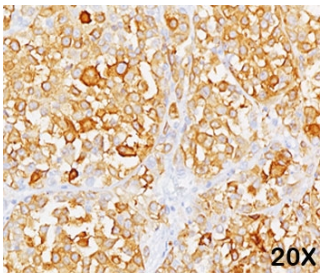
Melan-A Antibody [clone M2-9E3] (V2117)

Catalog No.	Formulation	Size
V2117-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2117-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2117SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2117IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

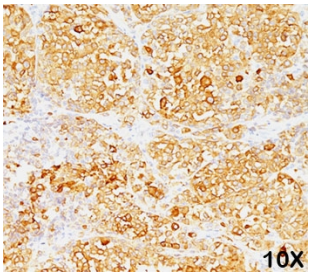
Citations (5)

Bulk quote request

Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	M2-9E3
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	2315
Localization	Cytoplasmic
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This **Melan-A antibody** is available for research use only.



Formalin/paraffin human melanoma stained with MART-1 / Melan-A antibody (clone M2-9E3). Note cytoplasmic staining of cells.



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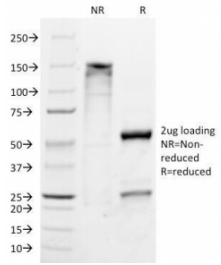
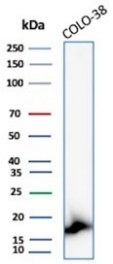


SDS-PAGE Analysis of Purified, BSA-Free Melan-A Antibody (clone M2-9E3). Confirmation of Integrity and Purity of the Antibody.



Western blot testing of human COLO-38 cell lysate with Melan-A antibody (clone M2-9E3). Expected molecular weight ~20 kDa with possible doublet.

Description

Melan-A antibody clone M2-9E3 is a monoclonal antibody specific for Melan-A, also known as MART-1, a melanocyte differentiation antigen expressed in normal melanocytes and the majority of melanomas. This protein is localized to the cytoplasm and plays a role in melanosome formation and pigment production. Because of its restricted expression in melanocytic lineages, Melan-A antibody clone M2-9E3 is one of the most reliable markers for identifying melanocytic tumors. NSJ Bioreagents provides this antibody for use in immunohistochemistry, immunofluorescence, and western blotting, offering consistent performance across multiple applications.

In diagnostic pathology, Melan-A antibody clone M2-9E3 is widely used to confirm the melanocytic origin of tumors. It produces strong cytoplasmic staining in melanocytes and melanoma cells, helping to distinguish malignant melanoma from non melanocytic tumors. This antibody is particularly valuable in differentiating melanomas from carcinomas, sarcomas, and lymphomas, where morphological features alone can be misleading. Alongside other markers such as HMB-45 and S100, Melan-A antibody clone M2-9E3 has become a cornerstone of melanoma diagnostic panels.

In addition to its diagnostic role, Melan-A has significance in immunology and tumor immunotherapy research. As a melanoma associated antigen, Melan-A can be recognized by cytotoxic T lymphocytes, making it a target of immune mediated responses. Melan-A antibody clone M2-9E3 has been applied in studies of antigen presentation, tumor immune

surveillance, and vaccine development. Researchers have used this antibody to investigate how tumors expressing Melan-A interact with immune cells and respond to immune checkpoint therapies.

Melan-A antibody clone M2-9E3 also provides insights into melanocyte biology. It can be used to monitor normal melanocyte distribution in skin, hair follicles, and mucosal tissues. This has relevance in pigmentary disorder research, where altered melanocyte activity contributes to diseases such as vitiligo or melasma. The antibodyÃ¢Â€Â™s strong and reproducible cytoplasmic staining pattern has made it a dependable choice for these studies.

Validated for use in formalin fixed, paraffin embedded sections, frozen tissues, and cultured cells, Melan-A antibody clone M2-9E3 has an extensive publication record supporting its reliability. Alternate names include MART-1 antibody, melanocyte antigen antibody, and melanoma marker Melan-A antibody.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Melan-A antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human Melan-A protein was used as the immunogen for this antibody.

Storage

Store the Melan-A antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

References (2)