

# Anti-MEKK3 Antibody

Catalog # ABO11228

# **Specification**

#### Anti-MEKK3 Antibody - Product Information

Application	IHC, WB
Primary Accession	<u>Q61084</u>
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	
Rabbit IgG polyclonal antibody for	
Mitogen-activated protein kinase kinase	

Mitogen-activated protein kinase kinase kinase 3(MAP3K3) detection. Tested with WB, IHC-P in Mouse;Rat.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-MEKK3 Antibody - Additional Information

Gene ID 26406

#### **Other Names**

Mitogen-activated protein kinase kinase kinase 3, 2.7.11.25, MAPK/ERK kinase kinase 3, MEK kinase 3, MEKK 3, Map3k3, Mekk3

Calculated MW 70776 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Rat, Mouse, By Heat<br>Western blot, 0.1-0.5 μg/ml, Mouse, Rat<br>

**Protein Name** Mitogen-activated protein kinase kinase kinase 3

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen



Anti-MEKK3 antibody, ABO11228, IHC(P)IHC(P): Rat Brain Tissue



Anti-MEKK3 antibody, ABO11228, IHC(P)IHC(P): Rat Brain Tissue



A synthetic peptide corresponding to a sequence at the N-terminus of mouse MEKK3(11-25aa MKDLVALQMSRRTRL), different from the related rat sequence by two amino acids.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

**Sequence Similarities** 

Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase kinase subfamily.

Anti-MEKK3 Antibody - Protein Information

Name Map3k3

Synonyms Mekk3

## Function

Component of a protein kinase signal transduction cascade. Mediates activation of the NF-kappa-B, AP1 and DDIT3 transcriptional regulators.

# Anti-MEKK3 Antibody - Protocols

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

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



Anti-MEKK3 antibody, ABO11228, Western blottingAll lanes: Anti MAP3K3 (ABO11228) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 71KDObserved bind size: 71KD

## Anti-MEKK3 Antibody - Background

MAP3K3(Mitogen-activated protein kinase kinase kinase 3), also known as MAP/ERK KINASE KINASE 3, MEKK3 or MAPKKK3, is an enzyme that in humans is encoded by the MAP3K3 gene. MAP3K3 is contiguously distal to LYK5 on chromosome 17(Puffenberger et al., 2007). By yeast 2-hybrid analysis of a mouse T-cell cDNA library, Uhlik et al.(2003) showed that a C-terminal fragment of mouse Osm(CCM2) interacted with Mekk3, which activates p38 in response to sorbitol-induced hyperosmotic conditions. Mekk3 and Osm colocalized in the cytoplasmic compartment of cotransfected cells, and the Mekk3-Osm complex was recruited to Rac1 and cytoskeletal actin-containing membrane ruffles in response to sorbitol treatment. Protein interaction assays showed that Osm interacted directly with the Mekk3 substrate Mkk3(MAP2K3), with actin, and with both GDPand GTP-loaded Rac1. Uhlik et al.(2003) concluded that the RAC1-OSM-MEKK3-MKK3 complex is required for regulation of p38 activity in response to osmotic shock.