

Ribosomal Protein S21 (A-12): sc-85882

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 S21 (RPS21), which is also known as 40S ribosomal protein S21 or 8.2 kDa differentiation factor, is an 83 amino acid protein which belongs to the ribosomal protein S21e family. Ribosomal Protein S21 is part of the 40S subunit and localizes to cytoplasm. Alternative Ribosomal Protein S21 splice variants have been described, although none have been verified. Like most ribosomal proteins, Ribosomal Protein S21 exists as multiple processed pseudogenes that are scattered throughout the genome.

REFERENCES

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3. Kostanyan, I.A., et al. 1994. A new human leukemia cell 8.2 kDa differentiation factor: isolation and primary structure. *FEBS Lett.* 356: 327-329.
4. Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. *Genome Res.* 8: 509-523.
5. Online Mendelian Inheritance in Man, OMIM[™]. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 180477. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Smirnova, E.V., et al. 2000. Cloning and characterization of the human Ribosomal Protein S21 gene. *Bioorg Khim* 26: 392-396.
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CHROMOSOMAL LOCATION

Genetic locus: RPS21 (human) mapping to 20q13.33; Rps21 (mouse) mapping to 2 H4.

SOURCE

Ribosomal Protein S21 (A-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Ribosomal Protein S21 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-85882 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Ribosomal Protein S21 (A-12) is recommended for detection of Ribosomal Protein S21 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).

Ribosomal Protein S21 (A-12) is also recommended for detection of Ribosomal Protein S21 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein S21 siRNA (h): sc-76401, Ribosomal Protein S21 siRNA (m): sc-152941, Ribosomal Protein S21 shRNA Plasmid (h): sc-76401-SH, Ribosomal Protein S21 shRNA Plasmid (m): sc-152941-SH, Ribosomal Protein S21 shRNA (h) Lentiviral Particles: sc-76401-V and Ribosomal Protein S21 shRNA (m) Lentiviral Particles: sc-152941-V.

Molecular Weight of Ribosomal Protein S21: 9 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or Jurkat whole cell lysate: sc-2204.

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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.