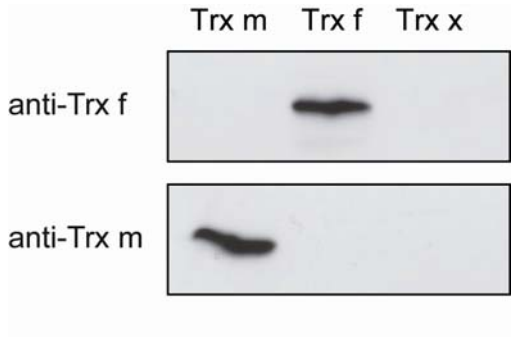

Fig. S4. Cross-reactivity of anti-Trx f and anti-Trx m antibodies. 250 ng of purified Trx were loaded onto 13% SDS-PAGE gels. Blots were detected using anti-Trx f or anti-Trs m as indicated. Trx f, tobacco Trx f; Trx m, tobacco Trx m; Trx x, *Arabidopsis* Trx x.