

# MRP-L44 (C-14): sc-103631

## 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-L44 (mitochondrial ribosomal protein L44) is a 332 amino acid protein that localizes to the mitochondrion, where it exists as a component of the 39S ribosomal subunit and works in conjunction with other MRPs to mediate protein synthesis. MRP-L44 contains one RNase III domain and one DRBM (double-stranded RNA-binding) domain, motifs that are typically found in proteins involved in RNA maturation and localization. The gene encoding MRP-L44 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome.

## CHROMOSOMAL LOCATION

Genetic locus: MRPL44 (human) mapping to 2q36.1; Mrpl44 (mouse) mapping to 1 C4.

## SOURCE

MRP-L44 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MRP-L44 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-103631 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-L44 (C-14) is recommended for detection of MRP-L44 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-L44 (C-14) is also recommended for detection of MRP-L44 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for MRP-L44 siRNA (h): sc-94925, MRP-L44 siRNA (m): sc-106247, MRP-L44 shRNA Plasmid (h): sc-94925-SH, MRP-L44 shRNA Plasmid (m): sc-106247-SH, MRP-L44 shRNA (h) Lentiviral Particles: sc-94925-V and MRP-L44 shRNA (m) Lentiviral Particles: sc-106247-V.

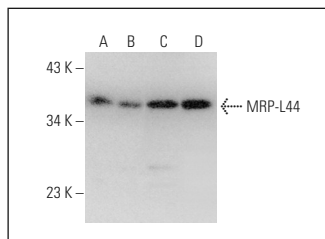
Molecular Weight of MRP-L44: 38 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

## 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-L44 (C-14): sc-103631. Western blot analysis of MRP-L44 expression in HeLa (A), Jurkat (B), K-562 (C) and Hep G2 (D) whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Satisfaction  
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Try **MRP-L44 (G-12): sc-515503** or **MRP-L44 (E-7): sc-515489**, our highly recommended monoclonal alternatives to MRP-L44 (C-14).