

## **Topo IIIβ-1 Polyclonal Antibody**

Catalog No: YT4698

**Reactivity:** Human; Mouse

**Applications:** WB;IHC;IF;ELISA

Target: Τορο IIIβ-1

**Fields:** >>Homologous recombination;>>Fanconi anemia pathway

Gene Name: TOP3B

**Protein Name:** DNA topoisomerase 3-beta-1

Human Gene Id: 8940

**Human Swiss Prot** 

No:

O95985

Mouse Gene Id:

21976

**Mouse Swiss Prot** 

No:

Q9Z321

Immunogen: The antiserum was produced against synthesized peptide derived from human

TOP3B. AA range:51-100

Specificity: Topo IIIβ-1 Polyclonal Antibody detects endogenous levels of Topo IIIβ-1

protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

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

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 96kD

**Cell Pathway:** Homologous recombination;

**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],

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.,

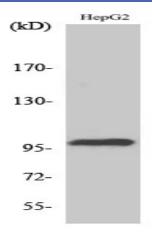
Subcellular Location:

condensed chromosome, nucleus, cytosol,

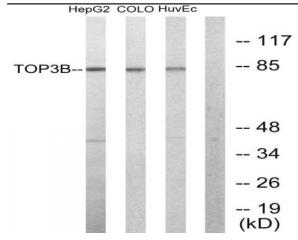
**Expression:** Isoform 1 is found in testis, heart and skeletal muscle. A 4 kb transcript which

probably represents isoform 2 is found in thymus, kidney and pancreas.

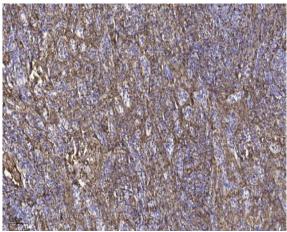
## **Products Images**



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,Inventbiotech,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