



**Figure S1.** The results of agarose gel electrophoresis. (a) Digestion of pMG36e plasmid and the amplified *trxA* fragment with *salI* and *HindIII* to generate recombinant plasmid pMG36etrxA. Marker: DNA ladder (0.1-5.0 kb), Lane 1: *trxA* digested by *salI* and *HindIII* (0.4 kb), Lane 2: pMG36e digested by *salI* and *HindIII* (3.6 kb). (b) Colony PCR results of heterologous expression of pMG36etrxA in DH5α cells. Marker: DNA ladder (0.1-5.0 kb), Lane 1 and 2 are positive results for the colony PCR of pMG36etrxA in DH5α cells (1.0 kb). (c) Colony PCR results of heterologous expression of pMG36etrxA in WCFS1 cells. Marker: DNA ladder (0.1-5.0 kb), Lane 1, 2, 3 and 4 are positive results for the colony PCR of pMG36etrxA in WCFS1 (1.0 kb).

**Table S1.** Primers used for real-time quantitative PCR.

Primer Name	Primer Sequence (5'-3')	Sequence Length	Reference
trxA-F	GGCGTGACTGTGACTGATT	118	This study
trxA-R	CGACATCAATCTTGCCGAATT		
trxA1-F	TTTTGGGCGGATTGGTGT	104	This study
trxA1-R	TCAACGTCGAGCGAAGCA		
trxA2-F	CGACGCCAACCCTGAAAC	84	This study
trxA2-R	TCAACCACTTCGCCATCC		
trxA3-F	TCCCTTTCTGAAGACCCA	86	This study
trxA3-R	AATTGACTGGCCGTAGCT		
trxH-F	TTATTCTTTACGGCGGACTG	128	This study
trxH-R	TGGGCAATTTCAATGTTGG		
trxB-F	ATGAATCAGCGACCCAGTT	169	This study
trxB-R	TCCTCGCCAGTAACACCC		
fdr-F	TAAAGTCATCCGAAACTGG-CACG	113	This study
fdr-R	TATCACCAATAGCCGCAATCCC		
pMG36e-F	TCGGTCCTCGGGATATGAT	1000	This study
pMG36e-R	ATGCCGATAACTAAACGAAA		