

Ribosomal Protein L13 (h): 293T Lysate: sc-110527

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 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.
- Sález-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.
- Jain, M., et al. 2004. Molecular characterization of a light-responsive gene, breast basic conserved protein 1 (OsiBBC1), encoding nuclear-localized protein homologous to Ribosomal Protein L13 from *Oryza sativa indica*. *Biochim. Biophys. Acta* 1676: 182-192.
- Kobayashi, T., et al. 2006. Activation of the Ribosomal Protein L13 gene in human gastrointestinal cancer. *Int. J. Mol. Med.* 18: 161-170.

CHROMOSOMAL LOCATION

Genetic locus: RPL13 (human) mapping to 16q24.3.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PRODUCT

Ribosomal Protein L13 (h): 293T Lysate represents a lysate of human Ribosomal Protein L13 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Ribosomal Protein L13 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Ribosomal Protein L13 antibodies.

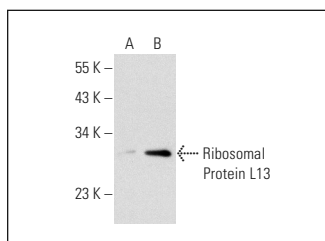
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Ribosomal Protein L13 (SS-09): sc-100829 is recommended as a positive control antibody for Western Blot analysis of enhanced human Ribosomal Protein L13 expression in Ribosomal Protein L13 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



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

PROTOCOLS

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