

# MRP-S9 (C-12): sc-132379

## BACKGROUND

Mammalian mitochondrial ribosomes (mitoribosomes) are responsible for protein synthesis within the mitochondrion. The mitoribosomes are composed of a 4:1 ratio of protein to RNA, with the proteins forming two subunits, the 28S subunit and the 39S subunit. Across species, the proteins that make up the mitoribosome subunits vary greatly in sequence, preventing easy recognition by sequence homology. MRP-S9 (mitochondrial 28S ribosomal protein S9), also known as RPMS9, is a 396 amino acid mitochondrial ribosomal protein. Localized to mitochondria, MRP-S9 is present in the 28S subunit of the mitoribosomes, which comprises a 12S rRNA and at least 30 distinct proteins.

## REFERENCES

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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.
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7. Zhang, Z. and Gerstein, M. 2003. Identification and characterization of over 100 mitochondrial ribosomal protein pseudogenes in the human genome. *Genomics* 81: 468-480.
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## CHROMOSOMAL LOCATION

Genetic locus: MRPS9 (human) mapping to 2q12.1; Mrps9 (mouse) mapping to 1 B.

## STORAGE

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

## SOURCE

MRP-S9 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MRP-S9 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-132379 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MRP-S9 (C-12) is recommended for detection of MRP-S9 of mouse, rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other MRP-S family members.

MRP-S9 (C-12) is also recommended for detection of MRP-S9 in additional species, including avian.

Suitable for use as control antibody for MRP-S9 siRNA (h): sc-94399, MRP-S9 siRNA (m): sc-149636, MRP-S9 shRNA Plasmid (h): sc-94399-SH, MRP-S9 shRNA Plasmid (m): sc-149636-SH, MRP-S9 shRNA (h) Lentiviral Particles: sc-94399-V and MRP-S9 shRNA (m) Lentiviral Particles: sc-149636-V.

Molecular Weight of MRP-S9: 46 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<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) 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.

## 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.