

# Summary

Production Name	MSK1 (phospho Ser360) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	ELISA,IF,IHC,WB
Reactivity	Human, Mouse

## Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

## Immunogen

Gene Name	RPS6KA5
	RPS6KA5; MSK1; Ribosomal protein S6 kinase alpha-5; S6K-alpha-5; 90 kDa ribosomal
Alternative Names	protein S6 kinase 5; Nuclear mitogen- and stress-activated protein kinase 1; RSK-like
	protein kinase; RSKL
Gene ID	9252.0
SwissProt ID	O75582. The antiserum was produced against synthesized peptide derived from human
	MSK1 around the phosphorylation site of Ser360. AA range:331-380

# Application



#### **Molecular Weight**

### Background

catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Appears to be activated by multiple phosphorylations on threonine and serine residues. ERK1/2 and MAPK14/p38-alpha may play a role in this process., function: Serine/threonine kinase required for the mitogen or stress-induced phosphorylation of the transcription factors CREB (cAMP response element-binding protein) and ATF1 (activating transcription factor-1). Essential role in the control of RELA transcriptional activity in response to TNF. Directly represses transcription via phosphorylation of 'Ser-1' of histone H2A. Phosphorylates 'Ser-10' of histone H3 in response to mitogenics, stress stimuli and epidemal growth-factor (EGF), which results in the transcriptional activation of several immediate early genes, including protooncogenes c-fos/FOS and c-jun/JUN. May also phosphorylate 'Ser-28' of histone H3. Mediates the mitogen- and stressinduced phosphorylation of high mobility group protein 14 (HMG-14)., miscellaneous: Enzyme activity requires the presence of both kinase domains., PTM: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., similarity: Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase subfamily, similarity: Contains 1 AGC-kinase C-terminal domain., similarity: Contains 2 protein kinase domains., subcellular location:Predominantly nuclear. Partially cytoplasmic., subunit:Forms a complex with either ERK1 or ERK2 in guiescent 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., tissue specificity: Widely expressed with high levels in heart, brain and placenta. Less abundant in lung, kidney and liver., catalytic activity: ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Appears to be activated by multiple phosphorylations on threonine and serine residues. ERK1/2 and MAPK14/p38-alpha may play a role in this process.,function:Serine/threonine kinase required for the mitogen or stress-induced phosphorylation of the transcription factors CREB (cAMP response element-binding protein) and ATF1 (activating transcription factor-1). Essential role in the control of RELA transcriptional activity in response to TNF. Directly represses transcription via phosphorylation of 'Ser-1' of histone H2A. Phosphorylates 'Ser-10' of histone H3 in response to mitogenics, stress stimuli and epidemal growth-factor (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 14 (HMG-14), miscellaneous: Enzyme activity requires the presence of both kinase domains., PTM: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., similarity: Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase subfamily., similarity: Contains 1 AGC-kinase C-terminal domain., similarity: Contains 2 protein kinase domains., subcellular location: Predominantly nuclear. Partially cytoplasmic., subunit: Forms a complex with either ERK1 or ERK2 in guiescent 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.,tissue specificity:Widely expressed with high levels in heart, brain and placenta. Less abundant in lung, kidney and liver.,

## **Research Area**

Insulin Receptor; Regulates Angiogenesis; MAPK\_ERK\_Growth; MAPK\_G\_Protein; B Cell Receptor; AMPK

## Image Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using MSK1 (Phospho-Ser360) Antibody



Immunofluorescence analysis of NIH/3T3 cells, using MSK1 (Phospho-Ser360) Antibody. The picture on the right is blocked with the phospho peptide.







Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MSK1 (Phospho-Ser360) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of MSK1 (Phospho-Ser360) Antibody. The lane on the right is blocked with the MSK1 (Phospho-Ser360) peptide.

### Note

For research use only.