

For Research Use Only

# TDP1 Polyclonal antibody

Catalog Number: 10641-1-AP

Featured Product

4 Publications



## Basic Information

### Catalog Number:

10641-1-AP

### Size:

800 ug/ml

### 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

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

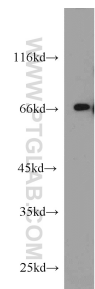
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

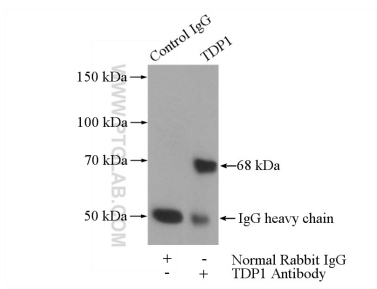
W: [ptgcn.com](http://ptgcn.com)

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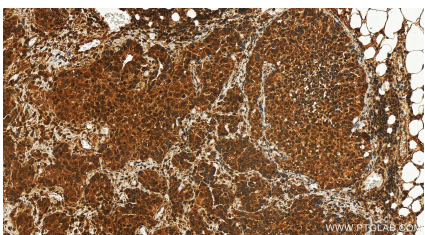
Selected Validation Data



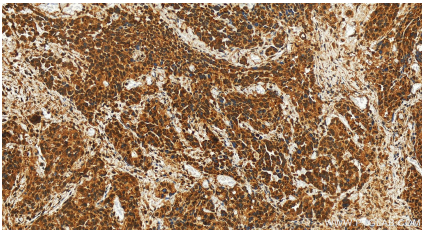
MCF7 cells were subjected to SDS PAGE followed by western blot with 10641-1-AP (TDP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



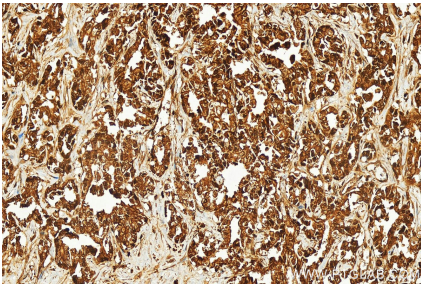
IP result of anti-TDP1 (IP:10641-1-AP, 4ug; Detection:10641-1-AP 1:1000) with HeLa cells lysate 1200ug.



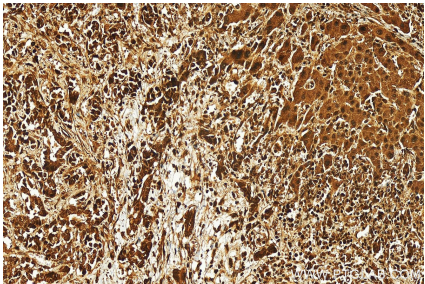
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 10641-1-AP (TDP1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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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).