SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein L22 (52): sc-136413

The Power to Question

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

1. Pardo, D., et al. 1979. Assembly of ribosomal subunits affected in a ribosomal mutant of *E. coli* having an altered L22 protein. Mol. Gen. Genet. 174: 53-58.
2. Fujita, Y., et al. 1994. A novel heparin-binding protein, HBp15, is identified as mammalian Ribosomal Protein L22. Biochem. Biophys. Res. Commun. 199: 706-713.

CHROMOSOMAL LOCATION

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

SOURCE

Ribosomal Protein L22 (52) is a mouse monoclonal antibody raised against amino acids 18-120 of Ribosomal Protein L22 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ribosomal Protein L22 (52) is available conjugated to agarose (sc-136413 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; and to HRP (sc-136413 HRP), 200 µg/ml, for WB, IHC(P) and ELISA.

APPLICATIONS

Ribosomal Protein L22 (52) is recommended for detection of Ribosomal Protein L22 of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

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.

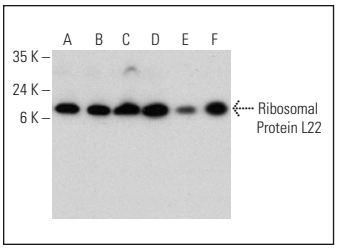
Molecular Weight of Ribosomal Protein L22: 15 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

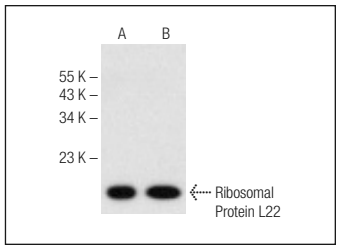
RECOMMENDED SUPPORT REAGENTS

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).

DATA



Ribosomal Protein L22 (52): sc-136413. Western blot analysis of Ribosomal Protein L22 expression in A-431 (**A**), HeLa (**B**), Jurkat (**C**), Neuro-2A (**D**), RAW 264.7 (**E**) and C6 (**F**) whole cell lysates.



Ribosomal Protein L22 (52): sc-136413. Western blot analysis of Ribosomal Protein L22 expression in A-431 (**A**) and Hep G2 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Vartanian, S., et al. 2016. Application of mass spectrometry profiling to establish brusatol as an inhibitor of global protein synthesis. Mol. Cell. Proteomics. 15: 1220-1231.
2. Wang, X., et al. 2018. The molecular landscape of synchronous colorectal cancer reveals genetic heterogeneity. Carcinogenesis 39: 708-718.
3. Sauer, M., et al. 2019. DHX36 prevents the accumulation of translationally inactive mRNAs with G_4-structures in untranslated regions. Nat. Commun. 10: 2421.
4. Cottrell, K.A., et al. 2020. Upregulation of 5'-terminal oligopyrimidine mRNA translation upon loss of the ARF tumor suppressor. Sci. Rep. 10: 22276.

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. Not for resale.

PROTOCOLS

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