

Ribosomal Protein L22 (H-106): sc-98857

BACKGROUND

Ribosomal Protein L22 is also known as heparin-binding protein HBp15, because it binds heparin in the submandibular gland and brain. This small protein is also associated with two small nuclear RNAs called EBERs (Epstein-Barr encoded RNAs). These RNAs are synthesized in large amounts by human B lymphocytes infected with Epstein-Barr virus (EBV). Ribosomal Protein L22, like L4, contains a globular domain that sits on the surface of the large ribosomal subunit and an extended loop that penetrates its core. These extensions contact multiple domains of 23S rRNA, indicating a potential, but not essential, role in rRNA folding during ribosomal assembly.

REFERENCES

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- Dobbelstein, M. and Shenk, T. 1995. *In vitro* selection of RNA ligands for the ribosomal L22 protein associated with Epstein-Barr virus-expressed RNA by using randomized and cDNA-derived RNA libraries. *J. Virol.* 69: 8027-8034.
- Davydova, N.L., et al. 1995. Ribosomal protein L22 from *Thermus thermophilus*: sequencing, overexpression and crystallisation. *FEBS Lett.* 369: 229-232.
- Rapanotti, M.C., et al. 1995. *Xenopus laevis* ribosomal protein L22: full-length cDNA sequence and expression analysis. *Gene* 154: 199-203.
- Chan, Y.L. and Wool, I.G. 1995. The primary structure of rat ribosomal protein L22. *Biochim. Biophys. Acta* 1260: 113-115.
- Unge, J., et al. 1998. The crystal structure of ribosomal protein L22 from *Thermus thermophilus*: insights into the mechanism of erythromycin resistance. *Structure* 6: 1577-1586.

CHROMOSOMAL LOCATION

Genetic locus: RPL22 (human) mapping to 1p36.31; Rpl22 (mouse) mapping to 4 E2.

SOURCE

Ribosomal Protein L22 (H-106) is a rabbit polyclonal antibody raised against amino acids 17-122 mapping within an internal region of Ribosomal Protein L22 of human origin.

PRODUCT

Each vial contains 200 µg IgG 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 L22 (H-106) is recommended for detection of Ribosomal Protein L22 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).

Ribosomal Protein L22 (H-106) is also recommended for detection of Ribosomal Protein L22 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein L22 siRNA (h): sc-63349, Ribosomal Protein L22 siRNA (m): sc-63350, Ribosomal Protein L22 shRNA Plasmid (h): sc-63349-SH, Ribosomal Protein L22 shRNA Plasmid (m): sc-63350-SH, Ribosomal Protein L22 shRNA (h) Lentiviral Particles: sc-63349-V and Ribosomal Protein L22 shRNA (m) Lentiviral Particles: sc-63350-V.

Molecular Weight of Ribosomal Protein L22: 15 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

SELECT PRODUCT CITATIONS

- Novetsky, A.P., et al. 2013. Frequent mutations in the RPL22 gene and its clinical and functional implications. *Gynecol. Oncol.* 128: 470-474.
- Stout, G.J., et al. 2013. Insulin/IGF-1-mediated longevity is marked by reduced protein metabolism. *Mol. Syst. Biol.* 9: 679.

RESEARCH USE

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


 MONOS
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Try **Ribosomal Protein L22 (D-7): sc-373993** or **Ribosomal Protein L22 (52): sc-136413**, our highly recommended monoclonal alternatives to Ribosomal Protein L22 (H-106).