

# MAP3K4 Rabbit pAb

**Catalog No.: A16918**

## Basic Information

**Observed MW**

170kDa

**Calculated MW**

182kDa

**Category**

Primary antibody

**Applications**

WB, IHC-P, ELISA

**Cross-Reactivity**

Human, Rat

## Background

The central core of each mitogen-activated protein kinase (MAPK) pathway is a conserved cascade of 3 protein kinases: an activated MAPK kinase kinase (MAPKKK) phosphorylates and activates a specific MAPK kinase (MAPKK), which then activates a specific MAPK. While the ERK MAPKs are activated by mitogenic stimulation, the CSBP2 and JNK MAPKs are activated by environmental stresses such as osmotic shock, UV irradiation, wound stress, and inflammatory factors. This gene encodes a MAPKKK, the MEKK4 protein, also called MTK1. This protein contains a protein kinase catalytic domain at the C terminus. The N-terminal nonkinase domain may contain a regulatory domain. Expression of MEKK4 in mammalian cells activated the CSBP2 and JNK MAPK pathways, but not the ERK pathway. In vitro kinase studies indicated that recombinant MEKK4 can specifically phosphorylate and activate PRKMK6 and SERK1, MAPKKs that activate CSBP2 and JNK, respectively but cannot phosphorylate PRKMK1, an MAPKK that activates ERKs. MEKK4 is a major mediator of environmental stresses that activate the CSBP2 MAPK pathway, and a minor mediator of the JNK pathway. Several alternatively spliced transcripts encoding distinct isoforms have been described.

## Recommended Dilutions

**WB** 1:500 - 1:2000**IHC-P** 1:100 - 1:200

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

**Gene ID**

4216

**Swiss Prot**

Q9Y6R4

**Immunogen**

Synthetic peptide. This information is considered to be commercially sensitive.

**Synonyms**

MTK1; MEKK4; MEKK 4; MAPKKK4; PRO0412; MAP3K4

## Contact

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## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

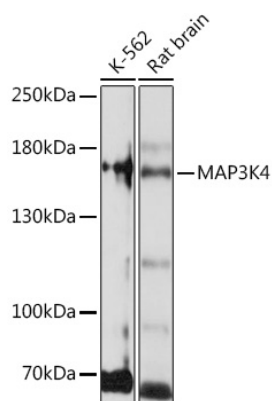
Affinity purification

**Storage**

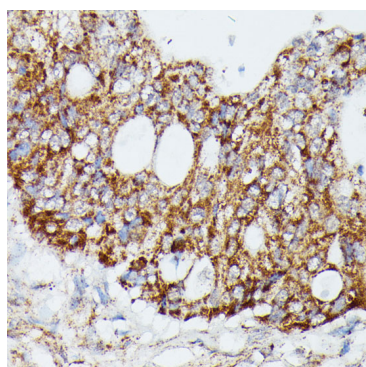
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

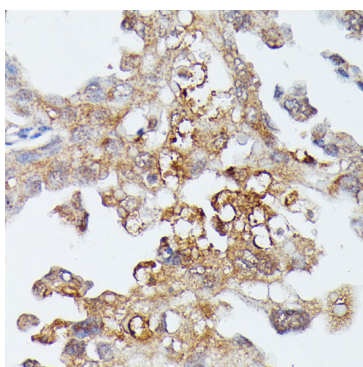
## Validation Data



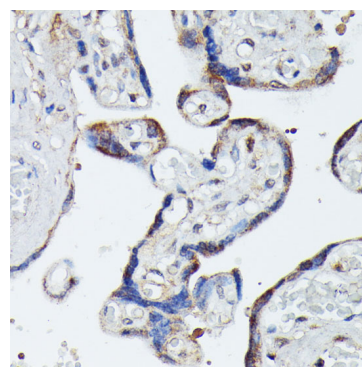
Western blot analysis of various lysates using MAP3K4 Rabbit pAb (A16918) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 1s.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using MAP3K4 Rabbit pAb (A16918) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human lung cancer using MAP3K4 Rabbit pAb (A16918) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human placenta using MAP3K4 Rabbit pAb (A16918) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.