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# MAPK9 / JNK2 beta (aa217-230) Antibody (internal region)

**Peptide-affinity purified goat antibody**
**Catalog # AF3717a**

## Specification

### MAPK9 / JNK2 beta (aa217-230) Antibody (internal region) - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | P45984 |
| Other Accession | NP_620708.1, NP_620709.1, 5601, 26420 (mouse), 50658 (rat) |
| Reactivity | **Human, Mouse** |
| Predicted | **Rat, Pig, Dog** |
| Host | **Goat** |
| Clonality | **Polyclonal** |
| Concentration | **0.5 mg/ml** |
| Isotype | **IgG** |
| Calculated MW | **48139** |

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

### MAPK9 / JNK2 beta (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:<a href="http://www.uniprot.org/citations/22441692" target="_blank">22441692</a>). Phosphorylates POU5F1, which results in the inhibition of POU5F1's transcriptional activity and enhances its proteasomal degradation (By similarity).

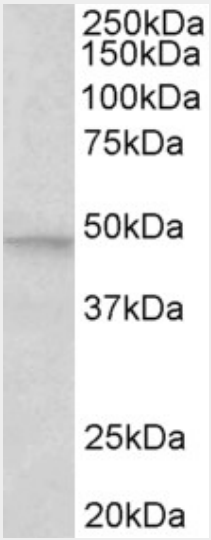
**Cellular Location**
Cytoplasm. Nucleus. Note=Colocalizes with POU5F1 in the nucleus. {ECO:0000250|UniProtKB:Q9WTU6}

## MAPK9 / JNK2 beta (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 Cytomety
- Cell Culture

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



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AF3717a (0.5 µg/ml) staining of Human Cerebellum lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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

This antibody is expected to recognize isoforms beta1 and beta 2 (NP_620708.1; NP_620709.1).

**MAPK9 / JNK2 beta (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