

For Research Use Only

TDP-43 Recombinant antibody, PBS Only



Catalog Number: 80002-1-PBS

Featured Product

Basic Information

Catalog Number: 80002-1-PBS	GenBank Accession Number: BC001487	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 23435	CloneNo.: 16A22
Source: Rabbit	UNIPROT ID: Q13148	
Isotype: IgG	Full Name: TAR DNA binding protein	
Immunogen Catalog Number: AG1231	Calculated MW: 43 kDa	
	Observed MW: 43 kDa	

Applications

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

Species Specificity:
Human, mouse, rat

Background Information

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 CTRF 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 80002-1-RR is a rabbit recombinant TDP-43 antibody recognizing N-terminal TDP-43. It recognizes the intact 43 kDa protein as well as all posttranslationally modified and truncated forms in multiple applications. Various forms of TDP-43 exist, including 18-35 kDa of cleaved C-terminal fragments, 45-50 kDa phospho-protein, 55 kDa glycosylated form, 75 kDa hyperphosphorylated form, and 90-300 kDa cross-linked form. (PMID: 17023659, 19823856, 21666678, 22193176) Recently TDP-43 has been reported to be overexpressed in triple negative breast cancer (TNBC) and it may be a potential target for TNBC diagnosis and drug design. (PMID: 29581274)

80002-1-RR antibody works well in IF experiment.

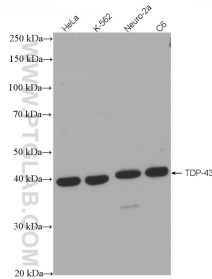
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

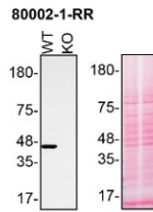
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

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

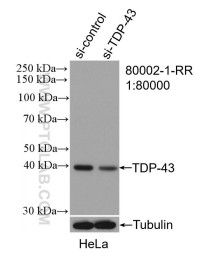
Selected Validation Data



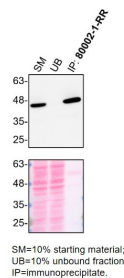
Various cell lysates were subjected to SDS PAGE followed by western blot with 80002-1-RR (TDP-43 antibody) at dilution of 1:12000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80002-1-PBS in a different storage buffer formulation.



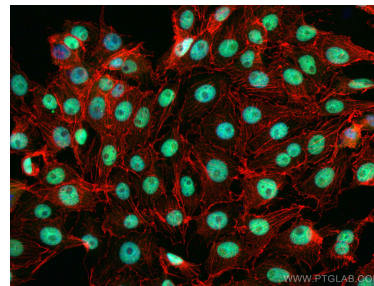
HAP1 (WT and TARDBP KO) lysates prepared with NP-40 buffer, 50 µg protein loaded. 80002-1-RR incubated at 1:1000 at 4°C overnight in 5% milk in TBST. Ponceau stained transfers shown on right. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency. This data was developed using the same antibody clone with 80002-1-PBS in a different storage buffer



WB result of TDP-43 antibody (80002-1-RR; 1:80000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TDP-43 transfected HeLa cells. This data was developed using the same antibody clone with 80002-1-PBS in a different storage buffer formulation.



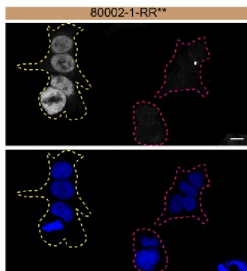
HAP1 lysates prepared and IP of TARDBP performed using 2.0 µg of 80002-1-RR coupled to protein A-Sepharose beads. The Ponceau stained transfers of each blot are shown. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency. This data was developed using the same antibody clone with 80002-1-PBS in a different storage buffer formulation.



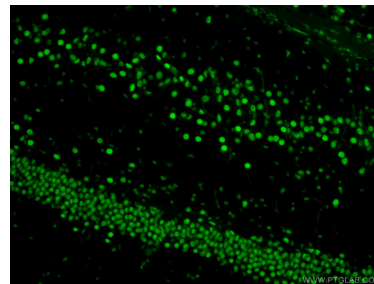
Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using TDP-43 antibody (80002-1-RR, Clone: 16A22) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Red: staining with CoraLite555-Phalloidin. This data was developed using the same antibody clone with 80002-1-PBS in a different storage buffer formulation.



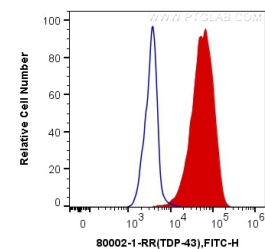
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using TDP-43 antibody (80002-1-RR, Clone: 16A22) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 80002-1-PBS in a different storage buffer formulation.



HAP1 WT cells (yellow outline) and TARDBP KO cells (red outline) labelled with a green or a far red fluorescence dye, respectively. Cells fixed with 4% PFA and stained with 80002-1-RR at 1:200 plus DAPI. Bars = 10 µm. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency. This data was developed using the same antibody clone with 80002-1-PBS in a different storage buffer



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using 80002-1-RR (TDP-43 antibody) at dilution of 1:200 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 80002-1-PBS in a different storage buffer formulation.



1X10⁶ HeLa cells were intracellularly stained with 0.4 µg Anti-Human TDP-43 (for IF/FC) (80002-1-RR, Clone:16A22) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 µg Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 80002-1-PBS in a different storage buffer formulation.