



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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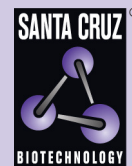
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## MSK2 (h): 293T Lysate: sc-116197

### BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. MSK2, also known as RPS6KA4 (ribosomal protein S6 kinase, 90 kDa, polypeptide 4) or RSKB, is a 772 amino acid protein that localizes to the nucleus and contains one AGC kinase C-terminal domain and two protein kinase domains. Using magnesium as a cofactor, MSK2 functions as a Ser/Thr kinase that is thought to play a role in the regulation of growth factor and stress-induced transcriptional activation, specifically by catalyzing the ATP-dependent phosphorylation of target proteins. Multiple isoforms of MSK2 exist due to alternative splicing events.

### REFERENCES

1. Deak, M., et al. 1998. Mitogen- and stress-activated protein kinase-1 (MSK1) is directly activated by MAPK and SAPK2/p38, and may mediate activation of CREB. *EMBO J.* 17: 4426-4441.
2. Pierrat, B., et al. 1998. RSK-B, a novel ribosomal S6 kinase family member, is a CREB kinase under dominant control of p38 $\alpha$  mitogen-activated protein kinase (p38 $\alpha$  MAPK). *J. Biol. Chem.* 273: 29661-29671.
3. Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 603606. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Gudi, T., et al. 2000. NO activation of Fos promoter elements requires nuclear translocation of G-kinase I and CREB phosphorylation but is independent of MAP kinase activation. *Oncogene* 19: 6324-6333.
5. Tomás-Zuber, M., et al. 2001. C-terminal elements control location, activation threshold, and p38 docking of ribosomal S6 kinase B (RSKB). *J. Biol. Chem.* 276: 5892-5899.
6. Prymakowska-Bosak, M., et al. 2001. Mitotic phosphorylation prevents the binding of HMGN proteins to chromatin. *Mol. Cell. Biol.* 21: 5169-5178.

### CHROMOSOMAL LOCATION

Genetic locus: RPS6KA4 (human) mapping to 11q13.1.

### PRODUCT

MSK2 (h): 293T Lysate represents a lysate of human MSK2 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

### APPLICATIONS

MSK2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MSK2 antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

### STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.