10320 Camino Santa Fe, Suite G
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Mouse Map3k7 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13919a

Specification

Mouse Map3k7 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q62073
Other Accession	P0C8E4, O43318, A2VDU3, NP_766276.1
Reactivity	**Human, Mouse**
Predicted	**Bovine, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**64228**
Antigen Region	**131-160**

Mouse Map3k7 Antibody (N-term) - Additional Information

Gene ID 26409

Other Names
Mitogen-activated protein kinase kinase kinase 7, Transforming growth factor-beta-activated kinase 1, TGF-beta-activated kinase 1, Map3k7, Tak1

Target/Specificity
This Mouse Map3k7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 131-160 amino acids from the N-terminal region of mouse Map3k7.

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 Map3k7 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Map3k7 Antibody (N-term) - Protein Information

Name Map3k7

Synonyms Tak1

Function Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway (PubMed:10748100, PubMed:16157589, PubMed:21183079, PubMed:29291351). Plays an important role in the cascades of cellular responses evoked by changes in the environment (PubMed:10748100, PubMed:16157589, PubMed:21183079, PubMed:29291351). Mediates signal transduction of TRAF6, various cytokines including interleukin-1 (IL-1), transforming growth factor- beta (TGFB), TGFB-related factors like BMP2 and BMP4, toll-like receptors (TLR), tumor necrosis factor receptor CD40 and B-cell receptor (BCR) (PubMed:10748100, PubMed:16157589, PubMed:21183079, PubMed:29291351, PubMed:8533096). 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 MAP2K1/MEK1, MAP2K3/MKK3, MAP2K6/MKK6 and MAP2K7/MKK7 (By similarity). These MAP2Ks in turn activate p38 MAPKs and c-jun N-terminal kinases (JNKs); both p38 MAPK and JNK pathways control the transcription factors activator protein-1 (AP-1) (By similarity). Independently of MAP2Ks and p38 MAPKs, acts as a key activator of NF-kappa-B by promoting activation of the I-kappa-B- kinase (IKK) core complex (PubMed:17965022). Mechanistically, recruited to polyubiquitin chains of RIPK2 and IKBKG/NEMO via TAB2/MAP3K7IP2 and TAB3/MAP3K7IP3, and catalyzes phosphorylation and activation of IKBKB/IKKB component of the IKK complex, leading to NF-kappa-B activation (By similarity). In osmotic stress signaling, plays a major role in the activation of MAPK8/JNK1, but not that of NF-kappa-B (By similarity). Promotes TRIM5 capsid-specific restriction activity (By similarity). Phosphorylates RIPK1 at 'Ser-321' which positively regulates RIPK1 interaction with RIPK3 to promote necroptosis but negatively regulates RIPK1 kinase activity and its interaction with FADD to mediate apoptosis (PubMed:28842570). Phosphorylates STING1 in response to cGAMP-activation, promoting association between STEEP1 and STING1 and STING1 translocation to COPII vesicles (PubMed:37832545).

Cellular Location
Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Although the majority of MAP3K7/TAK1 is found in the cytosol, when complexed with TAB1/MAP3K7IP1 and TAB2/MAP3K7IP2, it is also localized at the cell membrane.

Mouse Map3k7 Antibody (N-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 Map3k7 Antibody (N-term) - Images

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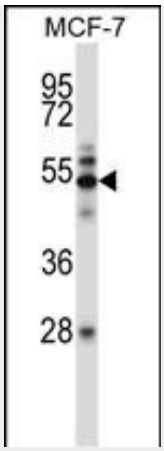
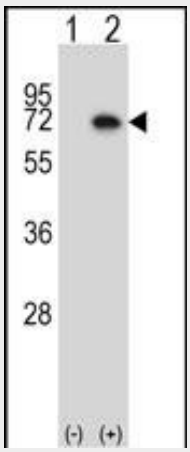
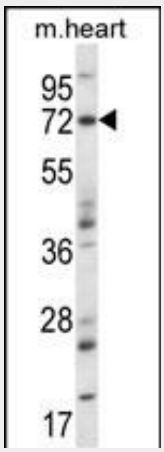


Mouse Map3k7 Antibody (N-term) (Cat. #AP13919a) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the Map3k7 antibody detected the Map3k7 protein (arrow).



Western blot analysis of Map3k7 (arrow) using rabbit polyclonal Mouse Map3k7 Antibody (N-term) (Cat. #AP13919a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the Map3k7 gene.



Mouse Map3k7 Antibody (N-term) (Cat. #AP13919a) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the Map3k7 antibody detected the Map3k7 protein (arrow).

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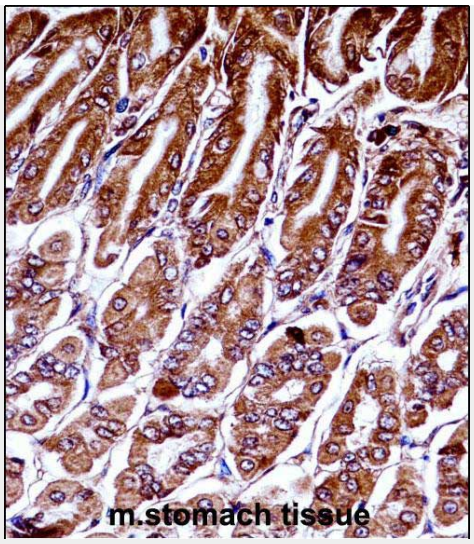

Mouse Map3k7 Antibody (N-term) (AP13919a)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Mouse Map3k7 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Map3k7 Antibody (N-term) - Background

Component of a protein kinase signal transduction cascade. Mediator of TRAF6 and TGF-beta signal transduction. Activates IKBKB and MAPK8 in response to TRAF6 signaling. Stimulates NF-kappa-B activation and the p38 MAPK pathway. In osmotic stress signaling, plays a major role in the activation of MAPK8/JNK, but not that of NF-kappa-B.

Mouse Map3k7 Antibody (N-term) - References

Kajino-Sakamoto, R., et al. J. Immunol. 185(8):4729-4737(2010)
Wu, Z.H., et al. Mol. Cell 40(1):75-86(2010)
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