


Product datasheet

Anti-MSK1 (phospho S376) antibody [E375] ab32190

Recombinant RabMAb

★★★★★ [10 Abreviews](#) [4 References](#) [6 Images](#)

Overview

Product name	Anti-MSK1 (phospho S376) antibody [E375]
Description	Rabbit monoclonal [E375] to MSK1 (phospho S376)
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Human Predicted to work with: Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: K562 cell lysate. IHC-P Human urinary bladder carcinoma. ICC/IF: HepG2 cells
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	E375
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab32190 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	1/1000 - 1/5000. Detects a band of approximately 87 kDa (predicted molecular weight: 90 kDa).
IHC-P	★★★★★ (5)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/500.

Application notes Is unsuitable for Flow Cyt.

Target

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).

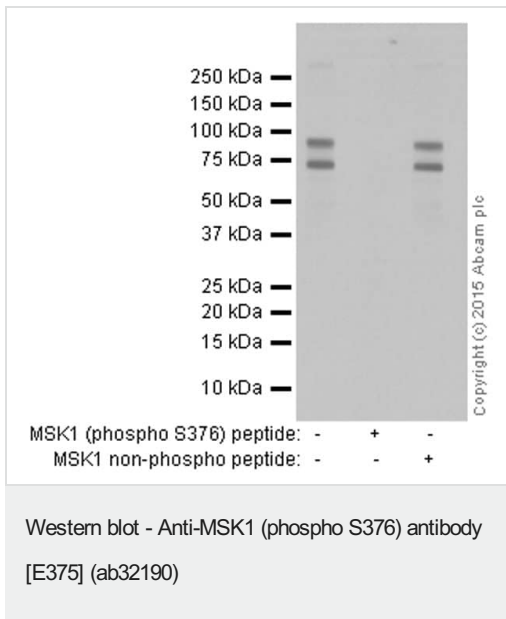
Tissue specificity Widely expressed with high levels in heart, brain and placenta. Less abundant in lung, kidney and liver.

Sequence similarities Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase subfamily.
Contains 1 AGC-kinase C-terminal domain.
Contains 2 protein kinase domains.

Post-translational modifications 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.

Cellular localization Nucleus. Cytoplasm. Predominantly nuclear. Partially cytoplasmic.

Images



All lanes : Anti-MSK1 (phospho S376) antibody [E375] (ab32190) at 1/2000 dilution

Lane 1 : HEK293 (human embryonic kidney) cells were treated with Epidermal growth factor whole cell lysates

Lane 2 : HEK293 (human embryonic kidney) cells were treated with Epidermal growth factor whole cell lysates with MSK1 (phospho S376) peptide

Lane 3 : HEK293 (human embryonic kidney) cells were treated with Epidermal growth factor whole cell lysates with MSK1 non-phospho peptide

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

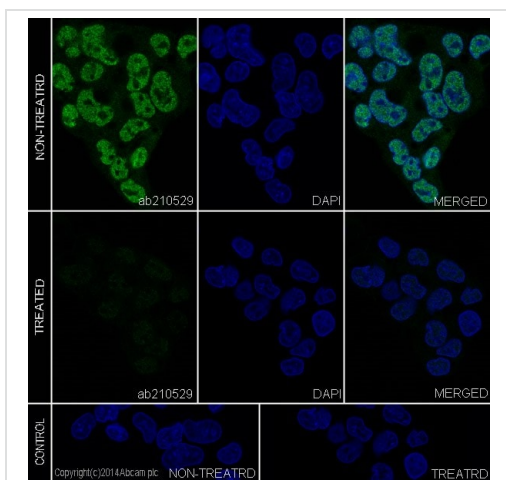
Predicted band size: 90 kDa

Exposure time: 10 seconds

Blocking/Diluting buffer: 5% NFD/MTBST

Observed band: 90, 80 kDa.

