



MRP-L40 (E-17): sc-86750

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-L40 (mitochondrial 39S ribosomal protein L40), also known as L40mt or MRP-40, is a 206 amino acid mitochondrial ribosomal protein. Localized to mitochondria, MRP-L40 is present in the 39S subunit of the mitoribosomes. Deletions in the gene that encodes MRP-L40 may contribute to the etiology of DiGeorge syndrome and velo-cardio-facial syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MRPL40 (human) mapping to 22q11.21; Mrpl40 (mouse) mapping to 16 A3.

STORAGE

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

SOURCE

MRP-L40 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MRP-L40 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-86750 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRP-L40 (E-17) is recommended for detection of MRP-L40 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).

Suitable for use as control antibody for MRP-L40 siRNA (h): sc-75828, MRP-L40 siRNA (m): sc-149602, MRP-L40 shRNA Plasmid (h): sc-75828-SH, MRP-L40 shRNA Plasmid (m): sc-149602-SH, MRP-L40 shRNA (h) Lentiviral Particles: sc-75828-V and MRP-L40 shRNA (m) Lentiviral Particles: sc-149602-V.

Molecular Weight of MRP-L40: 25 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.

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.