TXN
Recombinant Human Thioredoxin

Catalog No.	CRT139A	**Quantity:**	10 µg
	CRT139B		50 µg
	CRT139C		1.0 mg

Alternate Names: Thioredoxin, ATL-derived factor, ADF, Surface-associated sulphydryl protein, SASP, TXN, TRDX, TRX, TRX1, MGC61975, DKFZp686B1993

Description: 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.
Thioredoxin Human Recombinant produced in *E.Coli* is a single, non-glycosylated, polypeptide chain containing 105 amino acids.

Physical Appearance: Sterile filtered colorless solution.

Gene ID: 7295

Protein Accession No: P10599

Source: *E. coli*

Molecular Mass: 11.7 kDa

Formulation: Thioredoxin solution containing 20 mM phosphate buffer pH 7.4.

Purity: Greater than 95.0% as determined by
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE

Biological Activity: Specific activity is 7-10 A650/min/mg, obtained by measuring the increase of insulin precipitation in absorbance at 650 nm resulting from the reduction of insulin. Please refer to our activity assay protocol.

Amino Acid Sequence: MVKQIESKTA FQEALDAAGD KLVVVDFSAT WCGPCKMIKP FFHSLSEKYS NVIFLEVDVD DCQDVASECE VKCMPTFQFFKKGQKVGEFS GANKEKLEAT INELV.

Storage & Stability: Thyrodoxin human although stable at 4°C for 1 week, should be stored desiccated below -18°C.
Please prevent freeze thaw cycles.

Cell Sciences®
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Website: www.cellsciences.com