

p-Rsk-2 (Thr 577): sc-16407

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: RPS6KA3 (human) mapping to Xp22.12; Rps6ka3 (mouse) mapping to X F4.

SOURCE

p-Rsk-2 (Thr 577) is available as either goat (sc-16407) or rabbit (sc-16407-R) affinity purified polyclonal antibody raised against a short amino acid sequence containing Thr 577 phosphorylated Rsk-2 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-16407 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-Rsk-2 (Thr 577) is recommended for detection of Thr 577 phosphorylated Rsk-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

p-Rsk-2 (Thr 577) is also recommended for detection of correspondingly phosphorylated Rsk-2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Rsk-2 siRNA (h): sc-36441, Rsk-2 siRNA (m): sc-36442, Rsk-2 shRNA Plasmid (h): sc-36441-SH, Rsk-2 shRNA Plasmid (m): sc-36442-SH, Rsk-2 shRNA (h) Lentiviral Particles: sc-36441-V and Rsk-2 shRNA (m) Lentiviral Particles: sc-36442-V.

Molecular Weight of p-Rsk-2: 80 kDa.

Positive Controls: NIH/3T3 + UV cell lysate: sc-3804 or HeLa + PMA cell lysate: sc-2258.

STORAGE

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

DATA



p-Rsk-2 (Thr 577): sc-16407. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic, membrane and nuclear staining of myocytes.

SELECT PRODUCT CITATIONS

1. Watson, K., et al. 2005. Macrophage inflammatory protein 2 inhibits β -amyloid peptide (1-42)-mediated hippocampal neuronal apoptosis through activation of mitogen-activated protein kinase and phosphatidylinositol 3-kinase signaling pathways. *Mol. Pharmacol.* 67: 757-765.
2. Lin, J.X., et al. 2008. Critical role for Rsk-2 in T-lymphocyte activation. *Blood* 111: 525-533.
3. Lau, A.T., et al. 2011. Phosphorylation of histone H2B serine 32 is linked to cell transformation. *J. Biol. Chem.* 286: 26628-26637.

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
Satisfaction
Guaranteed

Try **p-Rsk-2 (C-6): sc-377501** or **p-Rsk-2 (F-7): sc-374664**, our highly recommended monoclonal alternatives to p-Rsk-2 (Thr 577).