

MSK1 (phospho Thr581) Polyclonal Antibody

Catalog No: #13698

Package Size: #13698-1 50ul #13698-2 100ul

Description

Product Name	MSK1 (phospho Thr581) Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB,IHC-p,IF/ICC,ELISA
Species Reactivity	Human,Mouse
Specificity	Phospho-MSK1 (T581) Polyclonal Antibody detects endogenous levels of MSK1 protein only when phosphorylated at T581.
Immunogen Description	The antiserum was produced against synthesized peptide derived from human MSK1 around the phosphorylation site of Thr581. AA range:551-600
Conjugates	Unconjugated
Other Names	RPS6KA5; MSK1; Ribosomal protein S6 kinase alpha-5; S6K-alpha-5; 90 kDa ribosomal protein S6 kinase 5; Nuclear mitogen- and stress-activated protein kinase 1; RSK-like protein kinase; RSKL
Accession No.	Swiss Prot:O75582GeneID:9252
SDS-PAGE MW	90
Concentration	1 mg/ml
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	-20°C/1

Application Details

Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.

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 epidermal 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.,

Note: This product is for in vitro research use only and is not intended for use in humans or animals.