

## **MAP4K4 Antibody**

Mouse Monoclonal Antiobody to MAP4K4
Catalog # AO1188b

### **Specification**

## **MAP4K4 Antibody - Product Information**

Application WB, E
Primary Accession O95819
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype Mouse IgG1
Calculated MW 142101

**Description** 

MAP4K4: mitogen-activated protein kinase kinase kinase kinase 4. The protein encoded by this gene is a member of the serine/threonine protein kinase family. This kinase has been shown to specifically activate MAPK8/JNK. The activation of MAPK8 by this kinase is found to be inhibited by the dominant-negative mutants of MAP3K7/TAK1, MAP2K4/MKK4, and MAP2K7/MKK7, which suggests that this kinase may function through the MAP3K7-MAP2K4-MAP2K7 kinase cascade, and mediate the TNF-alpha signaling pathway. Alternatively spliced transcript variants encoding different isoforms have been identified.

#### **Immunogen**

Purified recombinant fragment of MAP4K4(aa400-500) expressed in E. Coli.

### **MAP4K4 Antibody - Additional Information**

### **Gene ID 9448**

# **Other Names**

Mitogen-activated protein kinase kinase kinase kinase 4, HPK/GCK-like kinase HGK, MAPK/ERK kinase kinase 4, MEK kinase kinase 4, MEKKK 4, Nck-interacting kinase, MAP4K4, HGK, KIAA0687, NIK

#### Target/Specificity

Purified recombinant fragment of MAP4K4(aa400-500) expressed in E. Coli.

#### **Dilution**

WB~~1:500~~2000

E~~N/A

#### Format

Ascitic fluid containing 0.03% sodium azide.

## **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**



MAP4K4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **MAP4K4 Antibody - Protein Information**

Name MAP4K4 (<u>HGNC:6866</u>)

Synonyms HGK, KIAA0687, NIK

#### **Function**

Serine/threonine kinase that plays a role in the response to environmental stress and cytokines such as TNF-alpha. Appears to act upstream of the JUN N-terminal pathway (PubMed:<a href="http://www.uniprot.org/citations/9890973" target="\_blank">9890973</a>). 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>). Phosphorylates SMAD1 on Thr- 322 (PubMed:<a href="http://www.uniprot.org/citations/21690388" target="\_blank">21690388</a>).

Cellular Location Cytoplasm.

# **Tissue Location**

Widely expressed. Isoform 5 is abundant in the brain. Isoform 4 is predominant in the liver, skeletal muscle and placenta.

# **MAP4K4 Antibody - Protocols**

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

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

### MAP4K4 Antibody - Images



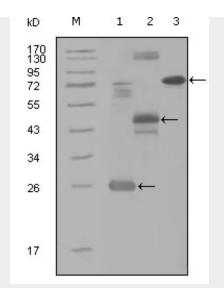


Figure 1: Western blot analysis using MAP4K4 mouse mAb against truncated Trx-MAP4K4 recombinant protein (1), MBP-MAP4K4 (aa300-400) recombinant protein (2) and MAP4K4(aa194-436)-hlgGFc transfected CH0-K1 cell lysate(3).

# **MAP4K4 Antibody - References**

- 1. Mol Cell Biol. 2000 Mar; 20(5):1537-45.
- 2. Curr Biol. 2002 Apr 16;12(8):622-31.
- 3. J Biol Chem. 2007 Mar 16;282(11):7783-9.