

Product datasheet for **TP316045M**

TXNRD1 (NM_182729) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins
Description: Recombinant protein of human thioredoxin reductase 1 (TXNRD1), transcript variant 3, 100 µg
Species: Human
Expression Host: HEK293T
Expression cDNA Clone or AA Sequence: >RC216045 representing NM_182729
Red=Cloning site **Green**=Tags(s)

MNGPEDLPKSYDYDLIIIGGGSSGLAAAKEAAQYGKKVMVLDFVTPTPLGTRWGLGGTCVNVGCIPKKLM
HQAALLGQALQDSRNYGWKVEETVKHDWDRMIEAVQNHIGSLNWGYRVALREKKVYENAYGQFIGPHRI
KATNNGKKEKIYSAERFLIATGERPRYLGIPIGDKEYCISSDDLFLPYCPGKTLVVGASYVALECAGFLA
GIGLDVTVMVRSILLRQFDQDMANKIGEHEMEEHGKIFRQFVPIKVEQIEAGTPGRLRVAQSTNSEIIE
EGEYNTVMLAIGRDACTRKIGLETGVKINEKTGKIPVTDEEQTNVPYIYAIGDILEDKVELTPVAIQAG
RLLAQRLYAGSTVKCDYENVPTTVFTPLEYGACGLSEEKAVEKFGREENIEVYHSYFWPLEWTIPSRDNNK
CYAKIICNTKDNERVVGFHVLGPNAGEVTQGFAAALKCGLTKKQLDSTIGIHPVCAEVFTTLSVTKRSGA
SILQAGCUG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK
Predicted MW: 54.6 kDa
Concentration: >0.05 µg/µL as determined by microplate BCA method
Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation: Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note: For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage: Store at -80°C.
Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



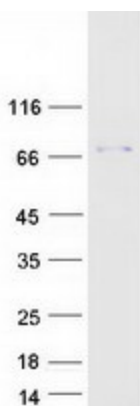
[View online >](#)

RefSeq:	NP_877393
Locus ID:	7296
UniProt ID:	Q16881 , Q16881-5
RefSeq Size:	3694
Cytogenetics:	12q23.3
RefSeq ORF:	1497
Synonyms:	GRIM-12; TR; TR1; TRXR1; TXNR

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 homeostasis. 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:



Coomassie blue staining of purified TXNRD1 protein (Cat# [TP316045]). The protein was produced from HEK293T cells transfected with TXNRD1 cDNA clone (Cat# [RC216045]) using MegaTran 2.0 (Cat# [TT210002]).