

# **Anti-JNK3 Rabbit Monoclonal Antibody**

Catalog # ABO13474

# **Specification**

# **Anti-JNK3 Rabbit Monoclonal Antibody - Product Information**

Application WB, IF, ICC, FC

Primary Accession
Host
Rabbit
Isotype
Rabbit IgG

Reactivity Rat, Human, Mouse

Clonality Monoclonal Format Liquid

**Description** 

Anti-JNK3 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

## Anti-JNK3 Rabbit Monoclonal Antibody - Additional Information

#### **Gene ID 5602**

#### **Other Names**

Mitogen-activated protein kinase 10, MAP kinase 10, MAPK 10, 2.7.11.24, MAP kinase p49 3F12, Stress-activated protein kinase 1b, SAPK1b, Stress-activated protein kinase JNK3, c-Jun N-terminal kinase 3, MAPK10, JNK3, JNK3A, PRKM10, SAPK1B

#### **Calculated MW**

52585 MW KDa

## **Application Details**

WB 1:1000-1:2000<br>ICC/IF 1:50-1:200<br>FC 1:500

## **Subcellular Localization**

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

## **Tissue Specificity**

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.

## **Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### **Immunogen**

A synthesized peptide derived from human JNK3

## **Purification**



Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

# **Anti-JNK3 Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/22441692" target="\_blank">22441692</a>). Phosphorylates JUND and this phosphorylation is inhibited in the presence of MEN1 (PubMed:<a href="http://www.uniprot.org/citations/22327296" target="\_blank">22327296</a>/a>).

## **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

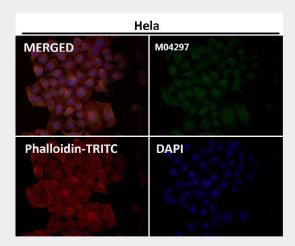
## **Anti-JNK3 Rabbit Monoclonal Antibody - Protocols**

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

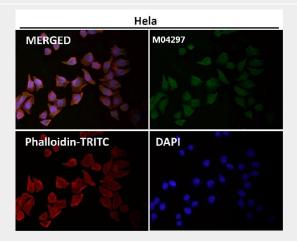
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-JNK3 Rabbit Monoclonal Antibody - Images





Immunofluorescent analysis using the Antibody at 1:150 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.

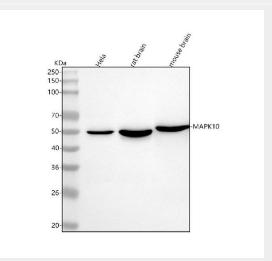


Figure 1. Western blot analysis of JNK3 using anti-JNK3 antibody (M04297). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: rat brain tissue lysates,





Tel: 858.875.1900 Fax: 858.875.1999

Lane 3: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-JNK3 antigen affinity purified monoclonal antibody (Catalog # M04297) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for JNK3 at approximately 50,53 kDa. The expected band size for JNK3 is at 53 kDa.