

For Research Use Only

# TXNRD1 Polyclonal antibody

Catalog Number: 11117-1-AP

Featured Product

60 Publications



## Basic Information

### Catalog Number:

11117-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop and 247 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG1618

### GenBank Accession Number:

BC018122

### GeneID (NCBI):

7296

### UNIPROT ID:

Q16881

### Full Name:

thioredoxin reductase 1

### Calculated MW:

55 kDa

### Observed MW:

55 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:3000-1:10000

IHC 1:300-1:1200

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB:** HeLa cells, MCF-7 cells, Jurkat cells, mouse heart tissue, rat heart tissue

**IHC:** human testis tissue, human breast cancer tissue, mouse testis tissue

**IF/ICC:** HeLa cells,

## Background Information

Thioredoxin reductase-1 (TXNRD1) is uniquely capable of utilizing electrons from NADPH to recover the reduced state of TRX1. Interestingly, TXNRD1 is upregulated in many human malignancies and promotes cancer progression, and attenuation of TXNRD1 levels effectively suppresses the growth of tumor cells (PMID: 31384178). TXNRD1 is also upregulated in many human malignancies and functions as a prognostic factor for many tumors, such as oral squamous cell carcinomas, lung cancer, breast cancer, and astrocytomas. TXNRD1 protein levels were analyzed by immunoblotting. Bands of ~55 kDa for TXNRD1 were observed. IHC analysis suggested TXNRD1 was mainly located in the cytoplasm. (PMID: 28536696, PMID: 20584310)

## Notable Publications

Author	Pubmed ID	Journal	Application
Dan Liu	30267739	Neurotoxicology	WB
Xiaoqing Zheng	28965082	Redox Biol	WB
Wenxuan Jiao	34540892	Front Mol Biosci	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

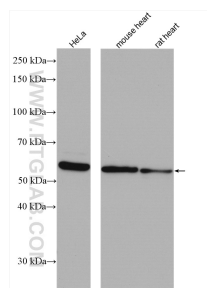
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

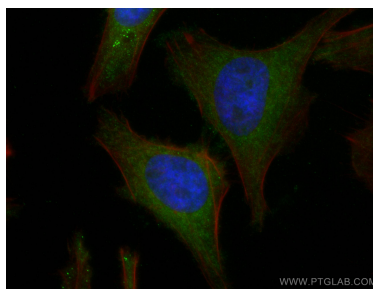
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

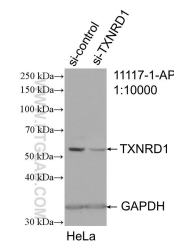
## Selected Validation Data



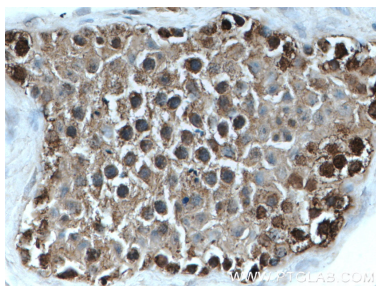
Various lysates were subjected to SDS PAGE followed by western blot with 11117-1-AP (TXNRD1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using TXNRD1 antibody (11117-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



WB result of TXNRD1 antibody (11117-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TXNRD1 transfected HeLa cells.



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 11117-1-AP (TXNRD1 antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).