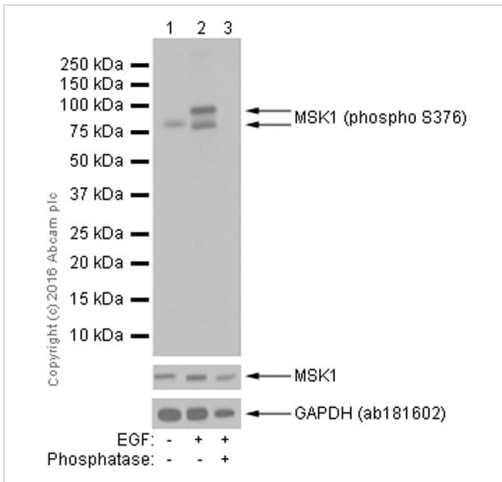
The 80 kDa band may represent isoform 2 or isoform 3 of MSK1.



Immunocytochemistry/ Immunofluorescence - Anti-MSK1 (phospho S376) antibody [E375] (ab32190)

Immunocytochemistry analysis of HepG2 (human hepatocellular carcinoma epithelial cell) cells labeling MSK1 (phospho S376) with ab32190 at 1/500 (4 µg/mL). Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% tritonX-100. [ab150077](#) AlexaFluor®488 Goat anti-Rabbit at 1/1000 (2 µg/mL) was used as the secondary antibody. DAPI (blue) was used as Nuclear counterstain.

Confocal image showing decreased nuclear staining in HepG2 cells treated with Alkaline Phosphatase (371 1h).



Western blot - Anti-MSK1 (phospho S376) antibody [E375] (ab32190)

All lanes : Anti-MSK1 (phospho S376) antibody [E375] (ab32190) at 1/2000 dilution

Lane 1 : Untreated HEK293 (human embryonic kidney) whole cell lysate

Lane 2 : HEK293 (human embryonic kidney) cells were treated with Epidermal growth factor (EGF) whole cell lysate

Lane 3 : HEK293 (human embryonic kidney) cells were treated with Epidermal growth factor (EGF) whole cell lysate. Then the membrane was incubated with Alkaline phosphatase.

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

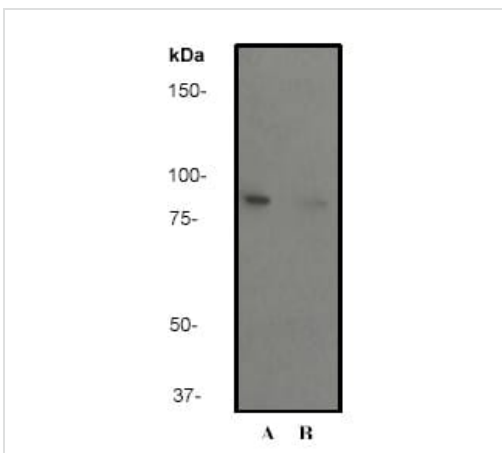
Predicted band size: 90 kDa

Exposure time: 5 seconds

Blocking/Diluting buffer 5% NFDm/TBST.

Observed band: 90, 80 kDa.

The 80 kDa band may represent isoform 2 or isoform 3 of MSK1.



Western blot - Anti-MSK1 (phospho S376) antibody [E375] (ab32190)

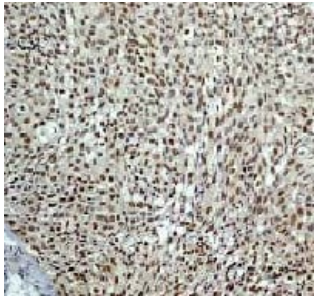
All lanes : Anti-MSK1 (phospho S376) antibody [E375] (ab32190) at 1/5000 dilution

Lane 1 : Untreated K562 cell lysate

Lane 2 : K562 cell lysate treated with Alkaline

Predicted band size: 90 kDa

Observed band size: 87 kDa

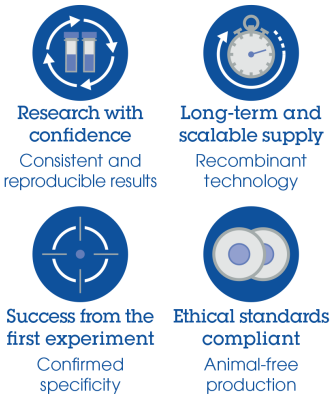


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MSK1 (phospho S376) antibody [E375] (ab32190)

Ab32190, at a dilution of 1/50, staining MSK1 in paraffin embedded human urinary bladder carcinoma tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Anti-MSK1 (phospho S376) antibody [E375] (ab32190)

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