

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. 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}

Volume

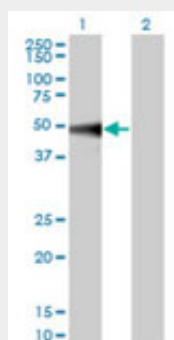
50 µl

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

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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.