Rabbit MKK3/MKK6 Polyclonal Antibody | anti-MKK3/MKK6 antibody

Phospho-MKK3/MKK6 (Ser189/Ser207) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329323	**Rabbit**	**Human, Mouse, Rat**	**ELISA, Immunohistochemistry**

PRODUCT SYNONYMS

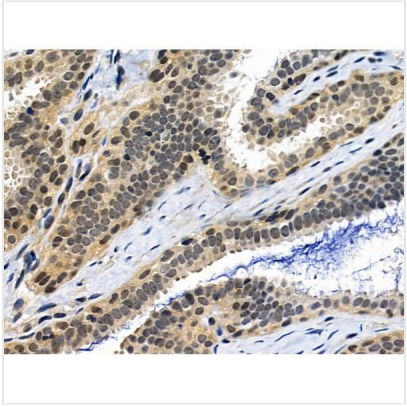
MKK3/MKK6; Polyclonal Antibody; Phospho-MKK3/MKK6 (Ser189/Ser207) Antibody; AW212142; dual specificity mitogen activated protein kinase kinase 3; Dual specificity mitogen-activated protein kinase kinase 3; MAP kinase kinase 3; map2k3; MAPK ERK kinase 3; MAPK/ERK kinase 3; MAPKK 3; MAPKK3; MEK 3; MEK3; Mitogen activated protein kinase kinase 3; MKK 3; MKK3; mMKK3b; MP2K3_HUMAN; PRKMK 3; PRKMK3; protein kinase; mitogen-activated; kinase 3; SAPK kinase 2; SAPKK 2; SAPKK2; Stress activated protein kinase kinase 2; Dual specificity mitogen activated protein kinase kinase 6; Dual specificity mitogen-activated protein kinase kinase 6; MAP kinase kinase 6; MAP2K6; MAPK/ERK kinase 6; MAPKK 6; MAPKK6; MEK 6; MEK6; Mitogen Activated Protein Kinase Kinase 6; MKK 6; MKK6; MP2K6_HUMAN; PRKMK6; Protein kinase mitogen activated kinase 6; kinase 6 (MAP kinase kinase 6); SAPK kinase 3; SAPKK-3; SAPKK3; SKK3; Stress-activated protein kinase kinase 3; anti-MKK3/MKK6 antibody

PRODUCT SPECIFICATIONS

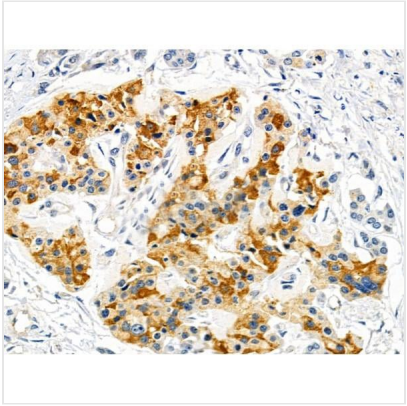
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-MKK3/MKK6 (Ser189/Ser207) Antibody detects endogenous levels of MKK3/MKK6 only when phosphorylated at Ser189/207. Tissue Specificity: Isoform 2 is only expressed in skeletal muscle. Isoform 1 is expressed in skeletal muscle, heart, and in lesser extent in liver or pancreas.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-MKK3/MKK6 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry)
Immunogen	A synthesized peptide derived from human MKK3/MKK6 around the phosphorylation site of Ser189/207.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Weakly autophosphorylated. Phosphorylated at Ser-207 and Thr-211 by the majority of M3Ks, such as MAP3K5/ASK1, MAP3K1/MEKK1, MAP3K2/MEKK2, MAP3K3/MEKK3, MAP3K4/MEKK4, MAP3K7/TAK1, MAP3K11/MLK3 and MAP3K17/TAOK2. Acetylation of Ser-207 and Thr-211 by Yersinia yopJ prevents phosphorylation and activation, thus blocking the MAPK signaling pathway.
Subunit Structure	Dimer. Interacts with Yersinia yopJ. Interacts (via its D domain) with its substrates MAPK11, MAPK12, MAPK13 and MAPK14 (By similarity). Interacts (via its DVD domain) with MAP3Ks activators like MAP3K5/ASK1, MAP3K1/MEKK1, MAP3K2/MEKK2, MAP3K3/MEKK3, MAP3K4/MEKK4, MAP3K7/TAK1, MAP3K11/MLK3 and MAP3K17/TAOK2 (By similarity). Interacts with DCTN1. Interacts with EIF2AK2/PKR.

