

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

Mouse Monoclonal Antibody Catalog # AH13228

Product Information

Application WB, IHC-P, IF, FC

Primary Accession Q16655 Other Accession 154069

Reactivity Human, Rat, Horse

Host Mouse **Clonality** Monoclonal

Isotype Mouse / IgG2b, kappa

Clone Names M2-7C10 Calculated MW 13157

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 Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml);

,Western Blotting 0.5-1ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should

be determined.

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.

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

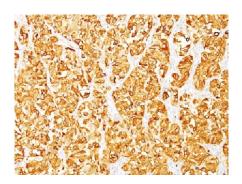
Tissue Location

Expression is restricted to melanoma and melanocyte cell lines and retina

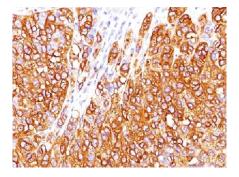
Background

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.

Images

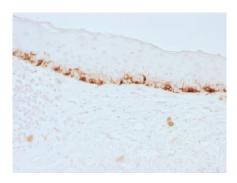


Formalin-fixed, paraffin-embedded human Melanoma stained with MART-1 Monoclonal Antibody (M2-7C10).



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).



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