

# MART-1 / Melan-A / MLANA (Melanoma Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM540] Catalog # AH10455

## **Product Information**

**Application** WB, IF, FC, IHC-P

Primary Accession
Other Accession
Reactivity
Q16655
2315, 154069
Human, Mouse, Rat

**Host** Mouse **Clonality** Monoclonal

**Isotype** Mouse / IgG2b, kappa

Clone Names SPM540 Calculated MW 13157

# **Additional Information**

**Gene ID** 2315

Other Names Melanoma antigen recognized by T-cells 1, MART-1, Antigen LB39-AA, Antigen

SK29-AA, Protein Melan-A, MLANA, MART1

**Application Note** WB~~1:1000 IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A

**Format** 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G.

Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available

WITHOUT BSA & azide at 1.0mg/ml.

**Storage** Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions MART-1 / Melan-A / MLANA (Melanoma Marker) Antibody - With BSA and

Azide is for research use only and not for use in diagnostic or therapeutic

procedures.

## **Protein Information**

Name MLANA

Synonyms MART1

**Function** Involved in melanosome biogenesis by ensuring the stability of GPR143.

Plays a vital role in the expression, stability, trafficking, and processing of melanocyte protein PMEL, which is critical to the formation of stage II

melanosomes.

#### **Cellular Location**

Endoplasmic reticulum membrane; Single-pass type III membrane protein. Golgi apparatus. Golgi apparatus, trans-Golgi network membrane. Melanosome. Note=Also found in small vesicles and tubules dispersed over the entire cytoplasm. A small fraction of the protein is inserted into the membrane in an inverted orientation Inversion of membrane topology results in the relocalization of the protein from a predominant Golgi/post-Golgi area to the endoplasmic reticulum. Melanoma cells expressing the protein with an inverted membrane topology are more effectively recognized by specific cytolytic T-lymphocytes than those expressing the protein in its native membrane orientation

**Tissue Location** 

Expression is restricted to melanoma and melanocyte cell lines and retina

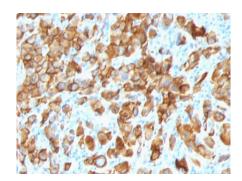
# **Background**

This antibody recognizes a protein doublet of 20-22kDa, identified as MART-1 (Melanoma Antigen Recognized by T cells 1) or Melan-A. MART-1 is a newly identified melanocyte differentiation antigen recognized by autologous cytotoxic T lymphocytes. Seven other melanoma associated antigens recognized by autologous cytotoxic T cells include MAGE-1, MAGE-3, tyrosinase, gp100, gp75, BAGE-1, and GAGE-1. Subcellular fractionation shows that MART-1 is present in melanosomes and endoplasmic reticulum. This MAb labels melanomas and other tumors showing melanocytic differentiation. It is also a useful positive-marker for angiomyolipomas. It does not stain tumor cells of epithelial, lymphoid, glial, or mesenchymal origin.

## References

Kawakami Y, et. al. Journal of Immunological Methods, 1997, 202(1):13-25. | Marincola FM, et. al. J of Immunotherapy with Emphasis on Tumor Immunol, 1996, 19(3):192-205

# **Images**



Formalin-fixed, paraffin-embedded human Melanoma stained with Melan-A Monoclonal Antibody (SPM540).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.