

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

Recombinant Mouse Monoclonal Antibody Catalog # AH13226

#### **Product Information**

**Application** WB, IHC-P, IF, FC

Primary Accession Q16655 Other Accession 154069

**Reactivity** Human, Mouse, Rat

**Host** Mouse **Clonality** Monoclonal

**Isotype** Mouse / IgG1, kappa

Clone Names rMLANA/788
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 (0.5-1ug/ml);

,Western Blotting (0.5-1.0ug/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 recombinant MAb purified 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

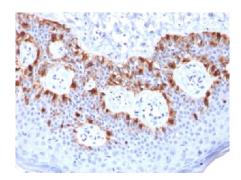
**Tissue Location** 

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 Melan-A Recombinant Mouse Monoclonal Antibody (rMLANA/788).

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