

# Mouse Trib3 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP14299b

## **Specification**

# Mouse Trib3 Antibody (C-term) Blocking Peptide - Product Information

**Primary Accession** 

**Q8K4K2** 

# Mouse Trib3 Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 228775** 

#### **Other Names**

Tribbles homolog 3, TRB-3, Neuronal cell death-inducible putative kinase, Trib3, Nipk, Trb3

### **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.

## Mouse Trib3 Antibody (C-term) Blocking Peptide - Protein Information

Name Trib3

Synonyms Nipk, Trb3

### **Function**

Inactive protein kinase which acts as a regulator of the integrated stress response (ISR), a process for adaptation to various stress (PubMed:<a href="http://www.uniprot.org/citations/17369260" target=" blank">17369260</a>). Inhibits the transcriptional activity of DDIT3/CHOP and is involved in DDIT3/CHOP-dependent cell death during ER stress (By similarity). May play a role in programmed neuronal cell death but does not appear to affect non-neuronal cells (By similarity). Acts as a negative feedback regulator of the ATF4-dependent transcription during the ISR: while TRIB3 expression is promoted by ATF4, TRIB3 protein interacts with ATF4 and inhibits ATF4 transcription activity (PubMed: <a href="http://www.uniprot.org/citations/12749859" target=" blank">12749859</a>, PubMed:<a href="http://www.uniprot.org/citations/17369260" target=" blank">17369260</a>). Disrupts insulin signaling by binding directly to Akt kinases and blocking their activation (PubMed: <a href="http://www.uniprot.org/citations/12791994" target=" blank">12791994</a>). May bind directly to and mask the 'Thr-308' phosphorylation site in AKT1 (PubMed: <a href="http://www.uniprot.org/citations/12791994" target=" blank">12791994</a>). Interacts with the NF- kappa-B transactivator p65 RELA and inhibits its phosphorylation and thus its transcriptional activation activity (By similarity). Interacts with MAPK kinases and regulates activation of MAP kinases (By similarity). Can inhibit APOBEC3A



editing of nuclear DNA (PubMed:<a href="http://www.uniprot.org/citations/22977230" target=" blank">22977230</a>).

**Cellular Location** Nucleus

#### **Tissue Location**

Highly expressed in liver. Not detected in heart, brain, spleen, lung, skeletal muscle, kidney or testis

## Mouse Trib3 Antibody (C-term) Blocking Peptide - Protocols

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

## • Blocking Peptides

Mouse Trib3 Antibody (C-term) Blocking Peptide - Images

# Mouse Trib3 Antibody (C-term) Blocking Peptide - Background

Trib3 disrupts insulin signaling by binding directly to Akt kinases and blocking their activation. May bind directly to and mask the 'Thr-308' phosphorylation site in AKT1. Binds to ATF4 and inhibits its transcriptional activation activity. Interacts with the NF-kappa-B transactivator p65 RELA and inhibits its phosphorylation and thus its transcriptional activation activity. Interacts with MAPK kinases and regulates activation of MAP kinases. May play a role in programmed neuronal cell death but does not appear to affect non-neuronal cells. Does not display kinase activity.

# Mouse Trib3 Antibody (C-term) Blocking Peptide - References

Morse, E., et al. Am. J. Physiol. Renal Physiol. 299 (5), F965-F972 (2010): Dedhia, P.H., et al. Blood 116(8):1321-1328(2010)Liew, C.W., et al. J. Clin. Invest. 120(8):2876-2888(2010)Humphrey, R.K., et al. J. Biol. Chem. 285(29):22426-22436(2010)Liu, J., et al. Am. J. Physiol. Endocrinol. Metab. 298 (3), E565-E576 (2010):