

# Ribosomal Protein S6 (E-13): sc-13007

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

Ribosomal Protein S6 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of 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.

Blocking peptide available for competition studies, sc-13007 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Ribosomal Protein S6 (N-12) is recommended for detection of 40S ribosomal protein S6 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).

Ribosomal Protein S6 (N-12) is also recommended for detection of 40S ribosomal protein S6 in additional species, including equine, canine, bovine, porcine and avian.

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 Ribosomal Protein S6: 32 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or KNRK whole cell lysate: sc-2214.

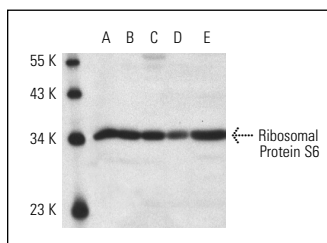
## STORAGE

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

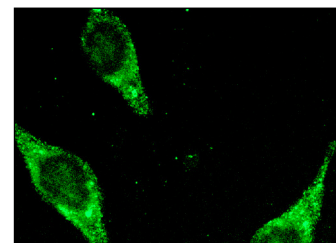
## RESEARCH USE

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

## DATA



Ribosomal Protein S6 (E-13): sc-13007. Western blot analysis of Ribosomal Protein S6 expression in HeLa (A), Hep G2 (B), K-562 (C), KNRK (D) and NIH/3T3 (E) whole cell lysates.



Ribosomal Protein S6 (E-13): sc-13007. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic staining.

## SELECT PRODUCT CITATIONS

1. Fukumura, J., et al. 2003. A temperature-sensitive mutant of the mammalian RNA helicase, DEAD-BOX X isoform, DBX, defective in the transition from G<sub>1</sub> to S phase. *J. Biochem.* 134: 71-82.
2. Yang, F., et al. 2004. Endonuclease-mediated mRNA decay requires tyrosine phosphorylation of polysomal ribonuclease 1 (PMR1) for the targeting and degradation of polyribosome-bound substrate mRNA. *J. Biol. Chem.* 279: 48993-49002.
3. Yoon, Y.J. and Mowry, K.L. 2004. *Xenopus* Staufin is a component of a ribonucleoprotein complex containing Vg1 RNA and kinesin. *Development* 131: 3035-3045.
4. Cabeza, M., et al. 2004. Intracellular Ca<sup>2+</sup> stimulates the binding to androgen receptors in platelets. *Steroids* 69: 767-772.
5. Kodiha, M., et al. 2005. Stress inhibits nucleocytoplasmic shuttling of heat shock protein HSC 70. *Am. J. Physiol., Cell Physiol.* 289: C1034-C1041.
6. Peng, Y., et al. 2007. c-Src activates endonuclease-mediated mRNA decay. *Mol. Cell* 25: 779-787.
7. Kodiha, M., et al. 2009. Interplay between MEK and PI3 kinase signaling regulates the subcellular localization of protein kinases ERK1/2 and Akt upon oxidative stress. *FEBS Lett.* 583: 1987-1993.
8. Zalocchi, M., et al. 2010. Biochemical characterization of native Usher protein complexes from a vesicular subfraction of tracheal epithelial cells. *Biochemistry* 49: 1236-1247.
9. Unterstab, G., et al. 2010. The polyomavirus BK agnoprotein co-localizes with lipid droplets. *Virology* 399: 322-331.



Try **Ribosomal Protein S6 (C-8): sc-74459** or **Ribosomal Protein S6 (H-4): sc-74576**, our highly recommended monoclonal alternatives to Ribosomal Protein S6 (E-13). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Ribosomal Protein S6 (C-8): sc-74459**.