

Mouse anti-Human, Rat p38 alpha Monoclonal Antibody | anti-MAPK14 antibody

p38 alpha (MAP Kinase) Antibody: Biotin

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103279	Mouse	Human, Rat	ELISA, Immunoprecipitation, Western Blot

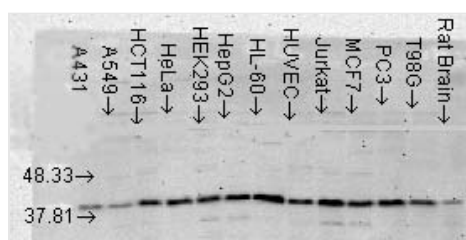
PRODUCT SYNONYMS

p38 alpha; Monoclonal Antibody; p38 alpha (MAP Kinase) Antibody: Biotin; CSAID Binding protein 1; CSBP1; CSBP2; EXIP; MAP kinase MXI2; MAPkinase p38alpha; MAPK14; p38 ALPHA; p38 MAP kinase; p38 mitogen activated protein kinase; RK; SAPK 2A; Stress activated protein kinase 2A; anti-MAPK14 antibody

PRODUCT SPECIFICATIONS

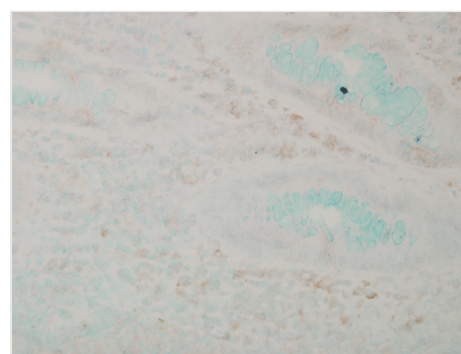
Host	Mouse
Reactivity	Human, Rat
Clonality	Monoclonal
Isotype	IgG1
Clone Number	9F12
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	360
Applicable Applications for anti-MAPK14 antibody	ELISA, IP (Immunoprecipitation), WB (Western Blot)
Conjugate	Biotin
Storage Buffer	PBS, 50% glycerol, 0.09% sodium azide
Preparation and Storage	-20 degree C

IMAGES



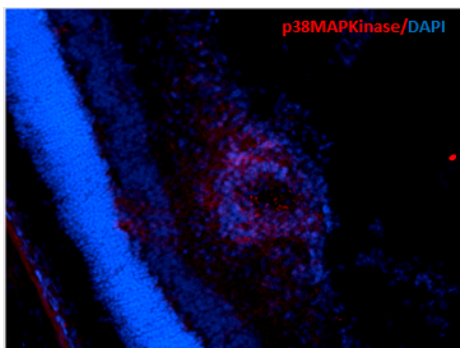
WB (Western Blot)

Western Blot analysis of Human Cell lysates showing detection of p38 MAPK protein using Mouse Anti-p38 MAPK Monoclonal Antibody, Clone 9F12. Load: 15 ug. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-p38 MAPK Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-p38 MAPK Monoclonal Antibody, Clone 9F12. Tissue: colon carcinoma. Species: Human. Fixation: Formalin. Primary Antibody: Mouse Anti-p38 MAPK Monoclonal Antibody at 1:10000 for 12 hours at 4 degree C. Secondary Antibody: Biotin Goat Anti-Mouse at 1:2000 for 1 hour at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200 ul for 2 minutes at RT. Magnification: 40x.



IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-p38 MAPK Monoclonal Antibody, Clone 9F12. Tissue: Retinal Injury Model. Species: Mouse. Primary Antibody: Mouse Anti-p38 MAPK Monoclonal Antibody at 1:1000. Secondary Antibody: Alexa Fluor 594 Goat Anti-Mouse (red). Courtesy of: Dr. Rajashekhar Gangaraju, University of Indiana, Department of Ophthalmology, Eugene and Marilyn Glick Eye Institute.

