



# Topo I Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-02123
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	TOP1
<b>Protein Name</b>	DNA topoisomerase 1
<b>Immunogen</b>	Synthesized peptide derived from the Internal region of human Topo I.
<b>Specificity</b>	Topo I Polyclonal Antibody detects endogenous levels of Topo I protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	TOP1; DNA topoisomerase 1; DNA topoisomerase I
<b>Observed Band</b>	90kD
<b>Cell Pathway</b>	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.
<b>Tissue Specificity</b>	Endothelial cells.
<b>Function</b>	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
<b>Background</b>	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