

# TDP-43

## Polyclonal ANTIBODY

Catalog Number: 18280-1-AP

2 Publications

### Basic Information

<b>Catalog Number:</b> 18280-1-AP	<b>GenBank Accession Number:</b> BC001487	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IP 0.5-4.0 ug for IP and 1:500-1:3000 for WB IHC 1:200-1:2000 IF 1:50-1:500
<b>Size:</b> 38 µg/150 µl	<b>GeneID (NCBI):</b> 23435	
<b>Source:</b> Rabbit	<b>Full Name:</b> TAR DNA binding protein	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 43 kDa	
<b>Purification Method:</b> Antigen affinity purification	<b>Observed MW:</b> 43 kDa	

### Applications

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

**Cited Applications:**  
IF

**Species Specificity:**  
human,mouse,rat

**Cited Species:**  
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.

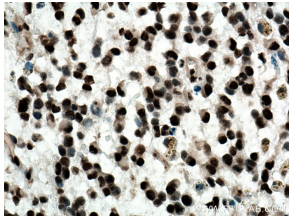
### Notable Publications

Author	Pubmed ID	Journal	Application
Saul Herranz-Martin	28550099	Dis Model Mech	IF
Florent Lafemière	30559480	Nat Neurosci	

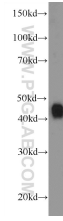
### Storage

**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

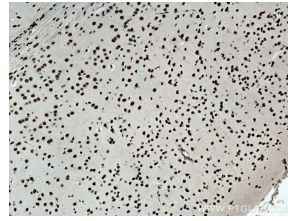
## Selected Validation Data



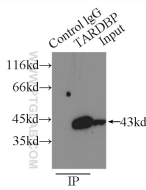
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 18280-1-AP (TDP-43 antibody) at dilution of 1:1000 (under 40x lens) heat mediated antigen retrieved with Tris-EDTA buffer(pH9).



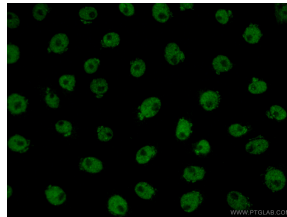
HeLa cells were subjected to SDS PAGE followed by western blot with 18280-1-AP( TDP-43 (full length) antibody at dilution of 1:2000 incubated at room temperature for 1.5 hours



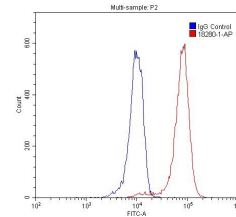
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 18280-1-AP (TDP-43 antibody) at dilution of 1:1000 (under 10x lens) heat mediated antigen retrieved with Tris-EDTA buffer(pH9).



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 CoralLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)



1X10<sup>6</sup> SH-SY5Y cells were stained with 0.2ug TDP-43 (full length) antibody (18280-1-AP red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.