## SANTA CRUZ BIOTECHNOLOGY, INC.

# Ribosomal Protein L18 (K-12): sc-131061



#### 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 L18, also known as RPL18, is a 188 amino acid protein that localizes to the cytoplasm and exists as a component of the 60S ribosomal subunit, playing a role in protein translation. Like most ribosomal proteins, Ribosomal Protein L18 exists as multiple processed pseudogenes that are scattered throughout the genome. The gene encoding Ribosomal Protein L18 maps to human chromosome 19, which is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEA-CAM and PSG family and Fc receptors (FcRs).

#### REFERENCES

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- 2. Wool, I.G., Chan, Y.L. and Glück, A. 1995. Structure and evolution of mammalian ribosomal proteins. Biochem. Cell Biol. 73: 933-947.
- 3. Kenmochi, N., Kawaguchi, T., Rozen, S., Davis, E., Goodman, N., Hudson, T.J., Tanaka, T. and Page, D.C. 1998. A map of 75 human ribosomal protein genes. Genome Res. 8: 509-523.
- 4. Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 604179. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
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- 6. Kapp, L.D. and Lorsch, J.R. 2004. The molecular mechanics of eukaryotic translation. Annu. Rev. Biochem. 73: 657-704.

#### CHROMOSOMAL LOCATION

Genetic locus: RPL18 (human) mapping to 19q13.33; Rpl18 (mouse) mapping to 7 B4.

#### SOURCE

Ribosomal Protein L18 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Ribosomal Protein L18 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.

Blocking peptide available for competition studies, sc-131061 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

Ribosomal Protein L18 (K-12) is recommended for detection of Ribosomal Protein L18 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); non cross-reactive with other Ribosomal Protein family members.

Ribosomal Protein L18 (K-12) is also recommended for detection of Ribosomal Protein L18 in additional species, including canine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein L18 siRNA (h): sc-97249, Ribosomal Protein L18 siRNA (m): sc-152899, Ribosomal Protein L18 shRNA Plasmid (h): sc-97249-SH, Ribosomal Protein L18 shRNA Plasmid (m): sc-152899-SH, Ribosomal Protein L18 shRNA (h) Lentiviral Particles: sc-97249-V and Ribosomal Protein L18 shRNA (m) Lentiviral Particles: sc-152899-V.

Molecular Weight of Ribosomal Protein L18: 22 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<sup>™</sup> 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<sup>™</sup> 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.

#### **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 Satisfation Guaranteed

## Try Ribosomal Protein L18 (3D5): sc-293359,

our highly recommended monoclonal alternative to Ribosomal Protein L18 (K-12).