

MSK2 (Y-15): sc-82231

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.

CHROMOSOMAL LOCATION

Genetic locus: RPS6KA4 (human) mapping to 11q13.1; Rps6ka4 (mouse) mapping to 19 A.

SOURCE

MSK2 (Y-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MSK2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82231 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

MSK2 (Y-15) is recommended for detection of MSK2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MSK2 (Y-15) is also recommended for detection of MSK2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for MSK2 siRNA (h): sc-75836, MSK2 siRNA (m): sc-75837, MSK2 shRNA Plasmid (h): sc-75836-SH, MSK2 shRNA Plasmid (m): sc-75837-SH, MSK2 shRNA (h) Lentiviral Particles: sc-75836-V and MSK2 shRNA (m) Lentiviral Particles: sc-75837-V.

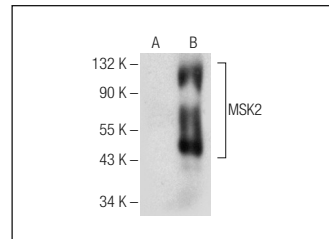
Molecular Weight of MSK2: 86 kDa.

Positive Controls: MSK2 (m): 293T Lysate: sc-121804 or A-431 whole cell lysate: sc-2201.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MSK2 (Y-15): sc-82231. Western blot analysis of MSK2 expression in non-transfected: sc-117752 (A) and mouse MSK2 transfected: sc-121804 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **MSK2 (F-2): sc-377151** or **MSK2 (2934C1a): sc-130653**, our highly recommended monoclonal alternatives to MSK2 (Y-15).