

MART-1 / Melan-A / MLANA (Melanoma Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone SPM540 ] Catalog # AH10455

#### Specification

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

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC-P, IF, FC <u>016655</u> 2315, <u>154069</u> Human, Mouse, Rat Mouse Monoclonal Mouse / IgG2b, kappa 20-22kDa (doublet) KDa

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

<span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_FC">FC~~1:10~50</span>

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.

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

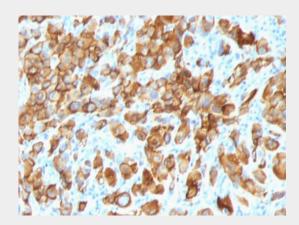
Expression is restricted to melanoma and melanocyte cell lines and retina

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

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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



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

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

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