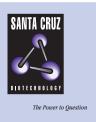
## SANTA CRUZ BIOTECHNOLOGY, INC.

# MRP-L16 (G-12): sc-109563



BACKGROUND

Mitochondrial ribosomes consist of a large 39S subunit and a small 28S subunit, both of which are comprised of multiple mitochondrial ribosomal proteins (MRPs) that are encoded by nuclear genes and are essential for protein synthesis within mitochondria. MRP-L16 (mitochondrial ribosomal protein L16), also known as PNAS-111 or L16mt, is a 251 amino acid protein that localizes to the mitochondrion, where it exists as a component of the 39S ribosomal subunit and works in conjunction with MRPs to mediate protein synthesis. The gene encoding MRP-L16 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. 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: MRPL16 (human) mapping to 11q12.1; Mrpl16 (mouse) mapping to 19 B.

#### SOURCE

MRP-L16 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MRP-L16 of human origin.

## STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109563 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

MRP-L16 (G-12) is recommended for detection of MRP-L16 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-L family members.

Suitable for use as control antibody for MRP-L16 siRNA (h): sc-96703, MRP-L16 siRNA (m): sc-149584, MRP-L16 shRNA Plasmid (h): sc-96703-SH, MRP-L16 shRNA Plasmid (m): sc-149584-SH, MRP-L16 shRNA (h) Lentiviral Particles: sc-96703-V and MRP-L16 shRNA (m) Lentiviral Particles: sc-149584-V.

Molecular Weight of MRP-L16: 28 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) Immunofluo-rescence: 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.