

# Ribosomal Protein L24 (C-5): sc-518250

## 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. Barkić, 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™. 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.

## SOURCE

Ribosomal Protein L24 (C-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 54-78 of Ribosomal Protein L24 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ribosomal Protein L24 (C-5) is available conjugated to agarose (sc-518250 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518250 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518250 PE), fluorescein (sc-518250 FITC), Alexa Fluor® 488 (sc-518250 AF488), Alexa Fluor® 546 (sc-518250 AF546), Alexa Fluor® 594 (sc-518250 AF594) or Alexa Fluor® 647 (sc-518250 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518250 AF680) or Alexa Fluor® 790 (sc-518250 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## RESEARCH USE

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

## APPLICATIONS

Ribosomal Protein L24 (C-5) is recommended for detection of Ribosomal Protein L24 of human origin by Western Blotting (starting dilution 1:100, 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 L24 siRNA (h): sc-78286, Ribosomal Protein L24 shRNA Plasmid (h): sc-78286-SH and Ribosomal Protein L24 shRNA (h) Lentiviral Particles: sc-78286-V.

Molecular Weight of Ribosomal Protein L24: 17 kDa.

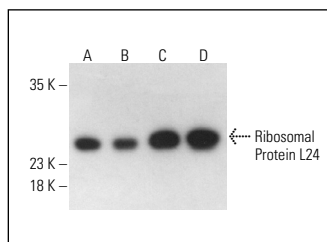
Positive Controls: K-562 whole cell lysate: sc-2203, HT-29 whole cell lysate: sc-364232 or HeLa whole cell lysate: sc-2200.

## RECOMMENDED SUPPORT REAGENTS

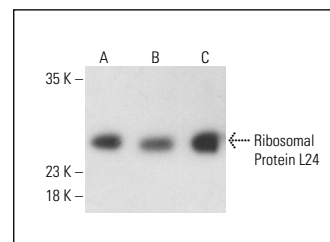
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (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 BP-FITC: sc-516140 or m-IgGκ BP-PE: 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 L24 (C-5): sc-518250. Western blot analysis of Ribosomal Protein L24 expression in HT-29 (A), Jurkat (B), HeLa (C) and K-562 (D) whole cell lysates. Detection reagent used: m-IgG<sub>1</sub> BP-HRP: sc-525408.



Ribosomal Protein L24 (C-5): sc-518250. Western blot analysis of Ribosomal Protein L24 expression in HT-29 (A), Jurkat (B) and HeLa (C) whole cell lysates. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

## 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) for detailed protocols and support products.

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