

Rabbit MSK2 Polyclonal Antibody | anti-MSK2 antibody

Phospho-MSK2 (Ser196) Antibody

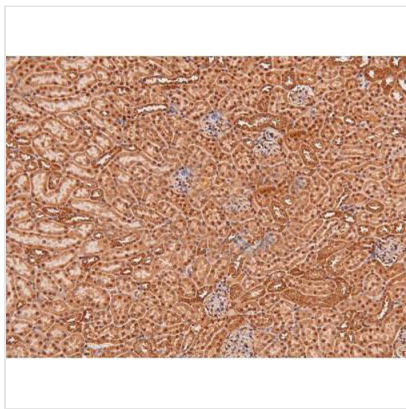
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329736	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (90%), Bovine (100%), Horse (100%), Sheep (100%), Dog (100%), Xenopus (80%)	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

MSK2; Polyclonal Antibody; Phospho-MSK2 (Ser196) Antibody; 90kDa ribosomal protein S6 kinase 4; EC 2.7.11.1; KS6A4_HUMAN; Mitogen and stress activated protein kinase 2; Nuclear mitogen and stress activated protein kinase 2; Nuclear mitogen- and stress-activated protein kinase 2; Ribosomal protein kinase B; Ribosomal protein S6 kinase 90kD polypeptide 4; Ribosomal protein S6 kinase 90kDa polypeptide 4; Ribosomal protein S6 kinase alpha 4; Ribosomal protein S6 kinase alpha-4; RPS6KA4; RSKB; S6K-alpha-4; anti-MSK2 antibody

PRODUCT SPECIFICATIONS

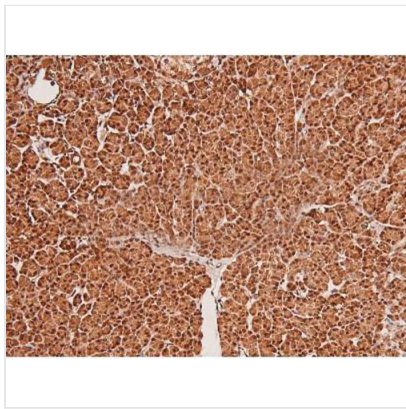
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (90%), Bovine (100%), Horse (100%), Sheep (100%), Dog (100%), Xenopus (80%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-MSK2 (Ser196) Antibody detects endogenous levels of MSK2 only when phosphorylated at Ser196.
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-MSK2 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MSK2 around the phosphorylation site of Ser196.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Ser-343 and Thr-568 phosphorylation is required for kinase activity. Ser-343 and Ser-196 are autophosphorylated by the C-terminal kinase domain, and their phosphorylation is essential for the catalytic activity of the N-terminal kinase domain. Phosphorylated at Ser-343, Thr-568 and Thr-687 by MAPK1/ERK2, MAPK3/ERK1 and MAPK14/p38-alpha. Autophosphorylated at Ser-737 and Ser-745 by the N-terminal kinase domain (By similarity).
Subunit Structure	Forms a complex with either MAPK1/ERK2 or MAPK3/ERK1 in quiescent cells which transiently dissociates following mitogenic stimulation. Also associates with MAPK14/p38-alpha. Activated RPS6KA4 associates with and phosphorylates the NF-kappa-B p65 subunit RELA.
Similarity	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase subfamily.
Subcellular Location	Nucleus.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



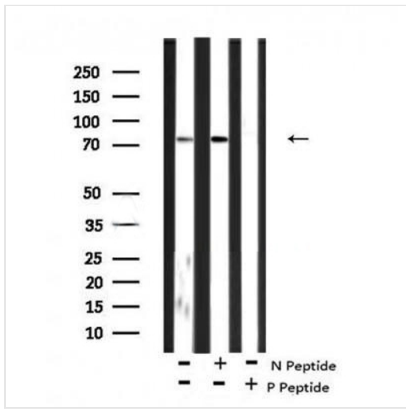
IHC (Immunohistochemistry)
At 1/200 staining Mouse kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated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



IHC (Immunohistochemistry)
At 1/200 staining Rat 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 (Immunohistochemistry)
Staining Human pancreas 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 MSK2 (Phospho-Ser196) using Etoposide treated 293 whole cell lysates. -/+ means absence or presence of N peptide (non-phospho peptide) and P peptide (phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-MSK2 antibody	Serine/threonine-protein kinase that is required for the mitogen or stress-induced phosphorylation of the transcription factors CREB1 and ATF1 and for the regulation of the transcription factor RELA, and that contributes to gene activation by histone phosphorylation and functions in the regulation of inflammatory genes. Phosphorylates CREB1 and ATF1 in response to mitogenic or stress stimuli such as UV-C irradiation, epidermal growth factor (EGF) and anisomycin. Plays an essential role in the control of RELA transcriptional activity in response to TNF. Phosphorylates 'Ser-10' of histone H3 in response to mitogenics, stress stimuli and EGF, which results in the transcriptional activation of several immediate early genes, including proto-oncogenes c-fos/FOS and c-jun/JUN. May also phosphorylate 'Ser-28' of histone H3. Mediates the mitogen- and stress-induced phosphorylation of high mobility group protein 1 (HMGN1/HMG14). In lipopolysaccharide-stimulated primary macrophages, acts downstream of the Toll-like receptor TLR4 to limit the production of pro-inflammatory cytokines. Functions probably by inducing transcription of the MAP kinase phosphatase DUSP1 and the anti-inflammatory cytokine interleukin 10 (IL10), via CREB1 and ATF1 transcription factors.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	55743138
NCBI GeneID	8986
NCBI Accession #	NP_001006945.1

NCBI GenBank Nucleotide #	NM_001006944.1
UniProt Accession #	O75676; O75585; Q53ES8; A8K7Z8
Molecular Weight	85,606 Da
NCBI Official Full Name	ribosomal protein S6 kinase alpha-4 isoform b
NCBI Official Synonym Full Names	ribosomal protein S6 kinase, 90kDa, polypeptide 4
NCBI Official Symbol	RPS6KA4
NCBI Official Synonym Symbols	MSK2; RSK-B
NCBI Protein Information	ribosomal protein S6 kinase alpha-4; RSKB; S6K-alpha-4; ribosomal protein kinase B; ribosomal protein S6 kinase alpha 4; 90 kDa ribosomal protein S6 kinase 4; mitogen- and stress-activated protein kinase 2; nuclear mitogen- and stress-activated protein ki
UniProt Protein Name	Ribosomal protein S6 kinase alpha-4
UniProt Gene Name	RPS6KA4
UniProt Synonym Gene Names	MSK2; S6K-alpha-4; RSKB
UniProt Entry Name	KS6A4_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/msk2-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/329736>