

# Ribosomal Protein S23 (C-14): sc-324271

## BACKGROUND

Ribosomes, the organelles that catalyze protein synthesis, are composed of a small subunit (40S) and a large subunit (60S) that consist of over 80 distinct ribosomal proteins. Mammalian ribosomal proteins are encoded by multigene families that contain processed pseudogenes and one functional intron-containing gene within their coding regions. Ribosomal Protein S23, also known as RPS23, is a 143 amino acid component of the 40S subunit. Localized to the cytoplasm, Ribosomal Protein S23 belongs to the S12P family of ribosomal proteins and functions in protein synthesis. Like most ribosomal proteins, Ribosomal Protein S23 exists as multiple processed pseudogenes that are scattered throughout the genome. Human Ribosomal Protein S23 shares significant amino acid similarity with its yeast counterpart, suggesting a conserved role between species.

## REFERENCES

- Hori, N., Murakawa, K., Matoba, R., Fukushima, A., Okubo, K. and Matsubara, K. 1993. A cDNA sequence of human ribosomal protein, homologue of yeast S28. *Nucleic Acids Res.* 21: 4394.
- Kitaoka, Y., Olvera, J. and Wool, I.G. 1994. The primary structure of rat ribosomal protein S23. *Biochem. Biophys. Res. Commun.* 202: 314-320.
- Kenmochi, N., Kawaguchi, T., Rozen, S., Davis, E., Goodman, N., Hudson, T.J., Tanaka, T. and Page, D.C. 1998. A map of 75 human ribosomal protein genes. *Genome Res.* 8: 509-523.
- Yoshihama, M., Uechi, T., Asakawa, S., Kawasaki, K., Kato, S., Higa, S., Maeda, N., Minoshima, S., Tanaka, T., Shimizu, N. and Kenmochi, N. 2002. The human ribosomal protein genes: sequencing and comparative analysis of 73 genes. *Genome Res.* 12: 379-390.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603683. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: RPS23 (human) mapping to 5q14.2; Rps23 (mouse) mapping to 13 C3.

## SOURCE

Ribosomal Protein S23 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Ribosomal Protein S23 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-324271 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

Ribosomal Protein S23 (C-14) is recommended for detection of Ribosomal Protein S23 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Ribosomal Protein S family members.

Ribosomal Protein S23 (C-14) is also recommended for detection of Ribosomal Protein S23 in additional species, including avian.

Suitable for use as control antibody for Ribosomal Protein S23 siRNA (h): sc-91667, Ribosomal Protein S23 siRNA (m): sc-152942, Ribosomal Protein S23 shRNA Plasmid (h): sc-91667-SH, Ribosomal Protein S23 shRNA Plasmid (m): sc-152942-SH, Ribosomal Protein S23 shRNA (h) Lentiviral Particles: sc-91667-V and Ribosomal Protein S23 shRNA (m) Lentiviral Particles: sc-152942-V.

Molecular Weight of Ribosomal Protein S23: 16 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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.