



Rabbit Anti-TOP2A antibody

SL1203R

Product Name:	TOP2A
Chinese Name:	DNA拓普西异构酶 II 抗体
Alias:	DNA topoisomerase II alpha; TOPO II; DNA topoisomerase 2-alpha; DNA topoisomerase II, alpha isozyme; TOP2; TP2A; DNA topoisomerase II 170 kD; DNA topoisomerase II alpha isozyme; DNA Topoisomerase2; TOP 2A; TopII alpha; Topo II alpha; Topoisomerase DNA II alpha 170kDa; Topoisomerase II alpha 170 kDa; TOP2A HUMAN; Topo II α ; Topo-II α ; Topoisomerase II- α .
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	174kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TOPO II alpha:121-230/1531
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 play a role in ataxia-telangiectasia. [provided by RefSeq].

Function:

Control of topological states of DNA by transient breakage and subsequent rejoining of DNA strands. Topoisomerase II makes double-strand breaks. Essential during mitosis and meiosis for proper segregation of daughter chromosomes.

Subunit:

Homodimer. Interacts with COPS5.

Subcellular Location:

Cytoplasm. Nucleus, nucleoplasm. Note=Generally located in the nucleoplasm.

Post-translational modifications:

Phosphorylation has no effect on catalytic activity. However, phosphorylation at Ser-1106 by CSNK1D/CK1 promotes DNA cleavable complex formation.

Similarity:

Belongs to the type II topoisomerase family.
Contains 1 Toprim domain.

SWISS:

P11388

Gene ID:

7153

Database links:

[Entrez Gene: 7153](#) Human

[Entrez Gene: 21973](#) Mouse

[Entrez Gene: 360243](#) Rat

[Omim: 126430](#) Human

[SwissProt: P11388](#) Human

[SwissProt: Q01320](#) Mouse

[SwissProt: P41516](#) Rat

[Unigene: 156346](#) Human

[Unigene: 4237](#) Mouse

[Unigene: 90996](#) Rat

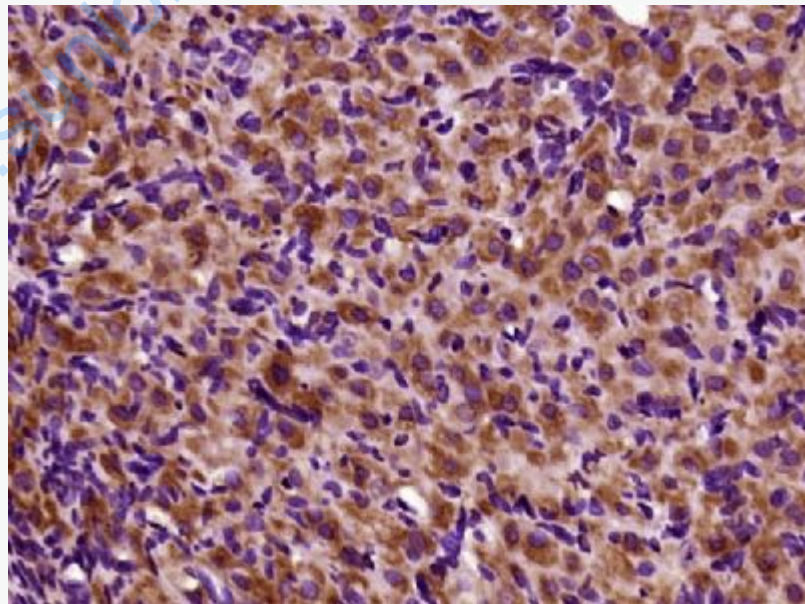
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

拓扑异构酶II是一种能催化DNA

拓扑异构体相互变换, 调节DNA三维结构的核酶。与染色质或染色体的组装与分组装、基因组复制、DNA重组、基因转录及DNA损伤后修复等有密切的关系。许多人的恶性Tumour都有拓扑异构酶II的过表达, 因此, 拓扑异构酶II是许多化疗药的靶标。大部分以拓扑异构酶II为重要靶标抗Tumour的化疗药物是通过稳定的DNA与拓扑异构酶II的复合物激发凋亡的。

Picture:



Paraformaldehyde-fixed, paraffin embedded (Rat ovary); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by

3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TOP2A) Polyclonal Antibody, Unconjugated (SL1203R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.

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