**Specification Sheet**

**Monoclonal Mouse Anti-Human Topoisomerase IIα**
Clone Ki-S1  
**Code No. M 7186**constantly proliferating cells (e.g. cell lines) react positively to topo IIα antibody during the entire cell cycle. Beyond its normal function, topo IIα is an important cellular target in the treatment of human cancers (4).

### Presentation
Monoclonal mouse antibody supplied in liquid form as purified IgG of ascites diluted in 0.05 mol/L Tris/HCl, 15 mmol/L NaN3, pH 7.2, 1% bovine serum albumin (BSA).

**Mouse Ig concentration:** 50 mg/L  
**Isotype:** IgG2a.

### Storage
2 - 8 °C.

### Clone
Ki-S1 (5).

### Immunogen
A nuclear protein preparation from the human cell line U937.

### Specificity/reactivity
The antibody produced by the Ki-S1 clone recognizes an epitope within the last 495 carboxyl-terminal amino acid residues of the topoisomerase IIα protein (6). The protein is expressed in the nucleus of proliferating cells. The Ki-S1 antibody has been used for identifying proliferative tumour cells in a variety of malignancies such as lymphomas (7), melanomas (8) and carcinomas of the breast (9-11) and endometrium (12).

### Application
The DAKO antibody can be used for immunohistochemistry. Furthermore, the antibody produced by the Ki-S1 clone has been shown to be applicable in flow cytometry (5,10), immunoblotting (5), and immunoprecipitation (5).

### Staining procedures
**Formalin-fixed and paraffin-embedded sections**
Can be used on formalin-fixed, paraffin-embedded tissue sections. To improve the staining pattern, antigen retrieval, such as by heating in 10 mmol/L citrate buffer, pH 6.0 or in DAKO Target Retrieval Solution, code No. S 1700, can be used. The slides should not be allowed to dry out during this treatment nor during the following immunohistochemical staining procedure.

For tissue sections sensitive staining techniques are recommended, including LSAB methods, such as the LSAB®+ system or the EnVision™+ systems.

The antibody gives an optimal staining at a dilution of 1:50 - 1:100 with the LSAB®+ system when tested on paraffin-embedded human tonsil.
Frozen sections and cell smears

Can be used for labelling acetone-fixed cryostat sections and for fixed cell smears.

For staining cell smears the APAAP technique is recommended.

The antibody may be used at a dilution at 1:50 - 1:100 in the APAAP technique and avidin-biotin methods such as the LSAB®+ system, when tested on acetone-fixed cryostat sections of human tonsil.

These are guidelines only; optimal dilutions should be determined by the individual laboratory.

Automation

The antibody can be used on automated immunostaining systems.

References


