

For Research Use Only

# TDP-43 (C-terminal) Polyclonal antibody



Catalog Number: 12892-1-AP

Featured Product

128 Publications

## Basic Information

### Catalog Number:

12892-1-AP

### Size:

150ul, Concentration: 650 µg/ml by Nanodrop and 407 µg/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

BC001487

### GeneID (NCBI):

23435

### Full Name:

TAR DNA binding protein

### Calculated MW:

43 kDa

### Observed MW:

43-45 kDa, 35 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:5000

IP 0.5-4.0 ug for IP and 1:500-1:2000 for WB

IHC 1:500-1:2000

IF 1:50-1:500

## Applications

### Tested Applications:

IF, IHC, IP, WB, ELISA

### Cited Applications:

ChIP, CoIP, IF, IHC, IP, WB

### Species Specificity:

human, mouse, rat

### Cited Species:

Drosophila, human, monkey, mouse, zebrafish

**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:** A549 cells, mouse embryo tissue, C6 cells, HeLa cells, mouse brain tissue

**IP:** HeLa cells, mouse brain tissue

**IHC:** mouse brain tissue, human lung cancer tissue, human gliomas tissue

**IF:** HeLa cells,

## 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). 12892-1-AP is a rabbit polyclonal antibody raised against the C-terminal amino acids of human TDP-43. 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. Various forms of TDP-43 exist, including 18-35 kDa of cleaved C-terminal fragments, 45-50 kDa phosphoprotein, 55 kDa glycosylated form, 75 kDa hyperphosphorylated form, and 90-300 kDa cross-linked form. (17023659,19823856,21666678,22193176)

Recently TDP-43 has been reported to be overexpressed in triple negative breast cancer (TNBC) and it may be a potential target for TNBC diagnosis and drug design. (29581274)

## Notable Publications

Author	Pubmed ID	Journal	Application
Y Liu	25270903	Neuroscience	
Wenrui Huang	34580300	Nat Commun	IHC
Hiroaki Suzuki	30250194	Cell Death Dis	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: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

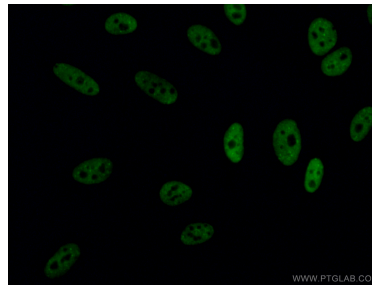
E: proteintech@ptglab.com  
W: ptglab.com

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

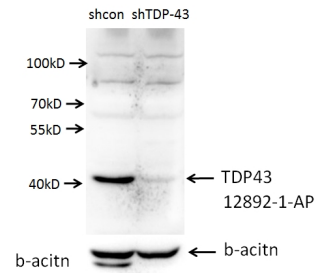
## Selected Validation Data



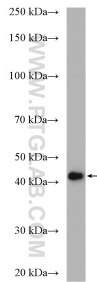
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 12892-1-AP (TDP-43 (C-terminal) antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



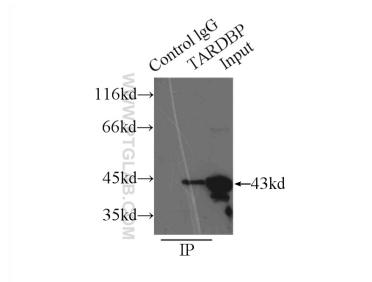
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 12892-1-AP (TDP-43 (C-terminal) antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



A549 cells (shcontrol and shRNA of TDP43) were subjected to SDS PAGE followed by western blot with 12892-1-AP (TDP43 antibody) at dilution of 1:1000.



HeLa cells were subjected to SDS PAGE followed by western blot with 12892-1-AP (TDP-43 (C-terminal) antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



IP Result of anti-TARDBP (IP:12892-1-AP, 3ug; Detection:12892-1-AP 1:1000) with HeLa cells lysate 3000ug.