

For Research Use Only

# TOP2A Polyclonal antibody

Catalog Number: 24641-1-AP

Featured Product

11 Publications



## Basic Information

**Catalog Number:**

24641-1-AP

**Size:**

150ul, Concentration: 1000 µg/ml by Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG19551

**GenBank Accession Number:**

BC140791

**GeneID (NCBI):**

7153

**UNIPROT ID:**

P11388

**Full Name:**

topoisomerase (DNA) II alpha 170kDa

**Calculated MW:**

1531 aa, 174 kDa

**Observed MW:**

174 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:2000-1:16000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:50-1:500

## Applications

**Tested Applications:**

IF, IHC, IP, WB, ELISA

**Cited Applications:**

WB, IP, IHC, IF

**Species Specificity:**

human, mouse

**Cited Species:**

human, mouse

**Positive Controls:**

**WB:** HEK-293T cells, HeLa cells, HepG2 cells, MDA-MB-231 cells

**IP:** HeLa cells,

**IHC:** human pancreas cancer tissue, human breast cancer tissue

**IF:** A431 cells,

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

## 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
Jun-Song Liu	25333415	Oncol Rep	
Jingjun Wu	26612655	Chem Biol Interact	WB
Li Wang	33236014	bioRxiv	WB

## Storage

**Storage:**

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

**Storage Buffer:**

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

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

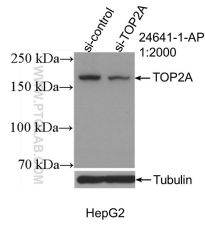
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

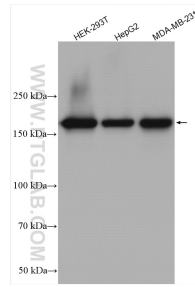
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

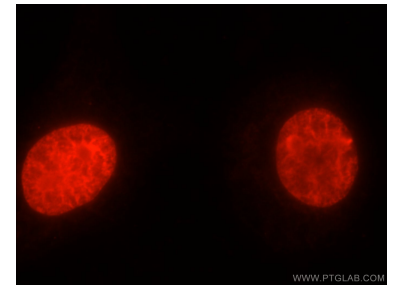
## Selected Validation Data



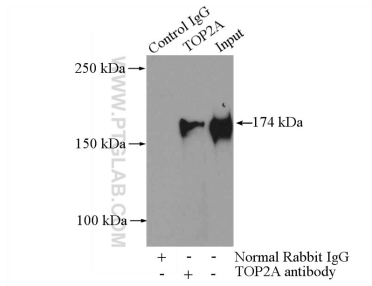
WB result of TOP2A antibody (24641-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TOP2A transfected HepG2 cells.



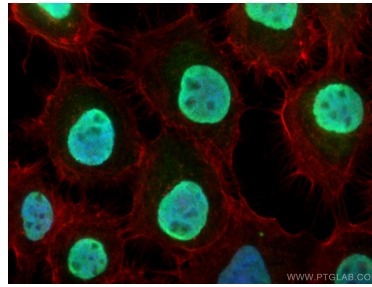
Various lysates were subjected to SDS PAGE followed by western blot with 24641-1-AP (TOP2A antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



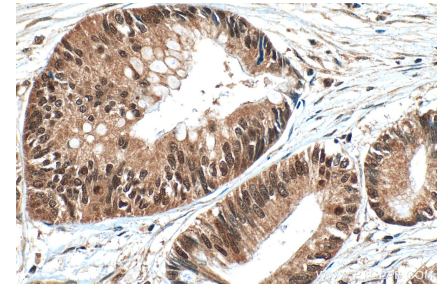
Immunofluorescent analysis of A431 cells using 24641-1-AP (TOP2A antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.



IP result of anti-TOP2A (IP:24641-1-AP, 4ug; Detection:24641-1-AP 1:1000) with HeLa cells lysate 2000ug.



Immunofluorescent analysis of (4% PFA) fixed A431 cells using TOP2A antibody (24641-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 24641-1-AP (TOP2A antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).