

A16631

Leader in Biomolecular Solutions for Life Science



Human Thioredoxin Reductase 1/TRXR1 Rabbit pAb

Catalog No.: A16631 **3 Publications**

Basic Information

Observed MW

65kDa

Calculated MW

71kDa

Category

Polyclonal Antibody

Applications

WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity

Human,Mouse,Rat

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 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.

Recommended Dilutions

WB 1:500 - 1:2000

IHC-P 1:50 - 1:100

IF/ICC 1:50 - 1:200

Immunogen Information

Gene ID

7296

Swiss Prot

Q16881

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 410-490 of human Thioredoxin reductase 1 (TXNRD1) (NP_001087240.1).

Synonyms

TR; TR1; TXNR; TRXR1; GRIM-12; Thioredoxin reductase 1 (TXNRD1)

Contact

 www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

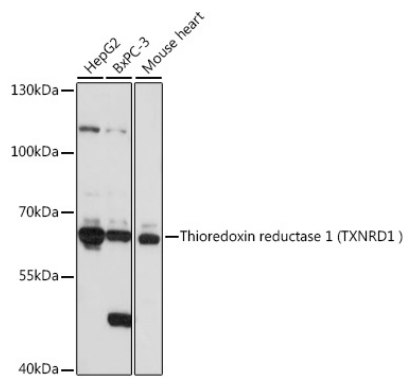
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of various lysates using Thioredoxin reductase 1 (TXNRD1) Rabbit pAb (A16631) at 1:1000 dilution.

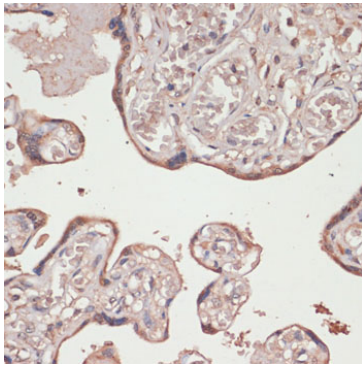
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

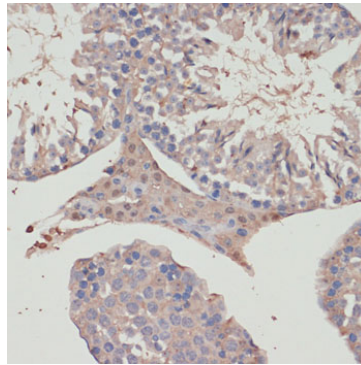
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

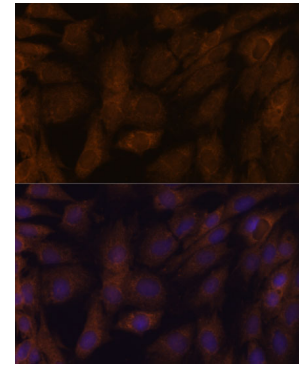
Exposure time: 90s.



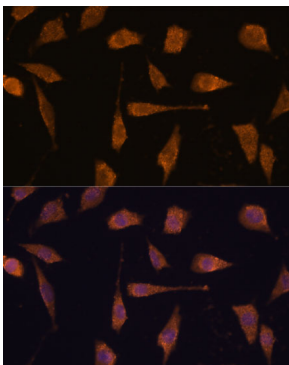
Immunohistochemistry analysis of paraffin-embedded Human placenta using Thioredoxin reductase 1 (Thioredoxin reductase 1 (TXNRD1)) antibody (A16631) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



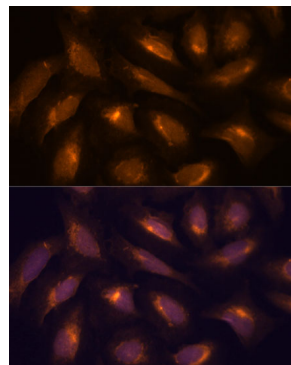
Immunohistochemistry analysis of paraffin-embedded Mouse testis using Thioredoxin reductase 1 (Thioredoxin reductase 1 (TXNRD1)) antibody (A16631) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunofluorescence analysis of C6 cells using Thioredoxin reductase 1 (TXNRD1) Rabbit pAb (A16631) 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 1 (TXNRD1) Rabbit pAb (A16631) 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 U-2 OS cells using Thioredoxin reductase 1 (TXNRD1) Rabbit pAb (A16631) 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.