

Ribosomal Protein L23 (C-15): sc-161193

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 L23 (RPL23), also known as 60S ribosomal protein L17, is a 140 amino acid protein and component of the 60S subunit that belongs to the ribosomal protein L14P family. Localizing to cytoplasm, Ribosomal Protein L23 is suggested to promote multidrug resistance (MDR) in gastric cancer cells through suppression of drug-induced apoptosis. Like most ribosomal proteins, Ribosomal Protein L23 exists as multiple processed pseudogenes that are scattered throughout the genome.

REFERENCES

- Berchtold, M.W. and Berger, M.C. 1991. Isolation and analysis of a human cDNA highly homologous to the yeast gene encoding L17A ribosomal protein. *Gene* 102: 283-288.
- Herauld, Y., et al. 1991. cDNA and predicted amino acid sequences of the human ribosomal protein genes rpS12 and rpL17. *Nucleic Acids Res.* 19: 4001.
- Wool, I.G., et al. 1995. Structure and evolution of mammalian ribosomal proteins. *Biochem. Cell Biol.* 73: 933-947.
- Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. *Genome Res.* 8: 509-523.
- Dai, M.S. and Lu, H. 2004. Inhibition of MDM2-mediated p53 ubiquitination and degradation by ribosomal protein L5. *J. Biol. Chem.* 279: 44475-44482.
- Dai, M.S., et al. 2004. Ribosomal protein L23 activates p53 by inhibiting MDM2 function in response to ribosomal perturbation but not to translation inhibition. *Mol. Cell. Biol.* 24: 7654-7668.
- Jin, A., et al. 2004. Inhibition of HDM2 and activation of p53 by ribosomal protein L23. *Mol. Cell. Biol.* 24: 7669-7680.

CHROMOSOMAL LOCATION

Genetic locus: RPL23 (human) mapping to 17q12; Rpl23 (mouse) mapping to 11 D.

SOURCE

Ribosomal Protein L23 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Ribosomal Protein L23 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-161193 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Ribosomal Protein L23 (C-15) is recommended for detection of Ribosomal Protein L23 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Ribosomal Protein L23a.

Ribosomal Protein L23 (C-15) is also recommended for detection of Ribosomal Protein L23 in additional species, including equine, canine, bovine, porcine and avian.

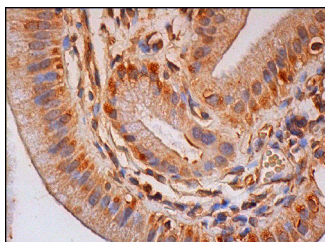
Suitable for use as control antibody for Ribosomal Protein L23 siRNA (h): sc-93816, Ribosomal Protein L23 siRNA (m): sc-152903, Ribosomal Protein L23 shRNA Plasmid (h): sc-93816-SH, Ribosomal Protein L23 shRNA Plasmid (m): sc-152903-SH, Ribosomal Protein L23 shRNA (h) Lentiviral Particles: sc-93816-V and Ribosomal Protein L23 shRNA (m) Lentiviral Particles: sc-152903-V.

Molecular Weight of Ribosomal Protein L23: 15 kDa.

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Ribosomal Protein L23 (C-15): sc-161193. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic staining of glandular cells.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.