

**SUPPLEMENTARY FIG. S4.** Structure homology comparison of IsTRP monomer with thioredoxin 1 from yeast. Cartoon representation of a homology model for IsTRP 3D structure (color coded from *blue* to *red* for N-terminal and C-terminal) superposed to yeast thioredoxin 1 (*gray cartoon*; PDB access code 3f3q). The three cysteines in IsTRP are depicted as spheres. An *inset* of the active site is shown on the *right* to provide a perspective onto group orientation with respect to a transparent molecular surface. Color code for spheres: *orange*, sulfur; *white*, carbon; *red*, oxygen; *blue*, nitrogen. Solvent exposure for Cys34 is variable among the models.