

MAPK9 / JNK2 / SAPK Antibody (clone 1C1-3A8)
Mouse Monoclonal Antibody
Catalog # ALS14413**Specification**

MAPK9 / JNK2 / SAPK Antibody (clone 1C1-3A8) - Product Information

| | |
|-------------------|------------------------|
| Application | WB |
| Primary Accession | P45984 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Calculated MW | 48kDa KDa |

MAPK9 / JNK2 / SAPK Antibody (clone 1C1-3A8) - 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

Target/Specificity

Human JNK2

Reconstitution & Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

MAPK9 / JNK2 / SAPK Antibody (clone 1C1-3A8) is for research use only and not for use in diagnostic or therapeutic procedures.

MAPK9 / JNK2 / SAPK Antibody (clone 1C1-3A8) - 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 (PubMed: [10376527](http://www.uniprot.org/citations/10376527), PubMed: [15805466](http://www.uniprot.org/citations/15805466), PubMed: [17525747](http://www.uniprot.org/citations/17525747), PubMed: [19675674](http://www.uniprot.org/citations/19675674), PubMed: [20595622](http://www.uniprot.org/citations/20595622), PubMed: [21364637](http://www.uniprot.org/citations/21364637), PubMed: [22441692](http://www.uniprot.org/citations/22441692)).

href="http://www.uniprot.org/citations/34048572" target="_blank">34048572). 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 (PubMed:10376527, PubMed:15805466, PubMed:17525747, PubMed:19675674, PubMed:20595622, PubMed:21364637, PubMed:22441692, PubMed:34048572). 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 (PubMed:10376527). In response to oxidative or ribotoxic stresses, inhibits rRNA synthesis by phosphorylating and inactivating the RNA polymerase 1-specific transcription initiation factor RRN3 (PubMed:15805466). Promotes stressed cell apoptosis by phosphorylating key regulatory factors including TP53 and YAP1 (PubMed:17525747, PubMed:21364637). In T-cells, MAPK8 and MAPK9 are required for polarized differentiation of T-helper cells into Th1 cells (PubMed:19290929). Upon T-cell receptor (TCR) stimulation, is activated by CARMA1, BCL10, MAP2K7 and MAP3K7/TAK1 to regulate JUN protein levels (PubMed:19290929). Plays an important role in the osmotic stress- induced epithelial tight-junctions disruption (PubMed:20595622). When activated, promotes beta-catenin/CTNNB1 degradation and inhibits the canonical Wnt signaling pathway (PubMed:19675674). Also participates in neurite growth in spiral ganglion neurons (By similarity). 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). Phosphorylates ALKBH5 in response to reactive oxygen species (ROS), promoting ALKBH5 sumoylation and inactivation (PubMed:34048572).

Cellular Location

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

Volume

50 µl

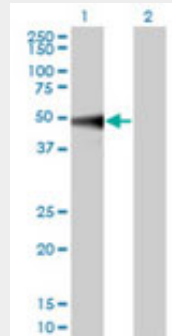
MAPK9 / JNK2 / SAPK Antibody (clone 1C1-3A8) - Protocols

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 / SAPK Antibody (clone 1C1-3A8) - Images



Western blot of MAPK9 expression in transfected 293T cell line by MAPK9 monoclonal antibody ALS14413

MAPK9 / JNK2 / SAPK Antibody (clone 1C1-3A8) - Background

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MAPK9 / JNK2 / SAPK Antibody (clone 1C1-3A8) - References

Sluss H.K.,et al.Mol. Cell. Biol. 14:8376-8384(1994).
Kallunki T.,et al.Genes Dev. 8:2996-3007(1994).
Gupta S.,et al.EMBO J. 15:2760-2770(1996).
Wang P.,et al.BMB Rep. 43:738-743(2010).
Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.