

Rabbit MKNK2 Polyclonal Antibody | anti-MKNK2 antibody

Phospho-MKNK2 (Thr249) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329734	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Sheep (100%), Dog (100%), Chicken (100%), Xenopus (100%)	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

MKNK2; Polyclonal Antibody; Phospho-MKNK2 (Thr249) Antibody; G protein coupled receptor kinase 7; GPRK7; MAP kinase interacting serine threonine kinase 2; MAP kinase interacting serine threonine kinase; MAP kinase interacting serine threonine protein kinase 2; MAP kinase signal integrating kinase 2; MAP kinase signal-integrating kinase 2; MAP kinase-interacting serine/threonine-protein kinase 2; MAPK interacting kinase 2; MAPK signal integrating kinase 2; Mitogen activated protein kinase interacting serine threonine kinase 2; Mknk2; MKNK2_HUMAN; Mnk2; Putative map kinase interacting kinase; anti-MKNK2 antibody

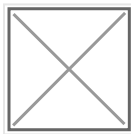
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Sheep (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-MKNK2 (Thr249) Antibody detects endogenous levels of MKNK2 only when phosphorylated at Thr249. Tissue Specificity: Ubiquitously expressed in all tissues examined. Isoform 2 is expressed at higher levels in the ovary than is isoform 1.
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-MKNK2 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MKNK2 around the phosphorylation site of Thr249.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Dual phosphorylation of Thr-244 and Thr-249 activates the kinase. Phosphorylation of Thr-379 activates the kinase. Phosphorylated upon arsenic trioxide As (2)O (3) treatment. Phosphorylated by MAPK1/ERK2, MAPK11 and MAPK14. Dephosphorylated by PP2A.
Subunit Structure	Monomer. Interacts with the C-terminal regions of EIF4G1 and EIF4G2; this interaction is promoted when MAPK pathways are repressed but repressed upon ERK proteins activation. Also binds to dephosphorylated MAPK3/ERK1 and MAPK1/ERK2. Isoform 1 interaction with phosphorylated MAPK3/ERK1 and MAPK1/ERK2 protects it from dephosphorylation and inactivation. Isoform 2 interacts with ESR2 and EIF4E in the nucleus.
Similarity	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family.
Subcellular Location	Nucleus>PML body. Cytoplasm.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



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 spleen 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 MNK2 (Phospho-Thr249) using Paclitaxel treated Jurkat whole cell lysates. -/+ means absence or presence of N peptide(1/4 non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-MKNK2 antibody	Serine/threonine-protein kinase that phosphorylates SFPQ/PSF, HNRNPA1 and EIF4E. May play a role in the response to environmental stress and cytokines. Appears to regulate translation by phosphorylating EIF4E, thus increasing the affinity of this protein for the 7-methylguanosine-containing mRNA cap. Required for mediating PP2A-inhibition-induced EIF4E phosphorylation. Triggers EIF4E shuttling from cytoplasm to nucleus. Isoform 1 displays a high basal kinase activity, but isoform 2 exhibits a very low kinase activity. Acts as a mediator of the suppressive effects of IFNgamma on hematopoiesis. Negative regulator for signals that control generation of arsenic trioxide As (2)O (3)-dependent apoptosis and anti-leukemic responses. Involved in anti-apoptotic signaling in response to serum withdrawal.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	40018631
NCBI GeneID	2872
NCBI Accession #	NP_060042.2
NCBI GenBank Nucleotide #	NM_017572.3
UniProt Accession #	Q9HBH9; Q6GPI3; Q9HBH8; Q9UHR0; Q9Y2N6
Molecular Weight	51,875 Da
NCBI Official Full Name	MAP kinase-interacting serine/threonine-protein kinase 2 isoform 1
NCBI Official Synonym Full Names	MAP kinase interacting serine/threonine kinase 2
NCBI Official Symbol	MKNK2
NCBI Official Synonym Symbols	MNK2; GPRK7
NCBI Protein Information	MAP kinase-interacting serine/threonine-protein kinase 2; MAPK signal-integrating kinase 2; G protein-coupled receptor kinase 7; MAP kinase signal-integrating kinase 2
UniProt Protein Name	MAP kinase-interacting serine/threonine-protein kinase 2
UniProt Gene Name	MKNK2
UniProt Synonym Gene Names	GPRK7; MNK2; MAPK signal-integrating kinase 2; Mnk2
UniProt Entry Name	MKNK2_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://stage.aaabiotech.com/polyclonal/mknk2-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/329734>