

MSK1 Polyclonal Antibody

Catalog No :	YT2902
Reactivity :	Human;Mouse
Applications :	WB;IHC;IF;ELISA
Target :	MSK1
Fields :	>>MAPK signaling pathway;>>Adrenergic signaling in cardiomyocytes;>>TNF signaling pathway;>>Circadian entrainment;>>Neurotrophin signaling pathway;>>Shigellosis;>>Pathways in cancer;>>MicroRNAs in cancer;>>Bladder cancer
Gene Name :	RPS6KA5
Protein Name :	Ribosomal protein S6 kinase alpha-5
Human Gene Id :	9252
Human Swiss Prot No :	O75582
Mouse Gene Id :	73086
Mouse Swiss Prot No :	Q8C050
Immunogen :	The antiserum was produced against synthesized peptide derived from human MSK1. AA range:551-600
Specificity :	MSK1 Polyclonal Antibody detects endogenous levels of MSK1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 90kD

Cell Pathway : Insulin Receptor; Regulates Angiogenesis;
MAPK_ERK_Growth;MAPK_G_Protein; B Cell Receptor; AMPK

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.,

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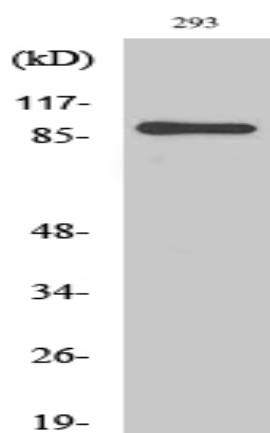
Subcellular Location :

Nucleus. Cytoplasm. Predominantly nuclear. Exported into cytoplasm in response to glucocorticoid.

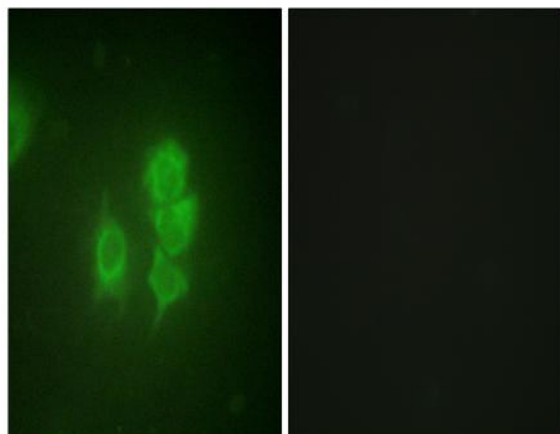
Expression :

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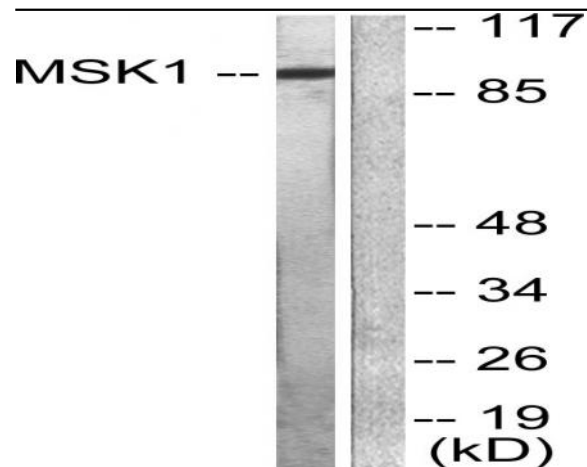
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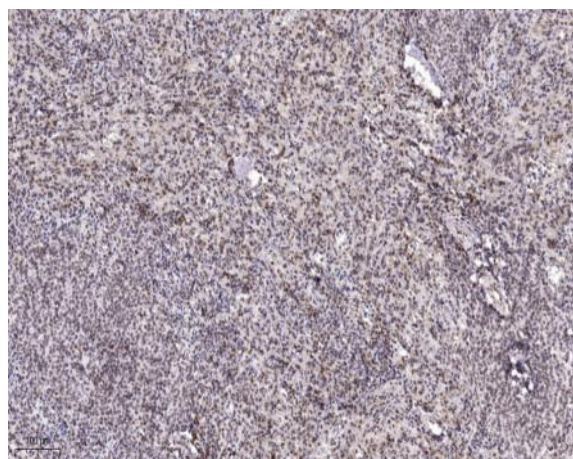
Western Blot analysis of various cells using MSK1 Polyclonal Antibody diluted at 1:1000



Immunofluorescence analysis of HUVEC cells, using MSK1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with UV 15', using MSK1 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human spleen. 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).