

Ribosomal Protein L36a (43-A): sc-100831

BACKGROUND

Ribosomes, the organelles that catalyze protein synthesis, are composed of a small subunit (40S) and a large subunit (60S) that consist of more than 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 L36a, also known as RPL36a, RPL44 (ribosomal protein 44), MIG6 (cell migration-inducing gene 6) or L44L, is a 106 amino acid protein that is a component of the 60S subunit. Localized to the cytoplasm and expressed ubiquitously, Ribosomal Protein L36a is a member of the L44E family of ribosomal proteins and functions in protein synthesis. Like most ribosomal proteins, Ribosomal Protein L36a exists as multiple processed pseudogenes that are scattered throughout the genome. Ribosomal Protein L36a is nearly identical to Ribosomal Protein L36aL, but these proteins are encoded by distinct genes.

REFERENCES

- Gallagher, M.J., et al. 1988. Primary structure of rat Ribosomal Protein L36a. *DNA* 7: 269-273.
- Feo, S., et al. 1992. The mapping of seven intron-containing ribosomal protein genes shows they are unlinked in the human genome. *Genomics* 13: 201-207.

CHROMOSOMAL LOCATION

Genetic locus: RPL36A (human) mapping to Xq22.1; Rpl36a (mouse) mapping to X E3.

SOURCE

Ribosomal Protein L36a (43-A) is a mouse monoclonal antibody raised against recombinant Ribosomal Protein L36a of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Ribosomal Protein L36a (43-A) is recommended for detection of Ribosomal Protein L36a 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).

Suitable for use as control antibody for Ribosomal Protein L36a siRNA (h): sc-91135, Ribosomal Protein L36a siRNA (m): sc-152917, Ribosomal Protein L36a shRNA Plasmid (h): sc-91135-SH, Ribosomal Protein L36a shRNA Plasmid (m): sc-152917-SH, Ribosomal Protein L36a shRNA (h) Lentiviral Particles: sc-91135-V and Ribosomal Protein L36a shRNA (m) Lentiviral Particles: sc-152917-V.

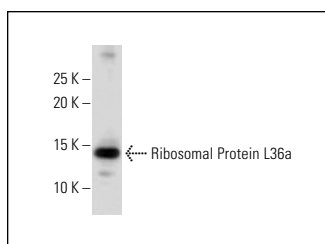
Molecular Weight of Ribosomal Protein L36a: 12 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

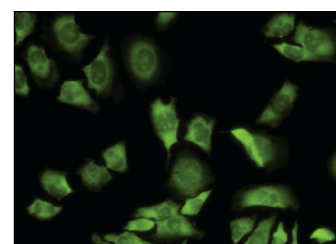
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (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). 3) Immunofluorescence: use m-IgGκ BPFITC: sc-516140 or m-IgGκ BPE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Ribosomal Protein L36a (43-A): sc-100831. Western blot analysis of Ribosomal Protein L36a expression in HeLa whole cell lysate.



Ribosomal Protein L36a (43-A): sc-100831. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Donati, G., et al. 2013. 5S ribosomal RNA is an essential component of a nascent ribosomal precursor complex that regulates the Hdm2-p53 checkpoint. *Cell Rep.* 4: 87-98.
- Shaikho, S., et al. 2016. Elevated levels of ribosomal proteins eL36 and eL42 control expression of Hsp90 in rhabdomyosarcoma. *Translation* 4: e1244395.
- Corsini, N.S., et al. 2018. Coordinated control of mRNA and rRNA processing controls embryonic stem cell pluripotency and differentiation. *Cell Stem Cell* 22: 543-558.
- Hartmann, H., et al. 2018. Proteomics and C9orf72 neuropathology identify ribosomes as poly-GR/PR interactors driving toxicity. *Life Sci. Alliance* 1: e201800070.
- Mahesh, A., et al. 2019. SET7/9 interacts and methylates the ribosomal protein, eL42 and regulates protein synthesis. *Biochim. Biophys. Acta Mol. Cell Res.* 1867: 118611.

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.