

## E. Coli Recombinant TRXB

<b>CATALOG #:</b>	6331-100	100 µg
<b>ALTERNATE NAMES:</b>	Thioredoxin reductase	
<b>SOURCE:</b>	E.Coli	
<b>PURITY:</b>	> 90% by SDS - PAGE	
<b>MOL. WEIGHT:</b>	34.6 kDa (321 aa, 1-321 aa)	
<b>FORMULATION:</b>	1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol and 1mM DTT.	

### 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:

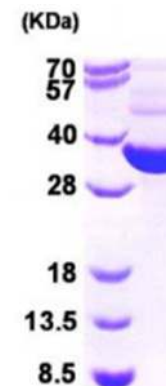
Thioredoxin reductases are the only known enzymes to reduce thioredoxin. Two classes of thioredoxin reductase have been identified: one class in bacteria and some eukaryotes and one in animals. Both classes are flavoproteins which function as homodimers. TRXB (Thioredoxin reductase) is a ubiquitous enzyme which is involved in many cellular processes such as cell growth, p53 activity, and protection against oxidation stress

### AMINO ACID SEQUENCE:

MGTTKHSKLL ILGSGPAGYT AAVYAARANL QPVLITGMEK GGQLTTTTEV ENWPGDPNDL  
TGPLLMMERMH EHATKFETEI IFDHINKVDL QNRPFRLNGD NGEYTCDALI IATGASARYL  
GLPSEEFKKG RGVACATCD GFFYRNQKVA VIGGGNTAVE EALYLSNIAS EVHLIHRRDG  
FRAEKILIKR LMDKVENGNI ILHTNRTLEE VTGDQMGVTG VRLRDTQNSD NIESLDVAGL  
FVAIGHSPNT AIFEGQLELE NGYIKVQSGI HGNATQTSIP GVFAAGDVMD HIYRQAITS  
GTGCMAALDA ERYLDGLADA K.

### BIOLOGICAL ACTIVITY:

Specific activity is 4-5 units/ml, and was measured in a coupled assay with DTNB and NADPH. The amount of TNB generated by NADPH was measured in absorbance at 412 nm



15% SDS-PAGE (3ug)

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### RELATED PRODUCTS:

- Thioredoxin Reductase Assay kit (Cat. No. K763-100)
- Human Recombinant Thioredoxin 1 (Cat. No. 6305-100)
- Human Recombinant Thioredoxin 2 (Cat. No. 6318-100)
- E. Coli Recombinant Thioredoxin 1 (Cat. No. 6329-50)
- Human Recombinant TXNRD1 (Cat. No. 6330-100)

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