



# **Human Recombinant Thioredoxin**

**CATALOG #**: 6305-100 100 μg

**ALTERNATE NAMES:** TXN, TRX, TRX1

SOURCE: E.Coli

**PURITY:** > 95% by SDS - PAGE

MOL. WEIGHT: 11.7 kDa (105 aa), confirmed by MALDI-TOF

ENDOTOXIN LEVEL: < 1.0 EU per 1 µg of protein (determined by LAL

method)

**FORMULATION:** 1 mg/ml solution in PBS (pH 7.4).

#### STORAGE CONDITIONS:

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.

### DESCRIPTION:

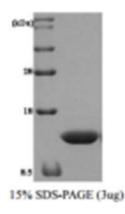
Thioredoxin (Trx) is a low molecular weight redox protein. Trx contains a redox active disulfide/dithiol group within the conserved Cys-Gly-Pro-Cys active site. It is involved in the first unique step in DNA synthesis. Trx also provides control over a number of transcription factors affecting cell proliferation and death through a mechanism referred to as redox regulation. Recombinant human thioredoxin-1 was overexpressed in E. coli and purified by using conventional chromatography techniques.

### **AMINO ACID SEQUENCE:**

MVKQIESKTA FQEALDAAGD KLVVVDFSAT WCGPCKMIKP FFHSLSEKYS NVIFLEVDVD DCQDVASECE VKCMPTFQFF KKGQKVGEFS GANKEKLEAT INELV

### **BIOLOGICAL ACTIVITY:**

7-10 A650/min/mg, obtained by measuring the increase of insulin precipitation in absorbance at 650 nm resulting from the reduction of insulin.



Human Recombinant Thioredoxin

FOR RESEARCH USE ONLY! Not to be used in humans.

## **RELATED PRODUCTS:**

Thioredoxin Reductase Assay kit (Cat. No. K763-100)

