10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

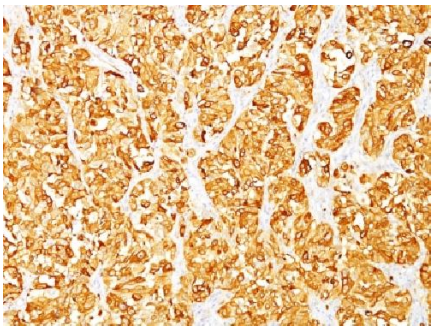
Name	MLANA
Synonyms	MART1
Function	Involved in melanosome biogenesis by ensuring the stability of GPR143. Plays a vital role in the expression, stability, trafficking, and processing of

	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

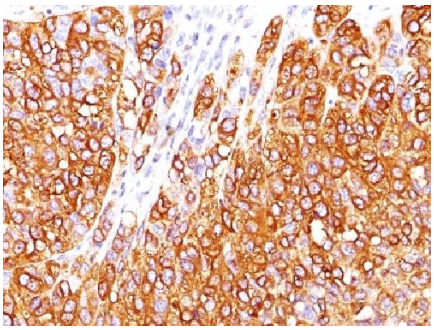
Background

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

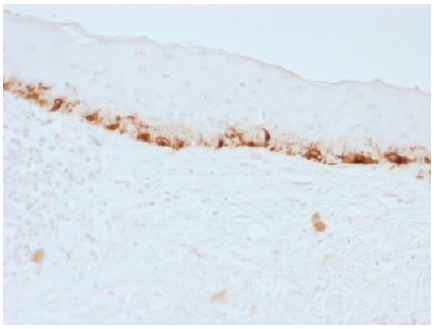


Formalin-fixed, paraffin-embedded human Melanoma stained with MART-1 Monoclonal Antibody (M2-7C10).



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'.