

## **MAP4K3 Antibody**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9860A

## **Specification**

# MAP4K3 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, FC, IHC-P,E <u>Q8IVH8</u> Human Rabbit Polyclonal Rabbit IgG 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, MEK kinase kinase 3, MEK kinase kinas

#### Target/Specificity

This MAP4K3 antibody is generated from rabbits immunized with a recombinant protein of human MAP4K3.

Dilution WB~~1:1000 FC~~1:10~50 IHC-P~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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:<u>9275185</u>). 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:<u>26437443</u>).

#### **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.

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

### MAP4K3 Antibody - Images



Anti-MAP4K3 Antibody at 1:1000 dilution + U-87 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 101 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





MAP4K3 Antibody (Cat. #AP9860a) IHC analysis in formalin fixed and paraffin embedded brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the MAP4K3 Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



MAP4K3 Antibody (Cat. #AP9860a) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# MAP4K3 Antibody - Background

MAP4K3 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 kinase 3 (MAP4K3).

# MAP4K3 Antibody - References



Yan, L., et al. Mol. Cell 37(5):633-642(2010) Ichikawa, S., et al. J. Bone Miner. Res. (2010) In press : Lam, D., et al. Proc. Natl. Acad. Sci. U.S.A. 106(29):11978-11983(2009) Wu, C., et al. Proteomics 7(11):1775-1785(2007)