SANTA CRUZ BIOTECHNOLOGY, INC.

MRP-L2 (S-14): sc-139002

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-L2 (mitochondrial ribosomal protein L2), also known as CGI-22 or RPML14, is a 305 amino acid protein that belongs to the ribosomal protein L2P family. The gene encoding MRP-L2 maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

CHROMOSOMAL LOCATION

Genetic locus: MRPL2 (human) mapping to 6p21.1; Mrpl2 (mouse) mapping to 17 C.

SOURCE

MRP-L2 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MRP-L2 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-139002 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-L2 (S-14) is recommended for detection of MRP-L2 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); non cross-reactive with other MRP-L family members.

MRP-L2 (S-14) is also recommended for detection of MRP-L2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for MRP-L2 siRNA (h): sc-95468, MRP-L2 siRNA (m): sc-149588, MRP-L2 shRNA Plasmid (h): sc-95468-SH, MRP-L2 shRNA Plasmid (m): sc-149588-SH, MRP-L2 shRNA (h) Lentiviral Particles: sc-95468-V and MRP-L2 shRNA (m) Lentiviral Particles: sc-149588-V.

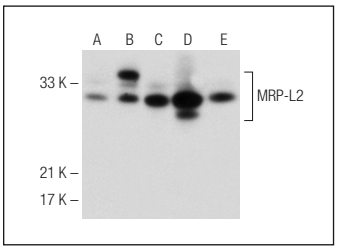
Molecular Weight of MRP-L2: 33 kDa.

Positive Controls: MRP-L2 (h): 293T Lysate: sc-117158, T-47D cell lysate: sc-2293 or DU 145 cell lysate: sc-2268.

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-L2 (S-14): sc-139002. Western blot analysis of MRP-L2 expression in non-transfected 293T: sc-117752 (**A**), human MRP-L2 transfected 293T: sc-117158 (**B**), MCF7 (**C**), T-47D (**D**) and DU 145 (**E**) 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.