SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein L10a (C-12): sc-131338

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 multi-gene families that contain processed pseudogenes and one functional intron-containing gene within their coding regions. Ribosomal Protein L10a, also known as RPL10A, NEDD6 (neural precursor cell expressed, developmentally downregulated 6) or CSA-19, is a 217 amino acid protein that is a component of the 60S subunit. Localized to the cytoplasm and expressed ubiquitously in malignant cells and normal tissues, Ribosomal Protein L10a belongs to the L1P family of ribosomal proteins and functions in protein synthesis. The expression of Ribosomal Protein L10a is downregulated by the immunosuppressive drug Cyclosporin A (CSA). Like most ribosomal proteins, Ribosomal Protein L10a exists as multiple processed pseudogenes that are scattered throughout the genome.

REFERENCES

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3. Balcer-Kubiczek, E.K., Meltzer, S.J., Han, L.H., Zhang, X.F., Shi, Z.M., Harrison, G.H. and Abraham, J.M. 1997. CSA-19, a radiation-responsive human gene, identified by an unbiased two-gel cDNA library screening method in human cancer cells. Oncogene 14: 3051-3057.
4. Wu, G. and Hashimoto, T. 1999. Sequence analysis of genes encoding ribosomal proteins of *amitochondriate protists*: L1 of *Trichomonas vaginalis* and L29 of *Giardia lamblia*. Parasitol. Int. 48: 135-144.
5. Méndez-Alvarez, S., Rüfenacht, K. and Eggen, R.I. 2000. The oxidative stress-sensitive Yap1 null strain of *Saccharomyces cerevisiae* becomes resistant due to increased carotenoid levels upon the introduction of the *Chlamydomonas reinhardtii* cDNA, coding for the 60S Ribosomal Protein L10a. Biochem. Biophys. Res. Commun. 267: 953-959.

CHROMOSOMAL LOCATION

Genetic locus: RPL10A (human) mapping to 6p21.31; Rpl10a (mouse) mapping to 17 A3.3.

SOURCE

Ribosomal Protein L10a (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Ribosomal Protein L10a of human origin.

RESEARCH USE

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

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-131338 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein L10a (C-12) is recommended for detection of and Ribosomal Protein L10a 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 L family members.

Ribosomal Protein L10a (C-12) is also recommended for detection of Ribosomal Protein L10a in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein L10a siRNA (h): sc-95362, Ribosomal protein L10A siRNA (m): sc-152892, Ribosomal Protein L10a shRNA Plasmid (h): sc-95362-SH, Ribosomal protein L10A shRNA Plasmid (m): sc-152892-SH, Ribosomal Protein L10a shRNA (h) Lentiviral Particles: sc-95362-V and Ribosomal protein L10A shRNA (m) Lentiviral Particles: sc-152892-V.

Molecular Weight of Ribosomal Protein L10a: 25 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HeLa whole cell lysate: sc-2200.

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.