

# Product datasheet

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# ARG41969 anti-MEK6 / MKK6 antibody

Package: 50 μg Store at: -20°C

## **Summary**

Product Description Rabbit Polyclonal antibody recognizes MEK6 / MKK6

Tested Reactivity Hu, Ms, Rat

Tested Application WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name MEK6 / MKK6

Species Human

Immunogen Synthetic peptide corresponding to aa. 7-23 of Human MEK6. (KKRNPGLKIPKEAFEQP)

Conjugation Un-conjugated

Alternate Names SAPK kinase 3; MEK 6; MAPKK 6; MAPKK 6; MAPKK 6; SAPKK3; MAPKK6; SAPKK-3;

Stress-activated protein kinase kinase 3; MKK6; MAP kinase kinase 6; Dual specificity mitogen-activated

protein kinase kinase 6; MEK6

# **Application Instructions**

Application table	Application	Dilution
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 37 kDa	

### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.2% Na2HPO4, 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.

Preservative 0.05% Thimerosal and 0.05% Sodium azide

Stabilizer 5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

MAP2K6

Gene Full Name

mitogen-activated protein kinase kinase 6

Background

This gene encodes a member of the dual specificity protein kinase family, which functions as a mitogenactivated 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. [provided by RefSeq, Jul 2008]

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. [UniProt]

Calculated Mw

37 kDa

PTM

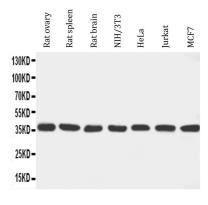
Weakly autophosphorylated. Phosphorylated at Ser-207 and Thr-211 by the majority of M3Ks, such as MAP3K5/ASK1, MAP3K1/MEKK1, MAP3K2/MEKK2, MAP3K3/MEKK3, MAP3K4/MEKK4, MAP3K7/TAK1, MAP3K11/MLK3 and MAP3K17/TAOK2.

Acetylation of Ser-207 and Thr-211 by Yersinia yopJ prevents phosphorylation and activation, thus blocking the MAPK signaling pathway. [UniProt]

Cellular Localization

Nucleus. Cytoplasm. Cytoplasm, cytoskeleton. Note=Binds to microtubules. [UniProt]

#### **Images**



#### ARG41969 anti-MEK6 / MKK6 antibody WB image

Western blot: Rat ovary, Rat spleen, Rat brain, NIH/3T3, HeLa, Jurkat and MCF7 cell lysates stained with ARG41969 anti-MEK6 / MKK6 antibody.