

MLANA Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1952a

Specification

MLANA Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Description WB, E <u>Q16655</u> Human Mouse Monoclonal IgG1 13.2kDa KDa

MLANA (melan-A) is a protein-coding gene. Diseases associated with MLANA include meningeal melanocytoma, and juvenile xanthogranuloma. 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

Immunogen Purified recombinant fragment of human MLANA (AA: 48-118) expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide.

MLANA Antibody - 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

Dilution WB~~1/500 - 1/2000 E~~1/10000

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions MLANA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

MLANA Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>





Figure 1: Western blot analysis using MLANA mAb against human MLANA (AA: 48-118) recombinant protein. (Expected MW is 33.9 kDa)



Figure 2: Western blot analysis using MLANA mAb against HEK293 (1) and MLANA (AA: 48-118)-hlgGFc transfected HEK293 (2) cell lysate.

MLANA Antibody - Background

The immunoglobulin epsilon receptor (IgE receptor) is the initiator of the allergic response. When two or more high-affinity IgE receptors are brought together by allergen-bound IgE molecules, mediators such as histamine that are responsible for allergy symptoms are released. This receptor is comprised of an alpha subunit, a beta subunit, and two gamma subunits. The protein encoded by this gene represents the alpha subunit. ; ; ;

MLANA Antibody - References

1. Mol Med Rep. 2011 Sep-Oct;4(5):799-803.2. J Cutan Pathol. 2011 Dec;38(12):954-60.