

For Research Use Only

Thioredoxin Monoclonal antibody

Catalog Number: 66475-1-Ig

Featured Product

2 Publications



Basic Information

Catalog Number:

66475-1-Ig

GenBank Accession Number:

BC003377

Purification Method:

Protein A purification

Size:

150ul, Concentration: 1400 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

GeneID (NCBI):

7295

CloneNo.:

1F3C1

UNIPROT ID:

P10599

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:1000-1:4000

IF/ICC 1:400-1:1600

Source:

Mouse

Full Name:

thioredoxin

Isotype:

IgG2a

Calculated MW:

12 kDa

Immunogen Catalog Number:

AG6355

Observed MW:

12 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Positive Controls:

WB : LNCaP cells, MCF-7 cells, HeLa cells, HepG2 cells, A549 cells, Jurkat cells, HEK-293 cells, K-562 cells

IHC : human ovary tumor tissue, human liver cancer tissue

IF/ICC : HepG2 cells,

Cited Applications:

WB

Species Specificity:

Human

Cited Species:

human

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

Background Information

TXN, TRDX, TRX, TRX1, ADF and SASP, belongs to the thioredoxin family. It participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyzes dithiol-disulfide exchange reactions. TXN plays a role in the reversible S-nitrosylation of cysteine residues in target proteins, and thereby contributes to the response to intracellular nitric oxide. Nitrosylates the active site Cys of CASP3 in response to nitric oxide (NO), and thereby inhibits caspase-3 activity. TXN induces the FOS/JUN AP-1 DNA-binding activity in ionizing radiation (IR) cells through its oxidation/reduction status and stimulates AP-1 transcriptional activity.

Notable Publications

Author	Pubmed ID	Journal	Application
Rui Yang	39141196	Biol Trace Elem Res	WB
Wuyang Shi	38277963	Redox Biol	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

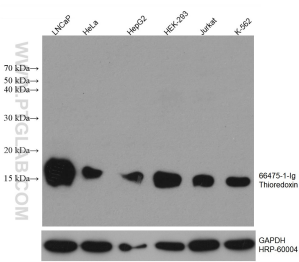
For technical support and original validation data for this product please contact:

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

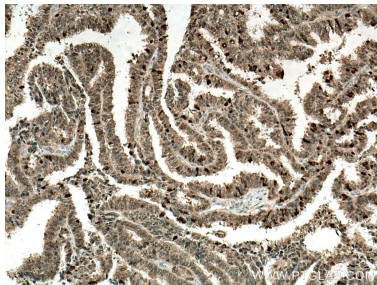
E: proteintech@ptglab.com
W: ptglab.com

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

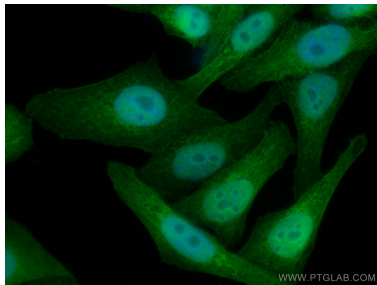
Selected Validation Data



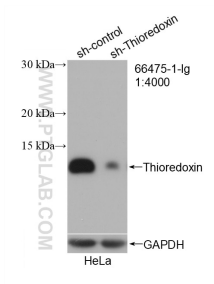
Various lysates were subjected to SDS PAGE followed by western blot with 66475-1-Ig (TXN antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



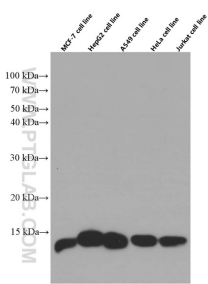
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 66475-1-Ig (Thioredoxin antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Thioredoxin antibody (66475-1-Ig, Clone: 1F3C1) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).



WB result of Thioredoxin antibody (66475-1-Ig; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Thioredoxin transfected HeLa cells.



Various lysates were subjected to SDS PAGE followed by western blot with 66475-1-Ig (Thioredoxin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.