

## TXNIP Blocking Peptide(N-term)

Synthetic peptide Catalog # BP19855a

# **Specification**

## TXNIP Blocking Peptide(N-term) - Product Information

Primary Accession <u>Q9H3M7</u>

Other Accession Q5M7W1, Q8BG60, NP\_006463.3

# TXNIP Blocking Peptide(N-term) - Additional Information

**Gene ID** 10628

### **Other Names**

Thioredoxin-interacting protein, Thioredoxin-binding protein 2, Vitamin D3 up-regulated protein 1, TXNIP, VDUP1

### **Target/Specificity**

The synthetic peptide sequence is selected from aa 14-27 of HUMAN TXNIP

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# TXNIP Blocking Peptide(N-term) - Protein Information

**Name TXNIP** 

Synonyms VDUP1

## **Function**

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. Acts as a suppressor of tumor cell growth. Inhibits the proteasomal degradation of DDIT4, and thereby contributes to the inhibition of the mammalian target of rapamycin complex 1 (mTORC1).

#### **Cellular Location**

Cytoplasm.



## TXNIP Blocking Peptide(N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

#### • Blocking Peptides

TXNIP Blocking Peptide(N-term) - Images

## TXNIP Blocking Peptide(N-term) - 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.

## TXNIP Blocking Peptide(N-term) - References

Zhuo de, X., et al. J. Biol. Chem. 285(41):31491-31501(2010) 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) :