

Recombinant E.coli trxB protein

Catalog Number: ATGP0540

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-321aa

UniProt No.

P0A9P4

NCBI Accession No.

YP_003044110.1

Alternative Names

Thioredoxin reductase, Thioredoxin reductase JW0871, ECK0879, FAD/NAD(P)-binding, TRXR

PRODUCT SPECIFICATION

Molecular Weight

34.6 kDa (321aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol

Purity

> 90% by SDS-PAGE

Biological Activity

Specific activity is > 10unit/mg, and was measured in a coupled assay with DTNB and NADPH. The amount of TNB generated by NADPH was measured in absorbance at 412nm.

Tag

Non-Tagged

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

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

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peroxide. Recombinant E. coli TRXB protein was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

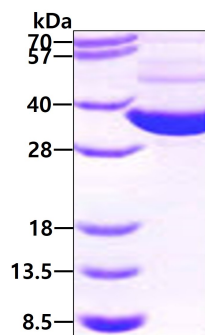
MGTTKHSKLL ILGSGPAGYT AAVYAARANL QPVLITGMEK GGQLTTTTEV ENWPGDPNDL TGPLLMERMH EHATKFETEI
IFDHINKVDL QNRPFRLNGD NGEYTCDALI IATGASARYL GLPSEEAFCG RGVSAACATCD GFFYRNQKVA VIGGGNTAVE
EALYLSNIAS EVHLIHRRDG FRAEKILIKR LMDKVENGNI ILHTNRTLEE VTGDQMGVTG VRLRDTQNSD NIESLDVAGL
FVAIGHSPNT AIFEGQLELE NGYIKVQSGI HGNATQTSIP GVFAAGDVMD HIYRQAITS A GTGCMAALDA ERYLDGLADA K

General References

Faulkner MJ., et al. (2008) Proc Natl Acad Sci U S A. 105(18):6735-40.
Takahata M., et al. (2008) J Biochem. 143(4):467-73.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.