

For Research Use Only

# TDP-43 (full length) Polyclonal antibody

Catalog Number: 18280-1-AP

16 Publications



## Basic Information

<b>Catalog Number:</b> 18280-1-AP	<b>GenBank Accession Number:</b> BC001487	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 500 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 23435	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q13148	IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
<b>Isotype:</b> IgG	<b>Full Name:</b> TAR DNA binding protein	IHC 1:200-1:2000
	<b>Calculated MW:</b> 43 kDa	IF/ICC 1:1500-1:6000
	<b>Observed MW:</b> 43 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, FC (Intra), IP, ELISA	<b>Positive Controls:</b> WB : K-562 cells,
<b>Cited Applications:</b> WB, IHC, IF, IP	IP : K-562 cells,
<b>Species Specificity:</b> human, mouse, rat	IHC : mouse brain tissue, rat brain tissue, human gliomas tissue
<b>Cited Species:</b> human, mouse	IF/ICC : SH-SY5Y cells,
	FC (Intra) : SH-SY5Y 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

Transactivation response (TAR) DNA-binding protein of 43 kDa (also known as TARDBP or TDP-43) was first isolated as a transcriptional inactivator binding to the TAR DNA element of the HIV-1 virus. Neumann et al. (2006) found that a hyperphosphorylated, ubiquitinated, and cleaved form of TARDBP, known as pathologic TDP-43, is the major component of the tau-negative and ubiquitin-positive inclusions that characterize amyotrophic lateral sclerosis (ALS) and the most common pathological subtype of frontotemporal lobar degeneration (FTLD-U). This antibody recognizes the cleavage product of 20-30 kDa in addition to the native and phosphorylated forms of TDP-43. Immunohistochemical analyses of TDP-43 using this antibody detect both normal diffuse nuclear staining and insoluble inclusions in pathologic tissues.

## Notable Publications

Author	Pubmed ID	Journal	Application
Keitaro Okada	36303452	J Neuropathol Exp Neurol	IHC
Barbara E Stopschinski	34635189	Acta Neuropathol Commun	IHC
Michele Cavalli	34659085	Front Neurol	IHC

## Storage

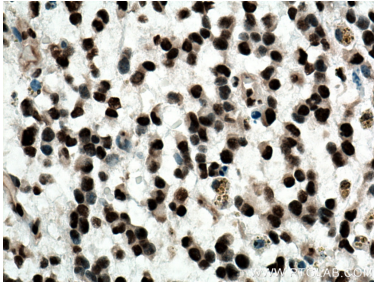
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

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

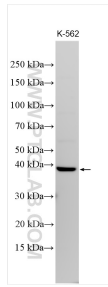
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

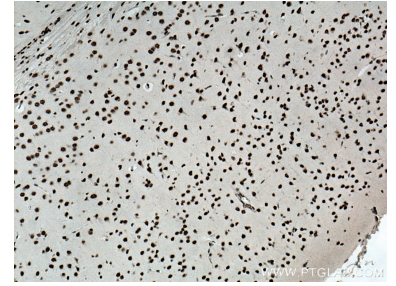
## Selected Validation Data



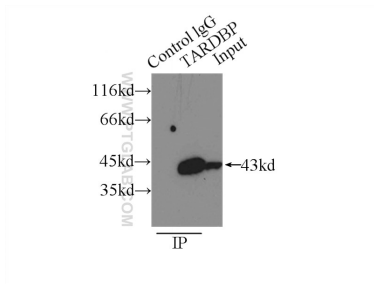
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 18280-1-AP (TDP-43 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



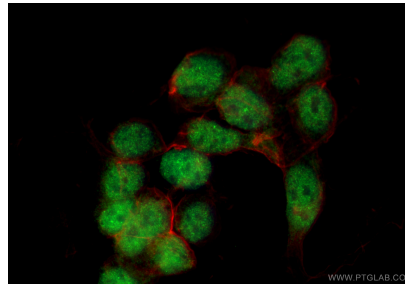
K562 cells were subjected to SDS PAGE followed by western blot with 18280-1-AP (TDP-43 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



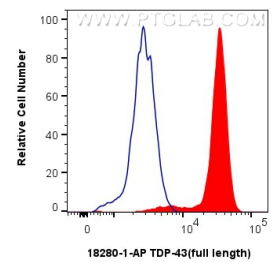
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 18280-1-AP (TDP-43 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-TDP-43 (IP:18280-1-AP, 3ug; Detection:18280-1-AP 1:1500) with K-562 cells lysate 6000ug.



Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using TDP-43 antibody (18280-1-AP) at dilution of 1:3000 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-Phalloidin (red).



1x10<sup>6</sup> SH-SY5Y cells were intracellularly stained with 0.2 ug TDP-43 (full length) Polyclonal antibody (18280-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.2 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).