

MRP-L13 (K-17): sc-87306

BACKGROUND

Mitochondrial ribosomes are made of a 28S subunit and a larger 39S subunit. These ribosomes have an approximate composition of 75% protein to rRNA as compared to prokaryotic ribosomes, where reverse proportions are found. MRP-L13 (39S ribosomal protein L13, mitochondrial) is a 178 amino acid protein that exists as a component of the 39S ribosomal subunit and works in conjunction with other MRPs to mediate protein synthesis. MRP-L13 contains an amino-terminal leucine zipper and a carboxy-terminal basic leucine zipper domain. MRP-L13 that is released from the 60S ribosomal subunit binds to γ -interferon-activated inhibitor of translation (GAIT) element in the 3-prime UTR of ceruloplasmin (Cp), thereby silencing the translation of Cp. With this evidence, it has been suggested that MRP-L13 functions both as a protein synthesis machine and acts as a station for regulatory proteins that modulate translation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MRPL13 (human) mapping to 8q24.12; Mrpl13 (mouse) mapping to 15 D1.

SOURCE

MRP-L13 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MRP-L13 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87306 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRP-L13 (K-17) is recommended for detection of MRP-L13 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).

MRP-L13 (K-17) is also recommended for detection of MRP-L13 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MRP-L13 siRNA (h): sc-77761, MRP-L13 siRNA (m): sc-149581, MRP-L13 shRNA Plasmid (h): sc-77761-SH, MRP-L13 shRNA Plasmid (m): sc-149581-SH, MRP-L13 shRNA (h) Lentiviral Particles: sc-77761-V and MRP-L13 shRNA (m) Lentiviral Particles: sc-149581-V.

Molecular Weight of MRP-L13: 24 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.