

Datasheet for ABIN7198219

**TXN Protein**[Go to Product page](#)**1** Image

## Overview

Quantity:	100 µg
Target:	TXN
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

## Product Details

Purpose:	Recombinant Human Thioredoxin/TXN Protein (Active)
Sequence:	Met 1-Val 105
Characteristics:	A DNA sequence encoding the C-terminal segment of human TXN (P10599) (Met 1-Val 105) was expressed and purified.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	Measured by its ability to catalyze the reduction of insulin. The specific activity is 5-9 pmoles/min/µg.2. Measured by its ability to catalyze the reduction of insulin. The reaction leads to precipitation, which can be measured by absorbance at 650 nm. The specific activity is 5-10 A650/min/mg.

## Target Details

Target:	TXN
Alternative Name:	Thioredoxin/TXN ( <a href="#">TXN Products</a> )

## Target Details

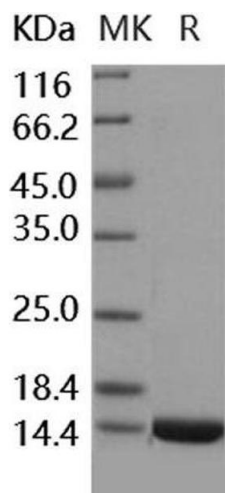
Background:	Background: Thioredoxin; also known as ATL-derived factor; Surface-associated sulphydryl protein; SASP and TXN; is a nucleus; cytoplasm and secreted protein which belongs to the thioredoxin family. Thioredoxins are proteins that act as antioxidants by facilitating the reduction of other proteins by cysteine thiol-disulfide exchange. Thioredoxins are found in nearly all known organisms and are essential for life in mammals. Thioredoxin / TXN participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyzes dithiol-disulfide exchange reactions. Thioredoxin / TXN plays a role in the reversible S-nitrosylation of cysteine residues in target proteins; and thereby contributes to the response to intracellular nitric oxide. Thioredoxin / TXN nitrosylates the active site Cys of CASP3 in response to nitric oxide (NO); and thereby inhibits caspase-3 activity. Thioredoxin / TXN induces the FOS/JUN AP-1 DNA-binding activity in ionizing radiation (IR) cells through its oxidation/reduction status and stimulates AP-1 transcriptional activity. Synonym: Thioredoxin; Trx; ATL-Derived Factor; ADF; Surface-Associated Sulphydryl Protein; SASP; TXN; TRDX; TRX; TRX1
Molecular Weight:	11.7 kDa
UniProt:	<a href="#">P10599</a>
Pathways:	<a href="#">Carbohydrate Homeostasis</a> , <a href="#">Cell RedoxHomeostasis</a>

## Application Details

Restrictions:	For Research Use only
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## Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.5
Storage:	4 °C, -20 °C, -80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.



Western Blotting

Image 1.