

Ribosomal Protein L7A (H-266): sc-98618

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 L7A, also known as RPL7A or SURF-3, is a 266 amino acid protein that interacts with select nuclear hormone receptors, such as TR (thyroid hormone receptor), and, via this interaction, is able to inhibit receptor function. The gene encoding Ribosomal Protein L7A maps to chromosome 9 and is subject to a recombination event which activates the Trk (tyrosine kinase receptor) oncogene and may play a role in oncogenesis. Like most ribosomal proteins, Ribosomal Protein L7A exists as multiple processed pseudogenes that are scattered throughout the genome.

REFERENCES

- Giallongo, A., Yon, J. and Fried, M. 1989. Ribosomal protein L7A is encoded by a gene (SURF-3) within the tightly clustered mouse surfeit locus. *Mol. Cell. Biol.* 9: 224-231.
- Yon, J., Jones, T., Garson, K., Sheer, D. and Fried, M. 1993. The organization and conservation of the human surfeit gene cluster and its localization telomeric to the c-abl and can proto-oncogenes at chromosome band 9q34.1. *Hum. Mol. Genet.* 2: 237-240.
- Mor, O., Duhig, T. and Fried, M. 1996. A high frequency polymorphism in the candidate region for tuberous sclerosis 1 (TSC1) at 9q34. *Ann. Hum. Genet.* 60: 259-260.
- Kenmochi, N., Kawaguchi, T., Rozen, S., Davis, E., Goodman, N., Hudson, T.J., Tanaka, T. and Page, D.C. 1998. A map of 75 human ribosomal protein genes. *Genome Res.* 8: 509-523.
- Zhu, Y., Lin, H., Li, Z., Wang, M. and Luo, J. 2001. Modulation of expression of Ribosomal Protein L7A (RPL7A) by ethanol in human breast cancer cells. *Breast Cancer Res. Treat.* 69: 29-38.

CHROMOSOMAL LOCATION

Genetic locus: RPL7A (human) mapping to 9q34.2; Rpl7a (mouse) mapping to 2 A3.

SOURCE

Ribosomal Protein L7A (H-266) is a rabbit polyclonal antibody raised against amino acids 40-236 mapping within an internal region of Ribosomal Protein L7A 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 L7A (H-266) is recommended for detection of Ribosomal Protein L7A 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 L7A (H-266) is also recommended for detection of Ribosomal Protein L7A in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Ribosomal Protein L7A siRNA (h): sc-76433, Ribosomal Protein L7A siRNA (m): sc-153108, Ribosomal Protein L7A shRNA Plasmid (h): sc-76433-SH, Ribosomal Protein L7A shRNA Plasmid (m): sc-153108-SH, Ribosomal Protein L7A shRNA (h) Lentiviral Particles: sc-76433-V and Ribosomal Protein L7A shRNA (m) Lentiviral Particles: sc-153108-V.

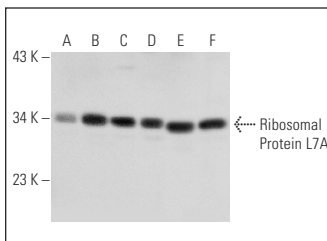
Molecular Weight of Ribosomal Protein L7A: 32 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Raji whole cell lysate: sc-364236 or RPL7A (h2): 293T Lysate: sc-173910.

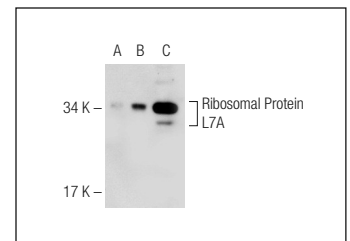
RECOMMENDED SECONDARY REAGENTS

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.

DATA



Ribosomal Protein L7A (H-266): sc-98618. Western blot analysis of Ribosomal Protein L7A expression in Hep G2 (A), A-431 (B), Jurkat (C), Raji (D), NIH/3T3 (E) and PC-12 (F) whole cell lysates.



Ribosomal Protein L7A (H-266): sc-98618. Western blot analysis of Ribosomal Protein L7A expression in non-transfected 293: sc-110760 (A), human Ribosomal Protein L7A transfected 293: sc-173910 (B) and K-562 (C) whole cell lysates.

RESEARCH USE

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