SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein L19 (K-12): sc-100830

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 L19 is a 196 amino acid protein that is a component of the 60S subunit. Localized to the cytoplasm, Ribosomal Protein L19 belongs to the L19e family of ribosomal proteins and functions in protein synthesis. The expression of Ribosomal Protein L19 is upregulated in breast cancers and its overexpression is used as a prognostic marker for prostate cancer. Like most ribosomal proteins, Ribosomal Protein L19 exists as multiple processed pseudogenes that are scattered throughout the genome.

CHROMOSOMAL LOCATION

Genetic locus: RPL19 (human) mapping to 17q12; Rpl19 (mouse) mapping to 11 D.

SOURCE

Ribosomal Protein L19 (K-12) is a mouse monoclonal antibody raised against recombinant protein mapping within amino acids 1-101 of Ribosomal Protein L19 of human origin.

PRODUCT

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

APPLICATIONS

Ribosomal Protein L19 (K-12) is recommended for detection of Ribosomal Protein L19 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 L19 siRNA (h): sc-93859, Ribosomal Protein L19 siRNA (m): sc-152901, Ribosomal Protein L19 shRNA Plasmid (h): sc-93859-SH, Ribosomal Protein L19 shRNA Plasmid (m): sc-152901-SH, Ribosomal Protein L19 shRNA (h) Lentiviral Particles: sc-93859-V and Ribosomal Protein L19 shRNA (m) Lentiviral Particles: sc-152901-V.

Molecular Weight of Ribosomal Protein L19: 23 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, MCF7 whole cell lysate: sc-2206 or HeLa whole cell lysate: sc-2200.

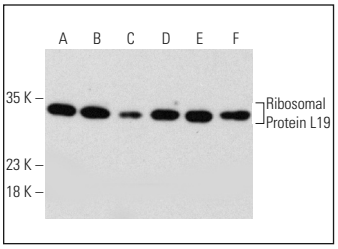
STORAGE

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

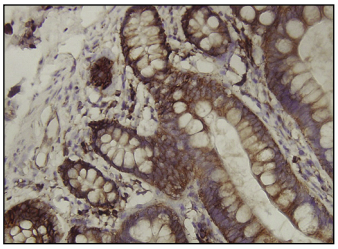
RESEARCH USE

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

DATA



Ribosomal Protein L19 (K-12): sc-100830. Western blot analysis of Ribosomal Protein L19 expression in HeLa (**A**), K-562 (**B**), MCF7 (**C**), RAW 264.7 (**D**) and NIH/3T3 (**E**) whole cell lysates and rat lung tissue extract (**F**).



Ribosomal Protein L19 (K-12): sc-100830. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human small Intestine tissue showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Miyazawa, N., et al. 2014. Human cell growth regulator Ly-1 antibody reactive homologue accelerates processing of preribosomal RNA. Genes Cells 19: 273-286.
2. Du, X., et al. 2014. Perinatal exposure to low-dose methoxychlor impairs testicular development in C57BL/6 mice. PLoS ONE 9: e103016.
3. Yamagishi, M., et al. 2015. Coordinated loss of microRNA group causes defenseless signaling in malignant lymphoma. Sci. Rep. 5: 17868.
4. Staudacher, J.J., et al. 2015. Hypoxia-induced gene expression results from selective mRNA partitioning to the endoplasmic reticulum. Nucleic Acids Res. 43: 3219-3236.
5. McKenna, M., et al. 2016. Mechanistic insights into the inhibition of Sec61-dependent co- and post-translational translocation by mycolactone. J. Cell Sci. 129: 1404-1415.
6. Hartmann, H., et al. 2018. Proteomics and C9orf72 neuropathology identify ribosomes as poly-GR/PR interactors driving toxicity. Life Sci. Alliance 1: e201800070.
7. Gamerdinger, M., et al. 2019. Early scanning of nascent polypeptides inside the ribosomal tunnel by NAC. Mol. Cell 75: 996-1006.
8. Petrova, E., et al. 2019. Uncovering flavivirus host dependency factors through a genome-wide gain-of-function screen. Viruses 11: 68.
9. Kim, H.K., et al. 2020. TMBIM6/BI-1 contributes to cancer progression through assembly with mTORC2 and Akt activation. Nat. Commun. 11: 4012.
10. Mestre-Fos, S., et al. 2020. Human ribosomal G-quadruplexes regulate heme bioavailability. J. Biol. Chem. 295: 14855-14865.

PROTOCOLS

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