

Recombinant Anti-JNK3 Rabbit mAb

Catalog # AP94990

Product Information

Application	WB, FC, IF/IC
Primary Accession	P53779
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal
Calculated MW	52585

Additional Information

Gene ID	5602
Other Names	JNK3; JNK3A; PRKM10; SAPK1B; Mitogen-activated protein kinase 10; MAP kinase 10; MAPK 10; MAP kinase p49 3F12; Stress-activated protein kinase 1b; SAPK1b; Stress-activated protein kinase JNK3; c-Jun N-terminal kinase 3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human JNK3 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	MAPK10
Synonyms	JNK3, JNK3A, PRKM10, SAPK1B
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. Also participates 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:[22441692](#)). Phosphorylates JUND and this phosphorylation is inhibited in the presence of MEN1 (PubMed:[22327296](#)).

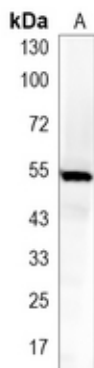
Cellular Location

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

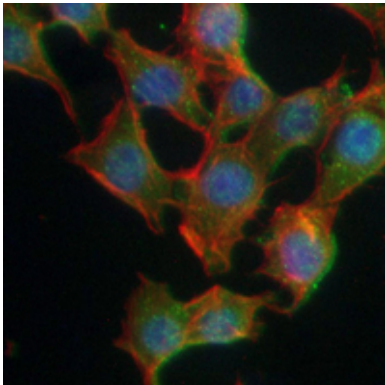
Tissue Location

Specific to a subset of neurons in the nervous system. Present in the hippocampus and areas, cerebellum, striatum, brain stem, and weakly in the spinal cord. Very weak expression in testis and kidney

Images



Western blot analysis of JNK3 expression in HeLa (A) whole cell lysates. (Predicted band size: 53 kD; Observed band size: 53 kD)



Immunofluorescent analysis of JNK3 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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