



Topo I Monoclonal Antibody

Catalog No	YP-mAb-02123
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	TOP1
Immunogen	Synthesized peptide derived from the Internal region of human Topo I.
Specificity	Topo I Monoclonal Antibody detects endogenous levels of Topo I protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DNA topoisomerase 1;DNA topoisomerase I;EC:5.6.2.1;TOPI;Top-I;Topo I;TOP1
Observed Band	90 kDa
Calculated Molecular Weight	91 kDa
Cell Pathway	Nucleus, nucleolus . Nucleus, nucleoplasm . Diffuse nuclear localization with some enrichment in nucleoli. On CPT treatment, cleared from nucleoli into nucleoplasm. Sumoylated forms found in both nucleoplasm and nucleoli.
Tissue Specificity	Endothelial cells.
Function	catalytic activity:ATP-independent breakage of single-stranded DNA, followed by passage and rejoining.,disease:A chromosomal aberration involving TOP1 is found in a form of therapy-related myelodysplastic syndrome. Translocation t(11;20)(p15;q11) with NUP98.,enzyme regulation:Specifically inhibited by camptothecin (CPT), a plant alkaloid with antitumor activity.,function:The reaction catalyzed by topoisomerases leads to the conversion of one topological isomer of DNA to another.,miscellaneous:Eukaryotic topoisomerase I and II can relax both negative and positive supercoils, whereas prokaryotic enzymes relax only negative supercoils.,miscellaneous:When a topoisomerase transiently breaks a DNA backbone bond, it simultaneously forms a protein-DNA link, in which a tyrosyl oxygen in the enzyme is joined to a DNA phosphorus at one end



of the enzyme-severed DNA strand.,PTM:Sumoylated. Lys-117 i

Background

This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic states of DNA during transcription. This enzyme catalyzes the transient breaking and rejoining of a single strand of DNA which allows the strands to pass through one another, thus altering the topology of DNA. This gene is localized to chromosome 20 and has pseudogenes which reside on chromosomes 1 and 22. [provided by RefSeq, Jul 2008],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images