**Thioredoxin, 1-105 aa**

**Human, Recombinant, E.coli**

**Cat. No.TRX0501**

**Synonyms:** TXN, TRX, TRX1

**NCBI Accession No.:** NP_003320

**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. Recombinant human TXN protein, fused to His-tag at N-terminus, was overexpressed in E. coli and purified by using conventional chromatography techniques.

**Form:** Liquid. In Phosphate Buffered Salin (pH7.4).

**Molecular Weight:** 11.7 kDa (105aa), confirmed by MALDI-TOF

**Purity:** > 90% by SDS - PAGE

**Concentration:** 1 mg/ml (determined by BCA assay)

**Biological activity:** Specific activity is >150 A650/cm/min/mg, obtained by measuring the increase of insulin precipitation in absorbance at 650 nm resulting from the reduction of insulin.

**Sequences of aminoacids:**

MVKQIESKTA FOEALDAAGD KLVVDFSAT WCQPCKM1KP FFHSLSEKYS NVIFLEDVDQ DQDVASECE VKCMPTQFF KKGQKVGEFS GANKEKLEAT INELV

**General references:**


Holmgren, A. (1979) *Journal of Biological Chemistry* 254, 9627-9632

**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.