

MRP-S11 (P-15): sc-104407

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-S11 (mitochondrial ribosomal protein S11) also known as Cervical cancer proto-oncogene 2 protein, is a 194 amino acid protein that localizes to the mitochondrion, where it exists as a component of the 28S ribosomal subunit and works in conjunction with other MRPs to mediate protein synthesis. Mutations in the MRP-S16 and MRP-S22 genes also cause a loss of MRP-S11 expression. The phenotype of these gene mutations is severe fatal respiratory chain dysfunction due to impaired translation of mitochondrial mRNAs. There are three isoforms of MRP-S11 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MRPS11 (human) mapping to 15q25.3; Mrps11 (mouse) mapping to 7 D3.

SOURCE

MRP-S11 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MRP-S11 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-104407 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRP-S11 (P-15) is recommended for detection of MRP-S11 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 MRP-S11-3.

Suitable for use as control antibody for MRP-S11 siRNA (h): sc-90071, MRP-S11 siRNA (m): sc-106250, MRP-S11 shRNA Plasmid (h): sc-90071-SH, MRP-S11 shRNA Plasmid (m): sc-106250-SH, MRP-S11 shRNA (h) Lentiviral Particles: sc-90071-V and MRP-S11 shRNA (m) Lentiviral Particles: sc-106250-V.

Molecular Weight of MRP-S11 isoforms: 21/17 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.

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.

PROTOCOLS

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