# SANTA CRUZ BIOTECHNOLOGY, INC.

# Ribosomal Protein S19 (FL-145): sc-134779



#### 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.

## CHROMOSOMAL LOCATION

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

#### SOURCE

Ribosomal Protein S19 (FL-145) is a rabbit polyclonal antibody raised against amino acids 1-145 representing full length Ribosomal Protein S19 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### **RESEARCH USE**

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

#### **APPLICATIONS**

Ribosomal Protein S19 (FL-145) 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), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 S19 (FL-145) 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.

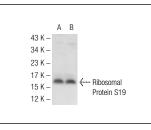
Molecular Weight of Ribosomal Protein S19: 16 kDa.

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

#### **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



Ribosomal Protein S19 (FL-145): sc-134779. Western blot analysis of Ribosomal Protein S19 expression in K-562 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.

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

## MONOS Satisfation

Guaranteed

Try **Ribosomal Protein S19 (WW-4): sc-100836**, our highly recommended monoclonal alternative to Ribosomal Protein S19 (FL-145).