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MAPK9 / JNK2 / SAPK Antibody (aa373-389)

Rabbit Polyclonal Antibody
Catalog # ALS12094

Specification

MAPK9 / JNK2 / SAPK Antibody (aa373-389) - Product Information

Application	**IHC**
Primary Accession	P45984
Reactivity	**Human, Rabbit, Pig, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**48kDa KDa**

MAPK9 / JNK2 / SAPK Antibody (aa373-389) - 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
A synthetic peptide corresponding to amino acids 373-389 (KDQPSDAAVSSNATPSQ) of human JNK2 was used as immunogen. This amino acid sequence is 100% homologous in cow and dog, and 94% in mouse and rat.

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
MAPK9 / JNK2 / SAPK Antibody (aa373-389) is for research use only and not for use in diagnostic or therapeutic procedures.

MAPK9 / JNK2 / SAPK Antibody (aa373-389) - 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 / SAPK Antibody (aa373-389) - 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 / SAPK Antibody (aa373-389) - Images



Anti-MAPK9 / JNK2 antibody IHC of human brain-cortex.

MAPK9 / JNK2 / SAPK Antibody (aa373-389) - Background

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MAPK9 / JNK2 / SAPK Antibody (aa373-389) - References

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