

Ribosomal Protein S17 (T-14): sc-169168

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 multi-gene families that contain processed pseudogenes and one functional intron-containing gene within their coding regions. Ribosomal Protein S17, also known as RPS17, RPS17L1 or RPS17L2, is a 135 amino acid protein that is a component of the 40S subunit. Localized to the cytoplasm and expressed ubiquitously, Ribosomal Protein S17 belongs to the S17E family of ribosomal proteins and functions in protein synthesis. Mutations in the gene encoding Ribosomal Protein S17 are associated with Diamond-Blackfan anemia (DBA), a rare congenital disorder characterized by defective differentiation of pro-erythroblasts. Like most ribosomal proteins, Ribosomal Protein S17 exists as multiple processed pseudogenes that are scattered throughout the genome.

REFERENCES

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- Thompson, M.D., et al. 1992. Characterization of RPS17, RP19 and RPL15: three nucleus-encoded plastid ribosomal protein genes. *Plant Mol. Biol.* 18: 931-944.
- Schultes, N.P., et al. 2000. Maize high chlorophyll fluorescent 60 mutation is caused by an Ac disruption of the gene encoding the chloroplast ribosomal small subunit protein 17. *Plant J.* 21: 317-327.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 180472. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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CHROMOSOMAL LOCATION

Genetic locus: RPS17 (human) mapping to 15q25.2; Rps17 (mouse) mapping to 7 D3.

SOURCE

Ribosomal Protein S17 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Ribosomal Protein S17 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-169168 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 S17 (T-14) is recommended for detection of Ribosomal Protein S17 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 S17 (T-14) is also recommended for detection of Ribosomal Protein S17 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein S17 siRNA (h): sc-90116, Ribosomal Protein S17 siRNA (m): sc-152938, Ribosomal Protein S17 shRNA Plasmid (h): sc-90116-SH, Ribosomal Protein S17 shRNA Plasmid (m): sc-152938-SH, Ribosomal Protein S17 shRNA (h) Lentiviral Particles: sc-90116-V and Ribosomal Protein S17 shRNA (m) Lentiviral Particles: sc-152938-V.

Molecular Weight of Ribosomal Protein S17: 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.

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.


 MONOS
Satisfaction
Guaranteed

Try **Ribosomal Protein S17 (40-K): sc-100835**, our highly recommended monoclonal alternative to Ribosomal Protein S17 (T-14).