

# Anti-MEK2 Antibody

Catalog # ABO11583

## Specification

## Anti-MEK2 Antibody - Product Information

ApplicationWBPrimary AccessionP36507HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Dual specificity mitogen-activated protein kinase kinase2(MAP2K2) detection. Tested with WB in Human; Mouse; Rat.

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

## **Anti-MEK2 Antibody - Additional Information**

Gene ID 5605

**Other Names** Dual specificity mitogen-activated protein kinase kinase 2, MAP kinase kinase 2, MAPKK 2, 2.7.12.2, ERK activator kinase 2, MAPK/ERK kinase 2, MEK 2, MAP2K2, MEK2, MKK2, PRKMK2

Calculated MW 44424 MW KDa

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

**Protein Name** Dual specificity mitogen-activated protein 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 N-terminus of human MEK2(2-20aa LARRKPVLPALTINPTIAE), 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-MEK2 Antibody - Protein Information**

Name MAP2K2

Synonyms MEK2, MKK2, PRKMK2

#### Function

Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates the ERK1 and ERK2 MAP kinases (By similarity). Activates BRAF in a KSR1 or KSR2-dependent manner; by binding to KSR1 or KSR2 releases the inhibitory intramolecular interaction between KSR1 or KSR2 protein kinase and N-terminal domains which promotes KSR1 or KSR2-BRAF dimerization and BRAF activation (PubMed:<a href="http://www.uniprot.org/citations/29433126" target="\_blank">>29433126</a>).

#### **Cellular Location**

Cytoplasm. Membrane; Peripheral membrane protein. Note=Membrane localization is probably regulated by its interaction with KSR1.

### **Anti-MEK2 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-MEK2 Antibody - Images





Anti-MEK2 antibody, ABO11583, All Western blottingAll lanes: MAP2K2(ABO11583) at 0.5ug/mlLane 1: Rat Skeletal Muscle Tissue Lysate at 40ugLane 2: Rat Kidney Tissue Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: COLO320 Whole Cell Lysate at 40ugLane 5: PC12 Whole Cell Lysate at 40ugLane 6: JURKAT Whole Cell Lysate at 40ugLane 7: HT1080 Whole Cell Lysate at 40ugPredicted bind size: 50KDObserved bind size: 50KD

### Anti-MEK2 Antibody - Background

Dual specificity mitogen-activated protein kinase kinase 2(MAP2K2), also called PRKMK2 or MEK2, is an enzyme that in humans is encoded by the MAP2K2 gene. The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. MAP2K2 is mapped to 19p13.3. This kinase is known to play a critical role in mitogen growth factor signal transduction, and the inhibition or degradation of this kinase is found to be involved in the pathogenesis of Yersinia and anthrax. Recombinant MEK2 and MEK1 both could activate human ERK1 in vitro, and they further characterized biochemically the 2 MAP2Ks. MAP2K2 has been shown to interact with MAPK3 and ARAF.