

# JNK3 Rabbit mAb

Catalog # AP77565

### **Product Information**

**Application** WB, IF, FC, ICC

Primary Accession P53779

**Reactivity** Rat, Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human JNK3

**Purification** Affinity Chromatography

Calculated MW 52585

## **Additional Information**

**Gene ID** 5602

Other Names MAPK10

**Dilution** WB~~1/500-1/1000 IF~~1:50~200 FC~~1:10~50 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

#### **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

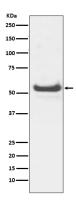
to the mitochondria in the presence of SARM1 (By similarity).

**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**



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