

For Research Use Only

TDP-43 (C-terminal) Recombinant antibody, PBS Only (Detector)

Catalog Number: 81350-1-PBS



Basic Information

Catalog Number: 81350-1-PBS	GenBank Accession Number: BC001487	Purification Method: Protein A purification
Size: 100ug, Concentration: 1mg/ml by Nanodrop;	GeneID (NCBI): 23435	CloneNo.: 5D17
Source: Rabbit	UNIPROT ID: Q13148	
Isotype: IgG	Full Name: TAR DNA binding protein	
	Calculated MW: 43 kDa	
	Observed MW: 43 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA

Species Specificity:
human, mouse, rat

Product Information

81350-1-PBS targets TDP-43 (C-terminal) as part of a matched antibody pair:

MP00589-1: 80007-1-PBS capture and 81350-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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).

Storage

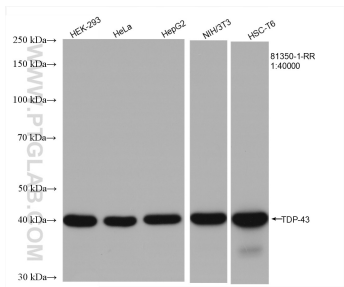
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

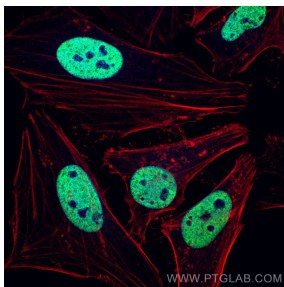
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

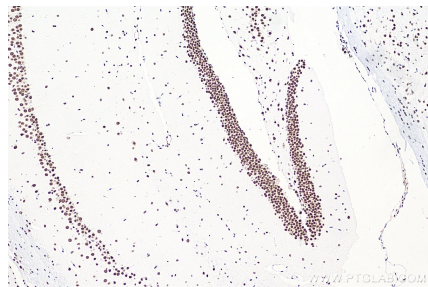
Selected Validation Data



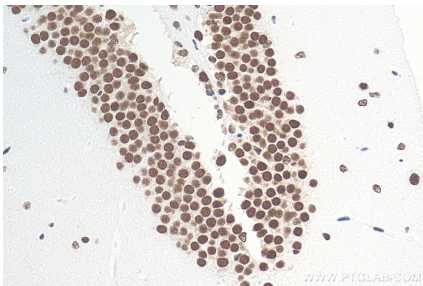
Various lysates were subjected to SDS PAGE followed by western blot with 81350-1-RR (TDP-43 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81350-1-PBS in a different storage buffer formulation.



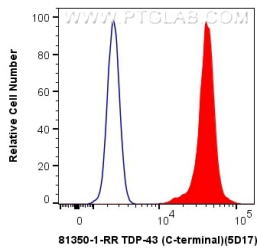
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using TDP-43 (C-terminal) antibody (81350-1-RR, Clone: 5D17) at dilution of 1:5000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 81350-1-PBS in a different storage buffer formulation.



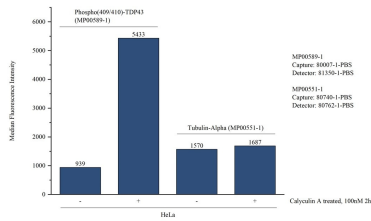
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 81350-1-RR (TDP-43 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81350-1-PBS in a different storage buffer formulation.



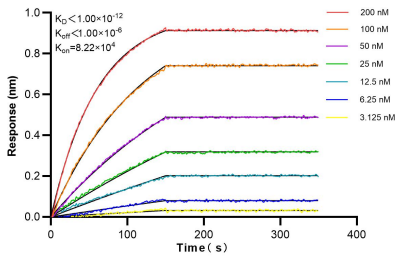
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 81350-1-RR (TDP-43 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81350-1-PBS in a different storage buffer formulation.



1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human TDP-43 (C-terminal) (81350-1-RR, Clone:5D17) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 81350-1-PBS in a different storage buffer formulation.



Cytometric bead array in cell lysate using MP00589-1, phospho(409/410)-TDP43 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 80007-1-PBS. Detection antibody: 81350-1-PBS. Cell lysate(30ug/well): Non-treated HeLa and Calyculin A treated HeLa cells were lysed in 8M urea buffer and diluted in assay buffer. Non-related target Tubulin-Alpha Recombinant Matched Antibody Pair (MP00551-1) was served as control.



Biolayer interferometry (BLI) kinetic assays of 81350-1-RR against Human TDP-43 (C-terminal) were performed. The affinity constant is below 1 pM.