## For Research Use Only

## TOP2A Monoclonal antibody

Catalog Number:66541-1-lg Featured Product

**3 Publications** 

P11388



**Basic Information** 

Catalog Number: 66541-1-lg Size:

2200 µg/ml Source: Mouse Isotype: IgG2a

Immunogen Catalog Number:

AG19551

GenBank Accession Number:

BC140791 GeneID (NCBI): **UNIPROT ID:** 

Full Name: topoisomerase (DNA) II alpha 170kDa IF/ICC 1:50-1:500

1531 aa, 174 kDa Observed MW: 174 kDa

Calculated MW:

**Applications** 

**Tested Applications:** IF/ICC, IHC, WB, ELISA Cited Applications:

WB, IHC

Species Specificity:

Human **Cited Species:** human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, HepG2 cells, HEK-293 cells, LO2 cells,

**Purification Method:** 

Protein A purification

Recommended Dilutions:

WB 1:2500-1:10000 IHC 1:250-1:1000

CloneNo.:

1E12B3

Jurkat cells

IHC: human lung cancer tissue,

IF/ICC: HepG2 cells,

**Background Information** 

TOP2A, also named as TOP2, belongs to the type II topoisomerase family. Topoisomerase II makes double-strand breaks. TOP2 control the topological states of DNA by transient breakage and subsequent rejoining of DNA strands. TOP2A may play a role in regulating the period length of ARNTL/BMAL1 transcriptional oscillation. DNA topoisomerase IIa (170 kDa, TOP2a/170) is essential in proliferating cells by resolving DNA topological entanglements during chromosome condensation, replication, and segregation.

## **Notable Publications**

Author	Pubmed ID	Journal	Application
Huijia Fu	36138481	Reprod Biol Endocrinol	WB,IHC
Yufeng Zhang	35912241	Front Oncol	WB,IHC
Ke Wang	31816603	Aging (Albany NY)	IHC

Storage

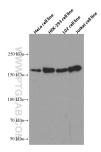
Storage:

Store at -20°C. Stable for one year after shipment.

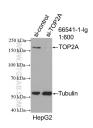
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

## **Selected Validation Data**



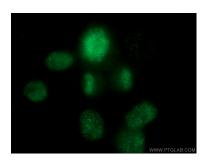
Various cells were subjected to SDS PAGE followed by western blot with 66541-1-1g (TOP2A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



WB result of TOP2A antibody (66541-1-lg; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-TOP2A transfected HepG2 cells.



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66541-1-1g (TOP2A antibody) at dilution of 1:500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 66541-1-1g (TOP2A antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).