

MAPK9 / JNK2 alpha (aa217-230) Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF3716a**Specification****MAPK9 / JNK2 alpha (aa217-230) Antibody (internal region) - Product Information**

Application	WB
Primary Accession	P45984
Other Accession	NP_620707.1 , NP_002743.3 , NP_001128516.1 , 5601 , 26420 (mouse) , 50658 (rat)
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	48139

MAPK9 / JNK2 alpha (aa217-230) Antibody (internal region) - Additional Information**Gene ID** 5601**Other Names**

Mitogen-activated protein kinase 9, MAP kinase 9, MAPK 9, 2.7.11.24, JNK-55, Stress-activated protein kinase 1a, SAPK1a, Stress-activated protein kinase JNK2, c-Jun N-terminal kinase 2, MAPK9, JNK2, PRKM9, SAPK1A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MAPK9 / JNK2 alpha (aa217-230) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

MAPK9 / JNK2 alpha (aa217-230) Antibody (internal region) - Protein Information**Name** MAPK9**Synonyms** JNK2, PRKM9, SAPK1A**Function**

Serine/threonine-protein kinase involved in various processes such as cell proliferation, differentiation, migration, transformation 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 MAPK9/JNK2. In turn, MAPK9/JNK2 phosphorylates a number of transcription factors, primarily components of AP-1 such as JUN and ATF2 and thus regulates AP-1 transcriptional activity. In response to oxidative or ribotoxic stresses, inhibits rRNA synthesis by phosphorylating and inactivating the RNA polymerase 1- specific transcription initiation factor RRN3. Promotes stressed cell apoptosis by phosphorylating key regulatory factors including TP53 and YAP1. In T-cells, MAPK8 and MAPK9 are required for polarized differentiation of T-helper cells into Th1 cells. Upon T-cell receptor (TCR) stimulation, is activated by CARMA1, BCL10, MAP2K7 and MAP3K7/TAK1 to regulate JUN protein levels. Plays an important role in the osmotic stress-induced epithelial tight-junctions disruption. When activated, promotes beta-catenin/CTNNB1 degradation and inhibits the canonical Wnt signaling pathway. Participates also in neurite growth in spiral ganglion neurons. Phosphorylates the CLOCK-BMAL1 heterodimer and plays a role in the regulation of the circadian clock (PubMed:22441692). Phosphorylates POU5F1, which results in the inhibition of POU5F1's transcriptional activity and enhances its proteasomal degradation (By similarity).

Cellular Location

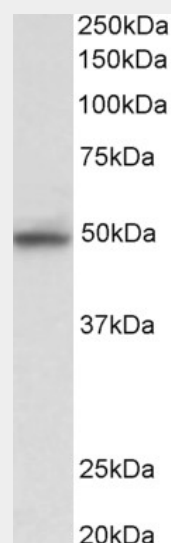
Cytoplasm. Nucleus. Note=Colocalizes with POU5F1 in the nucleus.
{ECO:0000250|UniProtKB:Q9WTU6}

MAPK9 / JNK2 alpha (aa217-230) Antibody (internal region) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MAPK9 / JNK2 alpha (aa217-230) Antibody (internal region) - Images



AF3716a (0.03 µg/ml) staining of HeLa lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

MAPK9 / JNK2 alpha (aa217-230) Antibody (internal region) - Background

This antibody is expected to recognize isoforms alpha1, alpha 2. and gamma (NP_620707.1; NP_002743.3; NP_001128516.1).

MAPK9 / JNK2 alpha (aa217-230) Antibody (internal region) - References

Diverse functions of JNK signaling and c-Jun in stress response and apoptosis. Leppä S, Bohmann D. Oncogene. 1999 Nov 1;18(45):6158-62. PMID: 10557107