

Rabbit p38alpha MAP Kinase Polyclonal Antibody | anti-Mapk14 antibody

p38alpha MAP Kinase (Tyr-323), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71695	Rabbit	Human, Rat, Mouse, Chicken	Immunocytochemistry, ELISA, Western Blot

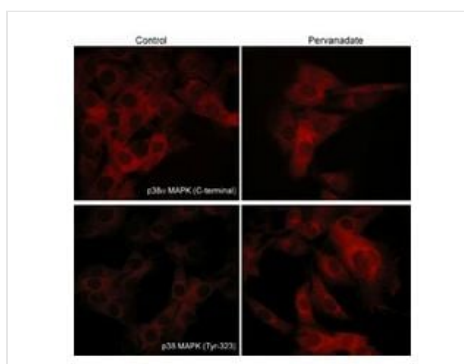
PRODUCT SYNONYMS

p38alpha MAP Kinase; Polyclonal Antibody; p38alpha MAP Kinase (Tyr-323); phospho-specific Antibody; phospho-specific; p 38 Tyr-323; anti-Mapk14 antibody

PRODUCT SPECIFICATIONS

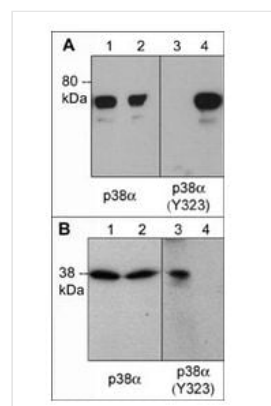
Host	Rabbit
Reactivity	Human, Rat, Mouse, Chicken
Clonality	Polyclonal
Specificity	This antibody was cross-adsorbed to a phospho-tyrosine peptide before affinity purification using phospho-p38alpha (Tyr-323) peptide (without carrier). The antibody detects a 38kDa* band corresponding to p38alpha on SDS-PAGE immunoblots of human Jurkat, K562, and mouse macrophage (J774A.1) cells treated with pervanadate. In addition, the antibody detects recombinant p38 MAP Kinase when treated with Fyn kinase (The in vitro kinase model was kindly provided by Dr. Paul Mittelstadt from the Laboratory of Immune Cell Biology at the NCI.)
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-Mapk14 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Phospho-p38alpha MAP Kinase (Tyr-323) synthetic peptide (coupled to KLH) corresponding to amino acid residues surrounding tyrosine 323 in mouse p38alpha. This peptide sequence is highly conserved in human and rat p38alpha, and has high homology to the conserved site in p38beta.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of p38 MAPK in pervanadate-treated mouse C2C12. The cells were labeled with mouse monoclonal p38alpha MAPK and rabbit polyclonal p38 MAPK (Tyr-323) antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3.



WB (Western Blot)

A) Western blot image of GST-recombinant p38 (K53M) mutant kinase untreated (lanes 1 & 3) or treated with Fyn kinase (lanes 2 & 4). B) Western blot analysis of p38 phosphorylation in mouse macrophages stimulated with 1mM pervanadate for 30 min. (lanes 1 & 3) then the blot was treated with alkaline phosphatase (lanes 2 & 4). Both blots were probed with anti-p38alpha (a.a. 319-328) (lanes 1 & 2) or anti-p38alpha (Tyr-323) (lanes 3 & 4).

ADDITIONAL INFORMATION

Related Product Information for anti-Mapk14 antibody	p38 MAP kinase (MAPK), also called RK, CSBP, and SAPK2a, is the mammalian orthologue of the yeast HOG kinase. This family of kinases participates in signaling cascades that control cellular responses to cytokines and stress. Four isoforms of p38 MAPK (alpha, beta, gamma, delta) have been identified. Similar to the SAPK/JNK pathway, p38 MAPK is activated by a variety of cellular stresses including osmotic shock, inflammatory cytokines, lipopolysaccharides, UV light, and growth factors. MKK3 and SEK activate p38 MAPK by dual phosphorylation at Thr-180/Tyr-182. Activated p38 MAPK has been shown to phosphorylate and activate MAPKAP kinase 2 and to phosphorylate the transcription factors ATF-2, Max and MEF2. T cells possess an alternative pathway for p38 activation where stimulation of the antigen receptor (TCR) induces phosphorylation of p38 on Tyr-323. This site is required for TCR-mediated phosphorylation of Thr-180 and catalytic activity. Thus, Tyr-323 may also have important roles in regulating p38 MAP kinase pathways.
References	Jirmanova, L. et al. (2009) Blood 113(10):2229. Salvador, J.M. et al. (2005) Nat Immunol. 6(4):390. Han, J. et al. (1994) Science 265:808. Lee, J. C. et al. (1994) Nature 372:739.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1346566
NCBI GeneID	26416
UniProt Accession #	P47811; O08666; Q3U6R5; Q3UZS3; Q8C289; Q9JLV8; Q9QZ80; B2KF37; B2KF38
Molecular Weight	32,327 Da
NCBI Official Full Name	Mitogen-activated protein kinase 14
NCBI Official Synonym Full Names	mitogen-activated protein kinase 14
NCBI Official Symbol	Mapk14
NCBI Official Synonym Symbols	p38; Crk1; Mxi2; p38a; CSBP2; Csbp1; PRKM14; PRKM15; p38MAPK; p38alpha; p38-alpha
NCBI Protein Information	mitogen-activated protein kinase 14
UniProt Protein Name	Mitogen-activated protein kinase 14
UniProt Gene Name	Mapk14
UniProt Synonym Gene Names	Crk1; Csbp1; Csbp2; MAP kinase 14; MAPK 14; MAP kinase p38 alpha

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.