

# Map2k1 Antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI14608

## Product Information

<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">P31938</a>
<b>Other Accession</b>	<a href="#">NM_008927</a> , <a href="#">NP_032953</a>
<b>Reactivity</b>	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Bovine
<b>Predicted</b>	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	43474

## Additional Information

<b>Gene ID</b>	26395
<b>Alias Symbol</b>	MAPKK1, MEKK1, Mek1, Prkmk1
<b>Other Names</b>	Dual specificity mitogen-activated protein kinase kinase 1, MAP kinase kinase 1, MAPKK 1, 2.7.12.2, ERK activator kinase 1, MAPK/ERK kinase 1, MEK 1, Map2k1, Mek1, Prkmk1
<b>Format</b>	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
<b>Reconstitution &amp; Storage</b>	Add 50 ul of distilled water. Final anti-Map2k1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
<b>Precautions</b>	Map2k1 Antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

<b>Name</b>	Map2k1
<b>Synonyms</b>	Mek1, Prkmk1
<b>Function</b>	Dual specificity protein kinase which acts as an essential component of the MAP kinase signal transduction pathway. Binding of extracellular ligands such as growth factors, cytokines and hormones to their cell-surface receptors activates RAS and this initiates RAF1 activation. RAF1 then further activates the dual-specificity protein kinases MAP2K1/MEK1 and MAP2K2/MEK2. Both MAP2K1/MEK1 and MAP2K2/MEK2 function specifically in the MAPK/ERK cascade, and catalyze the concomitant phosphorylation of a threonine and a

tyrosine residue in a Thr-Glu-Tyr sequence located in the extracellular signal-regulated kinases MAPK3/ERK1 and MAPK1/ERK2, leading to their activation and further transduction of the signal within the MAPK/ERK cascade. Activates BRAF in a KSR1 or KSR2-dependent manner; by binding to KSR1 or KSR2 releases the inhibitory intramolecular interaction between KSR1 or KSR2 protein kinase and N-terminal domains which promotes KSR1 or KSR2-BRAF dimerization and BRAF activation (By similarity). Depending on the cellular context, this pathway mediates diverse biological functions such as cell growth, adhesion, survival and differentiation, predominantly through the regulation of transcription, metabolism and cytoskeletal rearrangements. One target of the MAPK/ERK cascade is peroxisome proliferator-activated receptor gamma (PPARG), a nuclear receptor that promotes differentiation and apoptosis. MAP2K1/MEK1 has been shown to export PPARG from the nucleus. The MAPK/ERK cascade is also involved in the regulation of endosomal dynamics, including lysosome processing and endosome cycling through the perinuclear recycling compartment (PNRC), as well as in the fragmentation of the Golgi apparatus during mitosis.

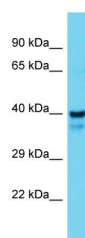
### Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:Q02750}. Cytoplasm, cytoskeleton, microtubule organizing center, spindle pole body {ECO:0000250|UniProtKB:Q02750}. Cytoplasm. Nucleus {ECO:0000250|UniProtKB:Q02750} Membrane; Peripheral membrane protein. Note=Localizes at centrosomes during prometaphase, midzone during anaphase and midbody during telophase/cytokinesis (By similarity). Membrane localization is probably regulated by its interaction with KSR1 (PubMed:10409742) {ECO:0000250|UniProtKB:Q02750, ECO:0000269|PubMed:10409742}

### References

Crews C.M.,et al.Science 258:478-480(1992).  
Crews C.M.,et al.Proc. Natl. Acad. Sci. U.S.A. 89:8205-8209(1992).  
Lubec G.,et al.Submitted (MAR-2007) to UniProtKB.  
Lange-Carter C.A.,et al.Science 260:315-319(1993).  
Duesbery N.S.,et al.Science 280:734-737(1998).

### Images



Host: Rabbit  
Target Name: Map2k1  
Sample Tissue: Mouse Liver lysates  
Antibody Dilution: 1.0µg/ml

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