SANTA CRUZ BIOTECHNOLOGY, INC.

Rsk-3 (A-16): sc-13379



BACKGROUND

The family of ribosomal S6 kinases (Rsks), designated Rsk-1 (or MAPKAP kinase-1), Rsk-2 and Rsk-3, are intracellular serine/threonine kinases that are important signaling intermediates in response to a broad range of ligand activated receptor tyrosine kinases. A unique feature common to the members of the Rsk family is that each possesses two non-identical complete kinase catalytic domains. An additional Rsk protein, Rsk-4, shows a high level of homology to the three previously isolated members of the human Rsk family. Rsk-4 is most abundantly expressed in brain and kidney and plays a role in normal neuronal development. The family of ribosomal S6 kinases includes p70 S6 kinase and p70 S6 kinase β , which are thought to have similar regulatory functions. MSK1 (also designated RLPK) is a novel Rsk-related protein, which, like the p90 Rsk family members, contains two non-identical complete kinase catalytic domains.

CHROMOSOMAL LOCATION

Genetic locus: RPS6KA2 (human) mapping to 6q27; Rps6ka2 (mouse) mapping to 17 A1.

SOURCE

Rsk-3 (A-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Rsk-3 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-13379 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Rsk-3 (A-16) is recommended for detection of Rsk-3 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).

Rsk-3 (A-16) is also recommended for detection of Rsk-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Rsk-3 siRNA (h): sc-36443, Rsk-3 siRNA (m): sc-36444, Rsk-3 shRNA Plasmid (h): sc-36443-SH, Rsk-3 shRNA Plasmid (m): sc-36444-SH, Rsk-3 shRNA (h) Lentiviral Particles: sc-36443-V and Rsk-3 shRNA (m) Lentiviral Particles: sc-36444-V.

Molecular Weight of Rsk-3: 90 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, A-431 whole cell lysate: sc-2201 or Rsk-3 (h): 293T Lysate: sc-176241.

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



Rsk-3 (A-16): sc-13379. Western blot analysis of Rsk-3 expression in non-transfected: sc-117752 (A) and human Rsk-3 transfected: sc-176241 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Dumont, J., et al. 2005. p90Rsk is not involved in cytostatic factor arrest in mouse oocytes. J. Cell Biol. 169: 227-231.
- 2. Bignone, P.A., et al. 2007. RPS6KA2, a putative tumour suppressor gene at 6q27 in sporadic epithelial ovarian cancer. Oncogene 26: 683-700.

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.

MONOS Satisfation Guaranteed

Try **Rsk-3 (3C4C8): sc-517198**, our highly recommended monoclonal aternative to Rsk-3 (A-16).