

# DATASHEET

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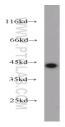
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## TDP-43 (C-terminal) Polyclonal Antibody

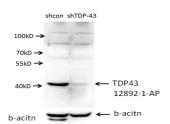
Catalog number: 12892-1-AP

Size: 61 µg/150 µl Source: Rabbit Isotype: IgG Synonyms:

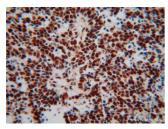
TARDBP; ALS10, TAR DNA binding protein, TAR DNA binding protein 43, TARDBP, **TDP 43, TDP43** 



HeLa cells were subjected to SDS PAGE followed by western blot with 12892-1-AP(TARDBP antibody) at dilution of 1:1000



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. (Data provided by Angran Biotech (www.miRNAlab.com)).



Immunohistochemical of paraffinembedded human lung cancer using 12892-1-AP(TARDBP antibody) at dilution of 1:100 (under 40x lens)

### Background

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 ubiquitinpositive 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.

## **Applications**

**Tested applications:** ELISA, IHC, IF, IP, WB

Cited applications: IF, IHC, IP, WB

Species specificity: Human, Mouse, Rat; other species not tested.

Cited species: Human, monkey, mouse, zebrafish 43 kDa

Calculated TDP-43 (C-

terminal) MW:

Observed TDP-43 (C-

Positive WB detected in

terminal) MW:

43-45 kDa,35 kDa

HeLa cells, A2780 cells, A549 cells, C6 cells, human heart tissue, human placenta tissue, K-562 cells, mouse

heart tissue, mouse pancreas tissue

Positive IP detected in HeLa cells, mouse brain tissue

Positive IHC detected in Human lung cancer tissue, human gliomas tissue,

mouse brain tissue, mouse pancreas tissue

Positive IF detected in A549 cells, HeLa cells Recommended dilution: WB: 1:500-1:5000

> IP: 1:500-1:5000 IHC: 1:20-1:200 IF: 1:20-1:200

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

#### Immunogen information

Immunogen: Ag4003 GenBank accession number: BC001487 Gene ID (NCBI):

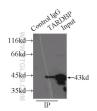
Full name: TAR DNA binding protein

#### Product information

**Purification method:** Antigen affinity purification

PBS with 0.1% sodium azide and 50% glycerol pH Storage:

7.3. Store at -20°C.



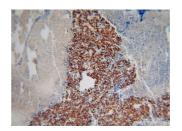
IP Result of anti-TARDBP (IP:12892-1-AP, 3ug; Detection:12892-1-AP 1:1000) with HeLa cells lysate 3000ug.



Immunofluorescent analysis of A549 cells, using TARDBP antibody 12892-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



Immunohistochemistry of paraffin-embedded mouse brain tissue slide using 12892-1-AP( TDP-43 Antibody) at dilution of 1:50 (under 10x lens)



Immunohistochemical of paraffin-embedded human lung cancer using 12892-1-AP(TARDBP antibody) at dilution of 1:100 (under 10x lens)