For Research Use Only

TDP-43 (full length) Polyclonal antibody

Catalog Number:18280-1-AP 16 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
18280-1-AP

Concentration:
500 ug/ml

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 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:5000-1:50000
IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:200-1:2000
IF/ICC: 1:1500-1:6000
FC (Intra): 0.20 ug per 10^6 cells in a 100 µl suspension

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:
WB, IHC, IF, IP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse

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 : K-562 cells,

IP : K-562 cells,

IHC : mouse brain tissue, rat brain tissue, human gliomas tissue

IF/ICC : SH-SY5Y cells,

FC (Intra) : SH-SY5Y 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). 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

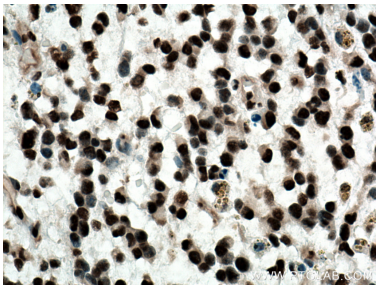
Storage

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

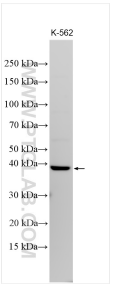
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

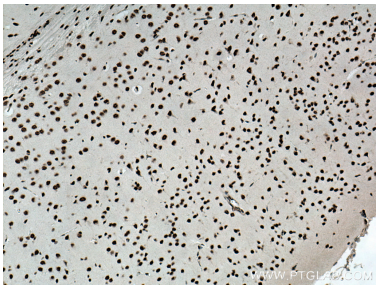
Selected Validation Data



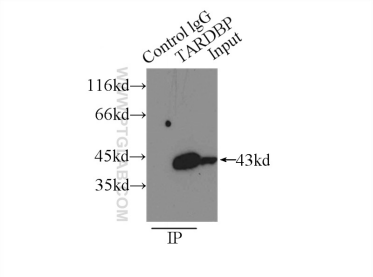
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 18280-1-AP (TDP-43 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



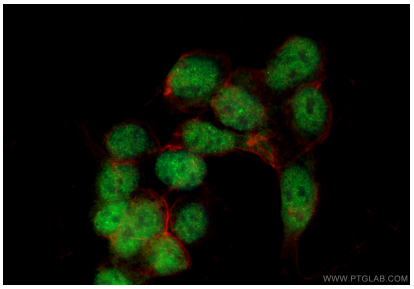
K562 cells were subjected to SDS PAGE followed by western blot with 18280-1-AP (TDP-43 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



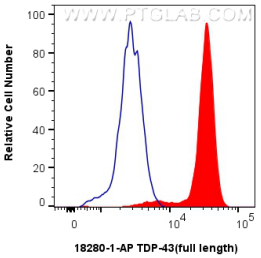
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 18280-1-AP (TDP-43 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



1x10^6 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).