

Mouse Mapkapk5 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14447a**Specification**

Mouse Mapkapk5 Antibody (N-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	O54992
Other Accession	Q8IW41 , XP_001479292.1 , NP_034895.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	54152
Antigen Region	39-66

Mouse Mapkapk5 Antibody (N-term) - Additional Information**Gene ID** 17165**Other Names**

MAP kinase-activated protein kinase 5, MAPK-activated protein kinase 5, MAPKAP kinase 5, MAPKAPK-5, Mapkapk5

Target/Specificity

This Mouse Mapkapk5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 39-66 amino acids from the N-terminal region of mouse Mapkapk5.

Dilution

WB~~1:1000

IHC-P~~1:10~50

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 Mapkapk5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Mapkapk5 Antibody (N-term) - Protein Information**Name** Mapkapk5

Function Tumor suppressor serine/threonine-protein kinase involved in mTORC1 signaling and post-transcriptional regulation. Phosphorylates FOXO3, ERK3/MAPK6, ERK4/MAPK4, HSP27/HSPB1, p53/TP53 and RHEB. Acts as a tumor suppressor by mediating Ras-induced senescence and phosphorylating p53/TP53. Involved in post-transcriptional regulation of MYC by mediating phosphorylation of FOXO3: phosphorylation of FOXO3 leads to promote nuclear localization of FOXO3, enabling expression of miR-34b and miR-34c, 2 post-transcriptional regulators of MYC that bind to the 3'UTR of MYC transcript and prevent MYC translation. Acts as a negative regulator of mTORC1 signaling by mediating phosphorylation and inhibition of RHEB. Part of the atypical MAPK signaling via its interaction with ERK3/MAPK6 or ERK4/MAPK4: the precise role of the complex formed with ERK3/MAPK6 or ERK4/MAPK4 is still unclear, but the complex follows a complex set of phosphorylation events: upon interaction with atypical MAPK (ERK3/MAPK6 or ERK4/MAPK4), ERK3/MAPK6 (or ERK4/MAPK4) is phosphorylated and then mediates phosphorylation and activation of MAPKAPK5, which in turn phosphorylates ERK3/MAPK6 (or ERK4/MAPK4). Mediates phosphorylation of HSP27/HSPB1 in response to PKA/PRKACA stimulation, inducing F-actin rearrangement.

Cellular Location

Cytoplasm. Nucleus. Note=Translocates to the cytoplasm following phosphorylation and activation. Interaction with ERK3/MAPK6 or ERK4/MAPK4 and phosphorylation at Thr-182, activates the protein kinase activity, followed by translocation to the cytoplasm Phosphorylation by PKA/PRKACA at Ser-115 also induces nuclear export

Tissue Location

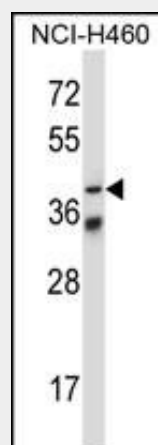
Expressed ubiquitously.

Mouse Mapkapk5 Antibody (N-term) - Protocols

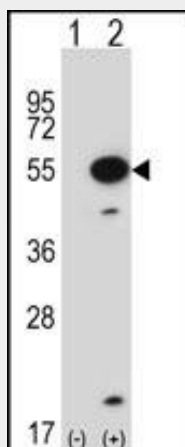
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

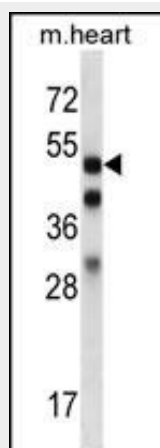
Mouse Mapkapk5 Antibody (N-term) - Images



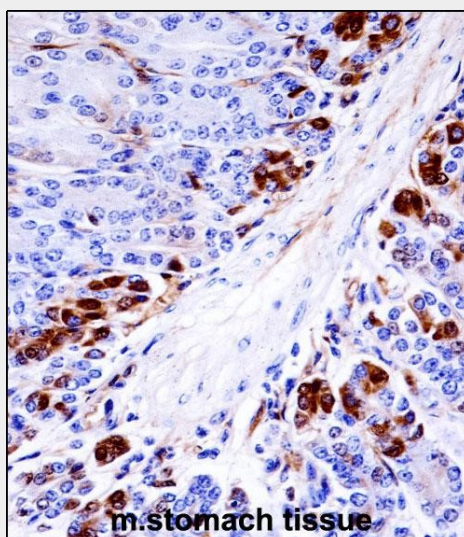
Mouse Mapkapk5 Antibody (N-term) (Cat. #AP14447a) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the Mapkapk5 antibody detected the Mapkapk5 protein (arrow).



Western blot analysis of Mapkapk5 (arrow) using rabbit polyclonal Mouse Mapkapk5 Antibody (N-term) (Cat. #AP14447a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the Mapkapk5 gene.



Mouse Mapkapk5 Antibody (N-term) (Cat. #AP14447a) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the Mapkapk5 antibody detected the Mapkapk5 protein (arrow).



Mouse Mapkapk5 Antibody (N-term) (AP14447a) 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 Mapkapk5 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Mapkapk5 Antibody (N-term) - Background

Mapkapk5 mediates stress-induced small heat shock protein 27 phosphorylation (By similarity).

Mouse Mapkapk5 Antibody (N-term) - References

Dingar, D., et al. Cell. Signal. 22(7):1063-1075(2010)
Gerits, N., et al. Cell. Mol. Biol. Lett. 14(4):548-574(2009)
Li, Q., et al. J. Biol. Chem. 283(16):11014-11023(2008)
Sun, P., et al. Cell 128(2):295-308(2007)
Seternes, O.M., et al. EMBO J. 23(24):4780-4791(2004)