

# Ribosomal Protein L24 (I-12): sc-100129

## 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 L24 (RPL24), also known as 60S ribosomal protein L24 or Ribosomal protein L30, is a 157 amino acid protein that belongs to the ribosomal protein L24e family. Ribosomal Protein L24 localizes to the cytoplasm, and the gene encoding Ribosomal Protein L21 maps to human chromosome 3q12.3. Like most ribosomal proteins, Ribosomal Protein L24 exists as multiple processed pseudogenes that are scattered throughout the genome.

## REFERENCES

1. Wool, I.G., et al. 1995. Structure and evolution of mammalian ribosomal proteins. *Biochem. Cell Biol.* 73: 933-947.
2. Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. *Genome Res.* 8: 509-523.
3. Oliver, E.R., et al. 2004. Ribosomal protein L24 defect in belly spot and tail (Bst), a mouse minute. *Development* 131: 3907-3920.
4. Barki, M., et al. 2009. The p53 tumor suppressor causes congenital malformations in Rpl24-deficient mice and promotes their survival. *Mol. Cell Biol.* 29: 2489-2504.
5. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 604180. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: RPL24 (human) mapping to 3q12.3; Rpl24 (mouse) mapping to 16 C1.1.

## SOURCE

Ribosomal Protein L24 (I-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Ribosomal Protein L24 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-100129 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

Ribosomal Protein L24 (I-12) is recommended for detection of Ribosomal Protein L24 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); non cross-reactive with other RPL family members.

Suitable for use as control antibody for Ribosomal Protein L24 siRNA (h): sc-78286, Ribosomal Protein L24 siRNA (m): sc-152905, Ribosomal Protein L24 shRNA Plasmid (h): sc-78286-SH, Ribosomal Protein L24 shRNA Plasmid (m): sc-152905-SH, Ribosomal Protein L24 shRNA (h) Lentiviral Particles: sc-78286-V and Ribosomal Protein L24 shRNA (m) Lentiviral Particles: sc-152905-V.

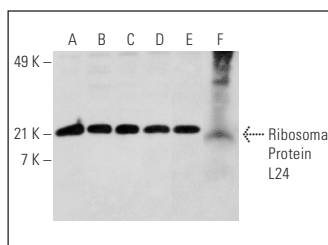
Molecular Weight of Ribosomal Protein L24: 17 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HEK293 whole cell lysate: sc-45136 or A549 cell lysate: sc-2413.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



Ribosomal Protein L24 (I-12): sc-100129. Western blot analysis of Ribosomal Protein L24 expression in RAW 264.7 (A), A549 (B), HeLa (C), HEK293 (D), NIH/3T3 (E) and A-431 (F) whole cell lysates.

## RESEARCH USE

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