GENE BIO SOLUTION

MELAN A

Format	Catalog No.	Pack size	Dilution
Concentrated	GB3114A,B	0.1, 0.5 mL	1:100
Prediluted	GB3114AA,H	6.0, 25 mL	Ready to use

PRODUCT DESCRIPTION -

Melan-A (MART-1) [A103] is a melanoma-specific antigen, functioning as a transmembrane protein and serving as a melanocyte differentiation marker acknowledged by cytotoxic T cells. Melan-A is expressed in the skin, predominantly in melanocytes and in renal angiomyolipomas . The Melan-A A103 clone, in contrast to clones M2-7C10 and M2-9E3, can assist in identifying steroid hormone-producing tumors and may be especially beneficial in diagnosing adrenocortical cancer.

INTENDED USE -

Melan A (M) [A103] is a mouse monoclonal antibody designed for laboratory application in the qualitative detection of Melan A protein using immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence must be supplemented by morphological studies utilizing appropriate controls and assessed in conjunction with the patient's clinical history and other diagnostic tests by a skilled pathologist.

SUMMARY AND EXPLANATION -

Melan-A (MART-1) [A103], a melanoma-specific antigen, is a transmembrane protein and a hallmark of melanocyte development acknowledged by cytotoxic T cells. Melan-A is expressed in the skin, predominantly in melanocytes and in renal angiomyolipomas. The Melan-A A103 clone, in contrast to the M2-7C10 and M2-9E3 clones, can assist in identifying steroid hormone-producing tumors and may be especially beneficial in diagnosing adrenocortical cancer.

PRINCIPLE OF PROCEDURE -

Antigen detection in tissues and cells is a multi-step immunohistochemistry procedure. The first step attaches the primary antibody to its designated epitope. Following the tagging of the antigen with a primary antibody, a one-, two-, or three-step detection protocol may be utilized. The one-step approach will utilize an enzyme-conjugated polymer that attaches to the main antibody. A two-step approach will involve the addition of a secondary antibody to bind to the primary antibody. An

enzyme-conjugated polymer is subsequently introduced to bind to the secondary antibody. The three-step detection protocol will include the addition of a secondary antibody to bind to the main antibody, succeeded by a linker antibody step to enhance binding efficacy. An enzyme-conjugated polymer is subsequently introduced to attach to the linker antibody. The presence of bound antibodies is demonstrated by a colorimetric response.

SOURCE - Mouse monoclonal

SPECIES REACTIVITY - Human; others not tested

CLONE - A103

ISOTYPE - IgG1

PROTEIN CONCENTRATION - Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - Melan A

CELLULAR LOCALISATION - Cytoplasmic

POSITIVE TISSUE CONTROL - Melanoma

KNOWN APPLICATIONS - Immunohistochemistry
30-40 min. At RT. Staining of formalin-fixed tissues requires heating tissue sections in between pH 7.4 - 9.0 for 45 min at 95°C followed by cooling at room temperature for 20 minutes.

SUPPLIED AS - Buffer with protein carrier and preservative

STORAGE AND STABILITY -

Store at 2°C to 8°C. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Materials required but not provided -

1) Positivetissuecontrol-Melanoma
2) Negativecontroltissue(internalorexternal)
3) Microscopeslidesandcoverslips
4) Stainingjarsorbaths
5) Timer
6) Xyleneorxylenesubstitute

7) Ethanolorreagentalcohol
8) Deionizedordistilledwater
9) Heatingequipmentorenzymefortissuepretreatmentstep
10)Detection system
11)Chromogen
12)Wash buffer
13) Hematoxylin
14)Antibody diluents
15)Peroxide block
16)Light microscope
17)Mounting medium

LIMITATIONS-

The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Genebio products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.