Ki-67 (MIB-1)

Format	Catalog No.	Pack size	Dilution
Concentrated	G3156 A, B, C	0.1, 0.5, 1.0 mL	1:100
Prediluted	G3156 AA, BB	6.0, 3.0 mL	Ready to use

PRODUCT DESCRIPTION -

Cell proliferation is linked to the nuclear antigen Ki-67. It is present during the G1, S, G2, and M phases of the cell cycle, but not during the G0 phase.

INTENDED USE -

For Research Purpose Only (RUO)

KI-67 [MIB-1] is a Mouse Monoclonal antibody that is intended for professional laboratory use after the initial diagnosis of tumor has been made by conventional histopathology using nonimmunologic histochemical stains, in the qualitative identification of Ki-67 protein by immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist as an aid in making any other clinical determinations.

SUMMARY AND EXPLANATION –

Cell proliferation is linked to the nuclear antigen Ki-67. It is present during the G1, S, G2, and M phases of the cell cycle, but not during the G0 phase.

PRINCIPLE OF PROCEDURE -

This antibody product may be used as the primary antibody in immunohistochemistry testing of formalin-fixed, paraffin-embedded tissue sections. In general, immunohistochemical (IHC) staining techniques allow for the visualization of antigens via the sequential application of a specific antibody to the antigen (primary antibody), a secondary antibody to the primary antibody (optional link antibody/probe), an enzyme complex and a chromogenic substrate with interposed washing steps. The enzymatic activation of the chromogen results in a visible reaction product at the antigen site. The specimen may then be counterstained, and cover slipped. Results are interpreted using a light microscope and aid in the differential diagnosis of pathophysiological processes, which may or may not be associated with a particular antigen.

SOURCE -: Mouse monoclonal

SPECIES REACTIVITY - Human; other species not tested.

CLONE- MIB-1

ISOTYPE- IgG1/kappa

PROTEIN CONCENTRATION - Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - Human recombinant peptide corresponding to a 1002 bp KI-67 cDNA fragment

CELLULAR LOCALISATION - Nucleus

POSITIVE TISSUE CONTROL - Colon cancer

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 95ºC followed by cooling at room temperature for 20 minutes.

SUPPLIED AS - Buffered saline solution, pH 6.1 – 6.3, containing a protein carrier and less than 0.1% sodium azide preservative.

STORAGE AND STABILITY -

Store at 2ºC to 8ºC. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly, any remaining reagent should be stored at 2ºC to 8ºC

Materials required but not provided -

1) Positive tissue control - Colon cancer
2) Negative control tissue(internal or external)
3) Microscope slides and coverslips
4) Staining jars or baths
5) Timer
6) Xylene or xylene substitute
7) Ethanol or reagent alcohol
8) Deionized or distilled water
9) Heating equipment or enzyme for tissue pretreatment step
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