

## MSK2 (Phospho-Thr568) Antibody

Catalog No: #12143

Package Size: #12143-1 50ul #12143-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

## Description

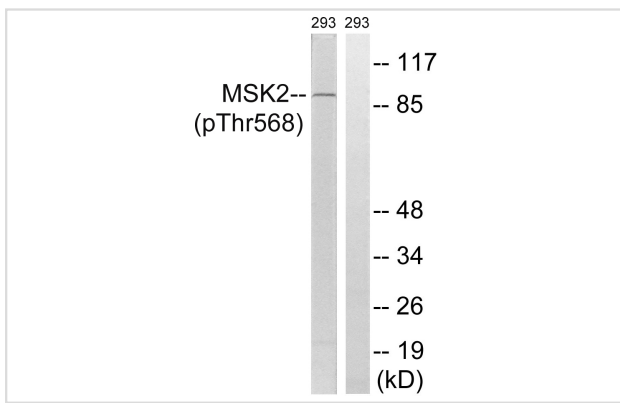
Product Name	MSK2 (Phospho-Thr568) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous levels of MSK2 only when phosphorylated at threonine 568.
Immunogen Type	peptide
Immunogen Description	Peptide sequence around phosphorylation site of threonine 568 (M-Q-T(p)-P-C) derived from Human MSK2.
Target Name	MSK2
Modification	Phospho
Other Names	EC 2.7.11.1; kinase MSK2; KS6A4; Ribosomal protein kinase B; RPS6KA4; RSK-B; Similar to ribosomal protein S6 kinase; 90kD; polypeptide 4
Accession No.	Swiss-Prot#:O75676;NCBI Gene#:8986
Uniprot	O75676
GeneID	8986;
SDS-PAGE MW	95kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

## Application Details

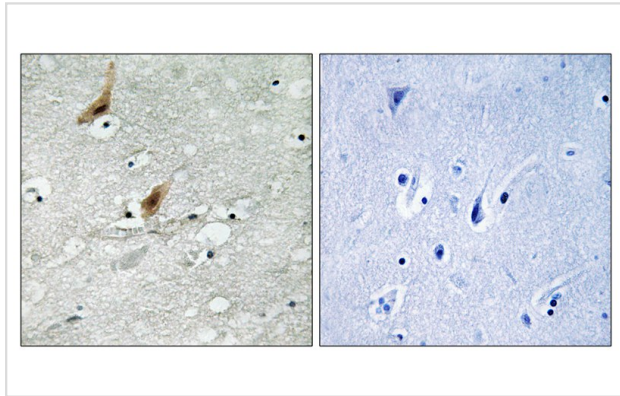
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

## Images



Western blot analysis of extracts from 293 cells, treated with H<sub>2</sub>O<sub>2</sub> (100uM, 15mins), using MSK2 (Phospho-Thr568) antibody #12143. The lane on the right is treated with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue using MSK2 (Phospho-Thr568) antibody #12143. The picture on the right is treated with the synthesized peptide.

## Background

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 factor RELA, 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. 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.

Note: This product is for in vitro research use only