

MRP-L28 (N-18): sc-55685

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, indigenous Taiwanese (eastern tribals), Yupik and Greenland Eskimos. MRP-L28 is found in a variety of normal tissues including spleen, testis, 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 β -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.
- Marc, M.M., et al. 2007. Lung tissue and tumour-infiltrating T lymphocytes in patients with non-small cell lung carcinoma and chronic obstructive pulmonary disease (COPD): moderate/severe versus mild stage of COPD. *Scand. J. Immunol.* 66: 694-702.

CHROMOSOMAL LOCATION

Genetic locus: MRPL28 (human) mapping to 16p13.3.

SOURCE

MRP-L28 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of MRP-L28 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-55685 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRP-L28 (N-18) is recommended for detection of MRP-L28 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 μ g per 100–500 μ 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 (N-18) is also recommended for detection of MRP-L28 in additional species, including canine, bovine and porcine.

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

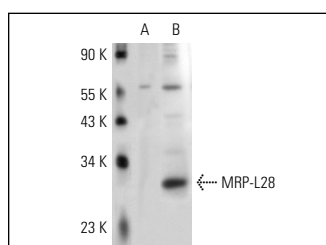
Molecular Weight of MRP-L28: 30 kDa.

Positive Controls: MRPL28 (h): 293 Lysate: sc-110593 or Hs 294t whole cell lysate.

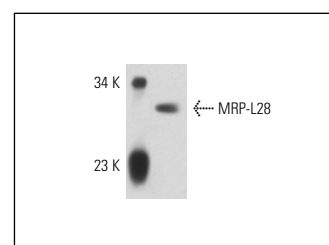
RECOMMENDED SECONDARY REAGENTS

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-L28 (N-18): sc-55685. Western blot analysis of MRP-L28 expression in non-transfected: sc-110760 (A) and human MRP-L28 transfected: sc-110593 (B) 293 whole cell lysates.



MRP-L28 (N-18): sc-55685. Western blot analysis of MRP-L28 expression in Hs 294t whole cell lysate.

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.