

Rabbit p38 alpha/MAPK14 Polyclonal Antibody | anti-MAPK14 antibody

Anti-p38 alpha/MAPK14 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125972	Rabbit	Human, Mouse, Rat	Western Blot, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

p38 alpha/MAPK14; Polyclonal Antibody; Anti-p38 alpha/MAPK14 Antibody Picoband; anti-MAPK14 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-MAPK14 antibody	WB (Western Blot), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	A synthetic peptide corresponding to a sequence of human p38 alpha/MAPK14 (KSLTYDEVISFVPPPLDQE).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of 293T cells using anti-P38 Alpha/MAPK14 antibody (AAA125972). Overlay histogram showing 293T cells stained with AAA125972 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-P38 Alpha/MAPK14 Antibody (AAA125972, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of P38 Alpha/MAPK14 using anti-P38 Alpha/MAPK14 antibody (AAA125972). P38 Alpha/MAPK14 was detected in an immunocytochemical section of Caco-2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-P38 Alpha/MAPK14 Antibody (AAA125972) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of P38 Alpha/MAPK14 using anti-P38 Alpha/MAPK14 antibody (AAA125972). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Jurkat whole cell lysates, Lane 2: human SW620 whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: rat lung tissue lysates, Lane 5: rat heart tissue lysates, Lane 6: mouse lung tissue lysates, Lane 7: mouse heart tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-P38 Alpha/MAPK14 antigen affinity purified polyclonal antibody (#AAA125972) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for P38 Alpha/MAPK14 at approximately 41 kDa. The expected band size for P38 Alpha/MAPK14 is at 41 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-MAPK14 antibody	Mitogen-activated protein kinase 14, also called p38-alpha, is an enzyme that in humans is encoded by the MAPK14 gene. The protein encoded by this gene is a member of 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. This kinase 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 this kinase. The substrates of this kinase include transcription regulator ATF2, MEF2C, and MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of this kinase in stress related transcription and cell cycle regulation, as well as in genotoxic stress response. Four alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.
Product Categories/Family for anti-MAPK14 antibody	Primary Antibodies , Rabbit Polyclonal Antibodies

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	41,293 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 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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
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