

Product datasheet for TP760704

TXNRD1 (NM_003330) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins Description: Purified recombinant protein of Human thioredoxin reductase 1 (TXNRD1), transcript variant 1, (Note, selenocysteine protein, internal stop codon, see reference data summary), full length, with N-terminal HIS tag, expressed in E.Coli, 50ug Species: Human **Expression Host:** F. coli **Expression cDNA Clone** A DNA sequence encoding human full-length TXNRD1 or AA Sequence: Tag: N-His Predicted MW: 60.2 kDa Concentration: >0.05 µg/µL as determined by microplate BCA method > 80% as determined by SDS-PAGE and Coomassie blue staining **Purity: Buffer:** 25 mM Tris-HCl, pH 8.0, 150 mM NaCl, 1% sarkosyl, 10% glycerol For testing in cell culture applications, please filter before use. Note that you may experience Note: some loss of protein during the filtration process. Store at -80°C. Storage: Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. NP 003321 RefSeq: 7296 Locus ID: UniProt ID: Q16881 **RefSeq Size:** 4206 Cytogenetics: 12q23.3 **RefSeq ORF:** 1497 Synonyms: GRIM-12; TR; TR1; TRXR1; TXNR



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GRIGENE TXNRD1 (NM_003330) Human Recombinant Protein – TP760704

Summary:The protein encoded by this gene belongs to the pyridine nucleotide-disulfide oxidoreductase
family, and is a member of the thioredoxin (Trx) system. Three thioredoxin reductase (TrxR)
isozymes are found in mammals. TrxRs are selenocysteine-containing flavoenzymes, which
reduce thioredoxins, as well as other substrates, and play a key role in redox homoeostasis.
This gene encodes an ubiquitously expressed, cytosolic form of TrxR, which functions as a
homodimer containing FAD, and selenocysteine (Sec) at the active site. Sec is encoded by
UGA codon that normally signals translation termination. The 3' UTRs of selenoprotein
mRNAs contain a conserved stem-loop structure, the Sec insertion sequence (SECIS) element,
which is necessary for the recognition of UGA as a Sec codon rather than as a stop signal.
Alternative splicing, primarily at the 5' end, results in transcript variants encoding same or
different isoforms, including a glutaredoxin-containing isoform that is predominantly
expressed in testis. [provided by RefSeq, May 2017]

Protein Families: Druggable Genome

Protein Pathways: Pyrimidine metabolism

Product images:



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