

For Research Use Only

# TDP1 Polyclonal antibody

Catalog Number: 10641-1-AP

Featured Product

4 Publications



## Basic Information

### Catalog Number:

10641-1-AP

### Size:

150ul, Concentration: 800 ug/ml by Nanodrop and 400 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0964

### GenBank Accession Number:

BC006083

### GeneID (NCBI):

55775

### UNIPROT ID:

Q9NUW8

### Full Name:

tyrosyl-DNA phosphodiesterase 1

### Calculated MW:

34 kDa, 68 kDa

### Observed MW:

68 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

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

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IP, ELISA

### Cited Applications:

WB, IF

### Species Specificity:

human

### Cited Species:

human

### Positive Controls:

WB : MCF7 cells, HeLa cells

IP : HeLa cells,

IHC : human ovary cancer tissue, human intrahepatic cholangiocarcinoma tissue

**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

Tyrosyl DNA phosphodiesterase 1 (TDP1) is an enzyme capable of hydrolyzing phosphodiester bonds between tyrosine and the 3-phosphate of DNA, which are typically generated in a transient manner by DNA topoisomerase I (topo I) and it appears to be more mobile and diffusible than topo I, and it has a different distribution in the nucleus (PMID:15494395). TDP1 is involved in protecting cells against oxidative DNA damage, and with the impaired ability of TDP1-deficient cells to remove 3-phosphoglycolate (PMID:21041670). Defects in TDP1 are the cause of spinocerebellar ataxia autosomal recessive with axonal neuropathy (SCAN1)(PMID:17948061).

## Notable Publications

Author	Pubmed ID	Journal	Application
Inken Flörkemeier	36142413	Int J Mol Sci	WB
Jing Li	29078113	DNA Repair (Amst)	WB
Qiqi Wang	39618045	Anal Chem	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

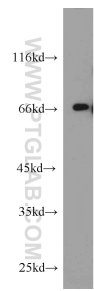
For technical support and original validation data for this product please contact:

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

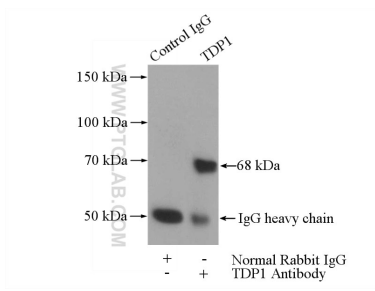
E: proteintech@ptglab.com  
W: ptglab.com

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

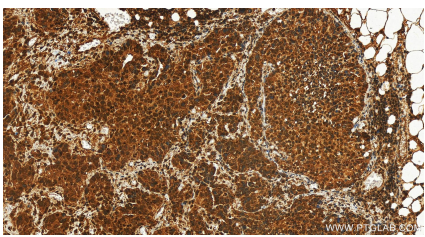
Selected Validation Data



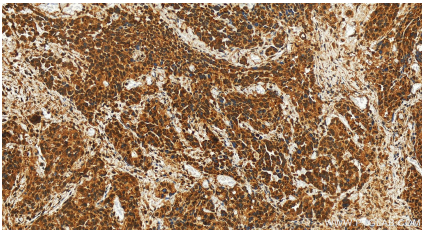
MCF7 cells were subjected to SDS PAGE followed by western blot with 10641-1-AP (TDP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



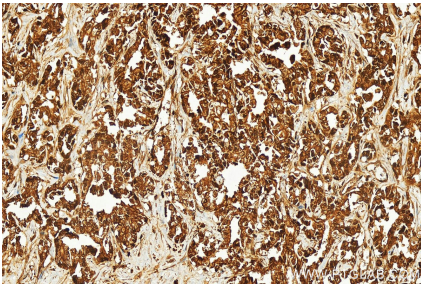
IP result of anti-TDP1 (IP:10641-1-AP, 4ug; Detection:10641-1-AP 1:1000) with HeLa cells lysate 1200ug.



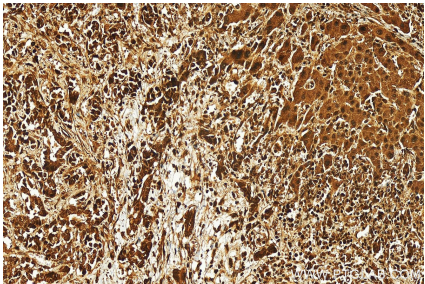
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 10641-1-AP (TDP1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 10641-1-AP (TDP1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 10641-1-AP (TDP1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).