

MRP-S23 (P-13): sc-132366

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-S23 (mitochondrial ribosomal protein S23), also known as HSPC329, is a 190 amino acid protein that localizes to the mitochondrion, where it exists as a component of the 28S ribosomal subunit and works in conjunction with other MRPs to mediate protein synthesis. The gene encoding MRP-S23 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1.

CHROMOSOMAL LOCATION

Genetic locus: MRPS23 (human) mapping to 17q22; Mrps23 (mouse) mapping to 11 C.

SOURCE

MRP-S23 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MRP-S23 of rat 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-132366 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-S23 (P-13) is recommended for detection of MRP-S23 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-S family members.

MRP-S23 (P-13) is also recommended for detection of MRP-S23 in additional species, including equine.

Suitable for use as control antibody for MRP-S23 siRNA (h): sc-93970, MRP-S23 siRNA (m): sc-149624, MRP-S23 shRNA Plasmid (h): sc-93970-SH, MRP-S23 shRNA Plasmid (m): sc-149624-SH, MRP-S23 shRNA (h) Lentiviral Particles: sc-93970-V and MRP-S23 shRNA (m) Lentiviral Particles: sc-149624-V.

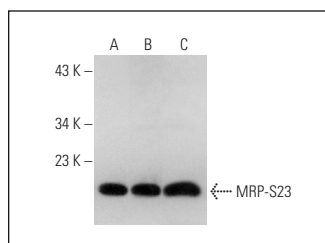
Molecular Weight of MRP-S23: 22 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176, RAW 264.7 whole cell lysate: sc-2211 or ARPE-19 whole cell lysate: sc-364357.

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-S23 (P-13): sc-132366. Western blot analysis of MRP-S23 expression in RAW 264.7 (A), U-251-MG (B) and ARPE-19 (C) 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.



Try **MRP-S23 (D-9): sc-514827**, our highly recommended monoclonal alternative to MRP-S23 (P-13).