

Ribosomal Protein S3 (FL-243): sc-135390

BACKGROUND

Ribosomal subunits are synthesized in the nucleus, and mature 40S and 60S subunits are exported stoichiometrically into the cytoplasm. Both 40S and 60S subunits are composed of four RNA species and approximately 80 structurally distinct proteins. Mitochondrial ribosomes consist of a small 28S subunit and a large 39S subunit. Ribosomal proteins have the ability to pass through the nuclear envelope in the native state, making them the largest of the structures accommodated by the nuclear pore complexes. The nuclear export of ribosomal subunits is a unidirectional, saturable and energy-dependent process. Ribosomal Protein S3 a member of the 40S subunit and plays a role in translation and ribosome maturation. Specifically, Ribosomal Protein S3 mediates the formation of the mRNA binding site 3' of the codon in the decoding site. In addition, Ribosomal Protein S3 is involved in DNA damage recognition as shown by its affinity for abasic sites and 7,8-dihydro-8-oxoguanine residues and its interaction with human base excision repair (BER) proteins OGG1 and Ref-1.

CHROMOSOMAL LOCATION

Genetic locus: RPS3 (human) mapping to 11q13.4; Rps3 (mouse) mapping to 7 E2.

SOURCE

Ribosomal Protein S3 (FL-243) is a rabbit polyclonal antibody raised against amino acids 1-243 representing full length Ribosomal Protein S3 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.

APPLICATIONS

Ribosomal Protein S3 (FL-243) is recommended for detection of Ribosomal Protein S3 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 S3 (FL-243) is also recommended for detection of Ribosomal Protein S3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein S3 siRNA (h): sc-96950, Ribosomal Protein S3 siRNA (m): sc-152950, Ribosomal Protein S3 shRNA Plasmid (h): sc-96950-SH, Ribosomal Protein S3 shRNA Plasmid (m): sc-152950-SH, Ribosomal Protein S3 shRNA (h) Lentiviral Particles: sc-96950-V and Ribosomal Protein S3 shRNA (m) Lentiviral Particles: sc-152950-V.

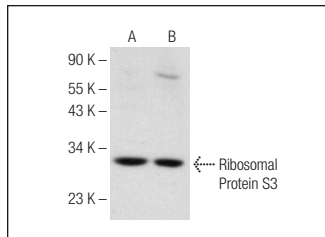
Molecular Weight of Ribosomal Protein S3: 33 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HEK293 whole cell lysate: sc-45136 or HeLa nuclear extract: sc-2120.

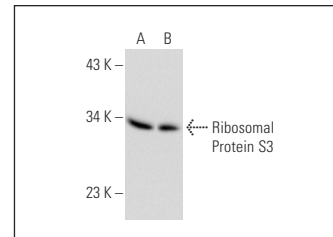
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Ribosomal Protein S3 (FL-243): sc-135390. Western blot analysis of Ribosomal Protein S3 expression in HeLa (A) and Raji (B) whole cell lysates.



Ribosomal Protein S3 (FL-243): sc-135390. Western blot analysis of Ribosomal Protein S3 expression in HEK293 whole cell lysate (A) and HeLa nuclear extract (B).

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.



Try **Ribosomal Protein S3 (C-7): sc-376008** or **Ribosomal Protein S3 (E-6): sc-376098**, our highly recommended monoclonal alternatives to Ribosomal Protein S3 (FL-243).