



MSK1 (phospho Ser376) Polyclonal Antibody

Catalog No	YP-Ab-14416
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC
Gene Name	RPS6KA5
Immunogen	The antiserum was produced against synthesized peptide derived from human MSK1 around the phosphorylation site of Ser376. AA range:343-392
Specificity	Phospho-MSK1 (S376) Polyclonal Antibody detects endogenous levels of MSK1 protein only when phosphorylated at S376.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000;IHC-p 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	RPS6KA5;EC:2.7.11.1;MSPK1;Nuclear mitogen- and stress-activated protein kinase 1;Ribosomal protein S6 kinase alph;MSK1;Ribosomal protein S6 kinase alpha-5;S6K-alpha-5;90 kDa ribosomal protein S6 kinase 5;RSK-like protein kinase;RSKL
Observed Band	90kD
Calculated Molecular Weight	90kD
Cell Pathway	Nucleus. Cytoplasm. Predominantly nuclear. Exported into cytoplasm in response to glucocorticoid.
Tissue Specificity	Widely expressed with high levels in heart, brain and placenta. Less abundant in lung, kidney and liver.
Function	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'

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 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.,

matters needing attention

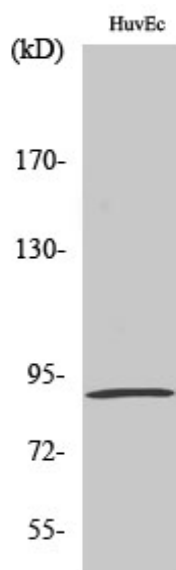
Avoid repeated freezing and thawing!

Usage suggestions

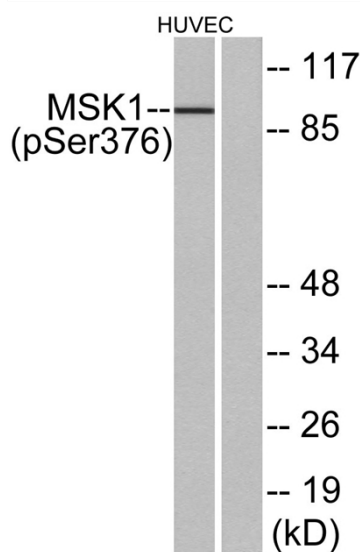
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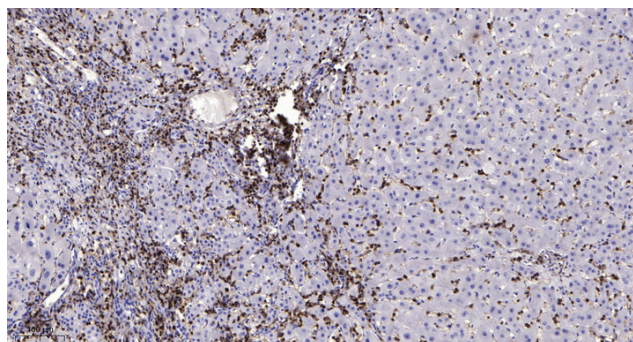
Products Images



Western Blot analysis of various cells using Phospho-MSK1 (S376) Polyclonal Antibody diluted at 1:1000



Western blot analysis of lysates from HUVEC cells treated with PMA 125ng/ml 30', using MSK1 (Phospho-Ser376) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).