

# p-Ribosomal Protein S6 (Ser 235): sc-101793

## BACKGROUND

The genes encoding for mammalian ribosomal proteins comprise multigene families that consist predominantly of multiple processed pseudogenes and one functional intron-containing gene within their coding regions. The RPS6 gene gives rise to Ribosomal Protein S6 (also designated RPS6). RPS6 is the major substrate of protein kinases in eukaryotic ribosomes. Sequence comparison has identified RPS6 as the equivalent of the Ribosomal Protein S10 from *Saccharomyces cerevisiae*. The sequence comparison of ribosomal proteins from evolutionarily distant eukaryotes, such as yeast and human, indicates that the structure and probably the function of RPS6 has been highly conserved. RPS6 phosphorylation is stimulated by growth factors, tumor promoting agents and mitogens. It is dephosphorylated at growth arrest.

## REFERENCES

1. Gross, T., et al. 1988. Primary structure of the ribosomal protein gene S6 from *Schizosaccharomyces pombe*. *Curr. Genet.* 13: 57-63.
2. Lott, J.B. and Mackie, G.A. 1988. Isolation and characterization of cloned cDNAs that code for human Ribosomal Protein S6. *Gene* 65: 31-39.
3. Heinze, H., et al. 1988. The primary structure of the human Ribosomal Protein S6 derived from a cloned cDNA. *J. Biol. Chem.* 263: 4139-4144.

## CHROMOSOMAL LOCATION

Genetic locus: RPS6 (human) mapping to 9p22.1; Rps6 (mouse) mapping to 4 C4.

## SOURCE

p-Ribosomal Protein S6 (Ser 235) is a rabbit polyclonal antibody raised against a short amino acid sequence containing Ser 235 phosphorylated Ribosomal Protein S6 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

p-Ribosomal Protein S6 (Ser 235) is recommended for detection of Ser 235 phosphorylated Ribosomal Protein S6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for Ribosomal Protein S6 siRNA (h): sc-36424, Ribosomal Protein S6 siRNA (m): sc-36425, Ribosomal Protein S6 shRNA Plasmid (h): sc-36424-SH, Ribosomal Protein S6 shRNA Plasmid (m): sc-36425-SH, Ribosomal Protein S6 shRNA (h) Lentiviral Particles: sc-36424-V and Ribosomal Protein S6 shRNA (m) Lentiviral Particles: sc-36425-V.

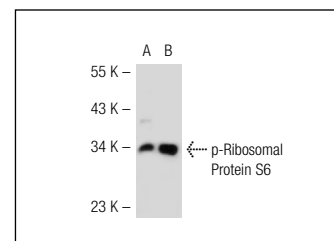
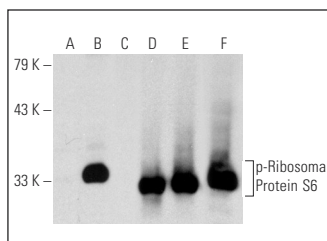
Molecular Weight of p-Ribosomal Protein S6: 28 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or Ribosomal Protein S6 (m): 293T Lysate: sc-125921.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Western Blotting Luminol Reagent: sc-2048 and Lambda Phosphatase: sc-200312A. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



## 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.

## PROTOCOLS

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



Try **p-Ribosomal Protein S6 (50.Ser 235/236): sc-293144**, our highly recommended monoclonal alternative to p-Ribosomal Protein S6 (Ser 235).