

MRP-L50 (C-9): sc-393829

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-L50 (mitochondrial ribosomal protein L50), is a 158 amino acid protein that localizes to the mitochondrion, where it exists as a component of the 39S ribosomal subunit and works in conjunction with other MRPs to mediate protein synthesis. The gene encoding MRP-L50 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: MRPL50 (human) mapping to 9q31.1; Mrpl50 (mouse) mapping to 4 B1.

SOURCE

MRP-L50 (C-9) is a mouse monoclonal antibody raised against amino acids 38-158 mapping at the C-terminus of MRP-L50 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MRP-L50 (C-9) is recommended for detection of MRP-L50 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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-L50 siRNA (h): sc-92796, MRP-L50 siRNA (m): sc-149611, MRP-L50 shRNA Plasmid (h): sc-92796-SH, MRP-L50 shRNA Plasmid (m): sc-149611-SH, MRP-L50 shRNA (h) Lentiviral Particles: sc-92796-V and MRP-L50 shRNA (m) Lentiviral Particles: sc-149611-V.

Molecular Weight (predicted) of MRP-L50: 18 kDa.

Molecular Weight (observed) of MRP-L50: 16-37 kDa.

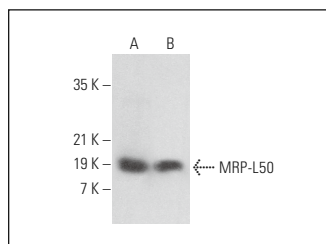
Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SUPPORT REAGENTS

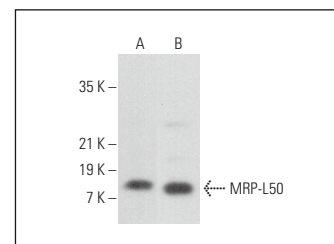
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



MRP-L50 (C-9): sc-393829. Western blot analysis of MRP-L50 expression in Jurkat (A) and NIH/3T3 (B) whole cell lysates.



MRP-L50 (C-9): sc-393829. Western blot analysis of MRP-L50 expression in HeLa (A) and K-562 (B) whole cell lysates.

STORAGE

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