SANTA CRUZ BIOTECHNOLOGY, INC.

MRP-L3 (I-16): sc-100039

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-L3 (mitochondrial 39S ribosomal protein L3), also known as L3mt, is a 348 amino acid protein belonging to the ribosomal protein L3P family. Localized to mitochondria, MRP-L3 is present in the 39S subunit of the mitoribosomes.

REFERENCES

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5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607118. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
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CHROMOSOMAL LOCATION

Genetic locus: MRPL3 (human) mapping to 3q22.1; Mrpl3 (mouse) mapping to 9 F1.

SOURCE

MRP-L3 (I-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MRP-L3 of human origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-100039 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRP-L3 (I-16) is recommended for detection of MRP-L3 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-L family members.

Suitable for use as control antibody for MRP-L3 siRNA (h): sc-77897, MRP-L3 siRNA (m): sc-149593, MRP-L3 shRNA Plasmid (h): sc-77897-SH, MRP-L3 shRNA Plasmid (m): sc-149593-SH, MRP-L3 shRNA (h) Lentiviral Particles: sc-77897-V and MRP-L3 shRNA (m) Lentiviral Particles: sc-149593-V.

Molecular Weight of MRP-L3: 38 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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