

## MSK1 2 Antibody HRP Conjugated

Catalog No: #C04415H

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## Description

Product Name	MSK1 2 Antibody HRP Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	WBB B IHC-PB IHC-F
Species Reactivity	HuB MsB RtB B
Immunogen Description	KLH conjugated synthetic peptide aa 49-94 802 derived from human MSK1
Conjugates	HRP
Target Name	MSK1 2
Other Names	MSK1; RPS6KA5; 90 kDa ribosomal protein S6 kinase 5; EC 2.7.11.1; KS6A5_HUMAN; MGC1911; Mitogen and stress activated protein kinase 1; MSPK1; Nuclear Mitogen And Stress Activated Protein Kinase 1; Nuclear mitogen- and stress-activated protein kinase 1; Ribosomal protein S6 kinase 90kD polypeptide 5;
Accession No.	NCBI Gene ID9252, 8986
GeneID	92528986
Excitation Emission	N A
Cell Localization	Nucleus
Concentration	1mg ml
Formulation	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

## Application Details

WB=1:500-2000B B IHC-P=1:50-200B IHC-F=1:50-200B

## Background

MSK1 is a mitogen and stress activated protein kinase 1 which belongs to the AGC family of kinases and is related in structure to the ribosomal p70 S6 kinase subfamily. MSK1 can be activated by ERK1 2 and SAPK2 p38 MAP kinase. It is also known to be required for the phosphorylation of CREB, ATF1 H3 and HMG14 in response to mitogen and stress. Similar to RSK, MSK1 contains two kinase domains (N term and a C term). Once phosphorylated on Thr581 and Ser360 by ERK1 2 and SAPK2 p38, MSK1 autophosphorylates on at least 5 sites. Of these autophosphorylation sites Ser212 and Ser376 get phosphorylated by the C terminal kinase domain of MSK1 which is essential for the catalytic activity of the N terminal kinase domain. MSK2 plays an essential role in the control of RELA transcriptional activity in response to TNF. Phosphorylates 'Ser-10' of histone H3 in response to mitogenics, stress stimuli and 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 1 (HMG1 HMG14). In lipopolysaccharide-stimulated primary macrophages, acts downstream of the Toll-like receptor TLR4 to limit the production of pro-inflammatory cytokines. Functions probably by inducing transcription of the MAP kinase phosphatase DUSP1 and the anti-inflammatory cytokine interleukin 10 (IL10), via CREB1 and ATF1 transcription factors.

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Note: This product is for in vitro research use only