

**MAP4K3 Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM1903b**

**Specification**

**MAP4K3 Antibody - Product Information**

|                   |                             |
|-------------------|-----------------------------|
| Application       | WB, IHC-P,E                 |
| Primary Accession | <a href="#">Q8IVH8</a>      |
| Other Accession   | <a href="#">NP_003609.2</a> |
| Reactivity        | Human                       |
| Host              | Mouse                       |
| Clonality         | Monoclonal                  |
| Isotype           | IgM,k                       |
| Calculated MW     | 101316                      |

**MAP4K3 Antibody - Additional Information**

**Gene ID 8491**

**Other Names**

Mitogen-activated protein kinase kinase kinase kinase 3, Germinal center kinase-related protein kinase, GLK, MAPK/ERK kinase kinase kinase 3, MEK kinase kinase 3, MEKK 3, MAP4K3, RAB8IPL1

**Target/Specificity**

This MAP4K3 monoclonal antibody is generated from mouse immunized with MAP4K3 recombinant protein.

**Dilution**

WB~~1:1000

IHC-P~~1:100

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.

**Storage**

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

**Precautions**

MAP4K3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**MAP4K3 Antibody - Protein Information**

**Name** MAP4K3 ([HGNC:6865](#))

**Synonyms** RAB8IPL1

**Function** Serine/threonine kinase that plays a role in the response to environmental stress. Appears to act upstream of the JUN N-terminal pathway (PubMed:[9275185](#)). 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:[26437443](#)).

#### Tissue Location

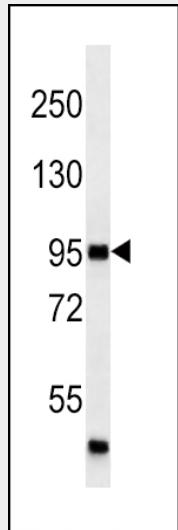
Ubiquitously expressed in all tissues examined, with high levels in heart, brain, placenta, skeletal muscle, kidney and pancreas and lower levels in lung and liver

#### MAP4K3 Antibody - Protocols

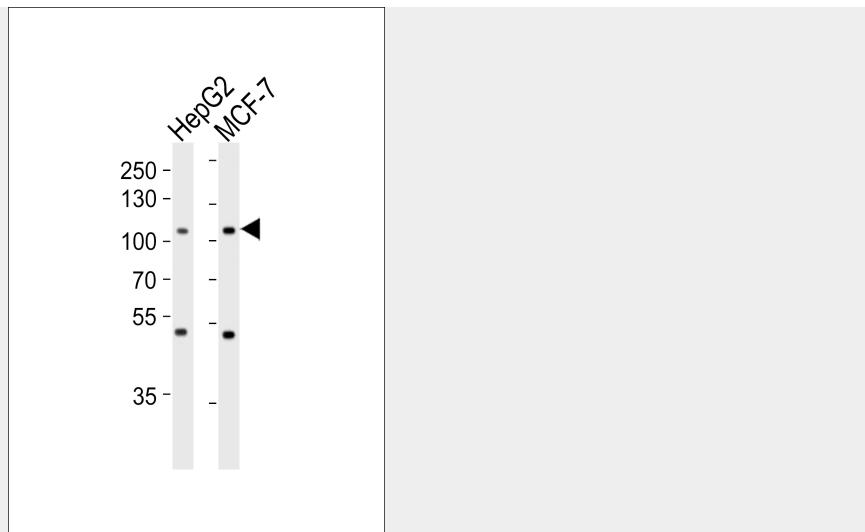
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

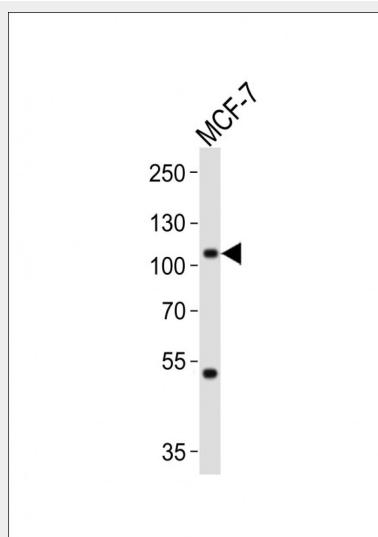
#### MAP4K3 Antibody - Images



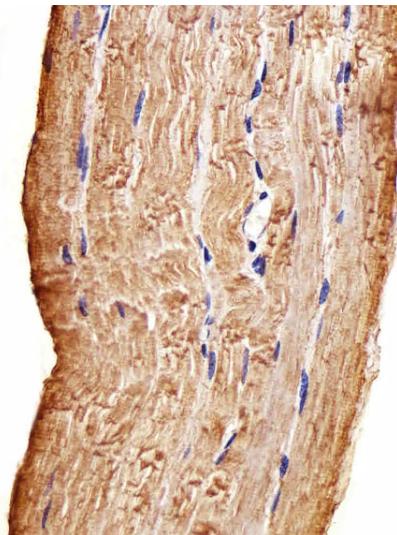
MAP4K3 (Cat. #AM1903b) western blot analysis in A2058 cell line lysates (35 $\mu$ g/lane). This demonstrates the MAP4K3 antibody detected the MAP4K3 protein (arrow).



Western blot analysis of lysates from HepG2, MCF-7 cell line (from left to right), using MAP4K3 Antibody(Cat. #AM1903b). AM1903b was diluted at 1:1000 at each lane. A goat anti-mouse IgM H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 35 $\mu$ g per lane.



Western blot analysis of lysate from MCF-7 cell line, using MAP4K3(Cat. #AM1903b). AM1903b was diluted at 1:1000. A goat anti-mouse IgM H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20 $\mu$ g.



Immunohistochemical analysis of paraffin-embedded *H. skeletal muscle* section using MAP4K3 Antibody(Cat#AM1903b). AM1903b was diluted at 1:100 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

#### **MAP4K3 Antibody - Background**

This gene encodes a member of the Ste20 family of serine/threonine protein kinases. The protein belongs to the subfamily that consists of members, such as germinal center kinase (GCK), that are characterized by an N-terminal catalytic domain and C-terminal regulatory domain. The kinase activity of the encoded protein can be stimulated by UV radiation and tumor necrosis factor-alpha. The protein specifically activates the c-Jun N-terminal kinase (JNK) signaling pathway. Evidence suggests that it functions upstream of mitogen-activated protein kinase kinase kinase 1 (MEKK1). This gene previously was referred to as RAB8-interacting protein-like 1 (RAB8IPL1), but it has been renamed mitogen-activated protein kinase kinase kinase 3 (MAP4K3).

#### **MAP4K3 Antibody - References**

Bailey, S.D., et al. *Diabetes Care* 33(10):2250-2253(2010)  
Ichikawa, S., et al. *J. Bone Miner. Res.* 25(8):1821-1829(2010)  
Rose, J.E., et al. *Mol. Med.* 16 (7-8), 247-253 (2010) :  
Yan, L., et al. *Mol. Cell* 37(5):633-642(2010)  
Talmud, P.J., et al. *Am. J. Hum. Genet.* 85(5):628-642(2009)