

For Research Use Only

TXNRD1 Polyclonal antibody

Catalog Number: 11117-1-AP

Featured Product

52 Publications



Basic Information

Catalog Number: 11117-1-AP	GenBank Accession Number: BC018122	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 500 µg/ml by Nanodrop and 247 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 7296	Recommended Dilutions: WB 1:3000-1:10000 IHC 1:300-1:1200 IF 1:50-1:500
Source: Rabbit	Full Name: thioredoxin reductase 1	
Isotype: IgG	Calculated MW: 55 kDa	
Immunogen Catalog Number: AG1618	Observed MW: 55 kDa	

Applications

Tested Applications:
FC, IF, IHC, WB, ELISA

Cited Applications:
IF, IHC, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse

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: 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

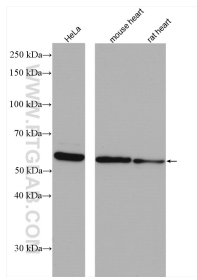
For technical support and original validation data for this product please contact:

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

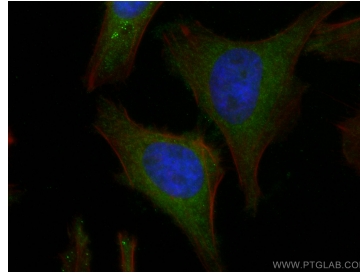
E: proteintech@ptglab.com
W: ptglab.com

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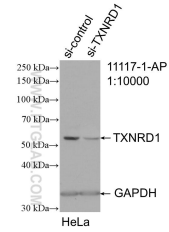
Selected Validation Data



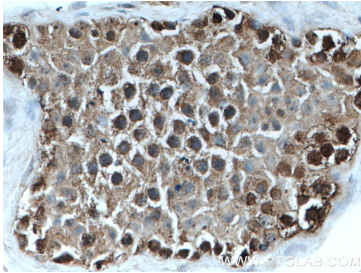
Various lysates were subjected to SDS PAGE followed by western blot with 11117-1-AP (TXNRD1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



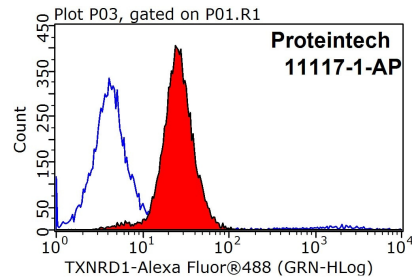
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using TXNRD1 antibody (11117-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



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).



1×10^6 MCF-7 cells were stained with 0.2ug TXNRD1 antibody (11117-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.