

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

Mouse Monoclonal Antibody [Clone MLANA/788] Catalog # AH11223

## **Product Information**

| Application<br>Primary Accession | WB, IHC, IF, FC<br><u>Q16655</u> |
|----------------------------------|----------------------------------|
| Other Accession                  | <u>2315, 154069</u>              |
| Reactivity                       | Human, Mouse, Rat, Drosophila    |
| Host                             | Mouse                            |
| Clonality                        | Monoclonal                       |
| Isotype                          | Mouse / IgG1, kappa              |
| Clone Names                      | MLANA/788                        |
| Calculated MW                    | 13157                            |

#### **Additional Information**

| Gene ID          | 2315   |
|------------------|--|
| Other Names      | Melanoma antigen recognized by T-cells 1, MART-1, Antigen LB39-AA, Antigen<br>SK29-AA, Protein Melan-A, MLANA, MART1   |
| Application Note | WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50   |
| 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<br>Azide is for research use only and not for use in diagnostic or therapeutic<br>procedures. |

#### **Protein Information**

| Name              | MLANA   |
|-------------------|---|
| Synonyms          | MART1   |
| Function          | Involved in melanosome biogenesis by ensuring the stability of GPR143.<br>Plays a vital role in the expression, stability, trafficking, and processing of<br>melanocyte protein PMEL, which is critical to the formation of stage II<br>melanosomes.  |
| Cellular Location | Endoplasmic reticulum membrane; Single-pass type III membrane protein.<br>Golgi apparatus. Golgi apparatus, trans-Golgi network membrane.<br>Melanosome. Note=Also found in small vesicles and tubules dispersed over<br>the entire cytoplasm. A small fraction of the protein is inserted into the |

|                 | membrane in an inverted orientation Inversion of membrane topology results<br>in the relocalization of the protein from a predominant Golgi/post-Golgi area<br>to the endoplasmic reticulum. Melanoma cells expressing the protein with an<br>inverted membrane topology are more effectively recognized by specific<br>cytolytic T-lymphocytes than those expressing the protein in its native<br>membrane orientation |
|-----------------|---|
| Tissue Location | Expression is restricted to melanoma and melanocyte cell lines and retina   |

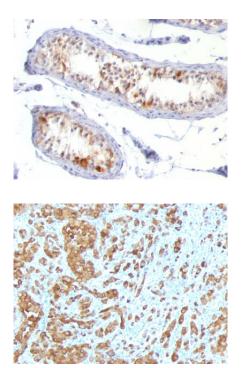
### Background

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

Chen Y-T, et. al. Proc Natl Acad Sci, USA, 1996, 93:5915-19

#### Images



Formalin-fixed, paraffin-embedded human Testis stained with Melan-A Monoclonal Antibody (MLANA/788).

Formalin-fixed, paraffin-embedded human Melanoma stained with Melan-A Monoclonal Antibody (MLANA/788).

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