

Anti-MEK6 Antibody
Catalog # ABO11224**Specification**

Anti-MEK6 Antibody - Product Information

Application	WB
Primary Accession	P52564
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Dual specificity mitogen-activated protein kinase kinase 6(MAP2K6) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

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

Anti-MEK6 Antibody - Additional Information

Gene ID 5608

Other Names

Dual specificity mitogen-activated protein kinase kinase 6, MAP kinase kinase 6, MAPKK 6, 2.7.12.2, MAPK/ERK kinase 6, MEK 6, Stress-activated protein kinase kinase 3, SAPK kinase 3, SAPKK-3, SAPKK3, MAP2K6, MEK6, MKK6, PRKMK6, SKK3

Calculated MW

37492 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Nucleus . Cytoplasm . Cytoplasm, cytoskeleton . Binds to microtubules.

Tissue Specificity

Isoform 2 is only expressed in skeletal muscle. Isoform 1 is expressed in skeletal muscle, heart, and in lesser extent in liver or pancreas. .

Protein Name

Dual specificity mitogen-activated protein kinase kinase 6

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 MEK6(7-23aa KKRNPGLKIPKEAFEQP), identical to the related mouse sequence and different from the related rat

sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, 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-MEK6 Antibody - Protein Information

Name MAP2K6

Synonyms MEK6, MKK6, PRKMK6, SKK3

Function

Dual specificity protein kinase which acts as an essential component of the MAP kinase signal transduction pathway. With MAP3K3/MKK3, catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in the MAP kinases p38 MAPK11, MAPK12, MAPK13 and MAPK14 and plays an important role in the regulation of cellular responses to cytokines and all kinds of stresses. Especially, MAP2K3/MKK3 and MAP2K6/MKK6 are both essential for the activation of MAPK11 and MAPK13 induced by environmental stress, whereas MAP2K6/MKK6 is the major MAPK11 activator in response to TNF. MAP2K6/MKK6 also phosphorylates and activates PAK6. The p38 MAP kinase signal transduction pathway leads to direct activation of transcription factors. Nuclear targets of p38 MAP kinase include the transcription factors ATF2 and ELK1. Within the p38 MAPK signal transduction pathway, MAP3K6/MKK6 mediates phosphorylation of STAT4 through MAPK14 activation, and is therefore required for STAT4 activation and STAT4-regulated gene expression in response to IL-12 stimulation. The pathway is also crucial for IL-6-induced SOCS3 expression and down-regulation of IL-6-mediated gene induction; and for IFNG-dependent gene transcription. Has a role in osteoclast differentiation through NF- κ B transactivation by TNFSF11, and in endochondral ossification and since SOX9 is another likely downstream target of the p38 MAPK pathway. MAP2K6/MKK6 mediates apoptotic cell death in thymocytes. Acts also as a regulator for melanocytes dendricity, through the modulation of Rho family GTPases.

Cellular Location

Nucleus. Cytoplasm. Cytoplasm, cytoskeleton. Note= Binds to microtubules

Tissue Location

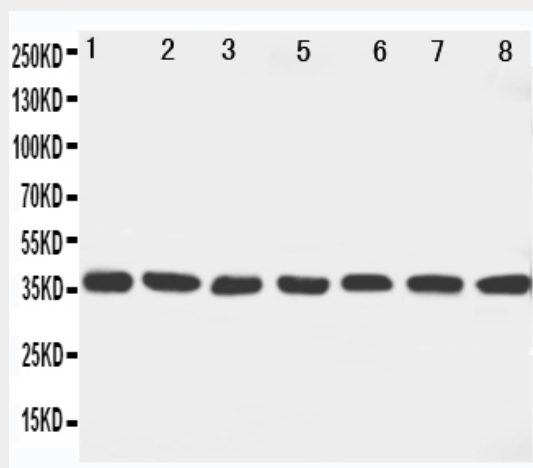
Isoform 2 is only expressed in skeletal muscle. Isoform 1 is expressed in skeletal muscle, heart, and in lesser extent in liver or pancreas.

Anti-MEK6 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 Cytometry](#)
- [Cell Culture](#)

Anti-MEK6 Antibody - Images



Anti-MEK6 antibody, ABO11224, Western blotting
Lane 1: Rat Ovary Tissue Lysate
Lane 2: Rat Spleen Tissue Lysate
Lane 3: Rat Brain Tissue Lysate
Lane 4: Rat Heart Tissue Lysate
Lane 5: NIH313 Cell Lysate
Lane 6: HELA Cell Lysate
Lane 7: JRUKAT Cell Lysate
Lane 8: MCF-7 Cell Lysate

Anti-MEK6 Antibody - Background

MAP2K6 (Mitogen-activated protein kinase kinase 6), also known as MAP kinase kinase 6 (MAPKK 6) or MAPK/ERK kinase 6 is an enzyme that in humans is encoded by the MAP2K6 gene. It is located on chromosome 17. MAPKK 6 is a member of the dual specificity protein kinase family, which functions as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This protein phosphorylates and activates p38 MAP kinase in response to inflammatory cytokines or environmental stress. As an essential component of p38 MAP kinase mediated signal transduction pathway, this gene is involved in many cellular processes such as stress-induced cell cycle arrest, transcription activation and apoptosis.