

Rabbit anti-Human, Mouse MSK1 Polyclonal Antibody | anti-MSK1 antibody

Phospho-MSK1 (Ser212) Antibody

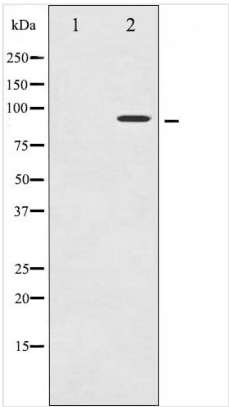
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321441	Rabbit	Human, Mouse	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

MSK1; Polyclonal Antibody; Phospho-MSK1 (Ser212) Antibody; 90 kDa ribosomal protein S6 kinase 5; EC 2.7.11.1; KS6A5_HUMAN; MGC1911; Mitogen and stress activated protein kinase 1; MSPK1; Nuclear Mitogen And Stress Activated Protein Kinase 1; Nuclear mitogen-and stress-activated protein kinase 1; Ribosomal protein S6 kinase 90kD polypeptide 5; Ribosomal protein S6 kinase 90kDa; Ribosomal protein S6 kinase 90kDa polypeptide 5; Ribosomal Protein S6 Kinase Alpha 5; Ribosomal protein S6 kinase alpha-5; RLPK; RPS6KA5; RSK Like Protein Kinase; RSK-like protein kinase; RSKL; S6K alpha 5; S6K-alpha-5; anti-MSK1 antibody

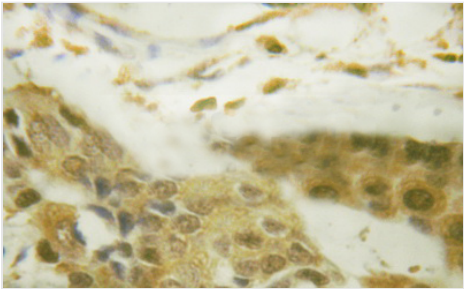
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-MSK1 (Ser212) antibody detects endogenous levels of MSK1 only when phosphorylated at Serine 212
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns.
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	723
Applicable Applications for anti-MSK1 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MSK1 around the phosphorylation site of Serine 212
Subcellular Location	Nucleus. Cytoplasm. Predominantly nuclear. Partially cytoplasmic.
Tissue Specificity	Widely expressed with high levels in heart, brain and placenta. Less abundant in lung, kidney and liver.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (80%), Zebrafish (80%), Bovine (90%), Horse (90%), Sheep (90%), Rabbit (100%), Dog (90%), Chicken (90%), Xenopus (90%)
Conjugation	Unconjugated
Epitope	Phospho Ser212
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)

Western blot analysis of MSK1 phosphorylation expression in EGF treated NIH-3T3 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

Phospho-MSK1 (Ser212) Antibody IHC in human testis



WB (Western Blot)

Western blot analysis of MSK1 phosphorylation expression in EGF treated Hela whole cell lysates, The lane on the right is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-MSK1 antibody	Description: An AGC kinase of the RSK family. Has two kinase domains connected by a regulatory linker region. Enzyme activity requires the presence of both kinase domains. Is phosphorylated and activated by Erk as well as p38 MAPK in response to growth factors and cellular stress. Function: 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 factors RELA, STAT3 and ETV1/ER81, and that contributes to gene activation by histone phosphorylation and functions in the regulation of inflammatory genes (PubMed:11909979, PubMed:12569367, PubMed:12763138, PubMed:9687510, PubMed:18511904, PubMed:9873047). Phosphorylates CREB1 and ATF1 in response to mitogenic or stress stimuli such as UV-C irradiation, epidermal growth factor (EGF) and anisomycin (PubMed:11909979, PubMed:9873047). Plays an essential role in the control of RELA transcriptional activity in response to TNF and upon glucocorticoid, associates in the cytoplasm with the glucocorticoid receptor NR3C1 and contributes to RELA inhibition and repression of inflammatory gene expression (PubMed:12628924, PubMed:18511904). In skeletal myoblasts is required for phosphorylation of RELA at 'Ser-276' during oxidative stress (PubMed:12628924). In erythropoietin-stimulated cells, is necessary for the 'Ser-727' phosphorylation of STAT3 and regulation of its transcriptional potential (PubMed:12763138). Phosphorylates ETV1/ER81 at 'Ser-191' and 'Ser-216', and thereby regulates its ability to stimulate transcription, which may be important during development and breast tumor formation (PubMed:12569367). Directly represses transcription via phosphorylation of 'Ser-1' of histone H2A (PubMed:15010469). 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 (PubMed:12773393). May also phosphorylate 'Ser-28' of histone H3 (PubMed:12773393). Mediates the mitogen-and stress-induced phosphorylation of high mobility group protein 1 (HMGN1/HMG14) (PubMed:12773393). In lipopolysaccharide-stimulated primary macrophages, acts downstream of the Toll-like receptor TLR4 to limit the production of pro-inflammatory cytokines (By similarity). 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 (By similarity). Plays a role in neuronal cell death by mediating the downstream effects of excitotoxic injury (By similarity). Phosphorylates TRIM7 at 'Ser-107' in response to growth factor signaling via the MEK/ERK pathway, thereby stimulating its ubiquitin ligase activity (PubMed:25851810). 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 RPS6KA5 associates with and phosphorylates the NF-kappa-B p65 subunit RELA. Interacts with CREBBP and EP300. Post-translational Modifications: Ser-376 and Thr-581 phosphorylation is required for kinase activity. Ser-376 and Ser-212 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-360, Thr-581 and Thr-700 by MAPK1/ERK2, MAPK3/ERK1 and MAPK14/p38-alpha. Autophosphorylated at Ser-750, Ser-752 and Ser-758 by the N-terminal kinase domain. Ubiquitinated. Similarity: Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase subfamily.
--	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	1016080537
NCBI GeneID	9252
NCBI Accession #	NP_001309164.1
NCBI GenBank Nucleotide #	NM_001322235.1
UniProt Accession #	O75582; O95316; Q96AF7; B7Z2Y5
Molecular Weight	Observed: 90 kDa Predicted: 90 kDa
NCBI Official Full Name	ribosomal protein S6 kinase alpha-5 isoform k
NCBI Official Synonym Full Names	ribosomal protein S6 kinase A5
NCBI Official Symbol	RPS6KA5
NCBI Official Synonym Symbols	MSK1; RLPK; MSPK1
NCBI Protein Information	ribosomal protein S6 kinase alpha-5
UniProt Protein Name	Ribosomal protein S6 kinase alpha-5

UniProt Gene Name	RPS6KA5
UniProt Synonym Gene Names	MSK1; S6K-alpha-5; RSKL

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/msk1-antibody-immunohistochemistry-western-blot-elisa/321441>