

Datasheet for ABIN7198220 **TXN2 Protein (His tag)**

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Overview

Quantity:	100 µg
Target:	TXN2
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This TXN2 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Thioredoxin-2/TXN2 Protein (His Tag)(Active)
Sequence:	Thr 60-Gly 166
Characteristics:	A DNA sequence encoding the mature form of human TXN2 (Q99757) (Thr 60-Gly 166) was expressed, with a polyhistide tag at the N-terminus.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	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 5-8 A650/min/mg.

Target Details

Target:	TXN2
Alternative Name:	Thioredoxin-2/TXN2 (TXN2 Products)

Target Details

Background:	<p>Background: Thioredoxin-2; also known as TXN2; MTRX and TRX2; is a member of the thioredoxin family. Tryparedoxins (TXN) are thioredoxin-related proteins which; as trypanothione:peroxiredoxin oxidoreductases; constitute the trypanothione-dependent antioxidant defense and may also serve as substrates for ribonucleotide reductase in trypanosomatids. Thioredoxin-2 / TXN2 contains one thioredoxin domain. It is widely expressed in adult (at protein level) and fetal tissues. Human Thioredoxin-2 / TXN2 is a small redox protein important in cellular antioxidant defenses; as well as in the regulation of apoptosis. Thioredoxin-2 / TXN2 has an anti-apoptotic function and plays an important role in the regulation of mitochondrial membrane potential. Thioredoxin-2 / TXN2 could be involved in the resistance to anti-tumor agents. It possesses a dithiol-reducing activity. Thioredoxin-2 / TXN2 plays an important role in protecting the mitochondria against oxidative stress and in sensitizing the cells to ROS-induced apoptosis. Mammalian Thioredoxin-2 / TXN2 is a mitochondrial isoform of highly evolutionary conserved thioredoxins. Thioredoxins are small ubiquitous protein-disulfide oxidoreductases implicated in a large variety of biological functions.</p> <p>Synonym: Thioredoxin Mitochondrial; MTRX; Mt-Trx; Thioredoxin-2; TXN2; TRX2</p>
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Molecular Weight:	13.4 kDa
UniProt:	Q99757
Pathways:	Cell RedoxHomeostasis

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 8.3
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	<p>Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.</p> <p>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.</p>