

## Product datasheet for TA332723S

### TXNRD2 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, ICC/IF, IHC, WB
Recommended Dilution:	WB, 1:500 - 1:2000 IHC-P, 1:50 - 1:200 IF/ICC, 1:50 - 1:200 ELISA, Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Formulation:	Store at -20°C (regular) and -80°C (long term). Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	57kDa
Gene Name:	thioredoxin reductase 2
Database Link:	<a href="#">NP_006431</a> <a href="#">Entrez Gene 26462 Mouse</a> <a href="#">Entrez Gene 10587 Human</a> <a href="#">Q9NNW7</a>


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**Background:**

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 a mitochondrial form important for scavenging reactive oxygen species in mitochondria. It 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. Alternatively spliced transcript variants encoding different isoforms, including a few localized in the cytosol and some lacking the C-terminal Sec residue, have been found for this gene.

**Synonyms:**

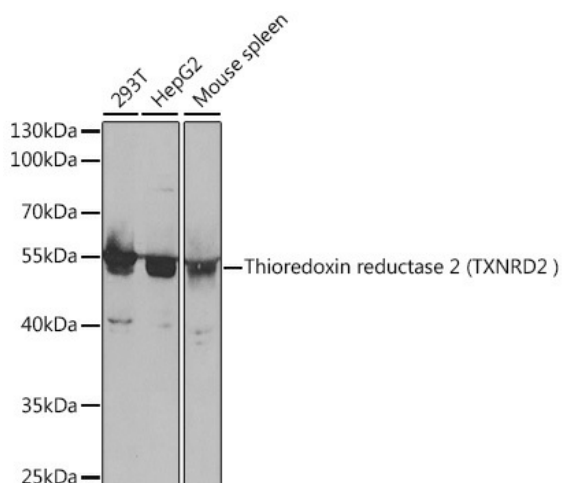
SELZ; TR; TR-BETA; TR3; TRXR2

**Protein Families:**

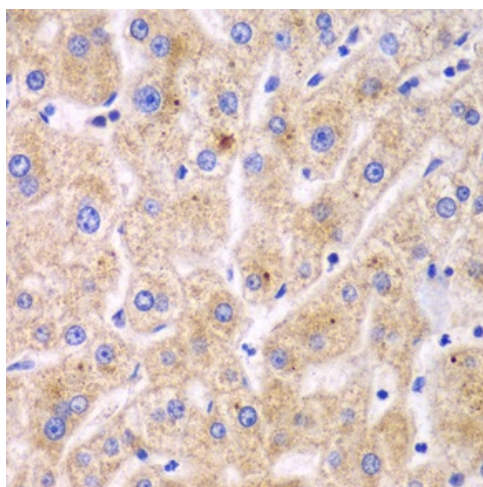
Druggable Genome

**Protein Pathways:**

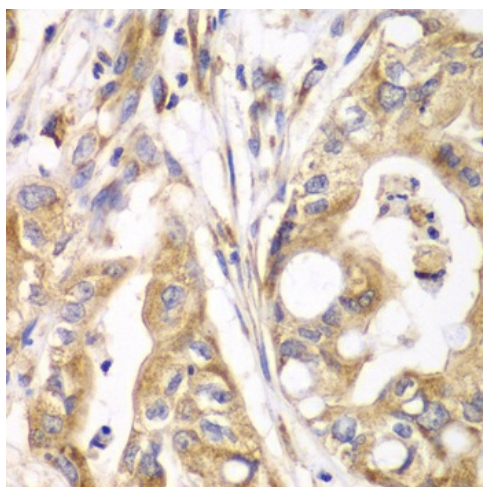
Pyrimidine metabolism

**Product images:**


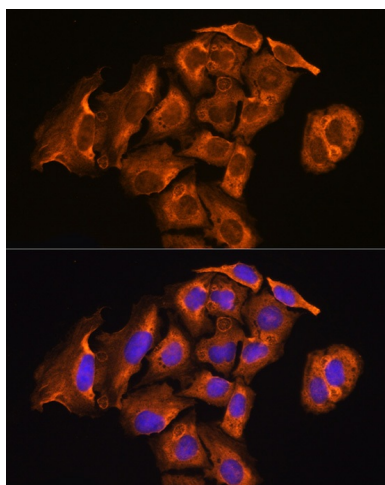
Western blot analysis of various lysates using Thioredoxin reductase 2 (TXNRD2) Rabbit pAb ([TA332723]) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 90s.



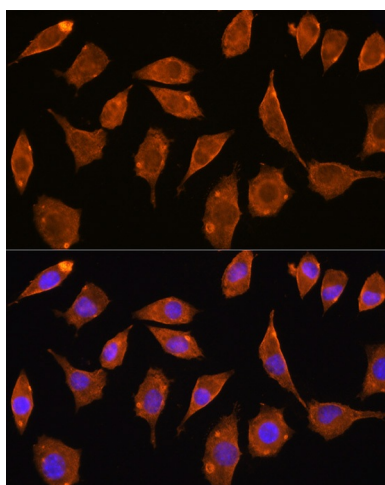
Immunohistochemistry analysis of paraffin-embedded Human liver damage using Thioredoxin reductase 2 (Thioredoxin reductase 2 (TXNRD2)) antibody ([TA332723]) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human liver cancer using Thioredoxin reductase 2 (Thioredoxin reductase 2 (TXNRD2)) antibody ([TA332723]) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunofluorescence analysis of U2OS cells using Thioredoxin reductase 2 (TXNRD2) Rabbit pAb ([TA332723]) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of L929 cells using Thioredoxin reductase 2 (TXNRD2 ) Rabbit pAb ([TA332723]) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.