

## MSK1 (phospho Ser212) Polyclonal Antibody

Catalog No: YP0791

**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

O75582

Q8C050

Human Gene Id: 9252

**Human Swiss Prot** 

No:

Mouse Gene Id: 73086

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

MSK1 around the phosphorylation site of Ser212. AA range:181-230

Specificity: Phospho-MSK1 (S212) Polyclonal Antibody detects endogenous levels of MSK1

protein only when phosphorylated at S212.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, lgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

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

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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 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 guiescent 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

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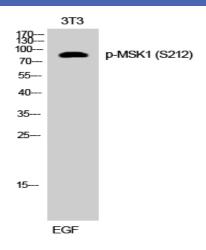
Subcellular Location:

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

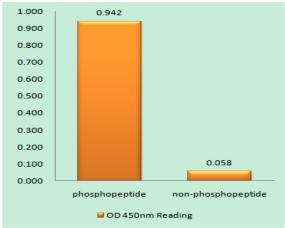
**Expression:** 

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

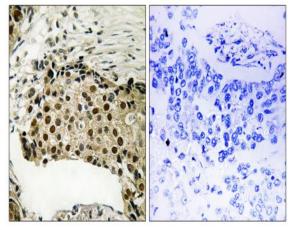
## **Products Images**



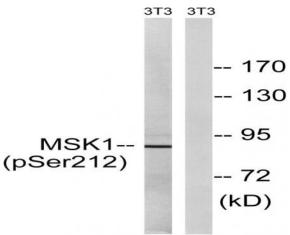
Western Blot analysis of 3T3 cells using Phospho-MSK1 (S212) Polyclonal Antibody diluted at 1:1000



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.