

Ribosomal Protein S10 (P-15): sc-243996

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 S10 (RPS10) is a 165 amino acid component of the small ribosomal 40S subunit. While generally found in the cytoplasm, RPS10 can localize to the granular component (GC) region of the nucleolus. For this to occur, methylation by PRMT5 is required as well as an interaction with NPS1. Defects in RPS10 are the cause of Diamond-Blackfan anemia type 9 (DBA9). It is a form of Diamond-Blackfan anemia, a congenital non-regenerative hypoplastic anemia that usually presents early in infancy. Diamond-Blackfan anemia is characterized by a moderate to severe macrocytic anemia, erythroblastopenia, and an increased risk of malignancy.

CHROMOSOMAL LOCATION

Genetic locus: RPS10 (human) mapping to 6p21.31; Rps10 (mouse) mapping to 17 A3.3.

SOURCE

Ribosomal Protein S10 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Ribosomal Protein S10 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-243996 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein S10 (P-15) is recommended for detection of Ribosomal Protein S10 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); non cross-reactive with other Ribosomal Protein S family members.

Ribosomal Protein S10 (P-15) is also recommended for detection of Ribosomal Protein S10 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein S10 siRNA (h): sc-106508, Ribosomal Protein S10 siRNA (m): sc-152931, Ribosomal Protein S10 shRNA Plasmid (h): sc-106508-SH, Ribosomal Protein S10 shRNA Plasmid (m): sc-152931-SH, Ribosomal Protein S10 shRNA (h) Lentiviral Particles: sc-106508-V and Ribosomal Protein S10 shRNA (m) Lentiviral Particles: sc-152931-V.

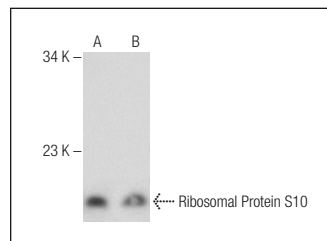
Molecular Weight of Ribosomal Protein S10: 18 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or BJAB whole cell lysate: sc-2207.

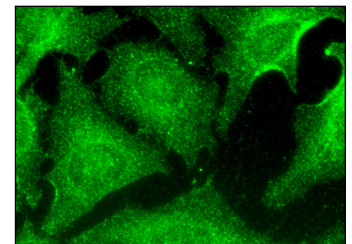
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Ribosomal Protein S10 (P-15): sc-243996. Western blot analysis of Ribosomal Protein S10 expression in K-562 (A) and BJAB (B) whole cell lysates.



Ribosomal Protein S10 (P-15): sc-243996. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Ribosomal Protein S10 (A-10): sc-515655**, our highly recommended monoclonal alternative to Ribosomal Protein S10 (P-15).