SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein L9 (ST-7): sc-100828

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 L9, also known as RPL9, is a 192 amino acid protein that is a component of the 60S subunit. Localized to the cytoplasm and expressed ubiquitously, Ribosomal Protein L9 belongs to the L6P family of ribosomal proteins and functions in protein synthesis. Like most ribosomal proteins, Ribosomal Protein L9 exists as multiple processed pseudogenes that are scattered throughout the genome. Due to alternative splicing events, Ribosomal Protein L9 is expressed as two isoforms.

REFERENCES

1. Hori, N., et al. 1993. A new human ribosomal protein sequence, homologue of rat L9. Nucleic Acids Res. 21: 4395.
2. Mazuruk, K., et al. 1996. Structural organization and chromosomal localization of the human Ribosomal Protein L9 gene. Biochim. Biophys. Acta 1305: 151-162.
3. Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. Genome Res. 8: 509-523.
4. Angelastro, J.M., et al. 2002. Nerve growth factor selectively regulates expression of transcripts encoding ribosomal proteins. BMC Neurosci. 3: 3.
5. Yoshihama, M., et al. 2002. The human ribosomal protein genes: sequencing and comparative analysis of 73 genes. Genome Res. 12: 379-390.
6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603686. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: RPL9 (human) mapping to 4p14; Rpl9 (mouse) mapping to 5 C3.1.

SOURCE

Ribosomal Protein L9 (ST-7) is a mouse monoclonal antibody raised against amino acids 93-192 corresponding to the C-terminal of Ribosomal Protein L9 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 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.

RESEARCH USE

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

APPLICATIONS

Ribosomal Protein L9 (ST-7) is recommended for detection of Ribosomal Protein L9 of mouse, rat and 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Ribosomal Protein L9 siRNA (h): sc-89182, Ribosomal Protein L9 siRNA (m): sc-152928, Ribosomal Protein L9 shRNA Plasmid (h): sc-89182-SH, Ribosomal Protein L9 shRNA Plasmid (m): sc-152928-SH, Ribosomal Protein L9 shRNA (h) Lentiviral Particles: sc-89182-V and Ribosomal Protein L9 shRNA (m) Lentiviral Particles: sc-152928-V.

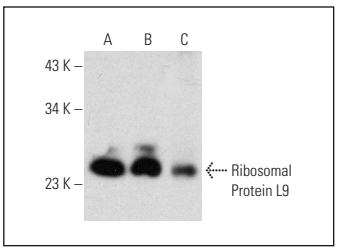
Molecular Weight of Ribosomal Protein L9: 22 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, rat spleen extract: sc-2397 or Jurkat whole cell lysate: sc-2204.

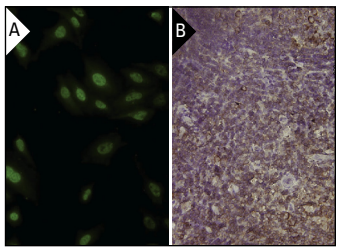
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Ribosomal Protein L9 (ST-7): sc-100828. Western blot analysis of Ribosomal Protein L9 expression in HeLa (**A**) and Jurkat (**B**) whole cell lysates and rat spleen tissue extract (**C**).



Ribosomal Protein L9 (ST-7): sc-100828. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human tonsil tissue showing cytoplasmic localization (**B**).

PROTOCOLS

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