

Ribosomal Protein L18 (3D5): sc-293359

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 CEACAM and PSG family and Fc receptors (FcRs).

REFERENCES

1. Puder, M., Barnard, G.F., Staniunas, R.J., Steele, G.D. and Chen, L.B. 1993. Nucleotide and deduced amino acid sequence of human Ribosomal Protein L18. *Biochim. Biophys. Acta* 1216: 134-136.
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/>
5. Yoshihama, M., Uechi, T., Asakawa, S., Kawasaki, K., Kato, S., Higa, S., Maeda, N., Minoshima, S., Tanaka, T., Shimizu, N. and Kenmochi, N. 2002. The human ribosomal protein genes: sequencing and comparative analysis of 73 genes. *Genome Res.* 12: 379-390.
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.

SOURCE

Ribosomal Protein L18 (3D5) is a mouse monoclonal antibody raised against amino acids 90-188 of Ribosomal Protein L18 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Ribosomal Protein L18 (3D5) is recommended for detection of Ribosomal Protein L18 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

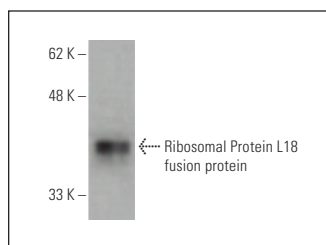
Suitable for use as control antibody for Ribosomal Protein L18 siRNA (h): sc-97249, Ribosomal Protein L18 shRNA Plasmid (h): sc-97249-SH and Ribosomal Protein L18 shRNA (h) Lentiviral Particles: sc-97249-V.

Molecular Weight of Ribosomal Protein L18: 22 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Ribosomal Protein L18 (3D5): sc-293359. Western blot analysis of human recombinant Ribosomal Protein L18 fusion protein.

RESEARCH USE

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

PROTOCOLS

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