



## MSK1 (phospho Ser360) rabbit pAb

Cat#: orb770875 (Manual)

For research use only. Not intended for diagnostic use.

Product Name MSK1 (phospho Ser360) rabbit pAb

Host species Rabbit

Applications IHC;IF;ELISA

Species Cross-Reactivity Human; Mouse

**Recommended dilutions** Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000.

ELISA: 1/10000. Not yet tested in other applications.

Immunogen The antiserum was produced against synthesized peptide derived from

human MSK1 around the phosphorylation site of Ser360. AA range:331-380

Specificity Phospho-MSK1 (S360) Polyclonal Antibody detects endogenous levels of

MSK1 protein only when phosphorylated at S360.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium

azide..

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name Ribosomal protein S6 kinase alpha-5

Gene Name RPS6KA5

Cellular localization Nucleus. Cytoplasm. Predominantly nuclear. Exported into cytoplasm in

response to glucocorticoid.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Clonality** Polyclonal





Concentration 1 mg/ml

Observed band

**Human Gene ID** 9252

**Human Swiss-Prot Number** O75582

RPS6KA5; MSK1; Ribosomal protein S6 kinase alpha-5; S6K-alpha-5; 90 **Alternative Names** 

kDa ribosomal protein S6 kinase 5; Nuclear mitogen- and stress-activated protein kinase 1; RSK-like protein kinase; RSKL

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 stressinduced 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

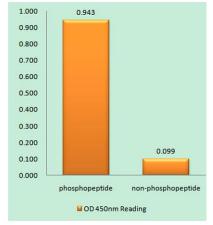
domains., subcellular location: Predominantly nuclear. Partially

cytoplasmic.,subunit:Forms a complex with either ERK1 or ERK2 in 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.,tissue specificity: Widely expressed with high levels in heart, brain and placenta. Less abundant in lung, kidney and liver.,

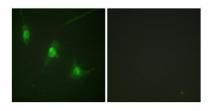




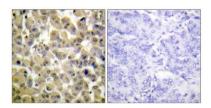
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Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using MSK1 (Phospho-Ser360) Antibody



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

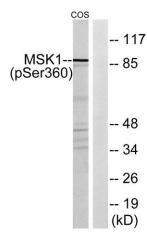


 $Immunohistochemistry\ analysis\ of\ paraffin-embedded\ human\ breast\ carcinoma, using\ MSK1\ (Phospho-Ser360)\ Antibody.\ The\ picture\ on\ the\ right\ is\ blocked\ with\ the\ phospho\ peptide.$ 





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