Recombinant Human Thioredoxin2

Cat. No. TXN2-133H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Thioredoxin2 was expressed in E.coli and purified by using conventional chromatography techniques, 11 kDa (108 aa).
Species	Human
Source	E.coli
ProteinLength	60-166 aa
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. The Thioredoxin2 may play important roles in the regulation of the mitochondrial membrane potential and in protection against oxidant-induced apoptosis.
Sequences of amino acids	MTTFNIQDGP DFQDRVVNSE TPVVVDFHAQ WCGPCKILGP RLEKMVAKQH GKVVMAKVDI DDHTDLAIEY EVSAVPTVLA MKNGDVVDKF VGIKDEDQLE AFLKKLIG
Formulation	Liquid. In PBS (pH 7.4)
Purity	> 95% by SDS - PAGE
Concentration	1 mg/ml (determined by Bradford assay)
Biological activity	Specific activity is 3-4 A650/min/mg and was obtained by measuring the increase of

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	insulin precipitation in absorbance at 650 nm resulting from the reduction of insulin.
Activity Assay	1. Prepare a 1ml reaction cocktail into a suitable container: The final concentrations are 5mM Tris, 63mM sodium phosphate, 1mM DTT, 0.1% (w/v) insulin, 2mM EDTA. 2. Add 4ug of recombinant thioredoxin2 into reaction cocktail and mix immediately. 3. Incubate at 25C for 20 minutes. 4. Record the increase in A650nm for 15 minutes.
Storagee	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.
GeneIDD	25828

GENE INFORMATION

Gene Name	
Synonyms	MT-TRX; MTRX; Mt-Trx; TRX2; Thioredoxin-2; mitochondrial thioredoxin ; thioredoxin 2; TXN2
mRNA Refseq	NM_012473
Protein Refseq	NP_036605
MIM	609063
UniProt ID	Q99757
Chromosome Location	22q13.1
Function	electron carrier activity; protein disulfide oxidoreductase activity

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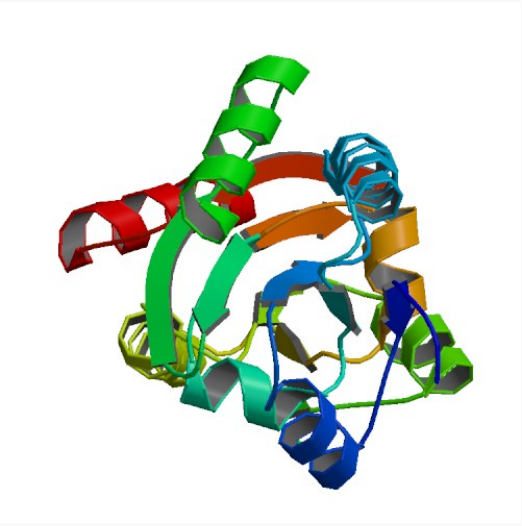
PDBrendering based on 1uvz. Available structures:1uvz,1w4v,1v



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