For Research Use Only

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

Size: 1mg/ml

Catalog Number:81350-1-PBS



Purification Method:

Protein A purification

CloneNo.:

5D17

Basic Information

Catalog Number: 81350-1-PBS

GenBank Accession Number:

BC001487

GeneID (NCBI):

23435

Source: **UNIPROT ID:** Rabbit Q13148 Full Name: Isotype:

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

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 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, tauand alpha-synuclein-negative frontotemporal dementia (FTLD-U) and in amyotrophic lateral sclerosis (ALS).

Storage

Storage:

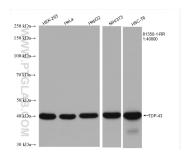
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

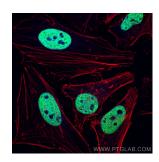
Storage Buffer:

PBS Only

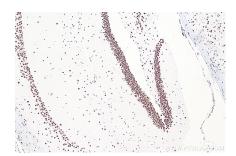
Selected Validation Data



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.



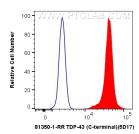
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using TDP-43 (C-terminal) antibody (81350-1-RR, Clone: SD17) at dilution of 1:5000 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 81350-1-PBS in a different storage buffer formulation.



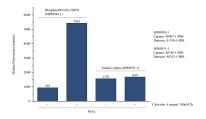
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 81350-1-RR (TDP-43 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (PH 9.0). This data was developed using the same antibody clone with 81350-1-PBS in a different storage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



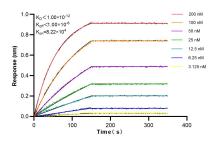
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 81350-1-RR (TDP-43 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81350-1-PBS in a different storage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



1X10^6 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(30 µ g/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 (BLL) kinetic assays of 81350-1-RR against Human TDP-43 (C-terminal) were performed. The affinity constant is below 1 pM.