

## Product datasheet for **TP508008**

### **Txnrd1 (NM\_001042514) Mouse Recombinant Protein**

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse thioredoxin reductase 1 (Txnrd1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR208008 representing NM_001042514 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MNGSKDPPGSYDFDLIIIGGGSGGLAAAKEAAKFDKVKLVLDVFTPTPLGTRWGLGGTCVNVGCIPKCLM  
HQAALLGQALKDSRNYGWKVEDTVKHDWEKMTESVQSHIGSLNWGYRVALREKKVYENAYGRFIGPHRI  
VATNNGKKEKIYSAERFIATGERPRYLGI PGDKEYCISDDLFLSLPYCPGKTLVVGASYVALECAGFLA  
GIGLDVTVMVRSILLRGRFDQDMANKIGEHEMEEHGIFIRQFVPTKIEQIEAGTPGRLRVTAQSTNSEETI  
EGEFNTVLLAVGRDSCRTTIGLETVGVKINEKTGKIPVTDEEQTNVPYIYAIGDILEGKLELTPVAIQAG  
RLLAQRLYGGSNVKCDYDNPPTTVFTPLEYGCCGLSEEKAVEKFGREENIEVYHSFFWPLEWTVPSRDNNK  
CYAKIICNLKDDERVGFHVLGPNAGEVTQGFAAALKCLTKQQLDSTIGIHPVCAEIFTTLSVTKRSGG  
DILQSGC\*G

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-MYC/DDK
Predicted MW:	55 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
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 after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u><a href="#">NP_001035979</a></u>



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Locus ID: 50493

UniProt ID: [Q9JMH6](#)

RefSeq Size: 3505

Cytogenetics: 10 C1

RefSeq ORF: 1497

Synonyms: T; TR; TR1; Trx; TrxR1

**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. [provided by RefSeq, May 2017]