

# ARG57873 anti-MSK1 phospho (Ser376) antibody

Package: 50 μl Store at: -20°C

# Summary

Product Description	Rabbit Polyclonal antibody recognizes MSK1 phospho (Ser376)	
Tested Reactivity	Hu, Ms, Rat	
Tested Application	IHC-P, WB	
Host	Rabbit	
Clonality	Polyclonal	
Isotype	lgG	
Target Name	MSK1	
Species	Human	
Immunogen	Phospho specific peptide corresponding to residues surrounding Ser376 of Human MSK1.	
Conjugation	Un-conjugated	
Alternate Names	RSKL; 90 kDa ribosomal protein S6 kinase 5; RSK-like protein kinase; MSK1; Nuclear mitogen- and stress- activated protein kinase 1; S6K-alpha-5; RLPK; EC 2.7.11.1; MSPK1; Ribosomal protein S6 kinase alpha-5	

# **Application Instructions**

Predict Reactivity Note	Human, Rat		
Application table	Application	Dilution	
	IHC-P	1:50 - 1:200	
	WB	1:500 - 1:2000	
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.		
Positive Control	NIH/3T3 + Anisomycin		
Observed Size	~ 100 kDa		

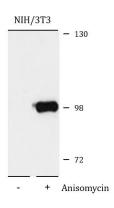
### Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

# Bioinformation

Gene Symbol	RPS6KA5	
Gene Full Name	ribosomal protein S6 kinase, 90kDa, polypeptide 5	
Function	Serine/threonine-protein kinase that is required for the mitogen or stress-induced phosphorylation of the transcription factors CREB1 and ATF1 and for the regulation of the transcription factors RELA, STAT3 and ETV1/ER81, and that contributes to gene activation by histone phosphorylation and functions in the regulation of inflammatory genes. Phosphorylates CREB1 and ATF1 in response to mitogenic or stress stimuli such as UV-C irradiation, epidermal growth factor (EGF) and anisomycin. Plays an essential role in the control of RELA transcriptional activity in response to TNF and upon glucocorticoid, associates in the cytoplasm with the glucocorticoid receptor NR3C1 and contributes to RELA inhibition and repression of inflammatory gene expression. In skeletal myoblasts is required for phosphorylation of RELA at 'Ser-276' during oxidative stress. In erythropoietin-stimulated cells, is necessary for the 'Ser-727' phosphorylation of STAT3 and regulation of is transcriptional potential. Phosphorylates ETV1/ER81 at 'Ser-191' and 'Ser-216', and thereby regulates its ability to stimulate transcription, which may be important during development and breast tumor formation. Directly represses transcription via phosphorylation of 'Ser-1' of histone H2A. 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 (HMGN1/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. Plays a role in neuronal cell death by mediating the downstream effects of	
Calculated Mw	90 kDa	
РТМ	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. Phosphorylated at Ser-360, Thr-581 and Thr-700 by MAPK1/ERK2, MAPK3/ERK1 and MAPK14/p38-alpha. Autophosphorylated at Ser-750, Ser-752 and Ser-758 by the N-terminal kinase domain. Ubiquitinated. [UniProt]	
Cellular Localization	Cytoplasm, Nucleus. [UniProt]	

### Images



### ARG57873 anti-MSK1 phospho (Ser376) antibody WB image

Western blot: 25  $\mu$ g of NIH/3T3 cells untreated or treated by Anisomycin (25  $\mu$ g/ml) for 30 min. The blots were stained with ARG57873 anti-MSK1 phospho (Ser376) antibody at 1:2000 dilution.