Ribosomal Protein S19 (N-16): sc-49095



The Power to Question

BACKGROUND

Ribosomal subunits are synthesized in the nucleus and mature 40S and 60S subunits are exported stoichiometrically into the cytoplasm. Together these subunits are composed of four RNA species and approximately 80 structurally distinct proteins. 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 S19 (RPS19) is a 145 amino acids protein expressed in various human adult tissues, including bone marrow, peripheral blood, spleen, liver and nonhematopoietic tissues. RPS19 expression decreases during terminal erythroid differentiation; a deficiency of RPS19 blocks proliferation of immature erythroid progenitor cells altogether. Mutations in the RPS19 gene are linked with Diamond-Blackfan anemia (DBA), a congenital, hypoplastic, red cell aplasia that occasionally presents with physical anomalies.

REFERENCES

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- Fallahi, M., Crosthwait, J., Calixte, S. and Bonen, L. 2005. Fate of mitochondrially located S19 Ribosomal Protein genes after transfer of a functional copy to the nucleus in cereals. Mol. Genet. Genomics 273: 76-83.

CHROMOSOMAL LOCATION

Genetic locus: RPS19 (human) mapping to 19q13.2; Rps19 (mouse) mapping to 7 A3.

SOURCE

Ribosomal Protein S19 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Ribosomal Protein S19 of human origin.

RESEARCH USE

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

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-49095 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein S19 (N-16) is recommended for detection of Ribosomal Protein S19 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 S19 (N-16) is also recommended for detection of Ribosomal Protein S19 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Ribosomal Protein S19 siRNA (h): sc-61474, Ribosomal Protein S19 siRNA (m): sc-61475, Ribosomal Protein S19 shRNA Plasmid (h): sc-61474-SH, Ribosomal Protein S19 shRNA Plasmid (m): sc-61475-SH, Ribosomal Protein S19 shRNA (h) Lentiviral Particles: sc-61474-V and Ribosomal Protein S19 shRNA (m) Lentiviral Particles: sc-61475-V.

Molecular Weight of Ribosomal Protein S19: 16 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

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.



Try Ribosomal Protein S19 (WW-4): sc-100836,

our highly recommended monoclonal alternative to Ribosomal Protein S19 (N-16).