Melan-A (A103): sc-20032

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, and 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. Anti-melanoma 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.

CHROMOSOMAL LOCATION

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

SOURCE

Melan-A (A103) is a mouse monoclonal antibody raised against recombinant Melan-A.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Melan-A (A103) is available conjugated to agarose (sc-20032 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-20032 HRP), 200 µg/ml, for WB, IHC) and ELISA; to either phycoerythrin (sc-20032 PE), fluorescein (sc-20032 FITC), Alexa Fluor® 488 (sc-20032 AF488), Alexa Fluor® 546 (sc-20032 AF546), Alexa Fluor® 594 (sc-20032 AF594) or Alexa Fluor® 647 (sc-20032 AF647), 200 µg/ml, for WB (RGB), IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-20032 AF680) or Alexa Fluor® 790 (sc-20032 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Melan-A (A103) 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 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).


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

Positive Controls: Melan-A (h2): 293T Lysate: sc-159493, C32 whole cell lysate: sc-2205 or SK-MEL-28 cell lysate: sc-2236.

STORAGE

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

DATA

Melan-A (A103) HRP: sc-20032 HRP. Direct western blot analysis of Melan-A expression in non-transfected 293T: sc-117752 (A), human Melan-A transfected 293T: sc-159493 (B) and SK-MEL-28 (C) whole cell lysates.

REFERENCES


SELECT PRODUCT CITATIONS


RESEARCH USE

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

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