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Product datasheet for AR09450PU-N

Thioredoxin reductase / TRXB (1-321) Escherichia coli Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Thioredoxin reductase / TRXB (1-321) e. coli recombinant protein, 0.1 mg
Species:	Escherichia coli
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGTTKHSKLL ILGSGPAGYT AAVYAARANL QPVLITGMEK GGQLTTTTEV ENWPGDPNDL TGPLLMERMH EHATKFETEI IFDHINKVDL QNRPFRLNGD NGEYTCDALI IATGASARYL GLPSEEAFKG RGVSACATCD GFFYRNQKVA VIGGGNTAVE EALYLSNIAS EVHLIHRRDG FRAEKILIKR LMDKVENGNI ILHTNRTLEE VTGDQMGVTG VRLRDTQNSD NIESLDVAGL FVAIGHSPNT AIFEGQLELE NGYIKVQSGI HGNATQTSIP GVFAAGDVMD HIYRQAITSA GTGCMAALDA ERYLDGLADA K
Predicted MW:	34.6 kDa
Concentration:	lot specific
Purity:	>90% pure by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol
Bioactivity:	Biological: Specific activity is > 10 units/mg, 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. Activity Assay 1. Prepare a 0.7 ml reaction mixture into a suitable container: The final concentrations are 100mM potassium phosphate, 10mM EDTA, 0.2mM beta-NADPH, 0.05% BSA, 0.014% (w/v) thioredoxin, 5mM DTNB, 5ug E.coli TRXB. 2. Equilibrate to 25°C and monitor the A412nm until the value is constant using a spectrophotometer. 3. Add 35 ul of 100 mM DTNB into reaction mixture and mix immediately. 4. Record the increase in A412nm for 2 minutes.
Preparation:	Liquid purified protein
Protein Description:	Recombinant E.coli TRXB protein was expressed in E.coli and purified by using conventional chromatography techniques.

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Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Summary: 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. The mammalian Thioredoxin reductase reduces thioredoxins as well as non-disulfide substrates such as selenite, lipoic acids, lipid hydroperoxides, and hydrogen peroxide.

Product images: