

TDP-43 Polyclonal Antibody

Catalog number: 10782-2-AP

Size: 46 µg/150 µl

Source: Rabbit

Isotype: IgG

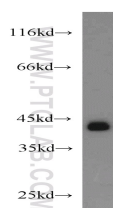
Synonyms:

TARDBP; ALS10, TAR DNA

binding protein, TAR DNA

binding protein 43, TARDBP,

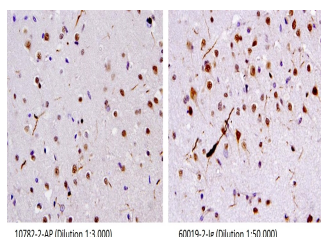
TDP 43, TDP43



K-562 cells were subjected to SDS PAGE followed by western blot with 10782-2-AP (TARDBP antibody) at dilution of 1:2000



A549 cells (shcontrol and shRNA of TDP43) were subjected to SDS PAGE followed by western blot with 10782-2-AP (TARDBP antibody) at dilution of 1:1000. (Data provided by Angnan Biotech (www.miRNAlab.com)).



40X of FTL-D-U case stained by 10782-2-AP and 60019-2-Ig, showing dystrophic neurites. (Figs were provided by Linda K. Kwong)

Background

The TARDBP gene encodes the TDP-43 protein, initially found to repress HIV-1 transcription by binding TAR DNA. TDP-43 has since been shown to bind RNA as well as DNA, and have multiple functions in transcriptional repression, translational regulation and pre-mRNA splicing. For instance, it is reported to regulate alternate splicing of the CTFR gene.

In 2006 Neumann et al. found that hyperphosphorylated, ubiquitinated and/or cleaved forms of TDP-43, collectively known as pathological TDP-43, play a major role in the disease mechanisms of ubiquitin-positive, tau- and alpha-synuclein-negative frontotemporal dementia (FTLD-U) and in amyotrophic lateral sclerosis (ALS).

Proteintech's 10782-2-AP antibody is a rabbit polyclonal antibody recognizing N-terminal TDP-43. Generated using the first 260 amino acids of TDP-43, it recognizes the intact 45 kDa protein as well as all posttranslationally modified and truncated forms in multiple applications..

Applications

Tested applications:

ELISA, WB, IHC, IP, FC, IF

Cited applications:

ChIP, CoIP, ELISA, IF, IHC, IP, RIP, WB

Species specificity:

Human, Mouse, Rat, Zebrafish; other species not tested.

Cited species:

C. elegans, canine, chicken, Drosophila, fly, hamster, horse, human, monkey, mouse, rat, recombinant protein, worm, Yeast, zebrafish

Calculated TDP-43 MW:

43 kDa

Observed TDP-43 MW:

43 kDa

Positive WB detected in

K-562 cells, A549 cells, HeLa cells, HL-60 cells, human heart tissue, mouse brain tissue, mouse pancreas tissue, rat brain tissue

Positive IP detected in

HeLa cells, K-562 cells

Positive IHC detected in

Human brain (FTLD-U) tissue, human brain tissue, human gliomas tissue, human pancreas tissue, human prostate cancer tissue, mouse brain tissue, rat brain tissue

Positive IF detected in

HeLa cells, HepG2 cells, MCF-7 cells, SH-SY5Y cells

Positive FC detected in

HeLa cells

Recommended dilution:

WB: 1:1000-1:10000

IP: 1:200-1:2000

IHC: 1:20-1:200

IF: 1:20-1:200

FC: N/A

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

Immunogen information

Immunogen: Ag1231

GenBank accession number: BC001487

Gene ID (NCBI): 23435

Full name:

TAR DNA binding protein

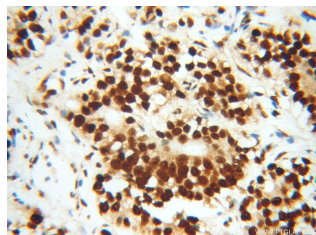
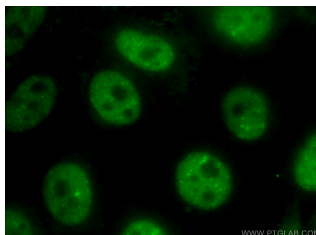
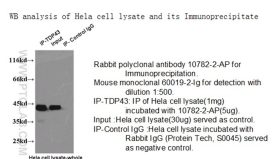
Product information

Purification method:

Antigen affinity purification

Storage:

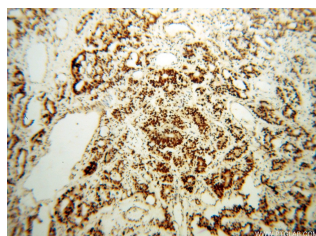
PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.



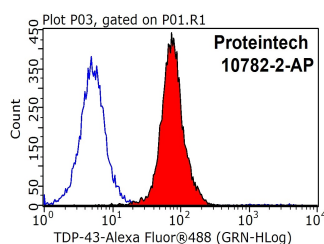
IP result of anti-TDP43(10782-2-AP for IP and 60019-2-Ig for Detection).

Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 10782-2-AP (TDP-43 Antibody) at dilution of 1:400 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)

Immunohistochemical analysis of paraffin-embedded human gliomas using 10782-2-AP (TARDBP antibody) at dilution of 1:200 (under 40x lens)



Immunohistochemical analysis of paraffin-embedded human gliomas using 10782-2-AP (TARDBP antibody) at dilution of 1:200 (under 10x lens)



1X10⁶ HeLa cells were stained with 0.2ug TDP-43 antibody (10782-2-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.