Similarity	The DVD domain (residues 311-334) contains a conserved docking site and is found in the mammalian MAP kinase kinases (MAP2Ks). The DVD sites bind to their specific upstream MAP kinase kinase kinases (MAP3Ks) and are essential for activation.The D domain (residues 4-19) contains a conserved docking site and is required for the binding to MAPK substrates.Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.
Subcellular Location	Nucleus. Cytoplasm. Cytoplasm>Cytoskeleton. Note: Binds to microtubules.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

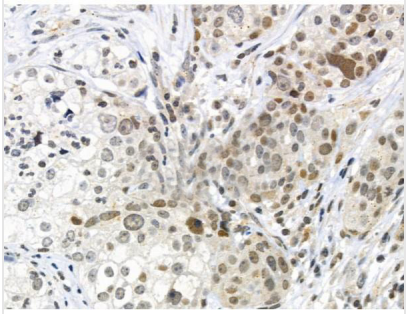
IMAGES



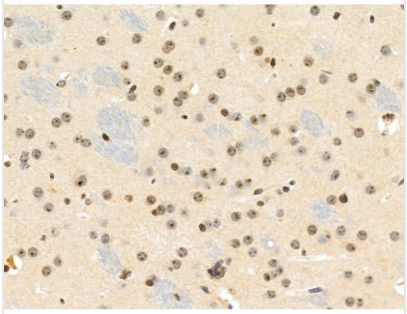
IHC (Immunohistochemistry)
At 1/100 staining Human mammary cancer and adjacent normal tissues by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemisry)
At 1/100 staining Human pancreatic cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohiostchemistry)
Staining Human ovarian cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)
At 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-MKK3/MKK6 antibody	Dual specificity protein kinase which acts as an essential component of the MAP kinase signal transduction pathway. With MAP3K3/MKK3, catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in the MAP kinases p38 MAPK11, MAPK12, MAPK13 and MAPK14 and plays an important role in the regulation of cellular responses to cytokines and all kinds of stresses. Especially, MAP2K3/MKK3 and MAP2K6/MKK6 are both essential for the activation of MAPK11 and MAPK13 induced by environmental stress, whereas MAP2K6/MKK6 is the major MAPK11 activator in response to TNF. MAP2K6/MKK6 also phosphorylates and activates PAK6. The p38 MAP kinase signal transduction pathway leads to direct activation of transcription factors. Nuclear targets of p38 MAP kinase include the transcription factors ATF2 and ELK1. Within the p38 MAPK signal transduction pathway, MAP3K6/MKK6 mediates phosphorylation of STAT4 through MAPK14 activation, and is therefore required for STAT4 activation and STAT4-regulated gene expression in response to IL-12 stimulation. The pathway is also crucial for IL-6-induced SOCS3 expression and down-regulation of IL-6-mediated gene induction; and for IFNG-dependent gene transcription. Has a role in osteoclast differentiation through NF-kappa-B transactivation by TNFSF11, and in endochondral ossification and since SOX9 is another likely downstream target of the p38 MAPK pathway. MAP2K6/MKK6 mediates apoptotic cell death in thymocytes. Acts also as a regulator for melanocytes dendricity, through the modulation of Rho family GTPases.

NCBI AND UNIPROT INFORMATION

NCBI GI #	21618347
NCBI GeneID	5606
NCBI Accession #	NP_002747.2
NCBI GenBank Nucleotide #	NM_002756.4
UniProt Accession #	P46734; Q99441; Q9UE71; Q9UE72; B3KSK7
Molecular Weight	39,318 Da
NCBI Official Full Name	dual specificity mitogen-activated protein kinase kinase 3 isoform A
NCBI Official Synonym Full Names	mitogen-activated protein kinase kinase 3
NCBI Official Symbol	MAP2K3
NCBI Official Synonym Symbols	MEK3; MKK3; MAPKK3; PRKMK3; SAPKK2; SAPKK-2
NCBI Protein Information	dual specificity mitogen-activated protein kinase kinase 3; MEK 3; MAPKK 3; SAPK kinase 2; MAPK/ERK kinase 3; MAP kinase kinase 3; stress-activated protein kinase kinase 2
UniProt Protein Name	Dual specificity mitogen-activated protein kinase kinase 3
UniProt Gene Name	**MAP2K3**
UniProt Synonym Gene Names	MEK3; MKK3; PRKMK3; SKK2; MAP kinase kinase 3; MAPKK 3; MEK 3; SAPK kinase 2; SAPKK-2; SAPKK2
UniProt Entry Name	MP2K3_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/polyclonal/mkk3-mkk6-antibody-peptide-elisa-immunohistochemistry-elisa/329323