

Ribosomal Protein L13 (SS-09): sc-100829

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 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

- 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.
- 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.
- Moerland, E., et al. 1997. Exclusion of BBC1 and CMAR as candidate breast tumour-suppressor genes. *Br. J. Cancer* 76: 1550-1553.
- Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. *Genome Res.* 8: 509-523.
- 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.
- Sáez-Vásquez, J., et al. 2000. Accumulation and nuclear targeting of BnC24, a *Brassica napus* ribosomal protein corresponding to a mRNA accumulating in response to cold treatment. *Plant Sci.* 156: 35-46.

CHROMOSOMAL LOCATION

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

SOURCE

Ribosomal Protein L13 (SS-09) is a mouse monoclonal antibody raised against recombinant Ribosomal Protein L13 of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

Ribosomal Protein L13 (SS-09) is recommended for detection of Ribosomal Protein L13 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) 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.

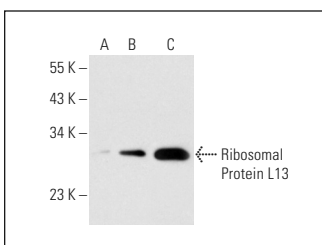
Molecular Weight of Ribosomal Protein L13: 24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or Ribosomal Protein L13 (h): 293T Lysate: sc-110527.

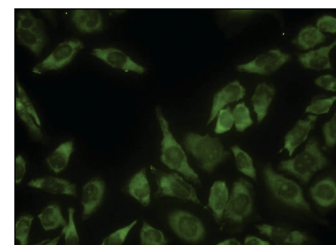
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Ribosomal Protein L13 (SS-09): sc-100829. Western blot analysis of Ribosomal Protein L13 expression in non-transfected 293T: sc-117752 (A), human Ribosomal Protein L13 transfected 293T: sc-110527 (B) and K-562 (C) whole cell lysates.



Ribosomal Protein L13 (SS-09): sc-100829. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Jang, C.Y., et al. 2012. Ribosomal protein S3 localizes on the mitotic spindle and functions as a microtubule associated protein in mitosis. *Biochem. Biophys. Res. Commun.* 429: 57-62.

RESEARCH USE

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