For Research Use Only

TXNIP Polyclonal antibody

Catalog Number:18243-1-AP Featured Product 67 Publications

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Basic Information

Catalog Number:
18243-1-AP

Size:
150ul , Concentration: 300 μg/ml by Nanodrop and 213 μg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG13009

GenBank Accession Number:
BC093702

GeneID (NCBI):
10628

Full Name:
thioredoxin interacting protein

Calculated MW:
391 aa, 44 kDa

Observed MW:
50-55 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IHC 1:50-1:500

Applications

Tested Applications:
IHC, WB, ELISA

Cited Applications:
FC, IF, IHC, IP, 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 : HL-60 cells, K-562 cells, MCF-7 cells, PC-12 cells

IHC : human kidney tissue, human ovary tumor tissue, mouse kidney tissue

Background Information

TXNIP, also known as VDUP-1 or TBP-2, belongs to alpha-arrestin protein family and is perhaps the only family member known to bind thioredoxin (TRX). TXNIP was induced by Vitamin D3, but not induced by another monocyte or macrophage differentiation inducer: phorbol 12-myristate 13-acetate (PMA). TXNIP bound catalytic active center of thioredoxin (TRX), which protected cells against oxidative stress. TXNIP was found to be a negative regulator of thioredoxin activity and inducer of the intracellular level of reactive oxygen species (ROS). TXNIP plays an important role in a wide variety of biological functions, such as the regulation of cell death, growth, differentiation, and energy metabolism.

Notable Publications

Author	Pubmed ID	Journal	Application
Rui Ding	32980492	Neurochem Int	IF
Xiang Ren	28944891	Mol Med Rep	WB
Feng Zhou	30429827	Front Endocrinol (Lausanne)	WB

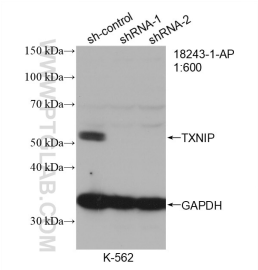
Storage

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

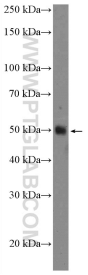
*** 20ul sizes contain 0.1% BSA

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

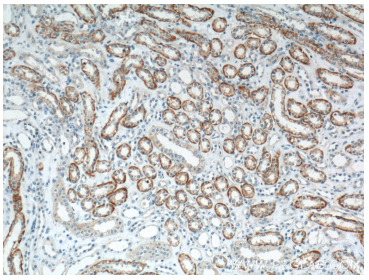
Selected Validation Data



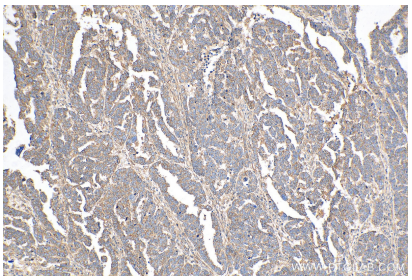
WB result of TXNIP antibody (18243-1-AP; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-TXNIP transfected K-562 cells.



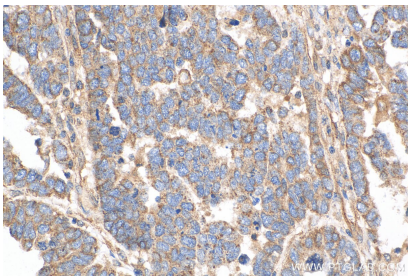
HL-60 cells were subjected to SDS PAGE followed by western blot with 18243-1-AP (TXNIP antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



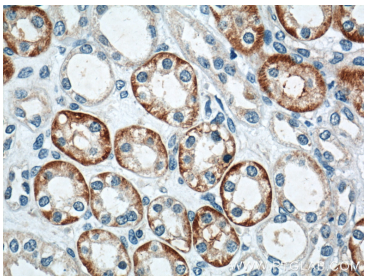
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 18243-1-AP (TXNIP Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 18243-1-AP (TXNIP antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 18243-1-AP (TXNIP antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 18243-1-AP (TXNIP Antibody) at dilution of 1:200 (under 40x lens).