

# p-Rsk-1 (pS380.20A): sc-136476

## BACKGROUND

The family of ribosomal S6 kinases (Rsk), designated Rsk-1, Rsk-2 and Rsk-3, are important signaling intermediates that mediate responses to a broad range of ligand-activated receptor tyrosine kinases. It has been established that Rsk-3 is not activated by MAP kinase *in vitro*, unlike Rsk-1 and Rsk-2. A unique feature common to the three members of the Rsk family is that each possesses two non-identical complete kinase catalytic domains. The Rsk family amino-terminal kinase domain is phosphorylated on Ser 227 by 3-phosphoinositide-dependent protein kinase-1 (PDK1), which increases the kinase activity of Rsk. In the carboxy-terminal kinase domain, Rsk-1 and Rsk-2 are autophosphorylated on Ser 380 and Ser 386, respectively, which mediates the docking of PDK1 to Rsk in order to promote phosphorylation of substrates, such as histone H3.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RPS6KA1 (human) mapping to 1p36.11.

## STORAGE

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

## SOURCE

p-Rsk-1 (pS380.20A) is a mouse monoclonal antibody raised against a short amino acid sequence containing Ser 380 phosphorylated Rsk-1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

p-Rsk-1 (pS380.20A) is recommended for detection of Ser 380 phosphorylated Rsk-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for Rsk-1 siRNA (h): sc-29475, Rsk-1 shRNA Plasmid (h): sc-29475-SH and Rsk-1 shRNA (h) Lentiviral Particles: sc-29475-V.

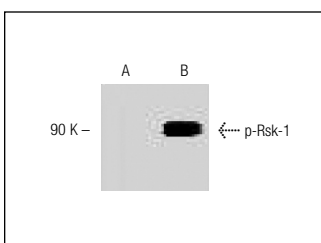
Molecular Weight of p-Rsk-1: 90 kDa.

Positive Controls: A-431 + EGF whole cell lysate: sc-2202.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Lambda Phosphatase: sc-200312A and Western Blotting Luminol Reagent: sc-2048.

## DATA



p-Rsk-1 (pS380.20A): sc-136476. Western blot analysis of Rsk-1 phosphorylation in A-431 whole cell lysates either untreated (A) or treated (B) with EGF.

## RESEARCH USE

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

## PROTOCOLS

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