### For Research Use Only

# TOP2A-Specific Polyclonal antibody

Catalog Number: 20233-1-AP

Featured Product

25 Publications



**Basic Information** 

Catalog Number:

20233-1-AP

NM\_001067

Concentration:

800 ug/ml

7153

Source:

UNIPROT ID:

Rabbit

P11388

Isotype:

GenBank Accession Number:

NM\_001067

GeneID (NCBI):

7153

UNIPROT ID:

Full Name:

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:200-1:800
IF/ICC: 1:200-1:800

**Purification Method:** 

WB: 1:2000-1:16000

Antigen affinity purification

Recommended Dilutions:

topoisomerase (DNA) II alpha 170kDa Calculated MW:

174 kDa

Observed MW: 170-177 kDa

**Applications** 

Tested Applications: WB, IHC, IF/ICC, IP, ELISA

Cited Applications: WB, IHC, IF Species Specificity:

human
Cited Species:
human, mouse

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, LO2 cells

IP: LO2 cells,

IHC: human ovary cancer tissue,

IF/ICC: U2OS 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
Yi Fang	31662984	Biomed Res Int	WB
Jun-Song Liu	25333415	Oncol Rep	
Xuefeng Li	25237769	Oncotarget	WB

Storage

Storage:

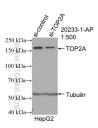
Store at -20°C. Stable for one year after shipment.

Storage Buffer

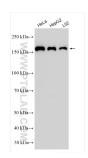
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

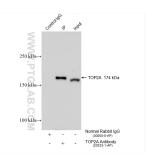
## **Selected Validation Data**



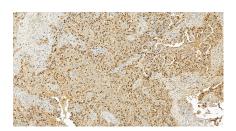
WB result of TOP2A-Specific antibody (20233-1-AP; 1:500; incubated at room temperature for 1.5 hours) with sh-Control and sh-TOP2A-Specific transfected HepG2 cells.



Various lysates were subjected to SDS PAGE followed by western blot with 20233-1-AP (TOP2A-Specific antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



IP result of anti-TOP2A-Specific (IP:20233-1-AP, 4ug; Detection:20233-1-AP 1:8000) with L02 cells lysate 1040 ug.



Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 20233-1-AP (TOP2A-Specific antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using TOP2A-Specific antibody (20233-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).