

Rabbit anti-Human, Mouse MAPKAPK5 Polyclonal Antibody | anti-MAPKAPK5 antibody

MAPKAPK5 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321254	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

MAPKAPK5; Polyclonal Antibody; MAPKAPK5 Antibody; MAP kinase-activated protein kinase 5; MAPK-activated protein kinase 5; MAPK5_HUMAN; MAPKAP kinase 5; MAPKAPK-5; Mitogen activated protein kinase activated protein kinase 5; p38-regulated/activated protein kinase; PRAK; anti-MAPKAPK5 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	MAPKAPK5 antibody detects endogenous levels of MAPKAPK5
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	471
Applicable Applications for anti-MAPKAPK5 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MAPKAPK5
Subcellular Location	Cytoplasm. Nucleus. Also observed in the nucleus.
Tissue Specificity	Expressed ubiquitously.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA321254 staining Hela 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) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis on K562 cell lysate using MAPKAPK5 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-MAPKAPK5 antibody	Description: The protein encoded by this gene is a member of the serine/threonine kinase family. In response to cellular stress and proinflammatory cytokines, this kinase is activated through its phosphorylation by MAP kinases including MAPK1/ERK, MAPK14/p38-alpha, and MAPK11/p38-beta. In vitro, this kinase phosphorylates heat shock protein HSP27 at its physiologically relevant sites. Two alternately spliced transcript variants of this gene encoding distinct isoforms have been reported. Function: Tumor suppressor serine/threonine-protein kinase involved in mTORC1 signaling and post-transcriptional regulation. Phosphorylates FOXO3, ERK3/MAPK6, ERK4/MAPK4, HSP27/HSPB1, p53/TP53 and RHEB. Acts as a tumor suppressor by mediating Ras-induced senescence and phosphorylating p53/TP53. Involved in post-transcriptional regulation of MYC by mediating phosphorylation of FOXO3: phosphorylation of FOXO3 leads to promote nuclear localization of FOXO3, enabling expression of miR-34b and miR-34c, 2 post-transcriptional regulators of MYC that bind to the 3'UTR of MYC transcript and prevent MYC translation. Acts as a negative regulator of mTORC1 signaling by mediating phosphorylation and inhibition of RHEB. Part of the atypical MAPK signaling via its interaction with ERK3/MAPK6 or ERK4/MAPK4: the precise role of the complex formed with ERK3/MAPK6 or ERK4/MAPK4 is still unclear, but the complex follows a complex set of phosphorylation events: upon interaction with atypical MAPK (ERK3/MAPK6 or ERK4/MAPK4), ERK3/MAPK6 (or ERK4/MAPK4) is phosphorylated and then mediates phosphorylation and activation of MAPKAPK5, which in turn phosphorylates ERK3/MAPK6 (or ERK4/MAPK4). Mediates phosphorylation of HSP27/HSPB1 in response to PKA/PRKACA stimulation, inducing F-actin rearrangement. Subunit Structure: Interacts with ERK3/MAPK6 and ERK4/MAPK4 (via FRIEDE motif); the interaction is direct (By similarity). Interacts with YWHAE; the interaction prevents phosphorylation of HSP27/HSPB1 leading to disrupt F-actin polymerization. Interacts with SQSTM1. Post-translational Modifications: Phosphorylated on Thr-182 ERK3/MAPK6 or ERK4/MAPK4; which is the regulatory phosphorylation site and is located on the T-loop/loop 12, leading to activation. Phosphorylation at Thr-182 by p38-alpha/MAPK14, p38-beta/MAPK11 is subject to debate. Phosphorylated at Ser-115 by PKA/PRKACA, leading to localization to the cytoplasm. Autophosphorylated (By similarity). Similarity: Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	21237765
NCBI GeneID	8550
NCBI Accession #	NP_003659.2
NCBI GenBank Nucleotide #	NM_003668.3
UniProt Accession #	Q8IW41; O60491; Q86X46; Q9BVX9; Q9UG86; B3KVA5
Molecular Weight	Observed: 60 kDa Predicted: 55 kDa
NCBI Official Full Name	MAP kinase-activated protein kinase 5 isoform 1
NCBI Official Synonym Full Names	mitogen-activated protein kinase-activated protein kinase 5
NCBI Official Symbol	MAPKAPK5
NCBI Official Synonym Symbols	MK5; MK-5; PRAK; MAPKAP-K5
NCBI Protein Information	MAP kinase-activated protein kinase 5
UniProt Protein Name	MAP kinase-activated protein kinase 5
UniProt Gene Name	MAPKAPK5
UniProt Synonym Gene Names	PRAK; MAPK-activated protein kinase 5; MAPKAP kinase 5; MAPKAP-K5; MAPKAPK-5; MK-5; MK5; PRAK

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.