

MRP-L28 (h): 293 Lysate: sc-110593

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) 1,290, 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 tribes), 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., el-Gamil, M., Li, Y.F., Topalian, S.L., Rivoltini, L., Sakaguchi, K., Appella, E., Kawakami, Y. and Rosenberg, S.A. 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., El-Gamil, M., Li, Y.F., Kawakami, Y., Loftus, D., Appella, E. and Rosenberg, S.A. 1996. A mutated β -catenin gene encodes a melanoma-specific antigen recognized by tumor infiltrating lymphocytes. *J. Exp. Med.* 183: 1185-1192.
- Kawakami, Y., Dang, N., Wang, X., Tupesis, J., Robbins, P.F., Wang, R.F., Wunderlich, J.R., Yannelli, J.R. and Rosenberg, S.A. 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., Wolfe, K.H. and Butler, G. 2002. Genomic differences between *Candida glabrata* and *Saccharomyces cerevisiae* around the MRPL28 and GCN3 loci. *Yeast* 19: 991-994.
- Wong, S., Butler, G. and Wolfe, K.H. 2002. Gene order evolution and paleopolyploidy in hemiascomycete yeasts. *Proc. Natl. Acad. Sci. USA* 99: 9272-9277.
- Marc, M.M., Korosec, P., Kern, I., Sok, M., Ihan, A. and Kosnik, M. 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.
- Suda, T., Tsunoda, T., Daigo, Y., Nakamura, Y. and Tahara, H. 2007. Identification of human leukocyte antigen-A24-restricted epitope peptides derived from gene products upregulated in lung and esophageal cancers as novel targets for immunotherapy. *Cancer Sci.* 98: 1803-1808.
- Takao, Y., Yamada, A., Yutani, S., Takedatsu, H., Ono, T., Etoh, K., Wang, Y., Suzuki, S., Ide, T., Shimotohno, K., Sata, M. and Itoh, K. 2007. Identification of new immunogenic peptides in conserved regions of hepatitis C virus (HCV) 1b with the potentiality to generate cytotoxic T lymphocytes in HCV1b+ HLA-A24+ patients. *Hepatol. Res.* 37: 186-195.

CHROMOSOMAL LOCATION

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

PRODUCT

MRP-L28 (h): 293 Lysate represents a lysate of human MRP-L28 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

MRP-L28 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive MRP-L28 antibodies. Recommended use: 10-20 μ l per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.