P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

MART-1; Clone M2-9E2
(Ready-To-Use)

Availability/Contents:

Item #	Volume
A00116-0002	2 ml
A00116-0007	7 ml
A00116-0025	25 ml

Description:

Species:	Mouse
Immunogen:	Recombinant human MART-1 protein was used to generate the MART-1 antibody.
Clone:	M2-9E2
Isotype:	Mouse IgG2b, Kappa
Format:	This antibody has been pretitered and quality controlled to work on formalin-fixed paraffin-embedded as well as acetone fixed cryostat tissue sections. No further titration is required.
Specificity:	The clone M2-9E2 MART-1 antibody labels melanomas and other tumors showing melanocyte differentiation.
Background:	Melan-A also known as MART-1 (Melanoma Antigen Recognized by T cells 1), is an 18 kDa melanocyte differentiation antigen recognized by T cells. Melan-A is expressed in melanosomes and the endoplasmic reticulum. Melan-A is the most widely used marker for identifying malignant melanoma (Campoli, 2012), a highly aggressive and deadly form of skin cancer which may be curable when caught early. Melan-A specific monoclonal antibodies have utility for evaluating suspected melanocyte lesions by immunohistochemistry as they have both high sensitivity (75-92%) and specificity (95-100%) for melanoma (Campoli, 2012, Oshie, 2012). The M2-9E3 antibody clone labels melanomas and other tumors showing melanocyte differentiation (Kawakami et al, 1997). The antibody has been highly characterized, including by immunohistochemistry, immunofluorescence, western blot and immunoprecipitation, and the specificity of the antibody for Melan-A has also been validated by Melan-A siRNA knockdown (Hoashi et al, 2005). Additionally, the Melan-A antibody has been used in combination with other melanocyte differentiation markers to help confirm or exclude melanocyte histogenesis (Collins, 2012; Mihic-Probst, 2012). It is important to note that Melan-A expression is not restricted to melanoma, and may also be detectable on some other type of tumors (reviewed in Campoli, 2012). The exact eptiope recognized by the Melan-A antibody has not been mapped. However, the Melan-A epitope recognized by this antibody appears to be different than that recognized by the M2-7C10 Melan-A antibody clone (ScyTek Cat# A00115) (Kawakami, 1997). Researchers often use more than one antibody against a given specificity to help follow up and validate results. Hence, it may be useful to use both the A00116 and A00115 antibodies in parallel to obtain additional information about Melan-A expression.
Species Reactivity:	Human, Mouse, Rat.
Positive Control:	Metastatic melanoma in lymph nodes.
Cellular Localization:	Cytoplasmic.
Titer/Working Dilution:	No further dilution is required.
Microbiological State:	This product is not sterile.

Storage: 2° C – 8° C

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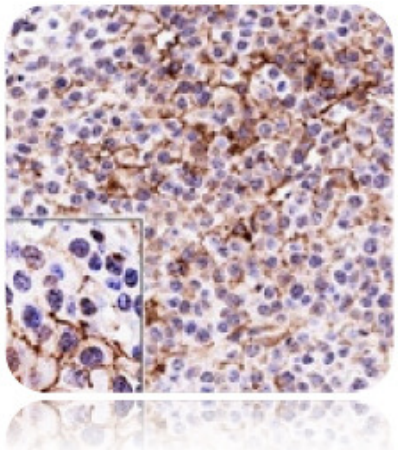
Uses/Limitations:

Not to be taken internally.
For Research Use Only.
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Do not use if reagent becomes cloudy.
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile.



Ordering Information and Current Pricing at www.scytek.com

Procedure:

1. **Tissue Section Pretreatment Recommended:** Staining of formalin fixed, paraffin embedded tissue sections is enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500) or Citrate Buffer (10x), pH 6.0 (ScyTek Catalog# CBB500, see IFU for instructions).

2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.

3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).
Do not pipette by mouth.
Avoid contact of reagents and specimens with skin and mucous membranes.
Avoid microbial contamination of reagents or increased nonspecific staining may occur.
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

1. Marincola FM etal. 19:192-205 J Immunother 19:192-205 (1996).
2. Kawakami Y etal. J Immunol Methods 202:13-25 (1997).
3. Campoli etal. Mohs Micrographic Surgery for the Treatment of Cutaneous Melanoma. In: Mohs Micrographic Surgery. Nouri K (Editor) 211-223 (2012), DOI: 10.1007/978-1-4471-2152-7_18
4. Ohsie et al. Tissue-Based Protein Biomarkers in Melanoma: Immunohistochemistry: (A) Diagnosis. In Diagnostic and Prognostic Biomarkers and Therapeutic Targets in Melanoma Current Clinical Pathology, Murphy MJ (Editor). 159-176 (2012), 159-176, DOI: 10.1007/978-1-60761-433-3_12.
5. Collins etal. J Cutan Pathol 39:637-643 (2012).
6. Mihic-Probst etal. PLosONE PLoS ONE 7: e33571 (2012). doi:10.1371/journal.pone.0033571.

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