

# Anti-MEKK2 Antibody

Catalog # ABO10818

#### Specification

## Anti-MEKK2 Antibody - Product Information

ApplicationWBPrimary AccessionO9Y2U5HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Mitogen-activated protein kinase kinase 2(MAP3K2)detection. Tested with WB in Human; Mouse; Rat.

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

## Anti-MEKK2 Antibody - Additional Information

Gene ID 10746

**Other Names** Mitogen-activated protein kinase kinase kinase 2, 2.7.11.25, MAPK/ERK kinase kinase 2, MEK kinase 2, MEKK 2, MAP3K2, MAPKKK2, MEKK2

Calculated MW 69741 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse<br>

**Subcellular Localization** Cytoplasm . Nucleus . Upon EGF stimulation, translocates into the nucleus.

**Protein Name** Mitogen-activated protein kinase kinase kinase 2

Contents

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

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human MEKK2(606-619aa SADELLRHMFVHYH), different from the related rat and mouse sequences by one amino acid.

**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-MEKK2 Antibody - Protein Information**

Name MAP3K2

Synonyms MAPKKK2, MEKK2

Function

Component of a protein kinase signal transduction cascade. Regulates the JNK and ERK5 pathways by phosphorylating and activating MAP2K5 and MAP2K7 (By similarity). Plays a role in caveolae kiss-and- run dynamics.

**Cellular Location** Cytoplasm. Nucleus. Note=Upon EGF stimulation, translocates into the nucleus

#### **Anti-MEKK2 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>

Anti-MEKK2 Antibody - Images



Anti-MEKK2 antibody, ABO10818, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Rat Testis Tissue LysateLane 3: Rat Lung Tissue Lysate

## Anti-MEKK2 Antibody - Background

MAP3K2, mitogen-activated protein kinase kinase kinase 2, also known as MEKK2, belongs to the mitogen-activated protein kinase(MAPK) kinase kinase gene family, which is involved in regulating multiple MAPK signaling pathways. Endogenous MAP3K2 localized mainly to the cytosol of unstimulated HeLa cells and rat fibroblasts. The MAP3K2 gene is mapped to chromosome 2 by the International Radiation Hybrid Mapping Consortium. MAP3K2 is a major upstream activator of the JNK, MAPK cascade. MAP3K2 was identifies as 1 of 6 kinases that regulate different steps of the caveolar cycle. Silencing of MAP3K2 strongly reduced kiss-and-run dynamics, leading to an accumulation of caveolar structures at the cell surface without affecting caveolae coat assembly or clustering.