## For Research Use Only

## TDP-43 (C-terminal) Recombinant antibody

Catalog Number:81350-1-RR

**1** Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 81350-1-RR BC001487

 81350-1-RR
 BC001487
 Protein A

 Size:
 GeneID (NCBI):
 CloneNo.:

 100ul , Concentration: 1000 ug/ml by 23435
 5D17

Nanodrop; UNIPROT ID:
Source: Q13148
Rabbit Full Name:

Isotype: TAR DNA binding protein

IgG Calculated MW:

43 kDa Observed MW: 43 kDa Purification Method:

Protein A purification

5D17

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:1000-1:4000 IF/ICC 1:2500-1:10000

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB

Species Specificity: human, mouse, rat Cited Species:

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 **Positive Controls:** 

WB: HEK-293 cells, HeLa cells, HepG2 cells, NIH/3T3

cells, HSC-T6 cells

IHC: mouse brain tissue,
IF/ICC: HeLa cells,

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

**Notable Publications** 

Author Pubmed ID Journal Application

Irika R Sinha 38585725 bioRxiv WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

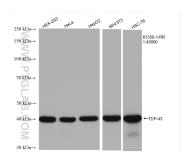
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

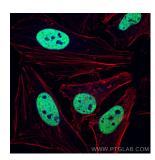
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

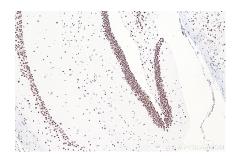
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 81550-1-RR (TDP-43 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours.



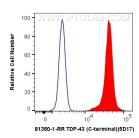
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using TDP-43 (C-terminal) antibody (81350-1-RR, Clone: 5D17) at dilution of 1:5000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



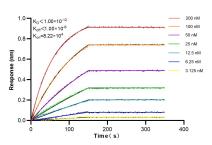
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 81350-1-RR (TDP-43 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).



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