For Research Use Only

Thioredoxin Monoclonal antibody

Catalog Number:66475-1-lg

Featured Product

2 Publications



Basic Information

Catalog Number: 66475-1-lg

Size:
1400 µ g/ml
Source:
Mouse
Isotype:
IgG2a

Immunogen Catalog Number:

AG6355

GenBank Accession Number:

BC003377
GeneID (NCBI):
7295
UNIPROT ID:
P10599
Full Name:

Calculated MW: 12 kDa

thioredoxin

Observed MW: 12 kDa Purification Method:

Protein A purification

CloneNo.: 1F3C1

Recommended Dilutions:

WB 1:5000-1:50000 IHC 1:1000-1:4000 IF/ICC 1:400-1:1600

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA 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

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,

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

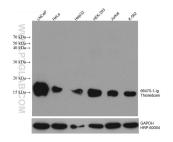
Store at -20°C. Stable for one year after shipment.

Storage Buffer

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

Aliquoting is unnecessary for -20°C storage

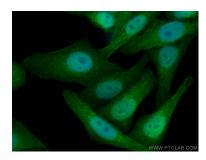
Selected Validation Data



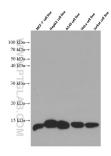
Various lysates were subjected to SDS PAGE followed by western blot with 66475-1-lg (TXN antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control



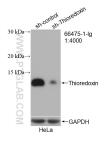
Immunohistochemical analysis of paraffinembedded human ovary tumor tissue slide using 66475-1-Ig (Thioredoxin antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



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



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