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Mouse Map2k1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14153B

Specification

Mouse Map2k1 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P31938
Other Accession	Q01986, P29678, Q02750, Q63980, NP_032953.1
Reactivity	**Human, Mouse**
Predicted	**Hamster, Rabbit, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**43474**
Antigen Region	**269-296**

Mouse Map2k1 Antibody (C-term) - Additional Information

Gene ID 26395

Other Names
Dual specificity mitogen-activated protein kinase kinase 1, MAP kinase kinase 1, MAPKK 1, ERK activator kinase 1, MAPK/ERK kinase 1, MEK 1, Map2k1, Mek1, Prkmk1

Target/Specificity
This Mouse Map2k1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 269-296 amino acids from the C-terminal region of mouse Map2k1.

Dilution
WB~~1:1000
IHC-P~~1:10~50

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 Map2k1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Map2k1 Antibody (C-term) - Protein Information

Name Map2k1

Synonyms Mek1, Prkmk1

Function 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}

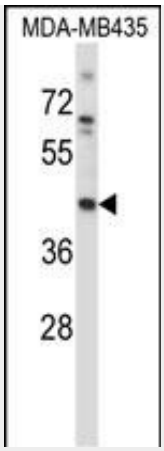
Mouse Map2k1 Antibody (C-term) - Protocols

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

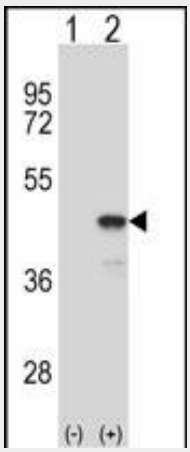
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Map2k1 Antibody (C-term) - Images

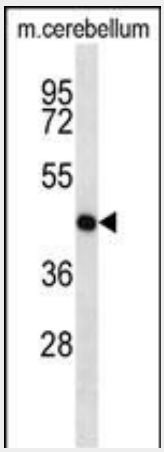
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Mouse Map2k1 Antibody (C-term) (Cat. #AP14153b) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the Map2k1 antibody detected the Map2k1 protein (arrow).

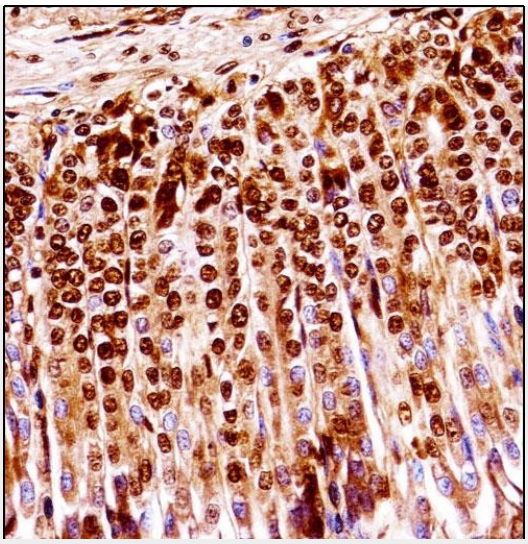


Western blot analysis of Map2k1 (arrow) using rabbit polyclonal Mouse Map2k1 Antibody (C-term) (Cat. #AP14153b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the Map2k1 gene.



Mouse Map2k1 Antibody (C-term) (Cat. #AP14153b) western blot analysis in mouse cerebellum tissue lysates (35ug/lane).This demonstrates the Map2k1 antibody detected the Map2k1 protein (arrow).

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Mouse Map2k1 Antibody (C-term) (AP14153b)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Mouse Map2k1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Map2k1 Antibody (C-term) - Background

Map2k1 catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates ERK1 and ERK2 MAP kinases.

Mouse Map2k1 Antibody (C-term) - References

Chandrakesan, P., et al. J. Biol. Chem. 285(43):33485-33498(2010)
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