SANTA CRUZ BIOTECHNOLOGY, INC.

MRP-L17 (V-12): sc-109566

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Mitochondria have their own translation machinery for production of thirteen proteins that are required for oxidative phosphorylation. MRP-L17 (39S ribosomal protein L17, mitochondrial), also known as LIP2 (LYST-interacting protein 2), is a 175 amino acid protein that is a component of the large ribosomal subunit of the mitochondria. Expressed in adipose tissue, adrenal gland and mammary gland, MRP-L17 is one of the 70 protein components of mitochondrial ribosomes that are encoded by the nuclear genome. The gene encoding MRP-L17 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

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3. Tchernev, V.T., et al. 2002. The Chediak-Higashi protein interacts with SNARE complex and signal transduction proteins. Mol. Med. 8: 56-64.
4. Ota, T., et al. 2004. Complete sequencing and characterization of 21,243 full-length human cDNAs. Nat. Genet. 36: 40-45.
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CHROMOSOMAL LOCATION

Genetic locus: MRPL17 (human) mapping to 11p15.4; Mrpl17 (mouse) mapping to 7 E3.

SOURCE

MRP-L17 (V-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MRP-L17 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-109566 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-L17 (V-12) is recommended for detection of MRP-L17 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-L17 (V-12) is also recommended for detection of MRP-L17 in additional species, including bovine.

Suitable for use as control antibody for MRP-L17 siRNA (h): sc-96601, MRP-L17 siRNA (m): sc-149585, MRP-L17 shRNA Plasmid (h): sc-96601-SH, MRP-L17 shRNA Plasmid (m): sc-149585-SH, MRP-L17 shRNA (h) Lentiviral Particles: sc-96601-V and MRP-L17 shRNA (m) Lentiviral Particles: sc-149585-V.

Molecular Weight (predicted) of MRP-L17: 20 kDa.

Molecular Weight (observed) of MRP-L17: 29 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or mouse brain extract: sc-2253.

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.

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.