

# MART-1/Melan-A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11689c

## **Product Information**

Application Primary Accession	WB, FC, E <u>Q16655</u>
Other Accession	<u>NP_005502.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19079
Calculated MW	13157
Antigen Region	34-60

## **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
Target/Specificity	This MART-1/Melan-A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 34-60 amino acids from the Central region of human MART-1/Melan-A.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MART-1/Melan-A Antibody (Center) 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

Involved in melanosome biogenesis by ensuring the stability of GPR143. Plays a vital role in the expression, stability, trafficking, and processing of melanocyte protein SILV/PMEL17, which is critical to the formation of stage II melanosomes.

# References

Li, Y., et al. J. Mol. Biol. 399(4):596-603(2010) Giordano, F., et al. Hum. Mol. Genet. 18(23):4530-4545(2009) Fernandez, L.P., et al. Exp. Dermatol. 18(7):634-642(2009) Beltraminelli, H., et al. Am J Dermatopathol 31(3):305-308(2009) Serana, F., et al. J Transl Med 7, 21 (2009) :

#### Images



Overlay histogram showing A2058 cells stained with AP11689c(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

Anti-MLANA Antibody (Center) at 1:2000 dilution + SK-MEL-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 13 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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