

Active Recombinant Full Length Human Thioredoxin, His-tagged

Cat. No. TXN-2356H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human TXN protein, fused to His-tag at N-terminus, was expressed in <i>E.coli</i> and purified by using conventional chromatography techniques, 13.9 kDa (125aa).
Species	Human
Source	E.coli
Protein Length	1-105 a.a.
Description	Thioredoxin (Trx) is a low molecular weight redox protein. Trx contains a redox active disulfide/dithiol group within the conserved Cys-Gly-Pro-Cys active site. It is involved in the first unique step in DNA synthesis. Trx also provides control over a number of transcription factors affecting cell proliferation and death through a mechanism referred to as redox regulation.
Form	Liquid. In Phosphate Buffered Saline pH7.4.
Purity	> 95% by SDS – PAGE.
Concentration	1 mg/ml (determined by Bradford assay).
Sequences Of Amino Acids	MGSSHHHHHH SSGLVPRGSH MVKQIESKTA FQEALDAAGD KLVVVD FSAT WCGPCKMIKP FFHSLSEKYS NVIFLEVDVD DCQDVASECE VKCMPTFQFF

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KKGQKVGEFS GANKEKLEAT INELV.

Biological activity

Specific activity is 7-10 A650/min/mg and was 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.

Activity Assay

1. Prepare a 1ml reaction cocktail into a suitable container: The final concentrations are 5mM Tris, 63mM sodium phosphate, 1mM DTT, 0.1% (w/v) insulin, 2mM EDTA. 2. Add 4ug of recombinant His-TXN into reaction cocktail and mix immediately. 3. Incubate at 25C for 20 minutes. 4. Record the increase in A650nm for 15 minutes.

Storage

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION

Gene Name

TXN thioredoxin [[Homo sapiens](#)]

Synonyms

TXN; MGC61975; TRX; ADF; DKFZp686B1993; MGC61975; OTTHUMP00000021892; SASP; TRDX; TRX1; Trx; thioredoxin; ATL-derived factor; Surface-associated sulphydryl protein

Gene ID

[7295](#)

mRNA Refseq

[NM_003329](#)

Protein Refseq

[NP_003320](#)

MIM

[187700](#)

UniProt ID

P10599

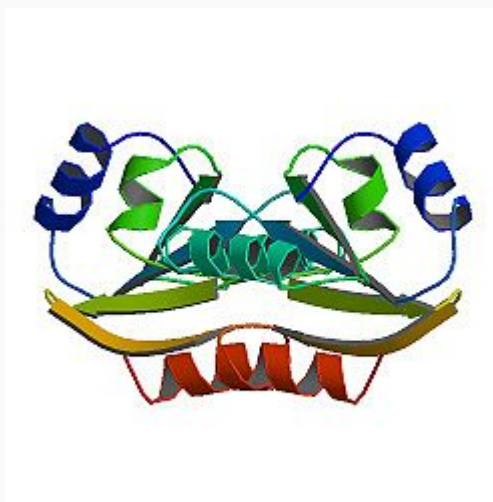
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Chromosome Location	9q31
Pathway	Nucleotide metabolism
Function	protein binding

PDB rendering based on 1aiu.



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