For Research Use Only

Thioredoxin Polyclonal antibody

Catalog Number:14999-1-AP Featured Product 84 Publications

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Basic Information

Catalog Number:
14999-1-AP

Size:
150ul , Concentration: 700 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG6989

GenBank Accession Number:
BC003377

GeneID (NCBI):
7295

UNIPROT ID:
P10599

Full Name:
thioredoxin

Calculated MW:
12 kDa

Observed MW:
12 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:9000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500

Applications

Tested Applications:
WB, IHC, FC (Intra), IP, ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP, ELISA

Species Specificity:
human

Cited Species:
human, mouse, rat, pig, chicken

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, HepG2 cells, K562 cells, MCF-7 cells, Jurkat cells

IP : HeLa cells,

IHC : human liver cancer tissue, human ovary tumor tissue

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
Ningning Guo	30240785	Neuropharmacology	WB
Jie Yang	28957736	J Inorg Biochem	WB
Wenjun Wang	32982756	Front Pharmacol	WB

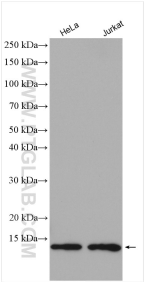
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

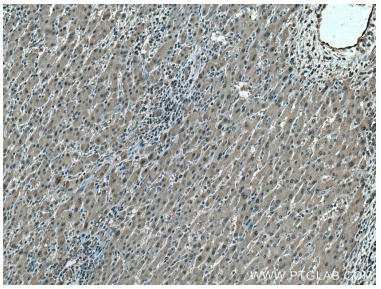
*** 20ul sizes contain 0.1% BSA

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

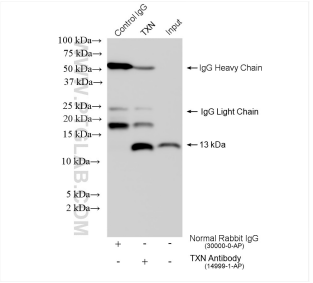
Selected Validation Data



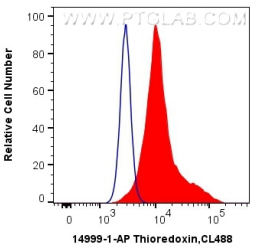
Various lysates were subjected to SDS PAGE followed by western blot with 14999-1-AP (Thioredoxin antibody) at dilution of 1:4500 incubated at room temperature for 1.5 hours.



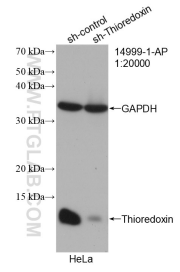
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 14999-1-AP (Thioredoxin antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



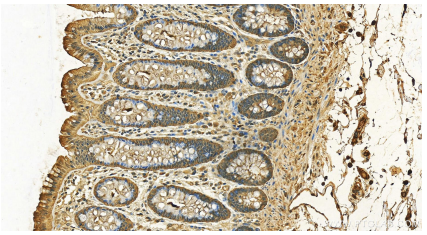
IP result of anti-Thioredoxin (IP:14999-1-AP, 4ug; Detection:14999-1-AP 1:6000) with HeLa cells lysate 1520 ug.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human Thioredoxin (14999-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



WB result of Thioredoxin antibody (14999-1-AP; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Thioredoxin transfected HeLa cells.



Immunohistochemical analysis of paraffin-embedded human normal colon slide using 14999-1-AP (Thioredoxin antibody) at dilution of 1:900 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).