DATA SHEET

Monoclonal Rat
Anti-Mouse Ki-67 Antigen
Clone TEC-3
Code No. M7249

For research use only. Not for use in diagnostic procedures.

Recommended use

Monoclonal Rat Anti-Mouse Ki-67 Antigen, Clone TEC-3, is recommended for use in immunocytochemistry. The antibody labels cells expressing Ki-67.

Introduction

The Ki-67 antigen is a large nuclear protein preferentially expressed during all active phases of the cell cycle (G_1, S, G_2 and M phases), but absent in resting cells (G_0) cells. Antibodies against the Ki-67 antigen have proven valuable by allowing direct monitoring of the growth fraction of a pool of cells (1).

The TEC-3 antibody is the antibody of choice for the demonstration of the Ki-67 antigen in formalin-fixed, paraffin-embedded **mouse** specimens.

Reagent provided

Monoclonal rat antibody provided in liquid form as cell culture supernatant dialysed against 0.05 mol/L Tris/HCl, pH 7.2, and containing 15 mmol/L NaN_3.

Clone: TEC-3. Isotype: IgG2a

Total protein concentration g/L: See label on vial.

Immunogen

Parts of mouse Ki-67-equivalent cDNA bacterially expressed as recombinant protein.

Specificity

The antibody labels the Ki-67 antigen in mouse cells. The antibody does not cross-react with the human Ki-67 antigen.

Precautions

1. The device is not intended for clinical use including diagnosis, prognosis, and monitoring of a disease state, and it must not be used in conjunction with patient records or treatment.
2. This product contains sodium azide (NaN_3), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, sodium azide may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
3. As with any product derived from biological sources, proper handling procedures should be used.

Storage

Store at 2-8 °C. Do not use after expiration date stamped on vial. If unexpected staining is observed which cannot be explained by variations in laboratory procedures and a problem with the antibody is suspected, contact our Technical Services.

Specimen preparation

Paraffin sections: The antibody can be used for labelling paraffin-embedded tissue sections fixed in formalin. Pre-treatment of tissues with heat-induced epitope retrieval is required. Optimal results are obtained with DakoCytomation Target Retrieval Solution, Citrate pH 6, code No S2369. Pre-treatment of tissues with Proteinase K was found inefficient. The tissue sections should not dry out during the treatment or during the following immunocytochemical staining procedure.

Staining procedure

Dilution: Monoclonal Rat Anti-Mouse Ki-67 Antigen, code No. M 7249, may be used at a dilution range of 1:25-1:50 when applied on formalin-fixed, paraffin-embedded sections of mouse tissue using 20 minutes heat-induced-epitope retrieval in DakoCytomation Target Retrieval Solution, Citrate pH 6, code No S2369, and 30 minutes incubation at room temperature with the primary antibody. Optimal conditions may vary depending on specimen and preparation method, and should be determined by each individual laboratory.

Visualization: For immunocytochemistry on mouse tissue, the combination of Biotinylated Rabbit Anti-Rat Immunoglobulins (DakoCytomation, code No. E0468) diluted 1:200, and Streptavidin/HRP (DakoCytomation, code No. P0397) diluted 1:300 is recommended for visualization using DAB+ (DakoCytomation, code No. K3467) as chromogen.

Performance characteristics

Cells labelled by the antibody display a nuclear staining pattern.

Explanation of symbols

REF	Catalogue number	2 °C 8 °C	Temperature limitation		Use by
	Consult instructions for use	LOT	Batch code		Manufacturer

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1910 Kampenhout, Belgium