

MAP2K6 / MEK6 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS12945**Specification**

MAP2K6 / MEK6 Antibody (C-Terminus) - Product Information

Application	IHC, WB
Primary Accession	P52564
Reactivity	Human, Mouse, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37kDa KDa

MAP2K6 / MEK6 Antibody (C-Terminus) - 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

Reconstitution & Storage

Store at -20°C.

Precautions

MAP2K6 / MEK6 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

MAP2K6 / MEK6 Antibody (C-Terminus) - 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

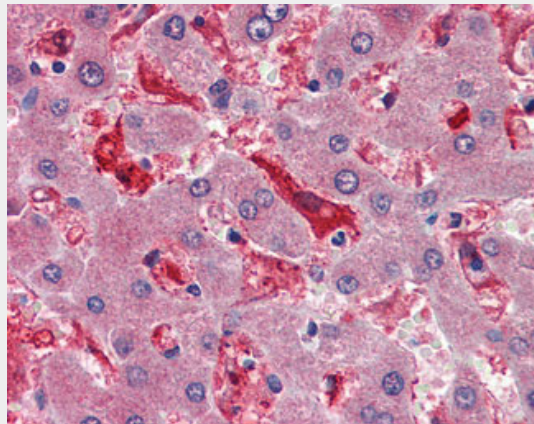
Isoform 2 is only expressed in skeletal muscle. Isoform 1 is expressed in skeletal muscle, heart, and in lesser extent in liver or pancreas.

MAP2K6 / MEK6 Antibody (C-Terminus) - Protocols

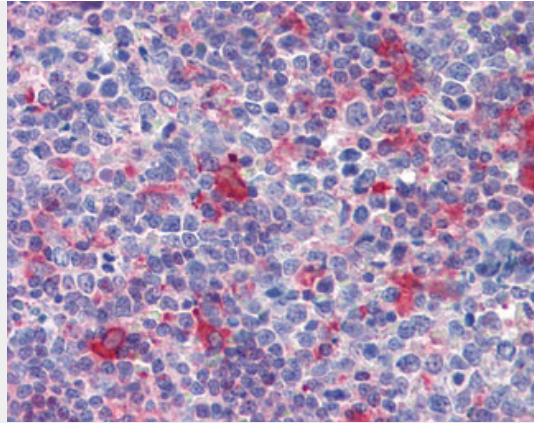
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

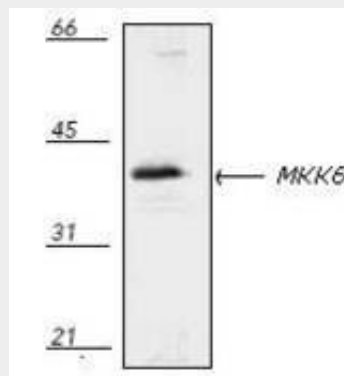
MAP2K6 / MEK6 Antibody (C-Terminus) - Images



Anti-MAP2K6 / MEK6 antibody IHC of human liver.



Anti-MAP2K6 / MEK6 antibody IHC of human tonsil.



Western blot of mouse brain tissue extract

MAP2K6 / MEK6 Antibody (C-Terminus) - Background

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.

MAP2K6 / MEK6 Antibody (C-Terminus) - References

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- Stein B., et al. J. Biol. Chem. 271:11427-11433(1996).
- Han J., et al. J. Biol. Chem. 271:2886-2891(1996).
- Moriguchi T., et al. J. Biol. Chem. 271:13675-13679(1996).
- Cuenda A., et al. EMBO J. 15:4156-4164(1996).

