

MRP-S6 (C-17): sc-67918

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

1. Spirin, A.S., et al. 1997. Topography of ribosomal proteins: reconsideration of protein map of small ribosomal subunit. *Biokhimiia* 61: 1928-1930.
2. Koc, E.C., et al. 2000. A proteomics approach to the identification of mammalian mitochondrial small subunit ribosomal proteins. *J. Biol. Chem.* 275: 32585-32591.
3. Figueroa, P., et al. 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.
4. Cavdar Koc, E., et al. 2001. The small subunit of the mammalian mitochondrial ribosome. Identification of the full complement of ribosomal proteins present. *J. Biol. Chem.* 276: 19363-19374.
5. Kenmochi, N., et al. 2001. The human mitochondrial ribosomal protein genes: mapping of 54 genes to the chromosomes and implications for human disorders. *Genomics* 77: 65-70.
6. Zhang, Z. and Gerstein, M. 2003. Identification and characterization of over 100 mitochondrial ribosomal protein pseudogenes in the human genome. *Genomics* 81: 468-480.

CHROMOSOMAL LOCATION

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

SOURCE

MRP-S6 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide 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.

Blocking peptide available for competition studies, sc-67918 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.

APPLICATIONS

MRP-S6 (C-17) is recommended for detection of Mitochondrial 28S ribosomal protein S6 of mouse 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).

MRP-S6 (C-17) is also recommended for detection of Mitochondrial 28S ribosomal protein S6 in additional species, including bovine.

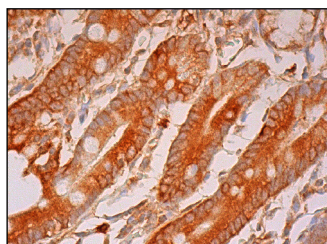
Suitable for use as control antibody for MRP-S6 siRNA (h): sc-62639, MRP-S6 siRNA (m): sc-62640, MRP-S6 shRNA Plasmid (h): sc-62639-SH, MRP-S6 shRNA Plasmid (m): sc-62640-SH, MRP-S6 shRNA (h) Lentiviral Particles: sc-62639-V and MRP-S6 shRNA (m) Lentiviral Particles: sc-62640-V.

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 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



MRP-S6 (C-17): sc-67918. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

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

MONOS
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Try **MRP-S6 (E-8): sc-390597**, our highly recommended monoclonal alternative to MRP-S6 (C-17).