Melan-A (0.N.397): sc-71569



The Power to Question

BACKGROUND

Melanoma-associated antigens recognized by cytotoxic T lymphocytes (CTL) have been grouped into three categories: melanocyte differentiation antigens, cancer/testis-specific antigens and mutated or aberrantly expressed antigens. Many of these antigens consist of peptides that are presented to T cells by HLA molecules; they represent potential targets for cancer immunotherapy. Melan-A (also designated MART-1) is a melanocyte differentiation antigen that is specific to melanomas, melanocyte cell lines and retina. Melan-A peptide is recognized by most HLA-A2-restricted tumor-specific tumor-infiltrating lymphocytes in patients with melanoma. Antimelanoma cytotoxic T lymphocytes can be generated with a Melan-A peptide, implicating Melan-A as a potential candidate for antigen-specific immunotherapy in melanoma patients.

REFERENCES

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- Busam, K.J., Chen, Y.T., Old, L.J., Stockert, E., Iverson, K., Coplan, K.A., Rosai, J., Barnhill, R.L. and Jungbluth, A.A. 1998. Expression of Melan-A (MART-1) in benign melanocytic nevi and primary cutaneous malignant melanoma. Am. J. Surg. Pathol. 22: 976-982.
- Loftus, D.J., Squarcina, P., Nielsen, M.B., Geisler, C., Castelli, C., Odum, N., Appella, E., Parmiani, G. and Rivoltini, L. 1998. Peptides derived from selfproteins as partial agonists and antagonists of human CD8+ T cell clones reactive to melanoma/melanocyte epitope MART-1 (27-35). Cancer Res. 58: 2433-2439.

CHROMOSOMAL LOCATION

Genetic locus: MLANA (human) mapping to 9p24.1; Mlana (mouse) mapping to 19 C1.

SOURCE

Melan-A (0.N.397) is a mouse monoclonal antibody raised against recombinant Melan-A of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 $\mu g \; lg G_{2b}$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

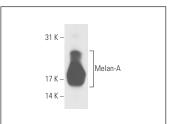
Melan-A (0.N.397) is recommended for detection of Melan-A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffinembedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

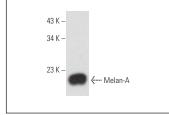
Suitable for use as control antibody for Melan-A siRNA (h): sc-35920, Melan-A siRNA (m): sc-35921, Melan-A shRNA Plasmid (h): sc-35920-SH, Melan-A shRNA Plasmid (m): sc-35921-SH, Melan-A shRNA (h) Lentiviral Particles: sc-35920-V and Melan-A shRNA (m) Lentiviral Particles: sc-35921-V.

Molecular Weight of acylated Melan-A: 20-24 kDa.

Positive Controls: C32 whole cell lysate: sc-2205, SK-MEL-28 cell lysate: sc-2236 or B16-F0 cell lysate: sc-2298.

DATA





Melan-A (0.N.397): sc-71569. Western blot analysis of Melan-A expression in SK-MEL-28 whole cell lysate.

Melan-A (0.N.397): sc-71569. Western blot analysis of Melan-A expression in C32 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.

PROTOCOLS

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



See **Melan-A (A103): sc-20032** for Melan-A antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.