

**MSK1 (phospho Ser212) Polyclonal Antibody**

<b>Catalog No :</b>	YP0791
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	MSK1
<b>Fields :</b>	>>MAPK signaling pathway;>>Adrenergic signaling in cardiomyocytes;>>TNF signaling pathway;>>Circadian entrainment;>>Neurotrophin signaling pathway;>>Shigellosis;>>Pathways in cancer;>>MicroRNAs in cancer;>>Bladder cancer
<b>Gene Name :</b>	RPS6KA5
<b>Protein Name :</b>	Ribosomal protein S6 kinase alpha-5
<b>Human Gene Id :</b>	9252
<b>Human Swiss Prot No :</b>	O75582
<b>Mouse Gene Id :</b>	73086
<b>Mouse Swiss Prot No :</b>	Q8C050
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human MSK1 around the phosphorylation site of Ser212. AA range:181-230
<b>Specificity :</b>	Phospho-MSK1 (S212) Polyclonal Antibody detects endogenous levels of MSK1 protein only when phosphorylated at S212.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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

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**Observed Band :** 90kD

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

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**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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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'

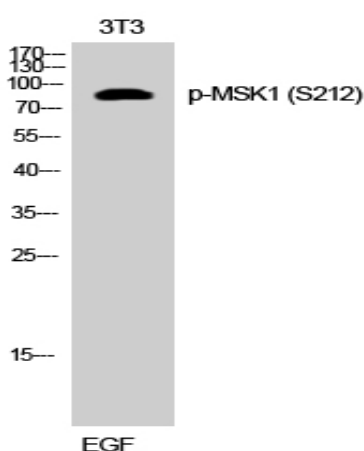
**Subcellular Location :**

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

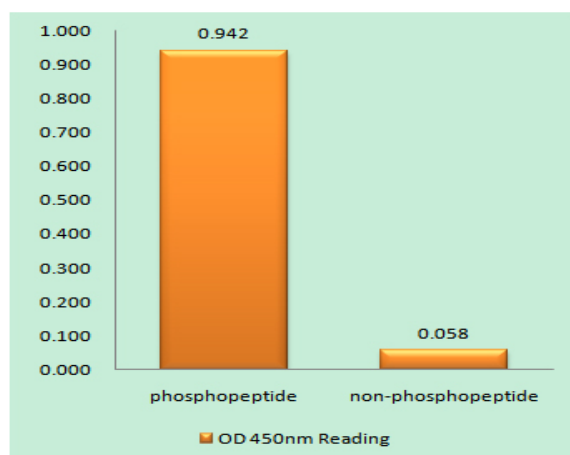
**Expression :**

Widely expressed with high levels in heart, brain and placenta. Less abundant in lung, kidney and liver.

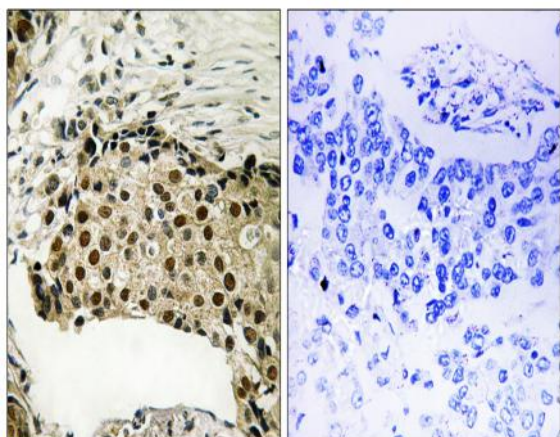
## Products Images



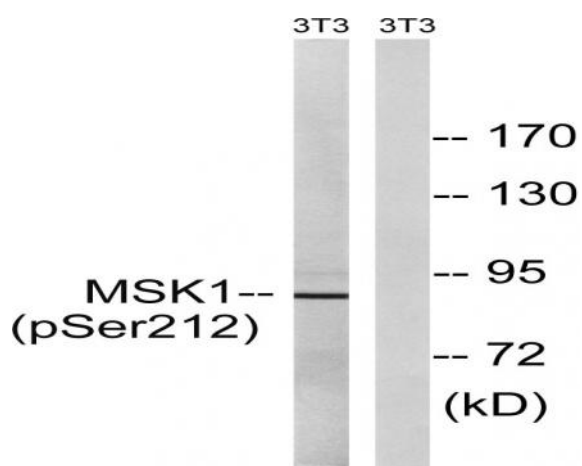
Western Blot analysis of 3T3 cells using Phospho-MSK1 (S212) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using MSK1 (Phospho-Ser212) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MSK1 (Phospho-Ser212) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from NIH/3T3 cells treated with EGF 200ng/ml 5', using MSK1 (Phospho-Ser212) Antibody. The lane on the right is blocked with the phospho peptide.