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Mouse Map3k5 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14442b

Product Information

Application	WB, IHC-P, E
Primary Accession	O35099
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34818
Calculated MW	154512
Antigen Region	1175-1203

Additional Information

Gene ID	26408
Other Names	Mitogen-activated protein kinase kinase kinase 5, Apoptosis signal-regulating kinase 1, ASK-1, MAPK/ERK kinase kinase 5, MEK kinase 5, MEKK 5, Map3k5, Ask1, Mekk5
Target/Specificity	This Mouse Map3k5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1175-1203 amino acids from the C-terminal region of mouse Map3k5.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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 Map3k5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Map3k5
Synonyms	Ask1, Mekk5
Function	Serine/threonine kinase which acts as an essential component of the MAP

kinase signal transduction pathway. Plays an important role in the cascades of cellular responses evoked by changes in the environment. Mediates signaling for determination of cell fate such as differentiation and survival. Plays a crucial role in the apoptosis signal transduction pathway through mitochondria-dependent caspase activation. MAP3K5/ASK1 is required for the innate immune response, which is essential for host defense against a wide range of pathogens. Mediates signal transduction of various stressors like oxidative stress as well as by receptor-mediated inflammatory signals, such as the tumor necrosis factor (TNF) or lipopolysaccharide (LPS). Once activated, acts as an upstream activator of the MKK/JNK signal transduction cascade and the p38 MAPK signal transduction cascade through the phosphorylation and activation of several MAP kinase kinases like MAP2K4/SEK1, MAP2K3/MKK3, MAP2K6/MKK6 and MAP2K7/MKK7. These MAP2Ks in turn activate p38 MAPKs and c-jun N-terminal kinases (JNKs). Both p38 MAPK and JNKs control the transcription factors activator protein-1 (AP-1).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q99683}. Endoplasmic reticulum. Note=Interaction with 14-3-3 proteins alters the distribution of MAP3K5/ASK1 and restricts it to the perinuclear endoplasmic reticulum region.

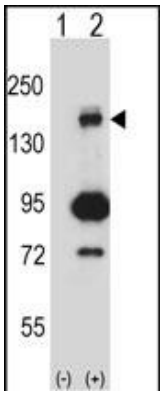
Tissue Location

Expressed in various adult mouse tissues including heart, brain, lung, liver and kidney.

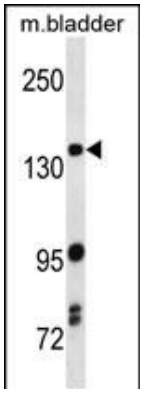
Background

Component of a protein kinase signal transduction cascade. Phosphorylates and activates MAP2K4 and MAP2K6, which in turn activate the JNK and p38 MAP kinases, respectively. Overexpression induces apoptotic cell death (By similarity).

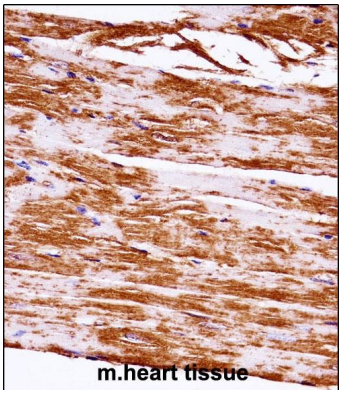
Images



Western blot analysis of Map3k5 (arrow) using rabbit polyclonal Mouse Map3k5 Antibody (C-term) (Cat. #AP14442b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the Map3k5 gene.



Mouse Map3k5 Antibody (C-term) (Cat. #AP14442b) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the Map3k5 antibody detected the Map3k5 protein (arrow).



Mouse Map3k5 Antibody(C-term) (AP14442b)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Mouse Map3k5 Antibody(C-term) for immunohistochemistry. Clinical relevance has not been evaluated.