

MRP-S2 (P-12): sc-107014

BACKGROUND

Mitochondrial ribosomes consist of a large 39S subunit and a small 28S subunit, both of which are comprised of multiple mitochondrial ribosomal proteins (MRPs) that are encoded by nuclear genes and are essential for protein synthesis within mitochondria. MRP-S2 (mitochondrial ribosomal protein S2), also known as S2mt or CGI-91, is a 296 amino acid mitochondrial protein that exists as a component of the 28S subunit and may play a role in mitochondrial protein synthesis. The gene encoding MRP-S2 maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and Familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MRPS2 (human) mapping to 9q34.3; Mrps2 (mouse) mapping to 2 A3.

STORAGE

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

RESEARCH USE

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

SOURCE

MRP-S2 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MRP-S2 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-107014 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRP-S2 (P-12) is recommended for detection of MRP-S2 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).

MRP-S2 (P-12) is also recommended for detection of MRP-S2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for MRP-S2 siRNA (h): sc-92589, MRP-S2 siRNA (m): sc-149621, MRP-S2 shRNA Plasmid (h): sc-92589-SH, MRP-S2 shRNA Plasmid (m): sc-149621-SH, MRP-S2 shRNA (h) Lentiviral Particles: sc-92589-V and MRP-S2 shRNA (m) Lentiviral Particles: sc-149621-V.

Molecular Weight of MRP-S2: 33 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.