

For Research Use Only

# TXNIP Polyclonal antibody

Catalog Number: 18243-1-AP

Featured Product

95 Publications



## Basic Information

**Catalog Number:**

18243-1-AP

**Concentration:**

400 ug/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG13009

**GenBank Accession Number:**

BC093702

**GeneID (NCBI):**

10628

**UNIPROT ID:**

Q9H3M7

**Full Name:**

thioredoxin interacting protein

**Calculated MW:**

391 aa, 44 kDa

**Observed MW:**

44-55 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:2000

IHC 1:50-1:500

## Applications

**Tested Applications:**

WB, IHC, ELISA

**Cited Applications:**

WB, IHC, IF, IP, CoIP

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, mouse, rat

**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 colon tissue, mouse kidney tissue, rat 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

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

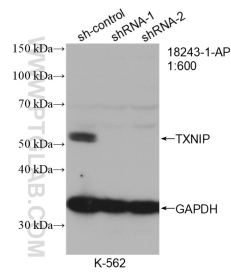
T: 4006900926

E: Proteintech-CN@ptglab.com

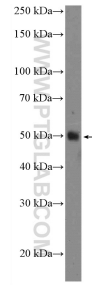
W: ptgcn.com

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

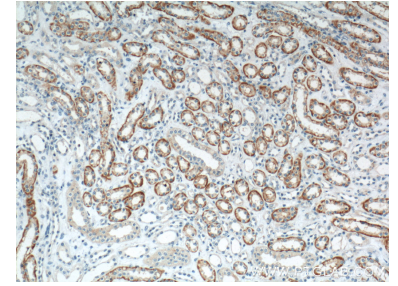
## Selected Validation Data



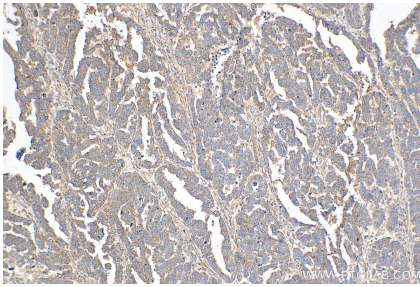
WB result of TXNIP antibody (18243-1-AP; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-TXNIP transfected K-562 cells.



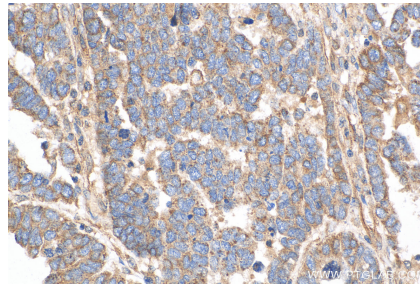
HL-60 cells were subjected to SDS PAGE followed by western blot with 18243-1-AP (TXNIP antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



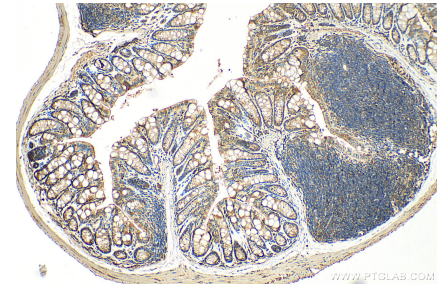
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 18243-1-AP (TXNIP Antibody) at dilution of 1:200 (under 10x lens).



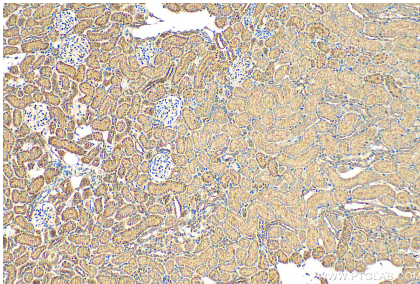
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 18243-1-AP (TXNIP antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



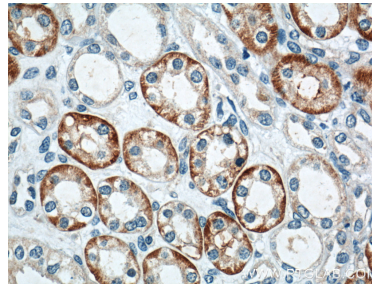
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 18243-1-AP (TXNIP antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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