

Mouse Mapkapk3 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14268a**Specification**

Mouse Mapkapk3 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q3UMW7](#)**Mouse Mapkapk3 Antibody (N-term) Blocking Peptide - 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

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 Mapkapk3 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Mouse Mapkapk3 Antibody (N-term) Blocking Peptide - Images**Mouse Mapkapk3 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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)