

## Yeast Thioredoxin - Purified

<b>Catalog No.:</b>	AR10713PU-L
<b>Quantity:</b>	1 mg
<b>Background:</b>	<p>Thioredoxins are small disulphide-containing redox proteins (within the conserved Cys-Gly-Pro-Cys active site) that have been found in all the kingdoms of living organisms. Thioredoxin contains a single disulfide active site and serves as a general protein disulphide oxidoreductase. Thioredoxins are involved in the first unique step in DNA synthesis. It interacts with a broad range of proteins by a redox mechanism based on reversible oxidation of two cysteine thiol groups to a disulphide, accompanied by the transfer of two electrons and two protons. The net result is the covalent interconversion of a disulphide and a dithiol. It has been suggested that thioredoxin may catalyze the formation of correct disulfides during protein folding because of its ability to act as an efficient oxidoreductant. Trx also provides control over a number of transcription factors affecting cell proliferation and death through a mechanism referred to as redox regulation.</p>
<b>Species:</b>	Yeast
<b>Source:</b>	<i>E. coli</i>
<b>Format:</b>	<p><b>State:</b> Lyophilized sterile purified protein <b>Purity:</b> &gt; 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Anion-exchange FPLC. (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained. <b>Buffer System:</b> Each mg of protein contains 20mM Phosphate buffer pH 7.4 <b>Reconstitution:</b> Restore in sterile 18MΩ·cm<sup>-1</sup> H<sub>2</sub>O</p>
<b>Description:</b>	<p>Recombinant Yeast Thioredoxin produced in <i>E. coli</i> is a single, non-glycosylated, polypeptide chain having a Molecular Mass of 12.6kDa <b>Biological Activity:</b> Yeast Recombinant TRX is fully biologically active when compared to standard. TRX activity is assayed by measuring the change in absorbance at 650 nm at 25°C using 0.13μM Bovine Insulin containing 0.33mM DTT (pH 6.5) <b>Specific Activity:</b> 3IU/mg</p>
<b>Storage:</b>	<p>Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.</p>