

Mouse Mapk10 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14264a**Specification**

Mouse Mapk10 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q61831](#)**Mouse Mapk10 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 26414**Other Names**

Mitogen-activated protein kinase 10, MAP kinase 10, MAPK 10, MAP kinase p49 3F12, Stress-activated protein kinase JNK3, c-Jun N-terminal kinase 3, Mapk10, Jnk3, Prkm10, Serk2

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 Mapk10 Antibody (N-term) Blocking Peptide - Protein Information**Name** Mapk10**Synonyms** Jnk3, Prkm10, Serk2**Function**

Serine/threonine-protein kinase involved in various processes such as neuronal proliferation, differentiation, migration and programmed cell death. Extracellular stimuli such as pro-inflammatory cytokines or physical stress stimulate the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway. In this cascade, two dual specificity kinases MAP2K4/MKK4 and MAP2K7/MKK7 phosphorylate and activate MAPK10/JNK3. In turn, MAPK10/JNK3 phosphorylates a number of transcription factors, primarily components of AP-1 such as JUN and ATF2 and thus regulates AP-1 transcriptional activity. Plays regulatory roles in the signaling pathways during neuronal apoptosis. Phosphorylates the neuronal microtubule regulator STMN2. Acts in the regulation of the amyloid-beta precursor protein/APP signaling during neuronal differentiation by phosphorylating APP. Participates also in neurite growth in spiral ganglion neurons. Phosphorylates the CLOCK-BMAL1 heterodimer and plays a role in the photic regulation of the circadian clock (PubMed: <http://www.uniprot.org/citations/22441692> target="_blank">22441692). Phosphorylates JUND and this phosphorylation is inhibited in the presence of MEN1 (By similarity).

Cellular Location

Cytoplasm. Membrane; Lipid-anchor. Nucleus Mitochondrion. Note=Palmitoylation regulates MAPK10 trafficking to cytoskeleton (By similarity). Recruited to the mitochondria in the presence of SARM1.

Tissue Location

Brain (at protein level). Expressed specifically in neurons of the hippocampus, cortex, cerebellum, brainstem, and spinal cord. Seems to be also found in testis, and very weakly in the heart

Mouse Mapk10 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Mouse Mapk10 Antibody (N-term) Blocking Peptide - Images**Mouse Mapk10 Antibody (N-term) Blocking Peptide - Background**

Mapk10 responds to activation by environmental stress and pro-inflammatory cytokines by phosphorylating a number of transcription factors, primarily components of AP-1 such as c-Jun and ATF2 and thus regulates AP-1 transcriptional activity. Required for stress-induced neuronal apoptosis and the pathogenesis of glutamate excitotoxicity.