

MRP-L15 (L-20): sc-87309

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-L15 (mitochondrial 39S ribosomal protein L15), also known as L15mt, is a 296 amino acid mitochondrial ribosomal protein belonging to the ribosomal protein L15P family. Localized to mitochondria, MRP-L15 is present in the 39S subunit of the mitoribosomes.

REFERENCES

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2. Simpson, J.C., Wellenreuther, R., Poustka, A., Pepperkok, R. and Wiemann, S. 2000. Systematic subcellular localization of novel proteins identified by large-scale cDNA sequencing. *EMBO Rep.* 1: 287-292.
3. Kenmochi, N., Suzuki, T., Uechi, T., Magoori, M., Kuniba, M., Higa, S., Watanabe, K. and Tanaka, T. 2001. The human mitochondrial ribosomal protein genes: mapping of 54 genes to the chromosomes and implications for human disorders. *Genomics* 77: 65-70.
4. Zhang, Z. and Gerstein, M. 2003. Identification and characterization of over 100 mitochondrial ribosomal protein pseudogenes in the human genome. *Genomics* 81: 468-480.
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CHROMOSOMAL LOCATION

Genetic locus: MRPL15 (human) mapping to 8q11.23; Mrpl15 (mouse) mapping to 1 A1.

SOURCE

MRP-L15 (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MRP-L15 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-87309 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

MRP-L15 (L-20) is recommended for detection of MRP-L15 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

MRP-L15 (L-20) is also recommended for detection of MRP-L15 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MRP-L15 siRNA (h): sc-77727, MRP-L15 siRNA (m): sc-149583, MRP-L15 shRNA Plasmid (h): sc-77727-SH, MRP-L15 shRNA Plasmid (m): sc-149583-SH, MRP-L15 shRNA (h) Lentiviral Particles: sc-77727-V and MRP-L15 shRNA (m) Lentiviral Particles: sc-149583-V.

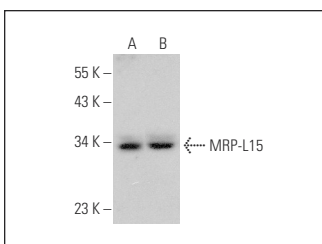
Molecular Weight of MRP-L15: 33 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or MCF7 whole cell lysate: sc-2206.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



MRP-L15 (L-20): sc-87309. Western blot analysis of MRP-L15 expression in HeLa (A) and MCF7 (B) whole cell lysates.

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.