

# MRP-L28 (H-104): sc-292181

## BACKGROUND

MRP-L28 (39S ribosomal protein L28, melanoma-associated antigen recognized by T lymphocytes) is a mitochondrial protein that belongs to the ribosomal protein L28P family. MRP-L28 potentially represents an important therapeutic reagent for HLA-A24 (A24) patients as this antigen is recognized by tumor-infiltrating lymphocyte (TIL) 1290, which targets the A24 serotype. HLA-A24 (A24) is an HLA-A serotype that identifies the more common HLA-A24 gene products. A24 is a split antigen that is also recognized by the A9 broad antigen type and the similar A23 types. A24 is common in Austronesia and has one of the highest A allele frequencies for a number of peoples, including Papua New Guineans, Indigeonous Taiwanese (Eastern Tribals), Yupik and Greenland Eskimos. MRP-L28 is found in a variety of normal tissues including spleen, testes, thymus, liver, kidney, brain, adrenal, lung and retinal tissue.

## REFERENCES

- Robbins, P.F., et al. 1995. Cloning of a new gene encoding an antigen recognized by melanoma-specific HLA-A24-restricted tumor-infiltrating lymphocytes. *J. Immunol.* 154: 5944-5950.
- Robbins, P.F., et al. 1996. A mutated  $\beta$ -catenin gene encodes a melanoma-specific antigen recognized by tumor infiltrating lymphocytes. *J. Exp. Med.* 183: 1185-1192.
- Kawakami, Y., et al. 2000. Recognition of shared melanoma antigens in association with major HLA-A alleles by tumor infiltrating T lymphocytes from 123 patients with melanoma. *J. Immunother.* 23: 17-27.
- Walsh, D.W., et al. 2002. Genomic differences between *Candida glabrata* and *Saccharomyces cerevisiae* around the MRPL28 and GCN3 loci. *Yeast* 19: 991-994.
- Wong, S., et al. 2002. Gene order evolution and paleopolyploidy in hemiascomycete yeasts. *Proc. Natl. Acad. Sci. USA* 99: 9272-9277.

## CHROMOSOMAL LOCATION

Genetic locus: MRPL28 (human) mapping to 16p13.3; Mrpl28 (mouse) mapping to 17 A3.3.

## SOURCE

MRP-L28 (H-104) is a rabbit polyclonal antibody raised against amino acids 57-160 mapping within an internal region of MRP-L28 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## PROTOCOLS

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

## APPLICATIONS

MRP-L28 (H-104) is recommended for detection of MRP-L28 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

MRP-L28 (H-104) is also recommended for detection of MRP-L28 in additional species, including equine.

Suitable for use as control antibody for MRP-L28 siRNA (h): sc-62643, MRP-L28 siRNA (m): sc-62644, MRP-L28 shRNA Plasmid (h): sc-62643-SH, MRP-L28 shRNA Plasmid (m): sc-62644-SH, MRP-L28 shRNA (h) Lentiviral Particles: sc-62643-V and MRP-L28 shRNA (m) Lentiviral Particles: sc-62644-V.

Molecular Weight of MRP-L28: 30 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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