

AM50292PU-N**Monoclonal Antibody to MART-1 - Purified**

Alternate names:	Antigen SK29-AA, LB39-AA, MART1, MLANA, Melan-A protein, MelanA, Melanoma antigen recognized by T-cells 1
Quantity:	0.2 mg
Concentration:	0.2 mg/ml
Uniprot ID:	Q16655
NCBI:	NP_005502.1
GeneID:	2315
Host / Isotype:	Mouse / IgG1/IgG2b
Clone:	A103 + M2-7C10 + M2-9E3
Immunogen:	Recombinant Human MART-1 protein (A103; M2-7C10; M2-9E3). Genename: MLANA
Format:	State: Liquid purified IgG fraction from Bioreactor Concentrate Purification: Protein A/G Chromatography Buffer System: 10mM PBS Preservatives: 0.05% Sodium Azide Stabilizers: 0.05% BSA
Applications:	Flow Cytometry: 0.5-1 $\mu\text{g}/10^6$ cells. Immunofluorescence: 0.5-1 $\mu\text{g}/\text{ml}$. Western Blot: 0.5-1 $\mu\text{g}/\text{ml}$. Immunoprecipitation: 0.5-1 $\mu\text{g}/500 \mu\text{g}$ protein lysate. Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections: 0.5-1 $\mu\text{g}/\text{ml}$ for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Positive Control: SK-MEL-13 and SK-MEL-19 Melanoma cell lines; Melanomas. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	20-22kDa (doublet)

Specificity:

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.

Cellular Localization: Cytoplasmic.

Species: Human, Mouse, Rat and Dog.

Other species not tested.

Storage:

Store undiluted at 2-8°C.

Shelf life: one year from despatch.

General Readings:

1. Chen YT, Stockert E, Jungbluth A, Tsang S, Coplan KA, Scanlan MJ, et al. Serological analysis of Melan-A(MART-1), a melanocyte-specific protein homogeneously expressed in human melanomas. Proc Natl Acad Sci U S A. 1996 Jun 11;93(12):5915-9. PubMed PMID: 8650193.
2. Kawakami Y, Battles JK, Kobayashi T, Ennis W, Wang X, Tupesis JP, et al. Production of recombinant MART-1 proteins and specific antiMART-1 polyclonal and monoclonal antibodies: use in the characterization of the human melanoma antigen MART-1. J Immunol Methods. 1997 Mar 10;202(1):13-25. PubMed PMID: 9075767.
3. Marincola FM, Hijazi YM, Fetsch P, Salgaller ML, Rivoltini L, Cormier J, et al. Analysis of expression of the melanoma-associated antigens MART-1 and gp100 in metastatic melanoma cell lines and in in situ lesions. J Immunother Emphasis Tumor Immunol. 1996 May;19(3):192-205. PubMed PMID: 8811494.

Pictures:

Formalin-Fixed, Paraffin-Embedded human melanoma stained with Melan-A Antibody Cat.-No AM50292PU (Clone A103+M2-7C10+M2-9E3). Note cytoplasmic staining of cells.

