

**Anti-MEK6 Picoband Antibody**  
Catalog # ABO12971**Specification****Anti-MEK6 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P52564</a>
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 Picoband 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, Mouse, Rat, Human<br>

**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. .

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**Immunogen**

E. coli-derived human MEK6 recombinant protein (Position: A280-D334). Human MEK6 shares 92.7% amino acid (aa) sequence identity with mouse MEK6.

**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.**

**Anti-MEK6 Picoband 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- $\kappa$ 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 Picoband 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 Picoband Antibody - Images**

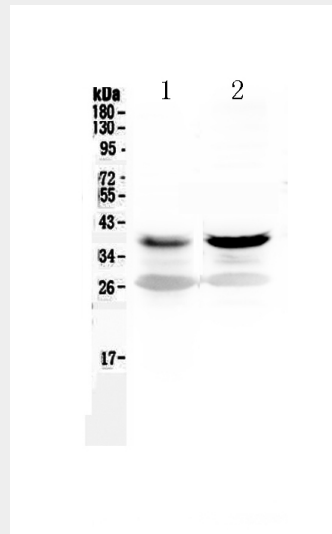


Figure 1. Western blot analysis of MEK6 using anti-MEK6 antibody (ABO12971).

#### **Anti-MEK6 Picoband 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.