

MRP-L52 (P-13): sc-107008

BACKGROUND

Mammalian mitochondrial ribosomes (mitoribosomes) are responsible for protein synthesis within mitochondria. 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-L52 (mitochondrial ribosomal protein L52), also known as L52mt, is a 123 amino acid protein that is a component of the mitochondrial ribosome large subunit (39S), which comprises a 16S rRNA and about 50 distinct proteins. The gene encoding MRP-L52 maps to human chromosome 14, which houses over 700 genes and comprises nearly 3.5% of the human genome.

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CHROMOSOMAL LOCATION

Genetic locus: MRPL52 (human) mapping to 14q11.2; Mrpl52 (mouse) mapping to 14 C2.

SOURCE

MRP-L52 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MRP-L52 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-107008 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRP-L52 (P-13) is recommended for detection of MRP-L52 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.

MRP-L52 (P-13) is also recommended for detection of MRP-L52 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MRP-L52 siRNA (h): sc-92202, MRP-L52 siRNA (m): sc-149613, MRP-L52 shRNA Plasmid (h): sc-92202-SH, MRP-L52 shRNA Plasmid (m): sc-149613-SH, MRP-L52 shRNA (h) Lentiviral Particles: sc-92202-V and MRP-L52 shRNA (m) Lentiviral Particles: sc-149613-V.

Molecular Weight of MRP-L52: 14 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.