

## TXNIP Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP19855a

### Product Information

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Application	WB, E
Primary Accession	<a href="#">Q9H3M7</a>
Other Accession	<a href="#">Q5M7W1</a> , <a href="#">Q8BG60</a> , <a href="#">NP_006463.3</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41554
Calculated MW	43661
Antigen Region	1-30

### Additional Information

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Gene ID	10628
Other Names	Thioredoxin-interacting protein, Thioredoxin-binding protein 2, Vitamin D3 up-regulated protein 1, TXNIP, VDUP1
Target/Specificity	This TXNIP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human TXNIP.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TXNIP Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

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Name	TXNIP
Synonyms	VDUP1

**Function** May act as an oxidative stress mediator by inhibiting thioredoxin activity or by limiting its bioavailability (PubMed:[17603038](#)). Interacts with COPS5 and restores COPS5-induced suppression of CDKN1B stability, blocking the COPS5-mediated translocation of CDKN1B from the nucleus to the cytoplasm (By similarity). Functions as a transcriptional repressor, possibly by acting as a bridge molecule between transcription factors and corepressor complexes, and over-expression will induce G0/G1 cell cycle arrest (PubMed:[12821938](#)). Required for the maturation of natural killer cells (By similarity). Acts as a suppressor of tumor cell growth (PubMed:[18541147](#)). Inhibits the proteasomal degradation of DDIT4, and thereby contributes to the inhibition of the mammalian target of rapamycin complex 1 (mTORC1) (PubMed:[21460850](#)).

**Cellular Location** Cytoplasm. Nucleus

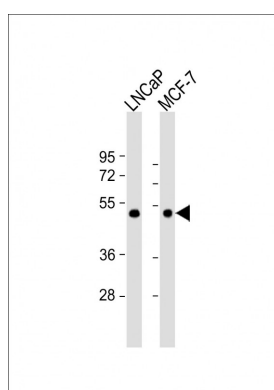
## Background

TXNIP may act as an oxidative stress mediator by inhibiting thioredoxin activity or by limiting its bioavailability. Interacts with COPS5 and restores COPS5-induced suppression of CDKN1B stability, blocking the COPS5-mediated translocation of CDKN1B from the nucleus to the cytoplasm. Functions as a transcriptional repressor, possibly by acting as a bridge molecule between transcription factors and corepressor complexes, and over-expression will induce G0/G1 cell cycle arrest. Required for the maturation of natural killer cells.

## References

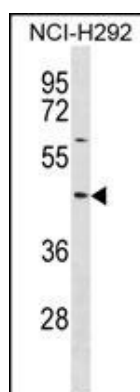
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Kwon, H.J., et al. J. Immunol. 185(7):3980-3989(2010)  
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)  
Yu, F.X., et al. J. Biol. Chem. 285(33):25822-25830(2010)  
Cadenas, C., et al. Breast Cancer Res. 12 (3), R44 (2010) :

## Images



All lanes : Anti-TXNIP Antibody (N-term) at 1:1000 dilution  
Lane 1: LNCaP whole cell lysate Lane 2: MCF-7 whole cell lysate  
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa  
Blocking/Dilution buffer: 5% NFDM/TBST.

TXNIP Antibody (N-term) (Cat. #AP19855a) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the TXNIP antibody detected the TXNIP protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.