

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

Mouse Monoclonal Antibody [Clone SPM342] Catalog # AH10452

Product Information

| Application | WB, IF, FC, IHC-P |
|-------------------|----------------------|
| Primary Accession | <u>Q16655</u> |
| Other Accession | <u>2315, 154069</u> |
| Reactivity | Human, Horse |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG2b, kappa |
| Clone Names | SPM342 |
| 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. Journal of Immunotherapy with Emphasis on Tumor Immunology, 1996, 19(3):192-205

Images



Formalin-fixed, paraffin-embedded human Melanoma stained with MART-1 Ab (SPM342).

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