SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein L30 (S-14): sc-98108

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 L30, also known as RPL30, is a 115 amino acid protein that localizes to the cytoplasm and exists as a component of the 60S subunit, possibly playing a role in protein translation. Like most ribosomal proteins, Ribosomal Protein L30 exists as multiple processed pseudogenes that are scattered throughout the genome. The gene encoding Ribosomal Protein L30 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

REFERENCES

1. Feo, S., et al. 1992. The mapping of seven intron-containing ribosomal protein genes shows they are unlinked in the human genome. Genomics 13: 201-207.
2. Online Mendelian Inheritance in Man, OMIM™. 1992. Johns Hopkins University, Baltimore, MD. MIM Number: 180467. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Wool, I.G., et al. 1995. Structure and evolution of mammalian ribosomal proteins. Biochem. Cell Biol. 73: 933-947.
4. Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. Genome Res. 8: 509-523.
5. Bortoluzzi, S., et al. 2001. Differential expression of genes coding for ribosomal proteins in different human tissues. Bioinformatics 17: 1152-1157.
6. Kapp, L.D., et al. 2004. The molecular mechanics of eukaryotic translation. Annu. Rev. Biochem. 73: 657-704.
7. De Bortoli, M., et al. 2006. Medulloblastoma outcome is adversely associated with overexpression of EEF1D, RPL30, and RPS20 on the long arm of chromosome 8. BMC Cancer 6: 223.

CHROMOSOMAL LOCATION

Genetic locus: RPL30 (human) mapping to 8q22.2; Rpl30 (mouse) mapping to 15 B3.1.

SOURCE

Ribosomal Protein L30 (S-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of Ribosomal Protein L30 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-98108 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein L30 (S-14) is recommended for detection of Ribosomal Protein L30 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 L30 (S-14) is also recommended for detection of Ribosomal Protein L30 in additional species, including bovine.

Suitable for use as control antibody for Ribosomal Protein L30 siRNA (h): sc-77598, Ribosomal Protein L30 siRNA (m): sc-152910, Ribosomal Protein L30 shRNA Plasmid (h): sc-77598-SH, Ribosomal Protein L30 shRNA Plasmid (m): sc-152910-SH, Ribosomal Protein L30 shRNA (h) Lentiviral Particles: sc-77598-V and Ribosomal Protein L30 shRNA (m) Lentiviral Particles: sc-152910-V.

Molecular Weight of Ribosomal Protein L30: 13 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.