For Research Use Only

TDP-43 Polyclonal antibody

Catalog Number:18280-1-AP 14 Publications

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Basic Information

Catalog Number:
18280-1-AP

Size:
150ul , Concentration: 500 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC001487

GeneID (NCBI):
23435

Full Name:
TAR DNA binding protein

Calculated MW:
43 kDa

Observed MW:
43 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:4000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:200-1:2000
IF 1:50-1:500

Applications

Tested Applications:
FC, IF, IHC, IP, WB,ELISA

Cited Applications:
IF, IHC, IP, WB

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 : HeLa cells, K-562 cells

IP : K-562 cells,

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

IF : 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

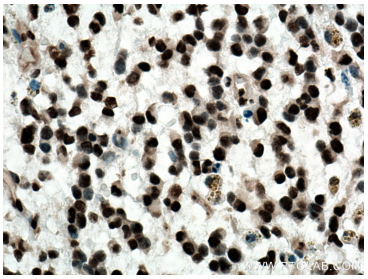
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

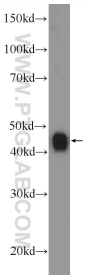
*** 20ul sizes contain 0.1% BSA

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

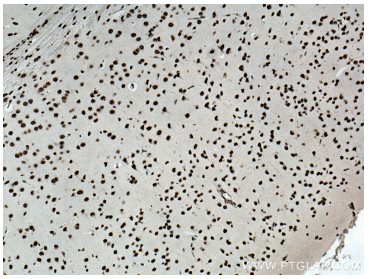
Selected Validation Data



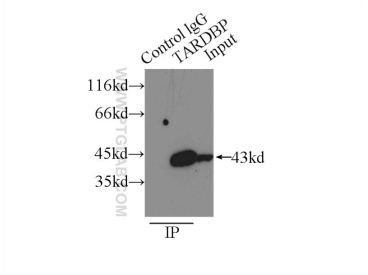
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 18280-1-AP (TDP-43 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



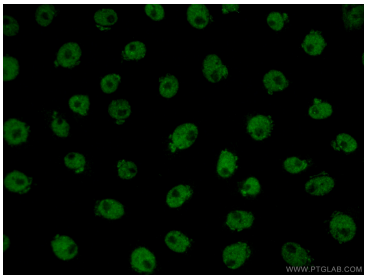
HeLa cells were subjected to SDS PAGE followed by western blot with 18280-1-AP (TDP-43 (full length) antibody at dilution of 1:2000 incubated at room temperature for 1.5 hours.



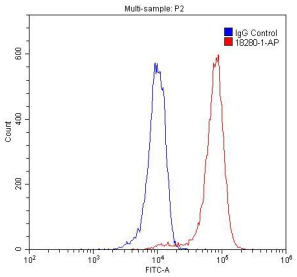
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 18280-1-AP (TDP-43 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP Result of anti-TARDBP (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 18280-1-AP (TDP-43 antibody) at dilution of 1:50 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 SH-SY5Y cells were stained with 0.2ug TDP-43 (full length) antibody (18280-1-AP, red) and control antibody (blue). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500. Cells were fixed with 4% PFA and permeabilized with 0.1% Triton X-100.