9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

TXN1 Human

Thioredoxin Human Recombinant
RCP2476

Product Overview

Name	TXN1 Human
Description	
Thioredoxin Human Recombinant	
Accession (Primary)	P10599
Synonyms	
Thioredoxin, ATL-derived factor, ADF, Surface-associated sulphydryl protein, SASP, TXN, TRDX, TRX, TRX1, MGC61975, DKFZp686B1993.	
Introduction	
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.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile filtered colorless solution.	
Formulation	
Thioredoxin solution containing 1mg/ml solution containing 1xPBS pH 7.4.	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.	
Purity	
Greater than 90.0% as determined by SDS-PAGE.	

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Amino acid sequence

MVKQIESKTA FQEALDAAGD KLVVVDFSAT WCGPCKMIKP FFHSLSEKYS NVIFLEVDVD DCQDVASECE VKCMPTFQFFKKGQKVGEFS GANKEKLEAT INELV.

Biological Activity

Specific activity is>150 A650/min/mg, obtained by measuring the increase of insulin precipitation in absorbance at 650 nm resulting from the reduction of insulin.

References

Title :Exogenous thioredoxin prevents ethanol-induced oxidative damage and apoptosis in mouse liver. Publication :Article first published online: 4 FEB 2009 DOI:10.1002/hep.22837 Copyright © 2009 American Association for the Study of Liver Diseases. Link : TXN1 prospec publication

Precautions

TXN1 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P10599)