SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein L26/L26L1 (N-14): sc-109861

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 L26 (also known as RPL26) and Ribosomal Protein L26L1 (also known as RPL26L1) are 145 amino acid proteins that belong to the ribosomal protein family and may play a role in protein synthesis. Like most ribosomal proteins, Ribosomal Protein L26 exists as multiple processed pseudogenes that are scattered throughout the genome.

REFERENCES

1. Zaman, G.J. 1993. Sequence of a cDNA encoding human ribosomal protein L26 and of a cDNA probably encoding human ribosomal protein L6. Nucleic Acids Res. 21: 1673.
2. Wool, I.G., et al. 1995. Structure and evolution of mammalian ribosomal proteins. Biochem. Cell Biol. 73: 933-947.
3. Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. Genome Res. 8: 509-523.
4. Uechi, T., et al. 2001. A complete map of the human ribosomal protein genes: assignment of 80 genes to the cytogenetic map and implications for human disorders. Genomics 72: 223-230.
5. Yoshihama, M., et al. 2002. The human ribosomal protein genes: sequencing and comparative analysis of 73 genes. Genome Res. 12: 379-390.
6. Kapp, L.D. and Lorsch, J.R. 2004. The molecular mechanics of eukaryotic translation. Annu. Rev. Biochem. 73: 657-704.
7. Andersen, J.S., et al. 2005. Nucleolar proteome dynamics. Nature 433: 77-83.
8. Ofir-Rosenfeld, Y., et al. 2008. MDM2 regulates p53 mRNA translation through inhibitory interactions with ribosomal protein L26. Mol. Cell 32: 180-189.

CHROMOSOMAL LOCATION

Genetic locus: RPL26 (human) mapping to 17p13.1, RPL26L1 (human) mapping to 5q35.1; Rpl26 (mouse) mapping to 11 B3.

SOURCE

Ribosomal Protein L26/L26L1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Ribosomal Protein L26 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.

Blocking peptide available for competition studies, sc-109861 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein L26/L26L1 (N-14) is recommended for detection of Ribosomal Protein L26 and Ribosomal Protein L26L1 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 L26/L26L1 (N-14) is also recommended for detection of Ribosomal Protein L26 and Ribosomal Protein L26L1 in additional species, including equine, canine, bovine, porcine and avian.

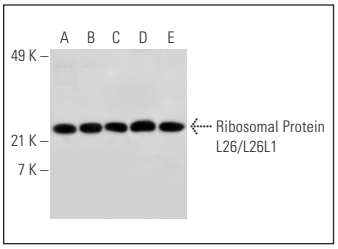
Molecular Weight of Ribosomal Protein L26/L26L1: 17 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, K-562 whole cell lysate: sc-2203 or MCF7 whole cell lysate: sc-2206.

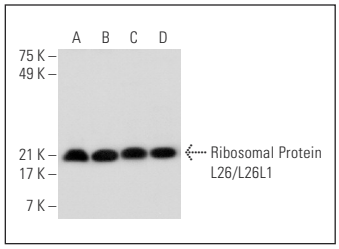
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Ribosomal Protein L26/L26L1 (N-14): sc-109861. Western blot analysis of Ribosomal Protein L26/L26L1 expression in HEK293 (**A**), HeLa (**B**), Jurkat (**C**), NIH/3T3 (**D**) and HCT-116 (**E**) whole cell lysates.



Ribosomal Protein L26/L26L1 (N-14): sc-109861. Western blot analysis of Ribosomal Protein L26/L26L1 expression in MCF7 (**A**), K-562 (**B**), Hep G2 (**C**) and PC-12 (**D**) whole cell lysates.

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.

PROTOCOLS

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