

**Topo III $\beta$ -1 rabbit pAb****Cat#: orb766502 (Manual)**

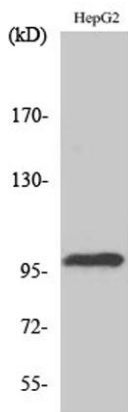
For research use only. Not intended for diagnostic use.

<b>Product Name</b>	Topo III $\beta$ -1 rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human TOP3B. AA range:51-100
<b>Specificity</b>	Topo III $\beta$ -1 Polyclonal Antibody detects endogenous levels of Topo III $\beta$ -1 protein.
<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 3-beta-1
<b>Gene Name</b>	TOP3B
<b>Cellular localization</b>	condensed chromosome,nucleus,cytosol,
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal

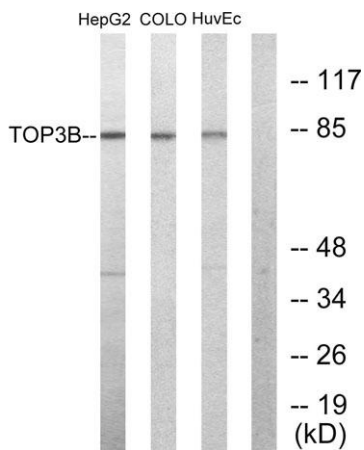
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	96kD
<b>Human Gene ID</b>	8940
<b>Human Swiss-Prot Number</b>	O95985
<b>Alternative Names</b>	TOP3B; TOP3B1; DNA topoisomerase 3-beta-1; DNA topoisomerase III beta-1

**Background**

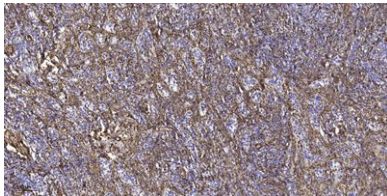
This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic states of DNA during transcription. This enzyme catalyzes the transient breaking and rejoining of a single strand of DNA which allows the strands to pass through one another, thus relaxing the supercoils and altering the topology of DNA. The enzyme interacts with DNA helicase SGS1 and plays a role in DNA recombination, cellular aging and maintenance of genome stability. Low expression of this gene may be related to higher survival rates in breast cancer patients. This gene has a pseudogene on chromosome 22. Alternate splicing results in multiple transcript variants. Additional alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq, Aug 2013],



**Western Blot analysis of various cells using Topo III $\beta$ -1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).**



**Western blot analysis of lysates from HepG2, COLO205, and HUVEC cells, using TOP3B Antibody. The lane on the right is blocked with the synthesized peptide.**



**Immunohistochemical analysis of paraffin-embedded human spleen tissue. 1, primary Antibody was diluted at 1:200(4° overnight). 2, Sodium citrate pH 6.0 was used for antigen retrieval(>98°C,20min). 3, Secondary antibody was diluted at 1:200**