

Product datasheet for AM32812PU-S

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MelanA (MLANA) Mouse Monoclonal Antibody [Clone ID: M2-7C10]

Product data:

Product Type: Primary Antibodies

Clone Name: M2-7C10

Applications: FC, IF, IHC, IP, WB

Recommended Dilution: ELISA: Use Antibody without BSA for Coating.

Western Blot: 0.5-1 µg/ml.

Immunoprecipitaion: 1-2 μg/500 μg protein lysate.

Flow Cytometry: 0.5-1 μg/106 cells. **Immunofluorescence:** 1-2 μg/ml.

Immunohistochemistry on Frozen Sections.

Immunohistochemistry on Paraffin Sections: 0.5-1 μg/ml for 30 minutes at RT. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM citrate

buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min.

Positive Control: SK-MEL-13 and SK-MEL-19 Melanoma cell lines; Melanomas.

Reactivity: Human
Host: Mouse
Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Recombinant Human MART-1 protein.



Specificity:

This MART-1 antibody clone M2-7C10 recognizes a protein doublet of 20-22kDa, identified as

MART-1 (Melanoma Antigen Recognized by T cells 1) or Melan-A.

This MART-1 antibody clone M2-7C10 does not react with Mouse or Rat. Others species not

tested.

Researchers should use the MART-1 Antibody clone M2-9E3 (Cat.-No AM32813PU), which also recognizes Human MART-1, to detect Mouse or Rat MART-1. The clone M2-7C10 MART-1 antibody labels melanomas and other tumors showing melanocyte differentiation, and is widely used for assessing melanomas (Campoli, 2012, Ohsie, 2012, Collins, 2012). Analysis of melanoma lesions with this antibody shows that there is significant heterogeneity of expression of MART-1 both as a percentage of cells and in intensity of expression (Marincola, 1996). The reactivity of the MART-1 antibody is not restricted to melanoma, and the antibody has also been shown to label some mesenchymal tumors and sarcomas (Campoli, 2012). The exact eptiope recognized by this MART-1 antibody has not been mapped. However, the MART-1 epitope recognized by this antibody appears to be different from that recognized by the MART-1 antibody clone M2-9E3 (Cat.-No AM32813PU) (Kawakami, 1997). Researchers often use more than one antibody against a given specificity to help follow up and validate results. Hence, it may be useful to use both the Cat.-No AM32812PU and Cat.-No AM32813PU antibodies in parallel to obtain additional information about MART-1 expression.

Cellular Localization: Cytoplasmic.

Formulation: 10mM PBS

State: Purified

State: Liquid purified IgG fraction from Bioreactor Concentrate

Stabilizer: 0.05% BSA

Preservative: 0.05% Sodium Azide

Concentration: lot specific

Purification: Affinity Chromatography on Protein A/G

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 20-22 kDa (Doublet)

Gene Name: melan-A

Database Link: Entrez Gene 2315 Human

Q16655



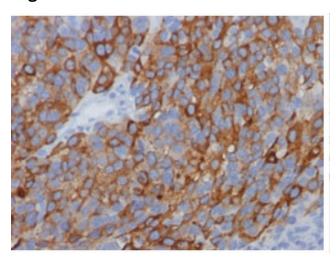
Background:

MART-1 (Melanoma Antigen Recognize by T cells 1), also known as Melan-A, is an 18 kDa melanocyte differentiation antigen recognized by autologous cytotoxic T lymphocytes. MART-1 is expressed in melanosomes and the endoplasmic reticulum. MART-1 is the most widely used marker for identifying malignant melanoma, the most deadly form of skin cancer, and facilitating complete removal of the primary tumor (Campoli, 2012). In this regard, MART-1 is used both as a confirmatory marker for melanocyte differentiation in S100 (protein present in melanocytes) positive lesions and a primary marker to evaluate the extent of melanocyte tumors (Ohsie, 2012, Collins, 2012). MART-1 specific monoclonal antibodies have high sensitivity (75-92%) and specificity (95-100%) for melanoma (Campoli, 2012, Oshie et.al, 2012).

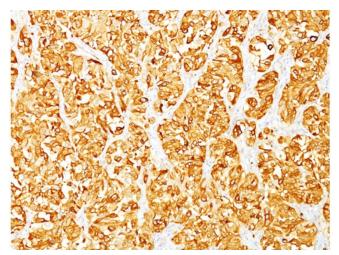
Synonyms:

Melan-A protein, MLANA, Antigen SK29-AA, LB39-AA, MelanA, MART1

Product images:

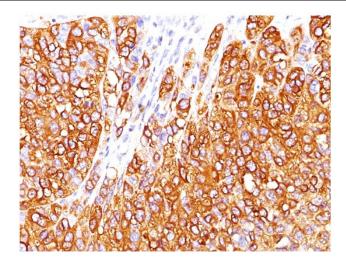


Formalin-Fixed, Paraffin-Embedded Human melanoma stained with MART-1 Antibody No (Clone M2-7C10). Note cytoplasmic staining of cells.



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