

Yeast Thioredoxin - Purified

Catalog No.:	AR10713PU-S
Quantity:	5 µg
Background:	<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>
Species:	Yeast
Source:	<i>E. coli</i>
Format:	<p>State: Lyophilized sterile purified protein Purity: > 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. Buffer System: Each mg of protein contains 20mM Phosphate buffer pH 7.4 Reconstitution: Restore in sterile 18MΩ·cm⁻¹ H₂O</p>
Description:	<p>Recombinant Yeast Thioredoxin produced in <i>E. coli</i> is a single, non-glycosylated, polypeptide chain having a Molecular Mass of 12.6kDa Biological Activity: 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) Specific Activity: 3IU/mg</p>
Storage:	<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>