## MART-1 / Melan-A Monoclonal Mouse Antibody (M2-7C10)



## **Product Description**

This antibody recognizes a protein doublet of 20-22 kDa, 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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order Catalog number key for antibody number 0009, Anti-MART-1 (M2-7C10)

## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

- 1. Int J Cancer (1998) 75, 517-524. (IHC, frozen; IHC, cytospin)
- 2. Cancer Cytopathol (1999) 87(1): 37-42. (IHC, FFPE; IHC, cytospin)
- 3. Mol Med Řep (2011) 4: 799-803. (WB; IF; IHC)

**BSA-free** 

4. World J Immunol (2013) 3(3): 62-67. (Flow, intracellular)

Regulatory status

formulation

Antibody/conjugate

Antibody research areas Cell/tissue expression

Tumor expression

Call us: 800-304-5357

| Product attributes             |   |  |  |  |
|--------------------------------|---|--|--|--|
| Antibody number                | #0009   |  |  |  |
| Antibody reactivity (target)   | MART-1, Melan-A   |  |  |  |
| Antibody type                  | Primary   |  |  |  |
| Host species                   | Mouse   |  |  |  |
| Clonality                      | Monoclonal  |  |  |  |
| Clone                          | M2-7C10   |  |  |  |
| Isotype                        | IgG2b, kappa  |  |  |  |
| Molecular weight               | 20-22 kDa (doublet)   |  |  |  |
| Synonyms                       | Antigen LB39-AA, Antigen SK29-AA,<br>Melanoma antigen recognized by T-cells<br>1, MLAN-A, MLANA   |  |  |  |
| Human gene symbol              | MLANA   |  |  |  |
| Entrez gene ID                 | 2315  |  |  |  |
| SwissProt                      | Q16655  |  |  |  |
| Unigene                        | 154069  |  |  |  |
| Immunogen                      | Recombinant hMART-1 protein   |  |  |  |
| Antibody target cellular       | Cytoplasmic   |  |  |  |
| Verified antibody applications | IHC (FFPE) (verified)   |  |  |  |
| Species reactivity             | Horse, Human  |  |  |  |
| Expected antibody applications | Immunofluroescence (published for clone), Flow (intracellular) (published for clone), IHC (frozen) (published for clone), WB (published for clone)  |  |  |  |
| Antibody application notes     | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, mmunofluorescence: 1-2 ug/mL, Does not react with mouse or rat, others not tested, Immunohistology formalin-fixed 0.5-1 ug/mL, 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 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user |  |  |  |
| Positive control               | SK-MEL-13 and SK-MEL-19 Melanoma cell lines; Melanomas  |  |  |  |
| Shipping condition             | Room temperature  |  |  |  |
| Storage Conditions             | Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C   |  |  |  |
| Shelf life                     | Guaranteed for at least 24 months from  |  |  |  |

date of receipt when stored as recommended

For research use only (RUO) Conjugates: 0.1 mg/mL in PBS/0.1%

without azide Cancer

Melanocytes

Melanoma

BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide,

Purified, BSA-free: 1 mg/mL in PBS

Email: btinfo@biotium.com

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel           | Dye Features     |
|-------------------|-------------|------------|------------|-----------------------------|------------------|
| BNC04             | CF®405S     | 404/431    | 405        | DAPI (microscopy),<br>AF405 | CF®405S Features |
| BNC88             | CF®488A     | 490/515    | 488        | GFP, FITC                   | CF®488A Features |
| BNC68             | CF®568      | 562/583    | 532, 561   | RFP, TRITC                  | CF®568 Features  |
| BNC94             | CF®594      | 593/614    | 561        | Texas Red®                  | CF®594 Features  |
| BNC40             | CF®640R     | 642/662    | 633-640    | Cy®5                        | CF®640R Features |
| BNC47             | CF®647      | 650/665    | 633-640    | Cy®5                        | CF®647 Features  |
| BNCB              | Biotin      | N/A        | N/A        | N/A                         |                  |
| BNUB              | Purified    | N/A        | N/A        | N/A                         |                  |
| DNILIM            | Durified    | NI/A       | NI/A       | NI/A                        |                  |

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, of LI-COR Bioscience.