

**AM50293PU-N****Monoclonal Antibody to MART-1 - Purified**

<b>Alternate names:</b>	Antigen SK29-AA, LB39-AA, MART1, MLANA, Melan-A protein, MelanA, Melanoma antigen recognized by T-cells 1
<b>Quantity:</b>	0.2 mg
<b>Concentration:</b>	0.2 mg/ml
<b>Uniprot ID:</b>	<a href="#">Q16655</a>
<b>NCBI:</b>	<a href="#">NP_005502.1</a>
<b>GeneID:</b>	<a href="#">2315</a>
<b>Host / Isotype:</b>	Mouse / IgG2b
<b>Recommended Isotype Controls:</b>	SM12P, AM03110PU-N
<b>Clone:</b>	M2-7C10 + M2-9E3
<b>Immunogen:</b>	Recombinant Human MART-1 protein (M2-7C10; M2-9E3). <b>Genename:</b> MLANA
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction from Bioreactor Concentrate <b>Purification:</b> Protein A/G Chromatography <b>Buffer System:</b> 10mM PBS <b>Preservatives:</b> 0.05% Sodium Azide <b>Stabilizers:</b> 0.05% BSA
<b>Applications:</b>	<b>Flow Cytometry:</b> 0.5-1 µg/10 <sup>6</sup> cells. <b>Immunofluorescence:</b> 0.5-1 µg/ml. <b>Western Blot:</b> 0.5-1 µg/ml. <b>Immunoprecipitation:</b> 0.5-1 µg/500 µg protein lysate. <b>Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections:</b> 0.5-1 µg/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. <b>Positive Control:</b> 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.
<b>Molecular Weight:</b>	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 and Rat.

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 AM50293PU (Clone M2-7C10 + M2-9E3). Note cytoplasmic staining of cells.

