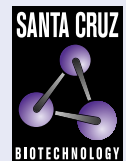


MRP-S6 (E-8): sc-390597



The Power to Question

BACKGROUND

Mitochondrial ribosomes are made of a 28S subunit and a larger 39S subunit. These ribosomes have an approximate composition of 75% protein to rRNA as compared to prokaryotic ribosomes, where reverse proportions are found. MRP-S6 (mitochondrial 28S ribosomal protein S6) is a mitochondrial ribosomal protein that belongs to the ribosomal protein S6P family. MRP-S6 is a component of the mitochondrial ribosome small subunit (28S) which is comprised of a 12S rRNA and almost 30 other distinct proteins. Half of this group of proteins are homologs to constituents of the 30S ribosome found in *Escherichia coli*. All of these proteins have homologs in most eukaryotic mitochondrial ribosomes.

CHROMOSOMAL LOCATION

Genetic locus: MRPS6 (human) mapping to 21q22.11; Mrps6 (mouse) mapping to 16 C4.

SOURCE

MRP-S6 (E-8) is a mouse monoclonal antibody raised against amino acids 11-125 mapping at the C-terminus of MRP-S6 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MRP-S6 (E-8) is available conjugated to agarose (sc-390597 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390597 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390597 PE), fluorescein (sc-390597 FITC), Alexa Fluor® 488 (sc-390597 AF488), Alexa Fluor® 546 (sc-390597 AF546), Alexa Fluor® 594 (sc-390597 AF594) or Alexa Fluor® 647 (sc-390597 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390597 AF680) or Alexa Fluor® 790 (sc-390597 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

MRP-S6 (E-8) is recommended for detection of MRP-S6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MRP-S6 siRNA (h): sc-62639, MRP-S6 siRNA (m): sc-62640, MRP-S6 shRNA Plasmid (h): sc-62639-SH, MRP-S6 shRNA Plasmid (m): sc-62640-SH, MRP-S6 shRNA (h) Lentiviral Particles: sc-62639-V and MRP-S6 shRNA (m) Lentiviral Particles: sc-62640-V.

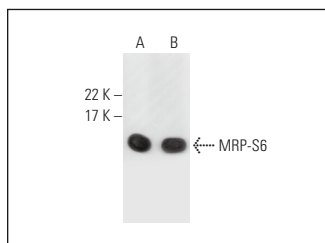
Molecular Weight of MRP-S6: 14 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or U-698-M whole cell lysate: sc-364799.

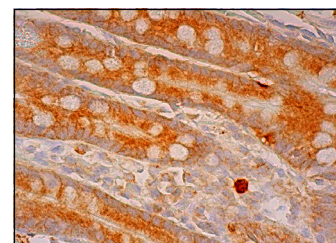
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



MRP-S6 (E-8): sc-390597. Western blot analysis of MRP-S6 expression in Jurkat (A) and U-698-M (B) whole cell lysates.



MRP-S6 (E-8): sc-390597. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Abad, E., et al. 2019. Common metabolic pathways implicated in resistance to chemotherapy point to a key mitochondrial role in breast cancer. *Mol. Cell. Proteomics* 18: 231-244.
- Oviya, R.P., et al. 2021. Mitochondrial ribosomal small subunit proteins (MRPS) MRPS6 and MRPS23 show dysregulation in breast cancer affecting tumorigenic cellular processes. *Gene* 790: 145697.

STORAGE

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

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

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