

## 32-13492: TXN Mouse

**Application :** Functional Assay

**Alternative Name :** TRX1, TRX2, Thioredoxin-1, Thioredoxin I, TR-I, Thioredoxin-2, Thioredoxin-1, ADF, Surface associated sulphhydryl protein, TXN protein, ATL derived factor, DKFZp686B1993, MGC61975, SASP, Thioredoxin, TRDX, TRX, TRX 1, TXN.

### Description

Source: Escherichia Coli.

Sterile filtered colorless solution.

Thioredoxin or TRX contains a single disulfide active site and serves as a general protein disulphide oxidoreductase. Thioredoxins are small disulphide-containing redox proteins (within the conserved Cys-Gly-Pro-Cys active site) that are found in all the kingdoms of living organisms. The protein is involved in the first unique step in DNA synthesis; it interacts with a wide range of proteins by a redox mechanism based on reversible oxidation of two cysteine thiol groups to a disulphide, along with 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.

TXN Mouse Å Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 128 amino acids (1-105 a.a.) and having a molecular mass of 14.1kDa. TXNÅ is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** TXN protein solution (1mg/ml) containing Phosphate Buffered Saline (pH 7.4) and 10% glycerol.

**Storage condition :** 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.

**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MGSMVKLIES KEAFQEALAA AGDKLVVVDF SATWCGPCKM  
IKPFFHSLCD KYSNVVFLEV DVDDCQDVAA DCEVKCMPTF QFYKKGQKVG EFSGANKEKL EASITEYA.

### Application Note

Specific activity is >60 A650/cm/min/mg, obtained by measuring the increase of insulin precipitation in absorbance at 650 nm resulting from the reduction of insulin.