

Rabbit MAPK9 Polyclonal Antibody | anti-MAPK9 antibody

MAPK9 Antibody

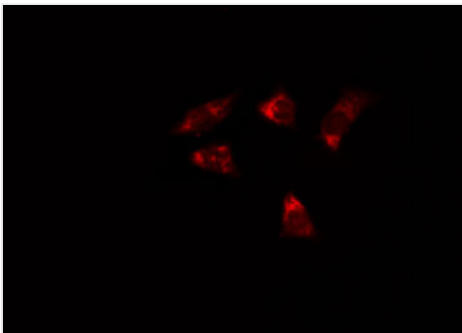
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323394	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

MAPK9; Polyclonal Antibody; MAPK9 Antibody; c Jun kinase 2; C Jun N terminal kinase 2; c-Jun N-terminal kinase 2; JNK 55; JNK-55; JNK2 alpha; JNK2; JNK2 beta; JNK2A; JNK2alpha; JNK2B; JNK2BETA; Jun kinase; MAP kinase 9; MAPK 9; Mapk9; Mitogen activated protein kinase 9; Mitogen-activated protein kinase 9; MK09_HUMAN; P54a; p54aSAPK; PRKM9; Protein kinase; mitogen-activated; 9; SAPK alpha; SAPK; SAPK1a; Stress activated protein kinase 1a; Stress-activated protein kinase JNK2; anti-MAPK9 antibody

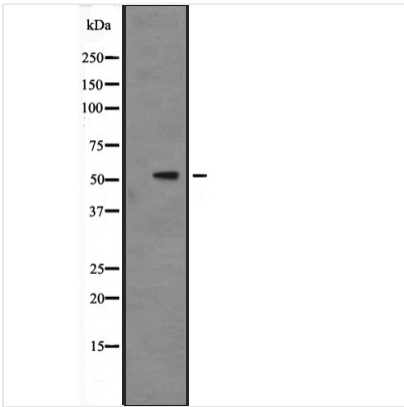
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MAPK9 antibody detects endogenous levels of total MAPK9
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	242
Applicable Applications for anti-MAPK9 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Nucleus
Conjugation	Unconjugated



IF (Immunofluorescence)

AAA323394 staining A549 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)

Western blot analysis of MAPK9 expression in Hela cell lysate, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-MAPK9 antibody

Description: Responds to activation by environmental stress and pro-inflammatory cytokines by phosphorylating a number of transcription factors, primarily components of AP-1 such as c-Jun and ATF2 and thus regulates AP-1 transcriptional activity. In T-cells, JNK1 and JNK2 are required for polarized differentiation of T-helper cells into Th1 cells.; JNK2 isoforms display different binding patterns: alpha-1 and alpha-2 preferentially bind to c-Jun, whereas beta-1 and beta-2 bind to ATF2. However, there is no correlation between binding and phosphorylation, which is achieved at about the same efficiency by all isoforms. JUNB is not a substrate for JNK2 alpha-2, and JUND binds only weakly to it.

Function: Serine/threonine-protein kinase involved in various processes such as cell proliferation, differentiation, migration, transformation and programmed cell death. Extracellular stimuli such as proinflammatory 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-ARNTL/BMAL1 heterodimer and plays a role in the regulation of the circadian clock (PubMed:22441692).

Subunit Structure: Interacts with MECOM (By similarity). Interacts with DCLK2 (By similarity). Binds to at least four scaffolding proteins, MAPK8IP1/JIP-1, MAPK8IP2/JIP-2, MAPK8IP3/JIP-3/JSAP1 and SPAG9/MAPK8IP4/JIP-4. These proteins also bind other components of the JNK signaling pathway (By similarity). Interacts with NFATC4 (PubMed:17875713). Interacts with ATF7; the interaction does not phosphorylate ATF7 but acts as a docking site for ATF7-associated partners such as JUN (PubMed:10376527). Interacts with BCL10 (PubMed:17189706). Interacts with CTNNB1 and GSK3B (PubMed:19675674). Interacts with MAPKBP1 (PubMed:28089251).

Post-translational Modifications: Dually phosphorylated on Thr-183 and Tyr-185 by MAP2K7 and MAP2K4, which activates the enzyme. Autophosphorylated in vitro.

Similarity: The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases. Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	205277412
NCBI GeneID	5601
NCBI Accession #	NP_001128516.1
NCBI GenBank Nucleotide #	NM_001135044.1

UniProt Accession #	P45984; Q15708; Q15710; Q15711; Q8N5C5; A8K0S3; B5BU66; B5M0B4; D3DWQ8; D3DWQ9
Molecular Weight	Observed: 54 kDa Predicted: 49 kDa
NCBI Official Full Name	mitogen-activated protein kinase 9 isoform JNK2 gamma
NCBI Official Synonym Full Names	mitogen-activated protein kinase 9
NCBI Official Symbol	MAPK9
NCBI Official Synonym Symbols	JNK2; SAPK; p54a; JNK2A; JNK2B; PRKM9; JNK-55; SAPK1a; JNK2BETA; p54aSAPK; JNK2ALPHA
NCBI Protein Information	mitogen-activated protein kinase 9
UniProt Protein Name	Mitogen-activated protein kinase 9
UniProt Gene Name	MAPK9
UniProt Synonym Gene Names	JNK2; PRKM9; SAPK1A; MAP kinase 9; MAPK 9; SAPK1a

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/mapk9-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/323394>