



Mouse anti-Ki-67

**Cat. No.: AIB-30118 (1 ml Concentrate); AIB-30119 (0.5 ml Concentrate);
AIB-30117(6 ml Ready-to-use)**

Instructions for use

Intended use

This antibody is designed for the specific localisation of Ki-67 antigen in formalin-fixed, paraffin-embedded tissue sections. Anti-Ki-67 antibody is intended for in vitro diagnostic use.

Specifications

Specificity:	Ki-67
Immunogen:	Recombinant Ki-67 protein
Clone:	K-2
Isotype:	Mouse IgG1
Species reactivity:	Human +, others not tested

Summary and explanation

Ki-67 is a nuclear protein which is expressed during all phases of the cell cycle except G₀. With anti-Ki-67 antibody it is possible to identify proliferating cells and distinguish them from stationary cells. Thus, the test allows for the evaluation of the growth fraction or mitosis rate in a cell population. It is particularly useful in studying malignant tumors and other pathogenic states as a measure of the proportion of proliferating cells.

Ki-67 shows a higher specificity than PCNA (*Proliferating Cell Nuclear Antigen*) for proliferating cells and a shorter half-life. Therefore detection of proliferating cells via Ki-67 is the state-of-the-art method in immunohistochemistry.

This Ki-67 antibody (clone K-2) stains lipoblasts and other fat containing cells and could therefore be useful in the detection of liposarcomas.

Reagent provided

Mouse monoclonal antibody in TBS with carrier protein and preservative for stabilisation in the following formats:

Concentrate:	1 ml	(Cat. No. AIB-30118)
Concentrate:	0.5 ml	(Cat. No. AIB-30119)
Ready-to-use:	6 ml	(Cat. No. AIB-30117)

Dilution of primary antibody

Dilution of Nordic Biosite' concentrated antibody depends on the detection system used. The final working dilution must always be determined by the user. The elaboration of staining protocol should be done by an experienced specialist. For Nordic Biosite' recommendations see chapter 'Staining procedure'.

Storage and handling

The antibody should be stored at 2-8°C without further dilution.

Dilutions of the concentrated antibody should be done with a suitable antibody dilution buffer (e.g. BCB-20005/BCB-20006 from Nordic Biosite). The diluted antibody should be stored at 2-8°C after use. The stability of this working solution depends on various parameters and has to be confirmed by appropriate controls.

The antibody provided is suitable for use until the expiry date indicated on the label, if stored at 2-8°C. Do not use product after the expiry date. Positive and negative controls should be run simultaneously with all specimens. If unexpected staining is observed which cannot be explained by variations in laboratory procedures and a problem with the antibody is suspected, contact Nordic Biosite' technical support or your local distributor.

Precautions

Use through qualified personnel only.

Wear protective clothing to avoid contact of reagents and specimens with eye, skin and mucous membranes. If reagents or specimens come in contact with sensitive area, wash with large amounts of water.

Microbial contamination of the reagent must be avoided, since otherwise non-specific staining may occur.

Sodium azide (NaN_3), used for stabilisation, is not considered hazardous material in the concentration used. Reaction of sodium azide with lead or copper in drainage pipes can result in the formation of highly explosive metallic azides. Sodium azide should be discarded in a large volume of running water to avoid formation of deposits. Material safety data sheet (MSDS) for the pure substance is available upon request.

Staining procedure

Refer to the following table for conditions specifically recommended for this antibody. Also refer to detection system data sheets for guidance on specific staining protocols or other requirements.

Parameters

*Pre-treatment:
20016)

*Control tissue

*Working dilution

*Incubation time

Nordic Biosites recommendations

Heat Induced Epitope Retrieval in Citrate buffer pH 6.0 (BCB-20015/BCB-

Lymph nodes, tonsils, breast carcinoma

1:200-1:400 (for concentrated antibodies only)

60 minutes

Quality control

The recommended positive control tissues for this antibody are lymph nodes or tonsils. We recommend carrying out a positive and a negative control with every staining run. Please refer to the instructions of the detection system for guidance on general quality control procedures.

Troubleshooting

If you observe unusual staining or other deviations from the expected results please read these instructions carefully, refer to the instructions of the detection system for relevant information or contact your local distributor.

Expected results

This antibody stains positive in nuclei of proliferating cells in formalin-fixed, paraffin-embedded tissue sections.

Interpretation of the staining results is solely the responsibility of the user. Any experimental result should be confirmed by a medically established diagnostic procedure.

Limitations of the Procedure

Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining, for example variations in fixation and embedding or the inherent nature of the tissue can cause inconsistent results (Nadji and Morales, 1983). Endogenous peroxidase, alkaline phosphatase or biotin may cause non-specific staining depending on the detection system used. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive results with HRP (horse radish peroxidase) detection systems (Omata et al, 1980). Inadequate counterstaining and mounting can influence the interpretation of the results. Nordic Biosite warrants that the product will meet all requirements described from its shipping date until the expiry date is reached, if the product is stored and utilised as recommended. No additional guarantees can be given. Under no circumstances shall Nordic Biosite liable for any damages arising out of the use of the reagent provided.

Performance characteristics

Nordic Biosite has conducted studies to evaluate the performance of the antibody for use with a standard detection system. The product has been found to be sensitive and specific to the antigen of interest with minimal or no cross-reactivity.

Bibliography

Gerdes J et al. Int J Cancer 31:13-20, 1982

Gerdes J et al. J Immunol 133:1710-1715, 1984








Lindboe CF und Torp SH. J Clin Pathol 55:467-471, 2002

Hall PA et al. J Pathol 154:223-235

Nadji M and Morales AR Ann N.Y. Acad Sci 420:134-9, 1983

Omata M et al. Am J Clin Pathol 73(5): 626-32, 1980

Explanations of the symbols on the product label:

	Catalog Number r Reference du catalogue		Chargenbezeichnung Batch Code Code du lot	 Manufacturer Nordic Biosite AB Propellervägen 4A S-183 62 Täby Sweden Tel: +46 (0)8 5444 33 40 Fax: +46 (0)8 756 94 90 info@nordicbioiste.com www.nordicbiosite.com
	Verwendbar bis Use By Utiliser jusque		In vitro Diagnostikum In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro	
	Gebrauchsanweisung beachten Consult Instructions for use Consulter les instructions d'utilisation		Lagerungstemperatur Temperature Limitation Limites de température	