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Mouse Mapkapk3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14268a

Specification

Mouse Mapkapk3 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q3UMW7
Other Accession	Q66H84, Q16644, Q3SYZ2, NP_849238.1
Reactivity	**Mouse**
Predicted	**Bovine, Human, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**43293**
Antigen Region	**63-90**

Mouse Mapkapk3 Antibody (N-term) - Additional Information

Gene ID 102626

Other Names
MAP kinase-activated protein kinase 3, MAPK-activated protein kinase 3, MAPKAP kinase 3, MAPKAP-K3, MAPKAPK-3, MK-3, Mapkapk3

Target/Specificity
This Mouse Mapkapk3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 63-90 amino acids from the N-terminal region of mouse Mapkapk3.

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 Mapkapk3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Mapkapk3 Antibody (N-term) - Protein Information

Name Mapkapk3

Function Stress-activated serine/threonine-protein kinase involved in cytokines production, endocytosis, cell migration, chromatin remodeling and transcriptional regulation. Following stress, it is phosphorylated and activated by MAP kinase p38-alpha/MAPK14, leading to phosphorylation of substrates. Phosphorylates serine in the peptide sequence, Hyd-X-R-X(2)-S, where Hyd is a large hydrophobic residue. MAPKAPK2 and MAPKAPK3, share the same function and substrate specificity, but MAPKAPK3 kinase activity and level in protein expression are lower compared to MAPKAPK2. Phosphorylates HSP27/HSPB1, KRT18, KRT20, RCSD1, RPS6KA3, TAB3 and TTP/ZFP36. Mediates phosphorylation of HSP27/HSPB1 in response to stress, leading to dissociate HSP27/HSPB1 from large small heat-shock protein (sHsps) oligomers and impair their chaperone activities and ability to protect against oxidative stress effectively. Involved in inflammatory response by regulating tumor necrosis factor (TNF) and IL6 production post- transcriptionally: acts by phosphorylating AU-rich elements (AREs)- binding proteins, such as TTP/ZFP36, leading to regulate the stability and translation of TNF and IL6 mRNAs. Phosphorylation of TTP/ZFP36, a major post-transcriptional regulator of TNF, promotes its binding to 14-3-3 proteins and reduces its ARE mRNA affinity leading to inhibition of dependent degradation of ARE-containing transcript. Involved in toll-like receptor signaling pathway (TLR) in dendritic cells: required for acute TLR-induced macropinocytosis by phosphorylating and activating RPS6KA3. Also acts as a modulator of Polycomb-mediated repression.

Cellular Location
[Isoform 1]: Nucleus. Cytoplasm. Note=Predominantly located in the nucleus, when activated it translocates to the cytoplasm

Tissue Location
Ubiquitously expressed (at protein level). Isoform 3 is expressed in skeletal muscles and heart

Mouse Mapkapk3 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 Mapkapk3 Antibody (N-term) - Images

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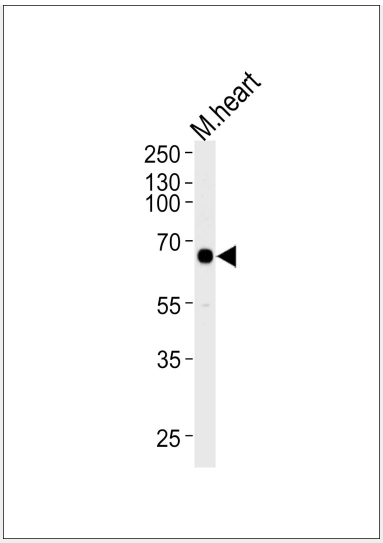
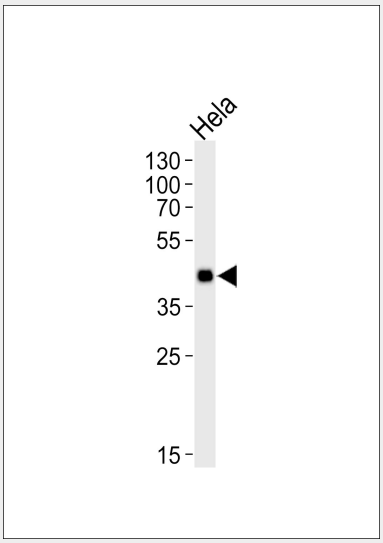


Western blot analysis of lysate from mouse heart tissue lysate, using Mouse Mapkapk3 Antibody (N-term)(Cat. #AP14268a). AP14268a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



Western blot analysis of lysate from Hela cell line, using Mouse Mapkapk3 Antibody (N-term)(Cat. #AP14268a). AP14268a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 35ug.

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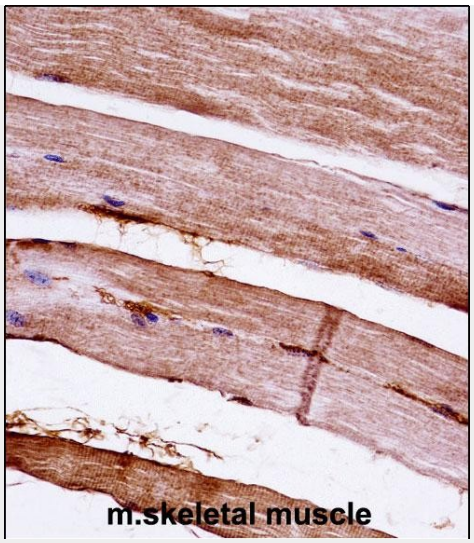

Mouse Mapkapk3 Antibody (N-term) (AP14268a)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Mouse Mapkapk3 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Mapkapk3 Antibody (N-term) - Background

Modulator of polycomb-mediated repression, which can be activated either by ERK, p38 and JNK. Substrate of CSBP (By similarity).

Mouse Mapkapk3 Antibody (N-term) - References

Menon, M.B., et al. J. Biol. Chem. 285(43):33242-33251(2010)
Moise, N., et al. Cell. Signal. 22(10):1502-1512(2010)
Ronkina, N., et al. Mol. Cell. Biol. 27(1):170-181(2007)