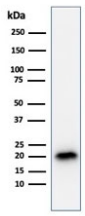
Melan-A Antibody / Melanocyte Lineage Marker [clone A103] (V2121)

Catalog No.	Formulation	Size
V2121-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2121-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2121SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2121IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

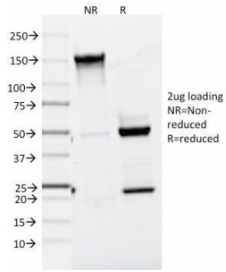
Citations (10)

Bulk quote request

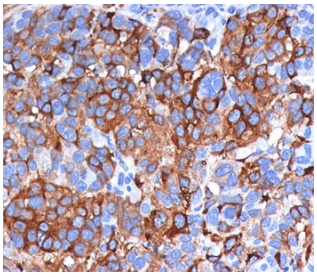
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	A103
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	2315
Localization	Cytoplasmic
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Melan-A Antibody / Melanocyte Lineage Marker clone A103 is available for research use only, not for diagnostic or therapeutic testing.



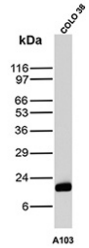
Melan-A Antibody COLO-38 Cell Line WB. Western blot analysis of human COLO-38 cell lysate using clone A103. A strong band is detected near approximately 18-20 kDa, consistent with the expected molecular weight range of Melan-A / MLANA/MART-1, a melanocyte lineage-associated protein involved in melanosome biology and melanoma differentiation pathways. A possible closely migrating doublet may reflect alternatively processed or post-translationally modified Melan-A-associated protein species commonly observed in melanocytic tumor cell lines.



SDS-PAGE Analysis of Purified, BSA-Free Melan-A Antibody (clone A103). Confirmation of Integrity and Purity of the Antibody.



Melan-A Antibody Clone A103 Melanoma IHC. Immunohistochemistry analysis of FFPE human melanoma tissue stained with clone A103. Strong cytoplasmic and membranous HRP-DAB brown staining is observed throughout malignant melanocytic tumor cells, consistent with the expected expression pattern of Melan-A / MLANA/MART-1 in melanoma-associated differentiation and melanosome-related cellular pathways.



Western blot testing of human COLO-38 cell lysate with recombinant Melan-A antibody (clone A103). Expected molecular weight ~20 kDa with possible doublet.

Description

Melan-A (MLANA), also known as MART-1, is a melanocyte lineage-associated protein involved in melanosome biogenesis, melanocytic differentiation, and pigmentation-associated cellular pathways. Melan-A Antibody / Melanocyte Lineage Marker clone A103 is suitable for investigations involving melanoma biology, melanocytic differentiation, pigment cell signaling pathways, and dermatopathology-associated tumor research. Melan-A is predominantly expressed within normal melanocytes and melanocytic tumors, where it contributes to melanosome structure and melanocyte-associated differentiation programs.

Melan-A antibody, also referred to as MLANA antibody, MART-1 antibody, Melanocyte differentiation antigen antibody, and Clone A103 Melan-A antibody in the literature, recognizes a melanocyte-associated protein widely used as a lineage marker in melanoma pathology and melanocytic tumor research. Expression of Melan-A is strongly associated with melanocytic cells and melanoma-derived tumors, making it an important biomarker for studies involving melanocyte differentiation and pigment cell-associated neoplasms. The protein is primarily localized within melanosome-associated intracellular compartments, consistent with its role in melanin-producing cell biology.

Melanocytic lineage markers such as Melan-A are central components of dermatopathology and melanoma-associated tumor classification studies. Melan-A expression has been widely investigated in cutaneous melanoma, metastatic

melanoma, melanocytic nevi, and pigment cell differentiation-associated signaling pathways. Because melanocyte lineage-associated proteins contribute to melanosome biology and pigmentation pathways, Melan-A remains relevant for investigations involving melanocyte development, melanoma progression, and melanocytic tumor biology.

Clone A103 is a highly cited mouse monoclonal antibody with extensive use in peer-reviewed melanoma and dermatopathology research literature. This clone has been widely utilized in studies involving melanocytic tumor identification, melanoma-associated lineage analysis, and melanocyte differentiation pathways. The extensive publication history associated with clone A103 supports its continued relevance for melanoma pathology, pigment cell biology, and melanocyte lineage-associated investigations.

Immunohistochemistry and western blot analyses support detection of endogenous Melan-A expression in melanocytic tissue and melanoma-derived samples, consistent with the expected localization pattern of this melanocyte lineage-associated protein. HuProt(TM) protein microarray specificity validation further supports selective recognition of Melan-A among thousands of human proteins. The combined validation profile supports use of clone A103 for investigations involving melanoma biology, melanocyte differentiation, pigment-associated signaling pathways, and dermatopathology-associated tumor research.

An antibody targeting Melan-A can therefore support studies involving melanoma pathology, melanocyte lineage identification, pigment cell differentiation pathways, melanosome-associated biology, and melanocytic tumor-associated signaling mechanisms.

Explore our MART-1 / Melan-A Antibody page to discover additional antibodies for melanoma biology, melanocyte lineage identification, pigment cell differentiation, and dermatopathology research applications.

Application Notes

Due to differences in protocols and secondary antibody used, the Melan-A Antibody / Melanocyte Lineage Marker clone A103 may require titration for optimal performance.
1. FFPE staining is enhanced by boiling 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 protein was used as the immunogen for the Melan-A antibody.

Storage

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

Alternate Names

Melan-A antibody, MLANA antibody, MART-1 antibody, Melanocyte differentiation antigen antibody, Clone A103 Melan-A antibody

References (1)