CHEMICON® INTERNATIONAL
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MOUSE ANTI-HUMAN TOPOISOMERASE IIα (Ki-S1) MONOCLONAL ANTIBODY

CATALOG NUMBER:	MAB4197 (formerly Roche Catalog Number 1742353)	**QUANTITY:**	100 μg
LOT NUMBER:		**CONCENTRATION:**	1 mg/mL

SPECIFICITY: In immunoprecipitation and Western blot experiments the Ki-S1 antibody recognizes a major protein of 170 kD which was identified as the α isoform of topoisomerase II (1, 2). In addition, it has been shown that the Ki-S1 antibody recognizes a carboxyterminal α-isoenzyme specific epitope missing in topoisomerase IIβ (1). In immunohistochemistry the Ki-S1 antibody shows strong nuclear staining only in proliferating cells. The epitope recognized by the antibody is also detectable in paraffin-embedded tissue sections (3). Accordingly, it has been shown that the expression of topoisomerase IIα is strongly restricted to proliferating cells (4). The topoisomerase IIα antigen is preferentially expressed during G_1, S, G_2 and M phase of the cell cycle, while resting, non-cycling cells (G_0 phase) lack topoisomerase IIα. In addition, constantly proliferating cells (e.g. cell lines) react positively to topoisomerase IIα during the entire cell-cycle. This specificity of Ki-S1 antibody for proliferating cells might make it a useful tool for determination of the proliferative fraction in solid tumors such as mammary carcinomas (2, 5–8) and gangliomas (9).

IMMUNOGEN: Nuclear protein preparation from the human cell line U937.50

ISOTYPE: IgG_{2a}

CLONE NAME: Ki-S1

APPLICATIONS:
Western blot: 1-10μg/mL
Immunoprecipitaion
Immunocytochemistry: 5-10 μg/mL
Immunohistochemistry: 5-10 μg/mL
Flow cytometry
Optimal working dilutions must be determined by end user.

SPECIES REACTIVITIES: Human

FORMAT: Purified immunoglobulin.

PRESENTATION: Liquid in 0.02M Phosphate buffer, 0.25M NaCl, pH 7.6 with 0.1% sodium azide.

STORAGE/HANDLING: Maintain at 2-8°C for up to six months from date of receipt.

Important Note: *During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 μL or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.*

For research use only; not for use as a diagnostic.

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