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MART-1 Antibody / Melanoma antigen recognized by T-cells 1 / MLANA [clone MSVA-900M] (V5893)

Catalog No.	Formulation	Size
V5893-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5893-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant **MOUSE MONOCLONAL**

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	MSVA-900M
UniProt	Q16655
Localization	Endoplasmic reticulum membrane, Golgi apparatus, Melanosome, trans-Golgi network membrane
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This MART-1/Melanoma antigen recognized by T-cells 1 antibody is available for research use only.
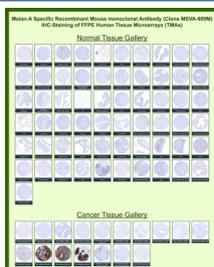
Immunohistochemistry analysis of Melanoma antigen recognized by T-cells 1 in FFPE human tissue microarrays. Formalin-fixed, paraffin-embedded human normal and cancer tissue microarrays were stained with recombinant MART-1/Melanoma antigen recognized by T-cells 1 antibody (clone MSVA-900M). Brown chromogenic signal indicates MART-1-positive cells, with strong cytoplasmic staining observed in malignant melanoma tissues and absence of staining in most non-melanocytic normal and cancer tissues, consistent with the expected melanocytic lineage-specific expression pattern.

Description

MART-1 antibody detects Melanoma antigen recognized by T-cells 1, a melanocyte differentiation antigen encoded by the MLANA gene and localized predominantly to the cytoplasm and melanosome membranes of melanocytes. Melanoma antigen recognized by T-cells 1 is commonly referred to as MART-1 and plays an essential role in melanosome structure, melanocyte differentiation, and antigen presentation within the melanocytic lineage. The MART-1 antibody is widely used

in research and diagnostic pathology to study melanocyte biology and to identify melanocytic lesions based on its restricted expression profile.

Melanoma antigen recognized by T-cells 1 functions as a melanosomal membrane-associated protein that stabilizes gp100 and supports proper melanosome maturation. Expression is largely confined to normal melanocytes, retinal pigment epithelial cells, and melanocytic tumors, making MART-1 antibody a valuable reagent for distinguishing melanocytic cells from non-melanocytic lineages. Because MLANA expression is preserved in the majority of melanomas, this antibody is frequently used as a marker of melanocytic differentiation in tissue-based studies.

In immunohistochemistry applications, MART-1 antibody typically produces cytoplasmic brown chromogenic staining in melanocytes and melanoma cells, while most epithelial, mesenchymal, and hematopoietic tissues remain negative. This selective expression pattern supports its use in evaluating melanocytic lesions, studying melanoma progression, and investigating melanocyte-associated pathways. Clone MSVA-900M is designed to recognize Melanoma antigen recognized by T-cells 1 in research applications and provides consistent detection of MLANA-positive cells in formalin-fixed, paraffin-embedded tissues when appropriate antigen retrieval conditions are applied.

Because of its lineage specificity, MART-1 antibody is also useful in comparative studies alongside other melanocytic markers such as SOX10, PMEL, and S100 family proteins, enabling refined characterization of melanocytic tumors and differentiation states. Its restricted expression profile continues to make Melanoma antigen recognized by T-cells 1 a cornerstone marker in melanocyte and melanoma research.

Application Notes

1. Optimal dilution of the MART-1/Melanoma antigen recognized by T-cells 1 antibody should be determined by the researcher.

2. This MART-1/Melanoma antigen recognized by T-cells 1 antibody is recombinantly produced by expression in human HEK293 cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

Recombinant full-length hMART-1 protein was used as the immunogen for the MART-1/Melanoma antigen recognized by T-cells 1 antibody.

Storage

MART-1/Melanoma antigen recognized by T-cells 1 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.