

MRP-S31 (I-17): sc-84211

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-S31 (mitochondrial 28S ribosomal protein S31), also known as S31mt or MRP-S31, is a 395 amino acid mitochondrial ribosomal protein. Localized to mitochondria, MRP-S31 is present in the 28S subunit of the mitoribosomes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MRPS31 (human) mapping to 13q14.11; Mrps31 (mouse) mapping to 8 A2.

SOURCE

MRP-S31 (I-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MRP-S31 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84211 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRP-S31 (I-17) is recommended for detection of MRP-S31 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 family members.

MRP-S31 (I-17) is also recommended for detection of MRP-S31 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MRP-S31 siRNA (h): sc-106255, MRP-S31 siRNA (m): sc-149630, MRP-S31 shRNA Plasmid (h): sc-106255-SH, MRP-S31 shRNA Plasmid (m): sc-149630-SH, MRP-S31 shRNA (h) Lentiviral Particles: sc-106255-V and MRP-S31 shRNA (m) Lentiviral Particles: sc-149630-V.

Molecular Weight of MRP-S31: 45 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.