

# Ribosomal Protein S3A (E-19): sc-50865

## BACKGROUND

Ribosomal subunits are synthesized in the nucleus, and mature 40S and 60S subunits are exported stoichiometrically into the cytoplasm. Both the 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 S3A, a component of the 40S subunit that belongs to the S3AE family of ribosomal proteins, localizes to the cytoplasm. RPS3A, the gene encoding for the Ribosomal Protein S3A, contains 6 exons and 5 introns spanning 5,013 bp and maps to chromosome 4q31.3.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RPS3A (human) mapping to 4q31.3; Rps3a (mouse) mapping to 3 F1.

## STORAGE

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

## SOURCE

Ribosomal Protein S3A (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Ribosomal Protein S3A 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-50865 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Ribosomal Protein S3A (E-19) is recommended for detection of Ribosomal Protein S3A 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 S3A (E-19) is also recommended for detection of Ribosomal Protein S3A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Ribosomal Protein S3A siRNA (h): sc-61476, Ribosomal Protein S3A siRNA (m): sc-61477, Ribosomal Protein S3A shRNA Plasmid (h): sc-61476-SH, Ribosomal Protein S3A shRNA Plasmid (m): sc-61477-SH, Ribosomal Protein S3A shRNA (h) Lentiviral Particles: sc-61476-V and Ribosomal Protein S3A shRNA (m) Lentiviral Particles: sc-61477-V.

Molecular Weight of Ribosomal Protein S3A: 30 kDa.

## 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.