



## Product Datasheet

<b>Product Name</b>	Thioredoxin-2 Human Recombinant
<b>Cata No</b>	CB501482
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	Thioredoxin mitochondrial, Thioredoxin-2, TXN2, MTRX, TRX2, MT-TRX, TRX-2, TXN-2.

### Description

Thioredoxin-2 is a low molecular weight redox protein. TRX2 contains a redox active disulfide/dithiol group within the conserved Cys-Gly-Pro-Cys active site. The TXN2 is involved in the regulation of the mitochondrial membrane potential and in protection against oxidant-induced apoptosis. Upon stimulation of Fas, TXN2 mediates denitrosylation of mitochondria-associated caspase-3, a process required for caspase-3 activation, and promoted apoptosis. TRX2 is important at low oxidative stress conditions. MTRX is involved in the regulation of the mitochondrial membrane potential and cell death. Mitochondrial thioredoxin plays an important roles in protection against oxidant-induced apoptosis. Thioredoxin1 and thioredoxin2 have opposed regulatory functions on hypoxia-inducible factor-1alpha. MTRX Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 108 amino acids and having a molecular mass of 11 kDa.

### Physical Appearance

Sterile Filtered colorless solution.

### Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Formulation

TXN2 protein solution contains 1x PBS pH-7.4.

### Stability

TRX2 although stable 4°C for 4 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

### Sequence

MTTFNIQDGP DFQDRVVNSE TPVVVDFHAQ  
WCGPCKILGP RLEKMVAKQH GKVVMAKVDI  
DDHTDLAIEY EVSAVPTVLA MKNGDVVDKF  
VGIKDEDQLE AFLKKLIG.

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