

TDP-43 (C-terminal) Polyclonal ANTIBODY

Catalog Number: 12892-1-AP

Featured Product

86 Publications

Basic Information

Catalog Number:
12892-1-AP

Size:
61 µg/150 µl

Source:
Rabbit

Isotype:
IgG

Purification Method:
Antigen affinity purification

GenBank Accession Number:
BC001487

GeneID (NCBI):
23435

Full Name:
TAR DNA binding protein

Calculated MW:
43 kDa

Observed MW:
43-45 kDa, 35 kDa

Recommended Dilutions:

WB 1:500-1:1000
IP 0.5-4.0 µg for IP and 1:500-1:2000 for WB
IHC 1:100-1:2000
IF 1:50-1:500

Applications

Tested Applications:

IF, IHC, IP, WB, ELISA

Cited Applications:

chip, IF, IHC, IP, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, monkey, mouse, zebrafish

Note: 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; A2780 cells; C6 cells; HeLa cells; human heart tissue; human placenta tissue; K-562 cells; mouse heart tissue; mouse pancreas tissue

IP : HeLa cells; mouse brain tissue

IHC : human gliomas tissue; human lung cancer tissue; mouse brain 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	
Hiroaki Suzuki	30250194	Cell Death Dis	WB
Ching-Chieh Chou	26130692	Hum Mol Genet	WB, IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

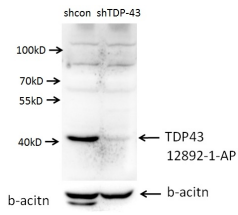
For technical support and original validation data for this product please contact:

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

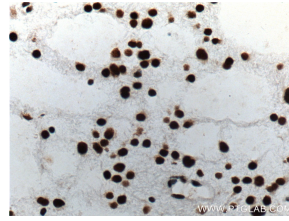
E: proteintech@ptglab.com
W: ptglab.com

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

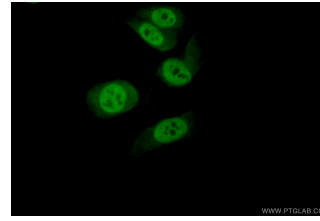
Selected Validation Data



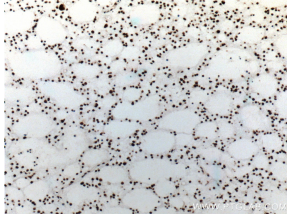
A549 cells (shcontrol and shRNA of TDP43) were subjected to SDS PAGE followed by western blot with 12892-1-AP (TDP43 antibody) at dilution of 1:1000.



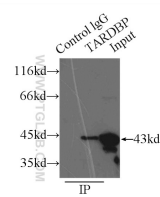
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12892-1-AP (TDP-43 (C-terminal) antibody at dilution of 1:1000 (under 40x lens), heat mediated antigen retrieved with Tris-EDTA buffer(pH9).



Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 12892-1-AP (TDP-43 (C-terminal) antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12892-1-AP (TDP-43 (C-terminal) antibody at dilution of 1:1000 (under 10x lens), heat mediated antigen retrieved with Tris-EDTA buffer(pH9).



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