

**MAP4K4 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1191a**

**Specification**

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**MAP4K4 Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">O95819</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>

**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.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**MAP4K4 Antibody - Additional Information**

**Gene ID** 9448

**Other Names**

Mitogen-activated protein kinase kinase kinase kinase 4, 2.7.11.1, HPK/GCK-like kinase HGK, MAPK/ERK kinase kinase kinase 4, MEK kinase kinase 4, MEKKK 4, Nck-interacting kinase, MAP4K4, HGK, KIAA0687, NIK

**Dilution**

WB~~1/500 - 1/2000  
IHC~~1:200~~1000

**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 ([HGNC:6866](#))

**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>\\\).\\]\\(http://www.uniprot.org/citations/21690388\\)\]\(http://www.uniprot.org/citations/26437443\)](http://www.uniprot.org/citations/9890973)

#### **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](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **MAP4K4 Antibody - Images**



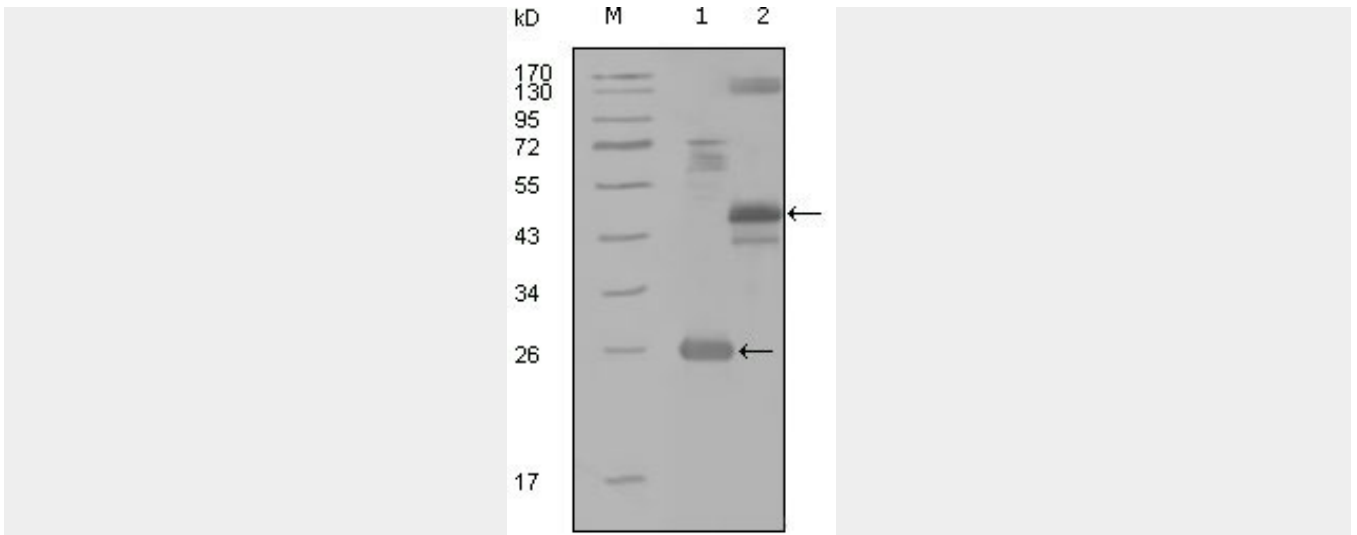


Figure 1: Western blot analysis using MAP4K4 mouse mAb against truncated Trx-MAP4K4 recombinant protein (1), MBP-MAP4K4 (aa300-400) recombinant protein (2) and MAP4K4(aa194-436)-hlgGfc transfected CHO-K1 cell lysate(3).

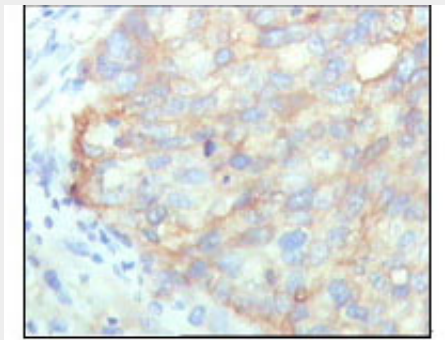


Figure 2: Immunohistochemical analysis of paraffin-embedded human cervical carcinoma, showing cytoplasmic localization with DAB staining using KARS mouse mAb.

**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.