

# Mouse Map2k6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16108a

## **Product Information**

**Application** WB, E **Primary Accession** P70236

Other Accession Q5E9X2, NP 036073.1
Reactivity Human, Mouse

Predicted Bovine
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB34810
Calculated MW 37432
Antigen Region 30-57

# **Additional Information**

**Gene ID** 26399

Other Names Dual specificity mitogen-activated protein kinase kinase 6, MAP kinase kinase

6, MAPKK 6, MAPK/ERK kinase 6, MEK 6, SAPKK3, Map2k6, Prkmk6, Sapkk3

**Target/Specificity** This Mouse Map2k6 antibody is generated from rabbits immunized with a

KLH conjugated synthetic peptide between 30-57 amino acids from the

N-terminal region of mouse Map2k6.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Mouse Map2k6 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

# **Protein Information**

Name Map2k6

**Synonyms** Prkmk6, Sapkk3

#### **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 STAT4regulated 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 {ECO:0000250|UniProtKB:P52564}. Cytoplasm {ECO:0000250|UniProtKB:P52564}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P52564}. Note=Binds to microtubules {ECO:0000250|UniProtKB:P52564}

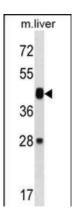
# **Background**

Map2k6 catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in MAP kinase p38 exclusively.

### References

Remy, G., et al. Cell. Signal. 22(4):660-667(2010) Sorkin, L.S., et al. Neuroscience 162(2):462-471(2009) Yoshizawa, T., et al. J. Immunol. 183(2):1360-1367(2009) Bulat, N., et al. J. Lipid Res. 50(1):81-89(2009) Yamashita, T., et al. Biochem. Biophys. Res. Commun. 365(2):252-257(2008)

# **Images**



Mouse Map2k6 Antibody (N-term) (Cat. #AP16108a) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the Map2k6 antibody detected the Map2k6 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.