SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein L13 (U-25): sc-133960



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 introncontaining gene within their coding regions. Ribosomal Protein L13, also known as RPL13 or BBC1 (breast basic conserved protein 1), is a 211 amino acid protein that is a component of the 60S subunit. Localized to the cytoplasm and expressed ubiquitously, Ribosomal Protein L13 belongs to the L13E family of ribosomal proteins and functions in protein synthesis. In addition, the gene encoding Ribosomal Protein L13 is expressed at high levels in benign breast lesions. Like most ribosomal proteins, Ribosomal Protein L13 exists as multiple processed pseudogenes that are scattered throughout the genome. Due to alternative splicing events and/or alternative polyadenylation, various isoforms exist for Ribosomal Protein L13.

REFERENCES

- 1. Adams, S.M., et al. 1992. Isolation and characterization of a novel gene with differential expression in benign and malignant human breast tumours. Hum. Mol. Genet. 1: 91-96.
- 2. Bertauche, N., et al. 1994. Conservation of the human breast basic conserved 1 gene in the plant kingdom: characterization of a cDNA clone from Arabidopsis thaliana. Gene 141: 211-214.
- 3. Moerland, E., et al. 1997. Exclusion of BBC1 and CMAR as candidate breast tumour-suppressor genes. Br. J. Cancer 76: 1550-1553.
- 4. Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. Genome Res. 8: 509-523.
- 5. Stubbs, A.P., et al. 1999. Differentially expressed genes in hormone refractory prostate cancer: association with chromosomal regions involved with genetic aberrations. Am. J. Pathol. 154: 1335-1343.

CHROMOSOMAL LOCATION

Genetic locus: RPL13 (human) mapping to 16q24.3; Rpl13 (mouse) mapping to 8 E1.

SOURCE

Ribosomal Protein L13 (U-25) is an affinity purified rabbit polyclonal antibody raised against synthetic Ribosomal Protein L13 peptide of human origin.

PRODUCT

Each vial contains 50 µg lgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

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 L13 (U-25) is recommended for detection of Ribosomal Protein L13 of mouse, rat, human and zebrafish 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Ribosomal Protein L13 siRNA (h): sc-92988, Ribosomal Protein L13 siRNA (m): sc-152894, Ribosomal Protein L13 shRNA Plasmid (h): sc-92988-SH, Ribosomal Protein L13 shRNA Plasmid (m): sc-152894-SH, Ribosomal Protein L13 shRNA (h) Lentiviral Particles: sc-92988-V and Ribosomal Protein L13 shRNA (m) Lentiviral Particles: sc-152894-V.

Molecular Weight of Ribosomal Protein L13: 24 kDa.

Positive Controls: Ribosomal Protein L13 (h): 293T Lysate: sc-174357, K-562 whole cell lysate: sc-2203 or HeLa nuclear extract: sc-2120.

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 antirabbit 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA





Ribosomal Protein L13 (U-25): sc-133960. Western blot analysis of Ribosomal Protein L13 expression in non transfected 293T: sc-117752 (A), human Ribosomal Protein L13 transfected 293T: sc-174357 (B) and K-562 (C) whole cell lysates

Ribosomal Protein L13 (U-25): sc-133960. Western blot analysis of Ribosomal Protein L13 expression in Jurkat whole cell lysate

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try Ribosomal Protein L13 (SS-09): sc-100829, our highly recommended monoclonal alternative to Ribosomal Protein L13 (U-25).