

# Immunotag™ Topo IIα Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4701
Product Description	Immunotag™ Topo IIα 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 IIα
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Monkey
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human TOP2A. AA range:1-50
Specificity	Topo IIα Polyclonal Antibody detects endogenous levels of Topo IIα 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	TOP2A
Accession No.	P11388 Q01320
Alternate Names	TOP2A; TOP2; DNA topoisomerase 2-alpha; DNA topoisomerase II; alpha isozyme

## Antibody Specification

Description	topoisomerase (DNA) II alpha(TOP2A) 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, alpha, is localized to chromosome 17 and the beta gene is localized to chromosome 3. 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
Protein Expression	Cervix carcinoma,Epithelium,Ovarian carcinoma,
Subcellular Localization	nuclear chromosome,condensed chromosome,nucleus,nucleoplasm,nucleolus,cytoplasm,centriole,nucleoid,DNA topoisomerase complex (ATP-hydrolyzing),viral integration complex,protein complex,
Protein Function	catalytic activity:ATP-dependent breakage, passage and rejoining of double-stranded DNA.,enzyme regulation:Specifically inhibited by the intercalating agent amsacrine.,function:Control of topological states of DNA by transient breakage and subsequent rejoining of DNA strands. Topoisomerase II makes double-strand breaks.,miscellaneous:Eukaryotic topoisomerase I and II can relax both negative and positive supercoils, whereas prokaryotic enzymes relax only negative supercoils.,PTM:Phosphorylation has no effect on catalytic activity.,similarity:Belongs to the type II topoisomerase family.,subcellular location:Generally located in the nucleoplasm.,subunit:Homodimer. Interacts with COPS5.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.