

MRP-S23 (Y-12): sc-132367

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.

REFERENCES

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CHROMOSOMAL LOCATION

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

SOURCE

MRP-S23 (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MRP-S23 of human origin.

STORAGE

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

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-132367 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRP-S23 (Y-12) 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), 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 (Y-12) is also recommended for detection of MRP-S23 in additional species, including canine and bovine.

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: rat brain extract: sc-2392.

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.


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Try **MRP-S23 (D-9): sc-514827**, our highly recommended monoclonal alternative to MRP-S23 (Y-12).