

MRP-L12 (K-12): sc-107762

BACKGROUND

MRP-L12 (mitochondrial ribosomal protein-L12), also referred to as 5c5-2, L12mt, MRPL7 or RPML12, is a mammalian mitochondrial ribosomal protein that is involved in protein synthesis within the mitochondrion. MRP-L12 is enhanced in growth-stimulated cells as a result of transcriptional activation, suggesting that it may function as a translational regulator of mitochondrial mRNAs. Impairment of MRP-L12 leads to reduction in cell growth rate, decreased mitochondrial ATP production and abolition of mitochondrial oxidative phosphorylation. MRP-L12 is cleaved during its translocation across the mitochondrial membrane and it exists as dimers that bind the large ribosomal subunit. MRP-L12 is 198 amino acids in length, belongs to the ribosomal protein L12P family and is highly expressed in the colon.

CHROMOSOMAL LOCATION

Genetic locus: MRPL12 (human) mapping to 17q25.3; Mrpl12 (mouse) mapping to 11 E2.

SOURCE

MRP-L12 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MRP-L12 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-107762 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-L12 (K-12) is recommended for detection of MRP-L12 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-L12 (K-12) is also recommended for detection of MRP-L12 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for MRP-L12 siRNA (h): sc-93743, MRP-L12 siRNA (m): sc-149580, MRP-L12 shRNA Plasmid (h): sc-93743-SH, MRP-L12 shRNA Plasmid (m): sc-149580-SH, MRP-L12 shRNA (h) Lentiviral Particles: sc-93743-V and MRP-L12 shRNA (m) Lentiviral Particles: sc-149580-V.

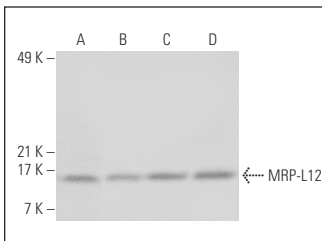
Molecular Weight of MRP-L12: 21 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

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-L12 (K-12): sc-107762. Western blot analysis of MRP-L12 expression in RAW 264.7 (A), HeLa (B), MCF7 (C) and Jurkat (D) 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.


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Try **MRP-L12 (397.1): sc-100839**, our highly recommended monoclonal alternative to MRP-L12 (K-12).