

# Topo IIβ (A32) polyclonal antibody

Catalog: BCP01659 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

Topoisomerases are nuclear enzymes involved in a variety of cellular activities such as chromosome condensation, DNA replication, transcription, recombination and segregation at mitosis. Human topoisomerase I is a 100kD protein capable of relaxing positively and negatively supercoiled DNA by performing a transient single stranded nick which is then religated at the end of the reaction. It has been shown that the enzyme is located in regions of the genome that are undergoing active RNA synthesis, where it probably reduces superhelical stresses in the DNA, enabling RNA polymerase to function properly. Both DNA topoisomerases I and II have been found to be targets of autoantibodies in the sera of patients with certain autoimmune diseases such as systemic lupus erythematosus and also of some anti tumor drugs and antibiotics. Elevated levels of DNA topoisomerase I, detected by transfer assays, have been demonstrated in colorectal tumors compared with normal colon mucosa as a result of increased transcription or mRNA stability.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

## **Molecular Weight:**

~ 183 kDa

#### **Swiss-Prot:**

Q02880

#### **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

#### **Applications:**

WB: 1:500~1:1000 IHC: 1:50~1:200

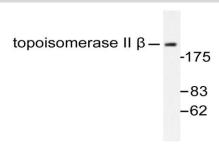
Storage&Stability:

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  long term. Avoid freeze-thaw cycles.

### **Specificity:**

Topoisomerase II  $\beta$  (A32) polyclonal antibody detects endogenous levels of Topoisomerase II  $\beta$  protein.

#### **DATA:**



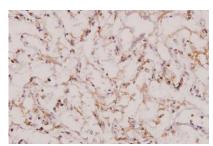
Western blot (WB) analysis of Topo IIB (A32) pAb at 1:500 dilution

Lane1:A549 whole cell lysate(20ug)

Lane2:HEK293T whole cell lysate(20ug)

Lane3:AML-12 whole cell lysate(20ug)

Lane4:PC12 whole cell lysate(40ug)



Immunohistochemistry (IHC) analyzes of Topo IIβ (A32) pAb in paraffin-embedded human lung carcinoma tissue at 1:100.

# Note:

For research use only, not for use in diagnostic procedure.