

Ribosomal Protein L39/L39L (C-14): sc-109896

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 multi-gene families that contain processed pseudogenes and one functional intron-containing gene within their coding regions. Ribosomal Protein L39 (RPL39), also known as 60S Ribosomal Protein L39, consists of 51 amino acids and is the smallest protein found in liver ribosomes. Ribosomal Protein L39 localizes to cytoplasm and is a member of the S39E family of ribosomal proteins. The gene encoding Ribosomal Protein L39 maps to human chromosome Xq24, and shares 92 percent homology with Ribosomal Protein L39L (Ribosomal Protein L39-like), which is also known as RPL39L, L39-2 or RPL39L1. Ribosomal Protein L39L is associated with the 60S ribosomal subunit and is expressed in testis with localization in nucleolus. The gene encoding Ribosomal Protein L39 maps to human chromosome 3q27.3.

REFERENCES

1. Tsui, S.K., Lee, S.M., Fung, K.P., Wayne, M.M. and Lee, C.Y. 1996. Primary structures and sequence analysis of human ribosomal proteins L39 and S27. *Biochem. Mol. Biol. Int.* 40: 611-616.
2. Otsuka, S., Tanaka, M., Saito, S., Yoshimoto, K. and Itakura, M. 1996. Molecular cloning of a cDNA encoding human Ribosomal Protein L39. *Biochim. Biophys. Acta* 1308: 119-121.
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: 601904. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Nadano, D., Notsu, T., Matsuda, T. and Sato, T. 2002. A human gene encoding a protein homologous to Ribosomal Protein L39 is normally expressed in the testis and derepressed in multiple cancer cells. *Biochim. Biophys. Acta* 1577: 430-436.
6. 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.
7. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 607547. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: RPL39 (human) mapping to Xq24, RPL39L (human) mapping to 3q27.3.

SOURCE

Ribosomal Protein L39/L39L (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Ribosomal Protein L39 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109896 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein L39/L39L (C-14) is recommended for detection of Ribosomal Protein L39 and Ribosomal Protein L39L 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).

Molecular Weight of Ribosomal Protein L39/L39L: 6 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™ 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™ 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.



Try **Ribosomal Protein L39L (FB-09): sc-100841**, our highly recommended monoclonal alternative to Ribosomal Protein L39/L39L (C-14).