

Rsk-3 (C-20): sc-1431

BACKGROUND

The family of ribosomal S6 kinases (Rsk), 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, RPS6KA3 (human) mapping to Xp22.12; Rps6ka2 (mouse) mapping to 17 A1, Rps6ka3 (mouse) mapping to X F4.

SOURCE

Rsk-3 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Rsk-3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-1431 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-1431 AC, 500 μ g/ 0.25 ml agarose in 1 ml.

APPLICATIONS

Rsk-3 (C-20) is recommended for detection of Rsk-3, and to a lesser extent, Rsk-2 of mouse, rat, human and mink origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (C-20) is also recommended for detection of Rsk-3, and to a lesser extent, Rsk-2 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of Rsk-3: 90 kDa.

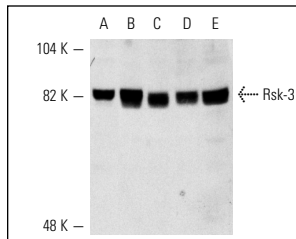
STORAGE

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

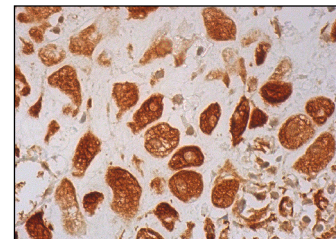
RESEARCH USE

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

DATA



Rsk-3 (C-20): sc-1431. Western blot analysis of Rsk-3 expression in NIH/3T3 (A), Mv 1 Lu (B), A-431 (C), HeLa (D) and MCF7 (E) whole cell lysates.



Rsk-3 (C-20): sc-1431. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic and nuclear staining of decidual cells.

SELECT PRODUCT CITATIONS

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- Dufresne, S.D., et al. 2001. Altered extracellular signal-regulated kinase signaling and glycogen metabolism in skeletal muscle from p90 ribosomal S6 kinase 2 knockout mice. *Mol. Cell. Biol.* 21: 81-87.
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