

For Research Use Only

TDP-43 (C-terminal) Polyclonal antibody, PBS Only

Catalog Number: 12892-1-PBS

Featured Product



Basic Information

Catalog Number:

12892-1-PBS

Size:

100ug, Concentration: 1 mg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC001487

GeneID (NCBI):

23435

UNIPROT ID:

Q13148

Full Name:

TAR DNA binding protein

Calculated MW:

43 kDa

Observed MW:

43-45 kDa, 35 kDa

Purification Method:

Antigen affinity purification

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-Fro, FC (Intra), IP, ELISA

Species Specificity:

human, mouse, rat

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)

Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS only, pH7.3

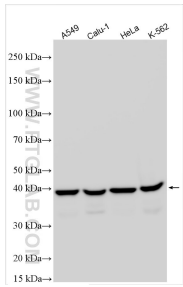
For technical support and original validation data for this product please contact:

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

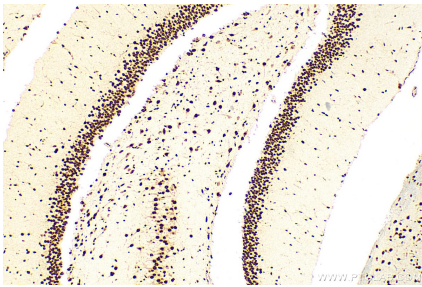
E: proteintech@ptglab.com
W: ptglab.com

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

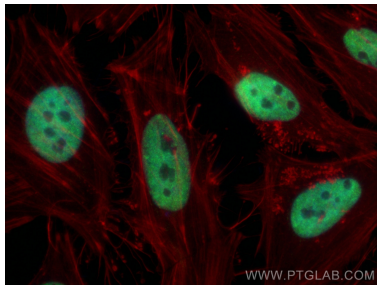
Selected Validation Data



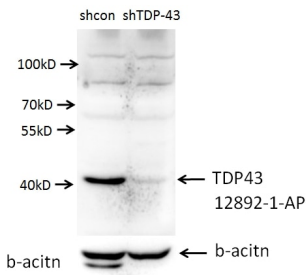
Various lysates were subjected to SDS PAGE followed by western blot with 12892-1-AP (TDP-43 (C-terminal) antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 12892-1-PBS in a different storage buffer formulation.



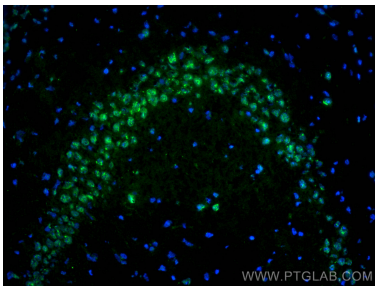
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 12892-1-AP (TDP-43 (C-terminal) antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 12892-1-PBS in a different storage buffer formulation.



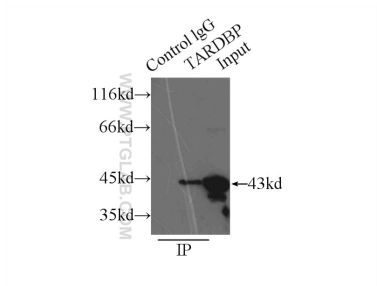
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using TDP-43 (C-terminal) antibody (12892-1-AP) at dilution of 1:4000 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 12892-1-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 12892-1-PBS in a different storage buffer formulation.



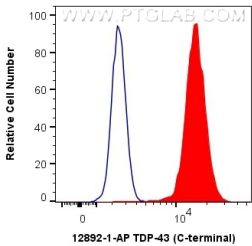
Immunofluorescent analysis of unfixed frozen OCT-embedded mouse brain tissue using TDP-43 (C-terminal) antibody (12892-1-AP) at dilution of 1:400 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 12892-1-PBS in a different storage buffer formulation.



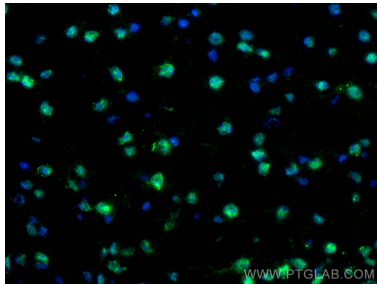
IP result of anti-TDP-43 (C-terminal) (IP:12892-1-AP, 3ug; Detection:12892-1-AP 1:1000) with HeLa cells lysate 3000ug. This data was developed using the same antibody clone with 12892-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 12892-1-PBS in a different storage buffer formulation.



1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human TDP-43 (C-terminal) (12892-1-AP) and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 12892-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of unfixed frozen OCT-embedded mouse brain tissue using TDP-43 (C-terminal) antibody (12892-1-AP) at dilution of 1:400 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 12892-1-PBS in a different storage buffer formulation.