

# Mouse Map3k5 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP14442b

### **Specification**

### Mouse Map3k5 Antibody (C-term) Blocking Peptide - Product Information

**Primary Accession** 

035099

## Mouse Map3k5 Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 26408** 

#### **Other Names**

Mitogen-activated protein kinase kinase 5, Apoptosis signal-regulating kinase 1, ASK-1, MAPK/ERK kinase kinase 5, MEK kinase 5, MEKK 5, Map3k5, Ask1, Mekk5

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### Mouse Map3k5 Antibody (C-term) Blocking Peptide - 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.

## Mouse Map3k5 Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

Mouse Map3k5 Antibody (C-term) Blocking Peptide - Images

Mouse Map3k5 Antibody (C-term) Blocking Peptide - 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).