



## Topo IIα rabbit pAb

Cat#: orb766503 (Manual)

For research use only. Not intended for diagnostic use.

Product NameTopo IIα rabbit pAb

Host species Rabbit

Applications WB;IHC;IF;ELISA

Species Cross-Reactivity Human; Monkey

**Recommended dilutions** 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.

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.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium

azide..

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name DNA topoisomerase 2-alpha

Gene Name TOP2A

Cellular localization Cytoplasm . Nucleus, nucleoplasm . Nucleus . Nucleus, nucleolus .

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Clonality** Polyclonal





Concentration 1 mg/ml

Observed band 174kD

Human Gene ID 7153

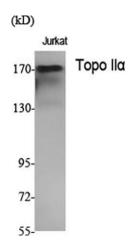
Human Swiss-Prot Number P11388

Alternative Names TOP2A; TOP2; DNA topoisomerase 2-alpha; DNA topoisomerase II;

alpha isozyme

## **Background**

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

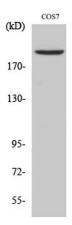


Western Blot analysis of various cells using Topo IIα Polyclonal Antibody diluted at 1:1000. Secondary antibody(catalog#:R\$0002) was diluted at 1:20000

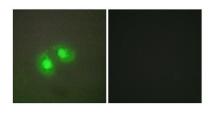




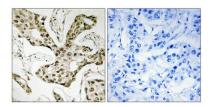
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Western Blot analysis of 293 cells using Topo IIα Polyclonal Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunofluorescence analysis of A549 cells, using TOP2A Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human liver carcinoma tissue, using TOP2A Antibody. The picture on the right is blocked with the synthesized peptide.