

**Topo II $\alpha$  (phospho Ser1525) rabbit pAb****Cat#: orb770290 (Manual)**

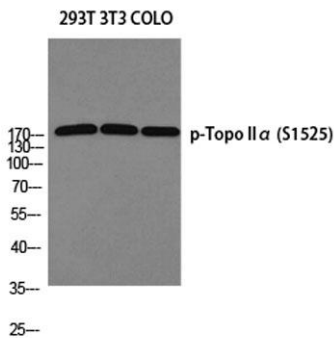
For research use only. Not intended for diagnostic use.

<b>Product Name</b>	Topo II $\alpha$ (phospho Ser1525) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human TOP2A around the phosphorylation site of Ser1525. AA range:1482-1531
<b>Specificity</b>	Phospho-Topo II $\alpha$ (S1525) Polyclonal Antibody detects endogenous levels of Topo II $\alpha$ protein only when phosphorylated at S1525.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	DNA topoisomerase 2-alpha
<b>Gene Name</b>	TOP2A
<b>Cellular localization</b>	Cytoplasm . Nucleus, nucleoplasm . Nucleus . Nucleus, nucleolus .
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal

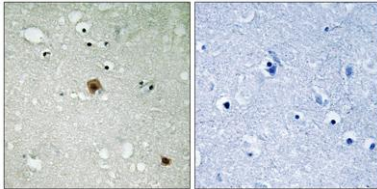
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	190kD
<b>Human Gene ID</b>	7153
<b>Human Swiss-Prot Number</b>	P11388
<b>Alternative Names</b>	TOP2A; TOP2; DNA topoisomerase 2-alpha; DNA topoisomerase II; alpha isozyme

## Background

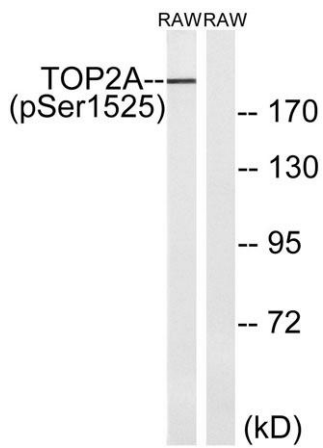
This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic states of DNA during transcription. This nuclear enzyme is involved in processes such as chromosome condensation, chromatid separation, and the relief of torsional stress that occurs during DNA transcription and replication. 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 293T 3T3 COLO using p-Topo II $\alpha$  (S1525) antibody. Antibody was diluted at 1:1000



Immunohistochemistry analysis of paraffin-embedded human brain, using TOP2A (Phospho-Ser1525) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from RAW264.7 cells treated with TNF 20ng/ml 5', using TOP2A (Phospho-Ser1525) Antibody. The lane on the right is blocked with the phospho peptide.