

# MRP-S6 (H-115): sc-135266

## BACKGROUND

Mitochondrial ribosomes are made of a 28S subunit and a larger 39S subunit. These ribosomes have an approximate composition of 75% protein to rRNA as compared to prokaryotic ribosomes, where reverse proportions are found. MRP-S6 (mitochondrial 28S ribosomal protein S6) is a mitochondrial ribosomal protein that belongs to the ribosomal protein S6P family. MRP-S6 is a component of the mitochondrial ribosome small subunit (28S) which is comprised of a 12S rRNA and almost 30 other distinct proteins. Half of this group of proteins are homologs to constituents of the 30S ribosome found in *Escherichia coli*. All of these proteins have homologs in most eukaryotic mitochondrial ribosomes.

## REFERENCES

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2. Koc, E.C., Burkhart, W., Blackburn, K., Moseley, A., Koc, H. and Spremulli, L.L. 2000. A proteomics approach to the identification of mammalian mitochondrial small subunit ribosomal proteins. *J. Biol. Chem.* 275: 32585-32591.
3. Figueroa, P., Holuigue, L., Araya, A. and Jordana, X. 2000. The nuclear-encoded SDH2-RPS14 precursor is proteolytically processed between SDH2 and RPS14 to generate maize mitochondrial RPS14. *Biochem. Biophys. Res. Commun.* 271: 380-385.
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5. Kenmochi, N., Suzuki, T., Uechi, T., Magoori, M., Kuniba, M., Higa, S., Watanabe, K. and Tanaka, T. 2001. The human mitochondrial ribosomal protein genes: mapping of 54 genes to the chromosomes and implications for human disorders. *Genomics* 77: 65-70.

## CHROMOSOMAL LOCATION

Genetic locus: MRPS6 (human) mapping to 21q22.11; Mrps6 (mouse) mapping to 16 C4.

## SOURCE

MRP-S6 (H-115) is a rabbit polyclonal antibody raised against amino acids 11-125 mapping at the C-terminus of MRP-S6 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.

## STORAGE

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

## APPLICATIONS

MRP-S6 (H-115) is recommended for detection of Mitochondrial 28S ribosomal protein S6 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 MRP-S6 siRNA (h): sc-62639, MRP-S6 siRNA (m): sc-62640, MRP-S6 shRNA Plasmid (h): sc-62639-SH, MRP-S6 shRNA Plasmid (m): sc-62640-SH, MRP-S6 shRNA (h) Lentiviral Particles: sc-62639-V and MRP-S6 shRNA (m) Lentiviral Particles: sc-62640-V.

Molecular Weight of MRP-S6: 14 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

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