ADDITIONAL INFORMATION

Related Product Information for anti-MAPK14 antibody	Background Info: Detects a ~38kDa protein corresponding to the molecular mass of p38alpha MAPK on SDS PAGE immunoblots. Scientific Background: The MAPK (mitogen activated protein kinase) comprises a family of ubiquitous praline-directed, proteinserine/ threonine kinases which signal transduction pathways that control intracellular events including acute responses to hormones and major developmental changes in organisms (1). This super family consists of stress activated protein kinases (SAPKs); extracellular signal-regulated kinases (ERKs); and p38 kinases, each of which forms a separate pathway (2). The kinase members that populate each pathway are sequentially activated by phosphorylation. Upon activation, p38 MAPK/SAPK2alpha translocates into the nucleus where it phosphorylates one or more nuclear substrates, effecting transcriptional changes and other cellular processes involved in cell growth, division, differentiation, inflammation, and death (3). Specifically p38 always acts as a pro-apoptotic factor with its activation leading to the release of cytochrome c from mitochondria and cleavage of caspase 3 and its downstream effector, PARP (4). p38 MAPK is activated by a variety of chemical stress inducers including hydrogen peroxide, heavy metals, anisomycin, sodium salicylate, LPS, and biological stress signals such as tumor necrosis factor, interleukin-1, ionizing and UV irradiation, hyperosmotic stress and chemotherapeutic drugs (5). As a result, p38 alpha has been widely validated as a target for inflammatory disease including rheumatoid arthritis, COPD and psoriasis (6) and has also been implicated in cancer, CNS and diabetes (7).
Product Categories/Family for anti-MAPK14 antibody	Cell Signaling; Phosphorylation
References	1. Pearson, G. et al (2001). Endocrine Reviews 22 (2):153-183. 2. Fan, Y. et al (2007) Mol. Cells 23 (1): 30-38. 3. Han, J. et al. (1994) Science 265: 808-811. 4. Van, L. A., et al. (2004) Faseb J. 18: 1946-1948. 5. Deng et al. (2003) Cell. 115: 61-70. 6. Salojin KV, et al. (2006) J Immunol. 176 (3):1899- 907. 7. Medicherla S. et al. (2006). J Pharmacol Exp Ther. 318(1): 99-107.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503069
NCBI GeneID	1432
NCBI Accession #	NP_001306.1
NCBI GenBank Nucleotide #	NM_001315.2
UniProt Accession #	Q16539 ; O60776 ; Q13083 ; Q14084 ; Q8TDX0 ; A6ZJ92 ; A8K6P4 ; B0LPH0
Molecular Weight	35,453 Da
NCBI Official Full Name	mitogen-activated protein kinase 14 isoform 1
NCBI Official Synonym Full Names	mitogen-activated protein kinase 14

NCBI Official Symbol	MAPK14
NCBI Official Synonym Symbols	RK; p38; CSBP; EXIP; Mxi2; CSBP1; CSBP2; CSPB1; PRKM14; PRKM15; SAPK2A; p38ALPHA
NCBI Protein Information	mitogen-activated protein kinase 14; MAP kinase 14; p38alpha Exip; p38 MAP kinase; MAP kinase Mxi2; MAP kinase p38 alpha; CSAID-binding protein; Csaids binding protein; MAX-interacting protein 2; stress-activated protein kinase 2A; p38 mitogen activated protein kinase; mitogen-activated protein kinase p38 alpha; cytokine suppressive anti-inflammatory drug binding protein; cytokine suppressive anti-inflammatory drug-binding protein
UniProt Protein Name	Mitogen-activated protein kinase 14
UniProt Gene Name	MAPK14
UniProt Synonym Gene Names	CSBP; CSBP1; CSBP2; CSPB1; MXI2; SAPK2A; MAP kinase 14; MAPK 14; CSAID-binding protein; CSBP; MAP kinase p38 alpha; SAPK2a
UniProt Entry Name	MK14_HUMAN

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://www.aaabiotech.com/monoclonal/p38-alpha-antibody-clone-9f12-immunoprecipitation-western-blot-elisa/103279>