

# Immunotag™ Topo IIβ Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4703
Product Description	Immunotag™ Topo IIβ Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Topo IIβ
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human TOP2B. AA range:1-50
Specificity	Topo IIβ Polyclonal Antibody detects endogenous levels of Topo IIβ protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	TOP2B
Accession No.	Q02880 Q64511
Alternate Names	TOP2B; DNA topoisomerase 2-beta; DNA topoisomerase II; beta isozyme

## Antibody Specification

Description	<p>topoisomerase (DNA) II beta(TOP2B) Homo sapiens This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic states of DNA during transcription. This nuclear enzyme is involved in processes such as chromosome condensation, chromatid separation, and the relief of torsional stress that occurs during DNA transcription and replication. It catalyzes the transient breaking and rejoining of two strands of duplex DNA which allows the strands to pass through one another, thus altering the topology of DNA. Two forms of this enzyme exist as likely products of a gene duplication event. The gene encoding this form, beta, is localized to chromosome 3 and the alpha form is localized to chromosome 17. The gene encoding this enzyme functions as the target for several anticancer agents and a variety of mutations in this gene have been associated with the development of drug resistance. Reduced activity of this enzyme may also pla</p>
Protein Expression	Brain,Epithelium,Lung,Placenta,
Subcellular Localization	heterochromatin,nucleus,nucleoplasm,nucleolus,cytoplasm,cytosol,nucleoid,DNA topoisomerase complex (ATP-hydrolyzing),
Protein Function	<p>catalytic activity:ATP-dependent breakage, passage and rejoining of double-stranded DNA.,function:Control of topological states of DNA by transient breakage and subsequent rejoining of DNA strands. Topoisomerase II makes double-strand breaks.,function:Control of topological states of DNA by transient breakage and subsequent rejoining of DNA strands. Topoisomerase II makes double-strand breaks. Indirectly involved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin-remodeling complex recruited by vitamin D receptor (VDR), which is required for the ligand-bound VDR-mediated transrepression of the CYP27B1 gene.,miscellaneous:Eukaryotic topoisomerase I and II can relax both negative and positive supercoils, whereas prokaryotic enzymes relax only negative supercoils.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the type II topoisomerase family.,subunit:Homodimer.,subunit:Homodimer. Component of the WINAC complex, at least composed of SMARCA2, SMARCA4, SMARCB1, SMARCC1, SMARCC2, SMARCD1, SMARCE1, ACTL6A, BAZ1B/WSTF, ARID1A, SUPT16H, CHAF1A and TOP2B.,</p>
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.