

Rabbit MEK1/2 Polyclonal Antibody | anti-MEK1/2 antibody

Phospho-MEK1/2 (Ser218+Ser222/Ser222+Ser226) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329637	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

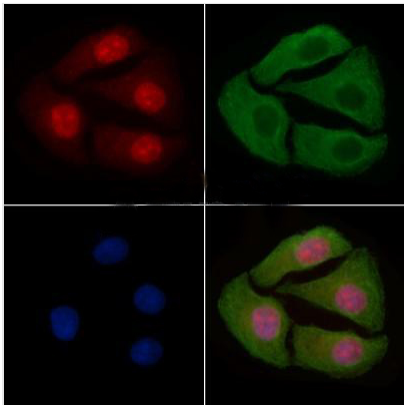
MEK1/2; Polyclonal Antibody; Phospho-MEK1/2 (Ser218+Ser222/Ser222+Ser226) Antibody; Dual specificity mitogen activated protein kinase kinase 1; Dual specificity mitogen-activated protein kinase kinase 1; ERK activator kinase 1; MAP kinase kinase 1; MAP kinase/Erk kinase 1; MAP2K1; MAPK/ERK kinase 1; MAPKK 1; MAPKK1; MEK 1; Mek1; MEKK1; Mitogen activated protein kinase kinase 1; MKK 1; MKK1; MP2K1_HUMAN; PRKMK1; Protein kinase mitogen activated kinase 1 (MAP kinase kinase 1); Protein kinase mitogen activated; kinase 1; Cardiofaciocutaneous syndrome; CFC syndrome; CFC4; Dual specificity mitogen activated protein kinase kinase 2; Dual specificity mitogen-activated protein kinase kinase 2; ERK activator kinase 2; FLJ26075; MAP kinase kinase 2; map2k2; MAPK/ERK kinase 2; MAPKK 2; MAPKK2; MEK 2; MEK2; Microtubule associated protein kinase kinase 2; Mitogen activated protein kinase kinase 2; Mitogen activated protein kinase kinase 2 p45; MKK 2; MKK2; MP2K2_HUMAN; OTTHUMP00000165826; OTTHUMP00000165827; PRKMK 2; PRKMK2; anti-MEK1/2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-MEK1/2 (Ser218+Ser222/Ser222+Ser226) Antibody detects endogenous levels of MEK1/2 only when phosphorylated at S218+S222 (MEK1)/S222+S226 (MEK2). Tissue Specificity: Widely expressed, with extremely low levels in brain.
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-MEK1/2 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MEK1/2 around the phosphorylation site of Ser218+Ser222/Ser222+Ser226.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	MAPKK is itself dependent on Ser/Thr phosphorylation for activity catalyzed by MAP kinase kinase kinases (RAF or MEKK1). Phosphorylated by MAP2K1/MEK1 (By similarity). Acetylation of Ser-222 and Ser-226 by Yersinia yopJ prevents phosphorylation and activation, thus blocking the MAPK signaling pathway.
Subunit Structure	Interacts with MORG1 (By similarity). Interacts with SGK1. Interacts with KSR1. Interacts with KSR1 and BRAF; the interaction with KSR1 mediates KSR1-BRAF dimerization. Interacts with GLS.
Similarity	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.

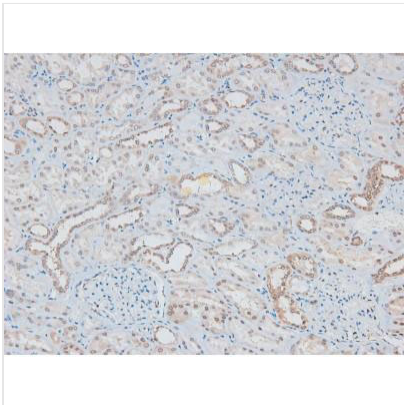
Subcellular Location	Cytoplasm. Membrane>Peripheral membrane protein. Note: Membrane localization is probably regulated by its interaction with KSR1.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



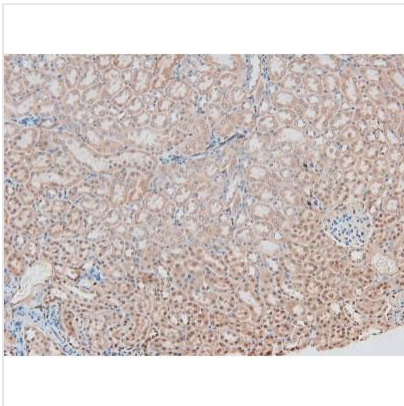
Application Data

At 25 degree C. Samples were then incubated with primary Ab(At 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI(blue).



IHC (Immunohistochemistry)

At 1/200 staining Human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



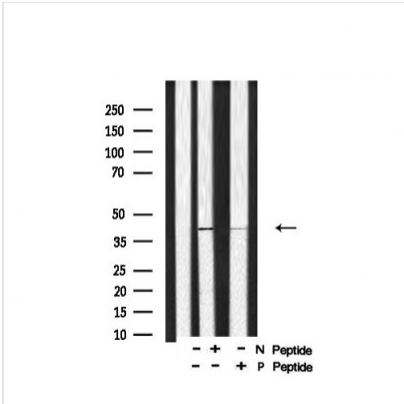
IHC (Immunohistochemisry)

At 1/200 staining Mouse kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



IHC (Immunohiostchemistry)

Staining Rat ganstric tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of MEK1/2 using Hela whole cell lysates.-/+ means absence or presence of N peptide¼non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-MEK1/2 antibody	Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates the ERK1 and ERK2 MAP kinases (By similarity). Activates BRAF in a KSR1 or KSR2-dependent manner; by binding to KSR1 or KSR2 releases the inhibitory intramolecular interaction between KSR1 or KSR2 protein kinase and N-terminal domains which promotes KSR1 or KSR2-BRAF dimerization and BRAF activation.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	5579478
NCBI GeneID	5604
NCBI Accession #	NP_002746.1
NCBI GenBank Nucleotide #	NM_002755.3
UniProt Accession #	Q02750; P36507
Molecular Weight	43,439 Da
NCBI Official Full Name	dual specificity mitogen-activated protein kinase kinase 1
NCBI Official Synonym Full Names	mitogen-activated protein kinase kinase 1
NCBI Official Symbol	MAP2K1
NCBI Official Synonym Symbols	MEK1; MKK1; MAPKK1; PRKMK1
NCBI Protein Information	dual specificity mitogen-activated protein kinase kinase 1; MEK 1; MAPKK 1; MAPK/ERK kinase 1; ERK activator kinase 1; protein kinase, mitogen-activated, kinase 1 (MAP kinase kinase 1)
UniProt Protein Name	Dual specificity mitogen-activated protein kinase kinase 1
UniProt Gene Name	MAP2K1
UniProt Synonym Gene Names	MEK1; PRKMK1; MAP kinase kinase 1; MAPKK 1; MKK1; MEK 1
UniProt Entry Name	MP2K1_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.