

For Research Use Only

TDP1 Polyclonal antibody

Catalog Number:10641-1-AP

Featured Product

3 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

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 : MCF7 cells, HeLa cells

IP : HeLa cells,

IHC : human ovary cancer tissue, human intrahepatic cholangiocarcinoma tissue

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
Perego Paola P	21978643	Biochem Pharmacol	IF

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:

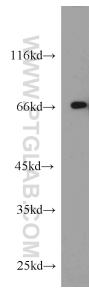
T: 4006900926

E: Proteintech-CN@ptglab.com

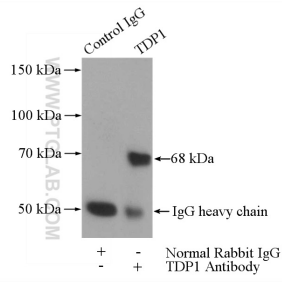
W: ptgcn.com

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

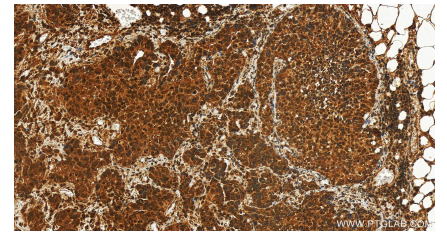
Selected Validation Data



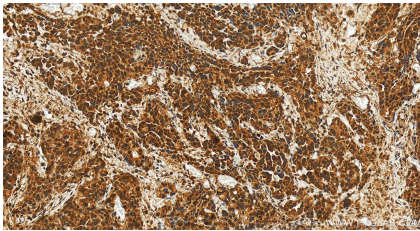
MCF7 cells were subjected to SDS PAGE followed by western blot with 10641-1-AP (TDP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



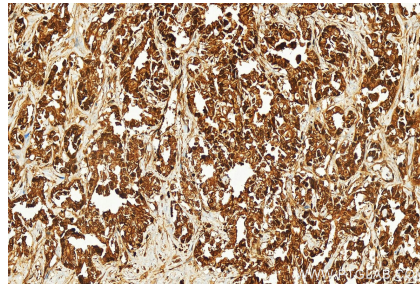
IP result of anti-TDP1 (IP:10641-1-AP, 4 μ g; Detection:10641-1-AP 1:1000) with HeLa cells lysate 1200 μ g.



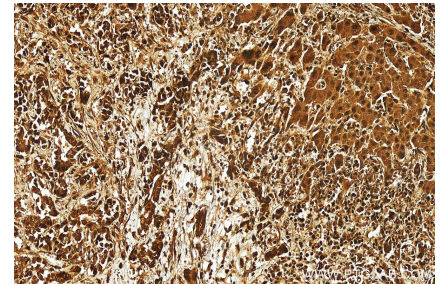
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 10641-1-AP (TDP1 antibody) at dilution of 1:200 (under 20 \times lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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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 20 \times 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 20 \times lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).