
TXNRD1, 161-649aa (seccys648cys) Human, His tag, E.coli

Cat.NO.: TP04361

3th Edition

Synonyms: Thioredoxin reductase 1, GRIM-12, TR, TR1, TRXR1, TXNR

Description: TXNRD1, also known as Thioredoxin reductase 1, is a part of a selenium-containing pyridine nucleotide-disulphide oxidoreductase family, which has a conserved catalytic site of Cys-Val-Asn-Val-Gly-Cys. This protein reduces thioredoxins as well as other substrates, and plays a role in selenium metabolism and protection against oxidative stress. Inhibition of TXNRD1 activity may provide for potential treatments of cancer, AIDS and other autoimmune diseases as well as bacterial infections and parasitic diseases. Recombinant human TXNRD1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form: Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 10% Glycerol

Molecular Weight: 55.9 kDa(510aa), confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMYDYDLIIIGGGSGGLAAAKEAAQYGKKVMVLDVFTPTPLGTRWGLGGTCVNVG
CIPKCLMHQAALLGQALQDSRNYGWKVEETVKHWDWMIEAVQNHIGSLNWGYRVALREKKVVYENAYGQFIGPH
RIKATNNGKKEKIYSAERFLIATGERPRYLGIPGDKEYCISDDLFSLPYCPGKTLVVGASYVALECAFLAGIGLDVT
VMVRSILLRGFDQDMANKIGEHEEHGKIFIRQFVPIKVEQIEAGTPGRLRVVAQSTNSEEIEGEYNTVMLAIGRDA
CTRKIGLETVGVKINEKTGKIPVTDEEQTNVPYIYAIGDILEDKVELTPVAIQAGRLLAQRLYAGSTVKCDYENVPTTV
FTPLEYGACGLSEEKAVEKFGREENIEVYHSYFWPLEWTIPSRDNNKCYAKIICNTKDNERVVG FHVLPNAGEVTQ
GFAAALKCGLTKKQLDSTIGIHPVCAEVFTTLSVTKRSGASILQAGCCG

Purity: > 95% by HPLC

Concentration: 1 mg/ml (determined by BCA assay)

Endotoxin Level: <1.0 EU per 1 ug of protein (determined by LAL method)

Storage: 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.