

### MINK1 / MINK Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS10905

### **Specification**

### MINK1 / MINK Antibody (Internal) - Product Information

Application IHC-P Primary Accession O8N4C8

Reactivity Human, Mouse, Monkey, Pig, Horse, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 150kDa KDa
Dilution IHC-P~~N/A

## MINK1 / MINK Antibody (Internal) - Additional Information

#### **Gene ID 50488**

#### **Other Names**

Misshapen-like kinase 1, 2.7.11.1, GCK family kinase MiNK, MAPK/ERK kinase kinase 6, MEK kinase kinase 6, MEKKK 6, Misshapen/NIK-related kinase, Mitogen-activated protein kinase kinase kinase 6, MINK1 (<a

href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=17565" target=" blank">HGNC:17565</a>)

### Target/Specificity

Human MINK1 / MAP4K6. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

### **Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

### **Precautions**

MINK1 / MINK Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

## MINK1 / MINK Antibody (Internal) - Protein Information

### Name MINK1 (HGNC:17565)

#### **Function**

Serine/threonine kinase which acts as a negative regulator of Ras-related Rap2-mediated signal transduction to control neuronal structure and AMPA receptor trafficking (PubMed:<a href="http://www.uniprot.org/citations/10708748" target="\_blank">10708748</a>, PubMed:<a href="http://www.uniprot.org/citations/16337592" target="\_blank">16337592</a>). Required for normal synaptic density, dendrite complexity, as well as surface AMPA receptor expression in hippocampal neurons (By similarity). Can activate the JNK and MAPK14/p38 pathways and mediates stimulation of the stress-activated protein kinase MAPK14/p38 MAPK downstream of the





Raf/ERK pathway. Phosphorylates TANC1 upon stimulation by RAP2A, MBP and SMAD1 (PubMed:<a href="http://www.uniprot.org/citations/18930710" target="\_blank">18930710</a>, PubMed:<a href="http://www.uniprot.org/citations/21690388" target="\_blank">21690388</a>). Has an essential function in negative selection of thymocytes, perhaps by coupling NCK1 to activation of JNK1 (By similarity). Activator of the Hippo signaling pathway which plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. MAP4Ks act in parallel to and are partially redundant with STK3/MST2 and STK4/MST2 in the phosphorylation and activation of LATS1/2, and establish MAP4Ks as components of the expanded Hippo pathway (PubMed:<a href="http://www.uniprot.org/citations/26437443" target="\_blank">26437443</a>).

### **Cellular Location**

Cytoplasm. Postsynaptic density. Cell projection, axon. Cell projection, dendrite

#### **Tissue Location**

Expressed in the brain, isoform 2 is more abundant than isoform 1. Isoform 3 is ubiquitously expressed. Isoform 1 is most abundant in the skeletal muscle. Isoform 4 is ubiquitously expressed with relative high levels in brain, skeletal muscle, pancreas and testis.

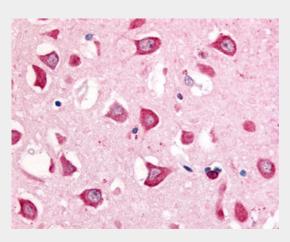
**Volume** 50 μl

## MINK1 / MINK Antibody (Internal) - Protocols

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

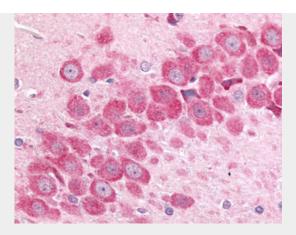
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## MINK1 / MINK Antibody (Internal) - Images

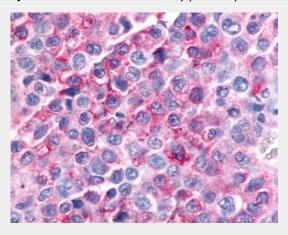


Anti-MINK1 / MAP4K6 antibody ALS10905 IHC of human hippocampus.





Anti-MINK1 / MAP4K6 antibody ALS10905 IHC of rat hippocampus.



Anti-MINK1 / MINK antibody IHC of human Lymph Node, Non-Hodgkins Lymphoma.

# MINK1 / MINK Antibody (Internal) - Background

Serine/threonine kinase which acts as a negative regulator of Ras-related Rap2-mediated signal transduction to control neuronal structure and AMPA receptor trafficking. Required for normal synaptic density, dendrite complexity, as well as surface AMPA receptor expression in hippocampal neurons. Can activate the JNK and MAPK14/p38 pathways and mediates stimulation of the stress-activated protein kinase MAPK14/p38 MAPK downstream of the Raf/ERK pathway. Phosphorylates: TANC1 upon stimulation by RAP2A, MBP and SMAD1. Has an essential function in negative selection of thymocytes, perhaps by coupling NCK1 to activation of JNK1.

## MINK1 / MINK Antibody (Internal) - References

Dan I.,et al.FEBS Lett. 469:19-23(2000). Hu Y.,et al.J. Biol. Chem. 279:54387-54397(2004). Hu Y.,et al.J. Biol. Chem. 280:5128-5128(2005). Zody M.C.,et al.Nature 440:1045-1049(2006). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.