



# Topo III $\beta$ -1 Polyclonal Antibody

Catalog No	BYab-02124
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	TOP3B
Protein Name	DNA topoisomerase 3-beta-1
Immunogen	The antiserum was produced against synthesized peptide derived from human TOP3B. AA range:51-100
Specificity	Topo III $\beta$ -1 Polyclonal Antibody detects endogenous levels of Topo III $\beta$ -1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	TOP3B; TOP3B1; DNA topoisomerase 3-beta-1; DNA topoisomerase III beta-1
Observed Band	96kD
Cell Pathway	condensed chromosome,nucleus,cytosol,
Tissue Specificity	Isoform 1 is found in testis, heart and skeletal muscle. A 4 kb transcript which probably represents isoform 2 is found in thymus, kidney and pancreas.
Function	catalytic activity:ATP-independent breakage of single-stranded DNA, followed by passage and rejoining.,function:Possesses negatively supercoiled DNA relaxing activity.,similarity:Belongs to the prokaryotic type I/III topoisomerase family.,tissue specificity:Isoform 1 is found in testis, heart and skeletal muscle. A 4 kb transcript which probably represents isoform 2 is found in thymus, kidney and pancreas.,
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

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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],

**matters needing attention**

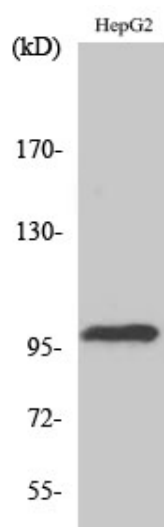
Avoid repeated freezing and thawing!

**Usage suggestions**

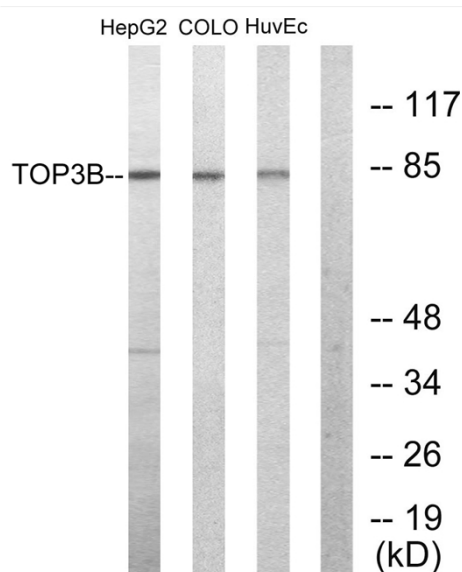
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



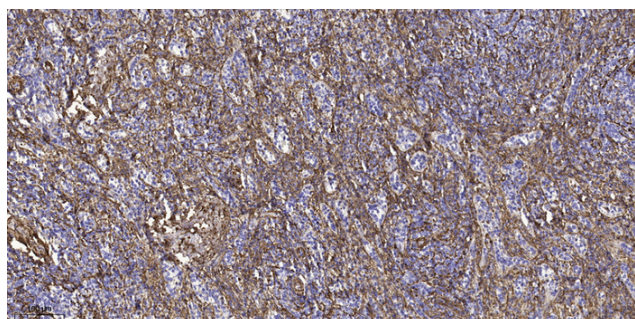
## Products Images



Western blot analysis of various cells using Topo IIIβ-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