

Mouse anti-Human p38 Monoclonal Antibody | anti-MAPK14 antibody

Anti-p38 Antibody, Mouse Monoclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA254356	Mouse	Human	Immunofluorescence, Immunocytochemistry, Immunohistochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

p38; Monoclonal Antibody; Anti-p38 Antibody; Mouse Monoclonal; p38 alpha/MAPK14 Antibody; Mouse MAb; mitogen-activated protein kinase 14; Anti-CSBP Antibody; Anti-CSBP1 Antibody; Anti-CSBP2 Antibody; Anti-CSPB1 Antibody; Anti-EXIP Antibody; Anti-Mxi2 Antibody; Anti-p38ALPHA Antibody; Anti-PRKM14 Antibody; Anti-PRKM15 Antibody; Anti-RK Antibody; Anti-SAPK2A Antibody; anti-MAPK14 antibody

PRODUCT SPECIFICATIONS

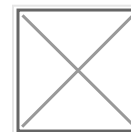
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Number	07
Specificity	Human p38 alpha/MAPK14
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-MAPK14 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant Human p38 alpha/MAPK14 Protein
Conjugation	Unconjugated
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human p38 alpha/MAPK14 (rh p38 alpha/MAPK14). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



IF (Immunofluorescence)

Immunofluorescence staining of MAPK14 in Hela cells. Cells were fixed with 4% PFA, permeabilized with 0.1% Triton X-100 in PBS, blocked with 10% serum, and incubated with mouse anti-human MAPK14 monoclonal antibody (dilution ratio 1:60) at 4 degree C overnight. Then cells were stained with the Alexa Fluor488-conjugated Goat Anti-mouse IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to Nucleus.



WB (Western Blot)

Anti-MAPK14 mouse monoclonal antibody at 1:500 dilution Lane A: Jurkat Whole Cell Lysate Lane B: A431 Whole Cell Lysate Lane C: MCF7 Whole Cell Lysate Lane D: HepG2 Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Mouse IgG (H+L)/HRP at 1/10000 dilution. Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 41 kDa Observed band size: 41 kDa (We are unsure as to the identity of these extra bands).

**IHC (Immunohistochemistry)**

Immunochemical staining of human MAPK14 in human stomach with mouse monoclonal antibody (1:100, formalin-fixed paraffin embedded sections).

**IHC (Immunohistochemistry)**

Immunochemical staining of human MAPK14 in human placenta with mouse monoclonal antibody (1:100, formalin-fixed paraffin embedded sections).

**IHC (Immunohistochemistry)**

Immunochemical staining of human MAPK14 in human brain with mouse monoclonal antibody (1:100, formalin-fixed paraffin embedded sections).

ADDITIONAL INFORMATION

Related Product Information for anti-MAPK14 antibody	MAPK14 contains 1 protein kinase domain and belongs to the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation, and development. MAPK14 can be detected in the brain, heart, placenta, pancreas, and skeletal muscle and it is expressed to a lesser extent in the lung, liver, and kidney. MAPK14 is activated by various environmental stresses and proinflammatory cytokines. The activation requires its phosphorylation by MAP kinase kinases (MKKs), or its autophosphorylation triggered by the interaction of MAP3K7IP1/TAB1 protein with MAPK14. The substrates of p38 alpha include transcription regulator ATF2, MEF2C, and MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of p38 alpha in stress-related transcription and cell cycle regulation, as well as in genotoxic stress response. In response to activation by environmental stress, pro-inflammatory cytokines, and lipopolysaccharide, MAPK14 phosphorylates some transcription factors, such as ELK1 and ATF2, and several downstream kinases, such as MAPKAPK2 and MAPKAPK5. MAPK14 plays a critical role in the production of some cytokines, for example, IL-6. It may play a role in the stabilization of EPO mRNA during hypoxic stress. Isoform Mxi2 activation is stimulated by mitogens and oxidative stress and only poorly phosphorylates ELK1 and ATF2.
Product Categories/Family for anti-MAPK14 antibody	Non-Canonical Wnt Pathway
References	Luo X, et al. (2011) Study on p38 mitogen activated protein kinase in vascular endothelial cells dysfunction in preeclampsia. Zhonghua Fu Chan Ke Za Zhi. 46(1):36-40.Park CH, et al. (2011) Epidermal growth factor-induced matrix metalloproteinase-1 expression is negatively regulated by p38 MAPK in human skin fibroblasts. J Dermatol Sci. 64(2):134-41.Lee JY, et al. (2011) Curcumin induces EGFR degradation in lung adenocarcinoma and modulates p38 activation in intestine: the versatile adjuvant for gefitinib therapy. PLoS One. 6(8):e23756.Riis JL, et al. (2011) CCL27 expression is regulated by both p38 MAPK and IKKbeta signalling pathways. Cytokine. 56(3):699-707.

NCBI AND UNIPROT INFORMATION

NCBI GI #	194578900
NCBI GeneID	1432
NCBI Accession #	NP_620581.1
NCBI GenBank Nucleotide #	NM_139012
UniProt Accession #	Q16539 ; O60776 ; Q13083 ; Q14084 ; Q8TDX0 ; A6ZJ92 ; A8K6P4 ; B0LPH0
Molecular Weight	~65 kDa
NCBI Official Full Name	Homo sapiens mitogen-activated protein kinase 14 (MAPK14), transcript variant 2, mRNA
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 p
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://stage.aaabiotech.com/monoclonal/p38-antibody-clone-07-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/254356>