

Anti-MART-1 / Melan-A / MLANA Antibody

Mouse Monoclonal Antibody Catalog # AH13228

Specification

Anti-MART-1 / Melan-A / MLANA Antibody - Product Information

Application WB, IHC-P, IF, FC

Primary Accession <u>Q16655</u> Other Accession <u>154069</u>

Reactivity Human, Rat, Horse

Host Mouse Clonality Monoclonal

Isotype Mouse / IgG2b, kappa

Calculated MW 13157

Anti-MART-1 / Melan-A / MLANA Antibody - Additional Information

Gene ID 2315

Other Names

Antigen LB39-AA, Antigen SK29-AA, Melanoma antigen recognized by T-cells 1, MLAN-A, MLANA

Application Note

WB~~1:1000/>span class

="dilution IHC-P">IHC-P~~N/A<br \><span class

="dilution_IF">IF \sim 1:50 \sim 200<br\>FC \sim 1:10 \sim 50

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

Anti-MART-1 / Melan-A / MLANA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-MART-1 / Melan-A / MLANA Antibody - 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

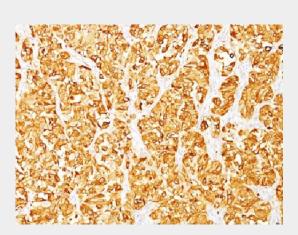
Expression is restricted to melanoma and melanocyte cell lines and retina

Anti-MART-1 / Melan-A / MLANA Antibody - Protocols

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

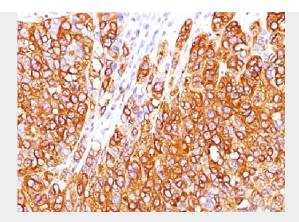
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MART-1 / Melan-A / MLANA Antibody - Images

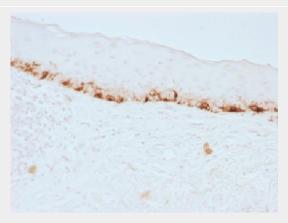


Formalin-fixed, paraffin-embedded human Melanoma stained with MART-1 Monoclonal Antibody (M2-7C10).





Formalin-fixed, paraffin-embedded human Melanoma stained with MART-1 Monoclonal Antibody (M2-7C10).



Formalin-fixed, paraffin-embedded human Skin stained with MART-1 Monoclonal Antibody (M2-7C10).

Anti-MART-1 / Melan-A / MLANA Antibody - 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.