

# Anti-MEK3 Antibody

Catalog # ABO10702

#### Specification

## Anti-MEK3 Antibody - Product Information

ApplicationWBPrimary AccessionP46734HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Dual specificity mitogen-activated protein kinase kinase3(MAP2K3) detection. Tested with WB in Human; Mouse; Rat.

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

## **Anti-MEK3 Antibody - Additional Information**

Gene ID 5606

**Other Names** Dual specificity mitogen-activated protein kinase kinase 3, MAP kinase kinase 3, MAPKK 3, 2.7.12.2, MAPK/ERK kinase 3, MEK 3, Stress-activated protein kinase kinase 2, SAPK kinase 2, SAPKK-2, SAPKK-2, MAP2K-3, MEK-3, MKK-3, PRKMK-3, SKK-2

Calculated MW 39318 MW KDa

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

**Tissue Specificity** Abundant expression is seen in the skeletal muscle. It is also widely expressed in other tissues.

Protein Name Dual specificity mitogen-activated protein kinase kinase 3(MAP kinase kinase 3/MAPKK 3)

**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 N-terminus of human MEK3(42-58aa RNLDSRTFITIGDRNFE), identical to the related mouse and rat sequences.

**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 subfamily.

#### **Anti-MEK3 Antibody - Protein Information**

Name MAP2K3

Synonyms MEK3, MKK3, PRKMK3, SKK2

Function

Dual specificity kinase. Is activated by cytokines and environmental stress in vivo. Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in the MAP kinase p38. Part of a signaling cascade that begins with the activation of the adrenergic receptor ADRA1B and leads to the activation of MAPK14.

**Tissue Location** Abundant expression is seen in the skeletal muscle. It is also widely expressed in other tissues

#### **Anti-MEK3 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 Cytomety
- <u>Cell Culture</u>

Anti-MEK3 Antibody - Images





Anti-MEK3 antibody, ABO10702, All Western blottingAll lanes: Anti-MAP2K3(ABO10702) at 0.5ug/mlLane 1: Rat Skeletal Muscle Tissue Lysate at 40ugLane 2: Rat Kidney Tissue Lysate at 40ugLane 3: Rat Spleen Tissue Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugLane 5: A549 Whole Cell Lysate at 40ugLane 6: JURKAT Whole Cell Lysate at 40ugLane 7: CEM Whole Cell Lysate at 40ugPredicted bind size: 39KDObserved bind size: 39KD

## Anti-MEK3 Antibody - Background

Dual specificity mitogen-activated protein kinase kinase 3 is an enzyme that in humans is encoded by the MAP2K3 gene. The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is activated by mitogenic and environmental stress, and participates in the MAP kinase-mediated signaling cascade. It phosphorylates and thus activates MAPK14/p38-MAPK. This kinase can be activated by insulin, and is necessary for the expression of glucose transporter. Expression of RAS oncogene is found to result in the accumulation of the active form of this kinase, which thus leads to the constitutive activation of MAPK14, and confers oncogenic transformation of primary cells. Rampoldi et al.(1997) localized the MAP2K3 gene to 17q11.2.