

MINK1 Polyclonal Antibody

Catalog # AP70947

### Specification

# **MINK1** Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P <u>O8N4C8</u> Human, Mouse Rabbit Polyclonal

## MINK1 Polyclonal Antibody - Additional Information

Gene ID 50488

**Other Names** MINK1; B55; MAP4K6; MINK; YSK2; ZC3; Misshapen-like kinase 1; GCK family kinase MiNK; MAPK/ERK kinase kinase kinase 6; MEK kinase kinase 6; MEKKK 6; Misshapen/NIK-related kinase; Mitogen-activated protein kinase kinase kinase kinase 6

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A

**Format** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

# **MINK1** Polyclonal Antibody - 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

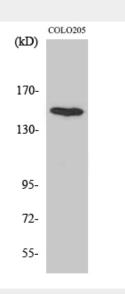
Expressed in the brain, isoform 2 is more abundant than isoform 1. Isoform 3 is ubiquitously expressed. Isoform 1 is most abundant in the skeletal muscle. Isoform 4 is ubiquitously expressed with relative high levels in brain, skeletal muscle, pancreas and testis.

## MINK1 Polyclonal Antibody - Protocols

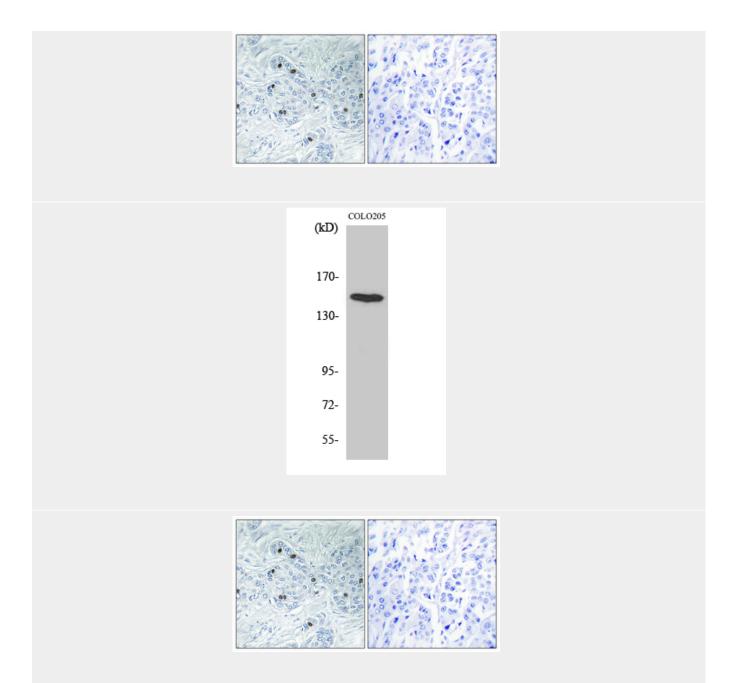
Provided below are standard protocols that you may find useful for product applications.

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

MINK1 Polyclonal Antibody - Images







# **MINK1 Polyclonal Antibody - 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.