



Mouse anti-Human Topo II β monoclonal antibody, clone 50/Upqp JJ β (CABT-B9344)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Human Topo II β aa. 1281-1494
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	50/Upqp JJ β
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	Bioimaging; WB; IF
Format	Liquid
Concentration	250 μ g/ml
Size	50 μ g, 150 μ g
Buffer	Aqueous buffered solution containing BSA, glycerol, and $\leq 0.09\%$ sodium azide.
Storage	Store undiluted at -20°C .

BACKGROUND

Introduction Eukaryotic DNA topoisomerase II, a ubiquitous ATP-dependent type II topoisomerase, is an

essential nuclear enzyme in DNA replication and transcription, chromatin segregation, and cell cycle progression. Topoisomerases transiently break a pair of complementary strands in double-stranded DNA to form a gate for the passage of duplex DNA. Two isoforms of DNA topoisomerase II have been identified: topo II α and topo II β . These exhibit a high degree of homology, except for some divergence in the C-terminal region. Both contain multiple bipartite nuclear localization sequences (NLS) that mediate their subnuclear localization. Topo II α levels rise during late S phase and peak in G2-M, whereas topo II β levels remain constant throughout the cell cycle. In addition, topo II α is expressed in proliferating cells, while topo II β is expressed in a wide range of tissues. Although the exact role of these two isoforms during cell proliferation is not known, the differences in cellular expression implicate different physiological roles. Both isoforms may also be important targets for anticancer agents that exert cytotoxicity in proliferating cells via stabilization of a topo II-DNA complex.

Keywords

TOP2B; topoisomerase (DNA) II beta 180kDa; TOPIIB; top2beta; DNA topoisomerase 2-beta; topo II beta; antigen MLAA-44; topoisomerase IIb; topoisomerase II beta; U937 associated antigen; DNA topoisomerase II beta; DNA topoisomerase II, 180 kD; DNA topoisomerase II, beta isozyme;

GENE INFORMATION

Entrez Gene ID

[7155](#)

UniProt ID

[Q02880](#)
