

For Research Use Only

# CoraLite® Plus 488-conjugated TDP-43 Recombinant antibody

Catalog Number: CL488-80001

Featured Product



## Basic Information

<b>Catalog Number:</b> CL488-80001	<b>GenBank Accession Number:</b> BC001487	<b>Purification Method:</b> Protein A purification
<b>Concentration:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 23435	<b>CloneNo.:</b> 11N20
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q13148	<b>Recommended Dilutions:</b> IF/ICC 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> TAR DNA binding protein	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
<b>Immunogen Catalog Number:</b> AG1231	<b>Calculated MW:</b> 43 kDa	
	<b>Observed MW:</b> 43 kDa	

## Applications

<b>Tested Applications:</b> IF/ICC, FC (Intra)	<b>Positive Controls:</b> IF/ICC : HeLa cells,
<b>Species Specificity:</b> 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 80001-1-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).

80001-1-RR can be used in WB, IHC, IHF. For the ICC (IF with cells) experiment, the results will be better with ethanol fixed cell and dilution 1:50 or 1:100. Another antibody with CatNo. 80002-1-RR is recommended for IF or ICC experiment.

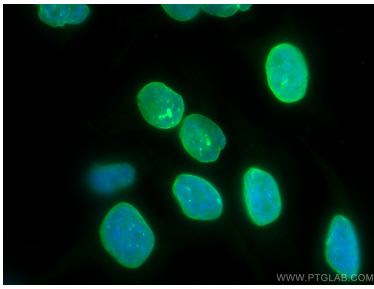
## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

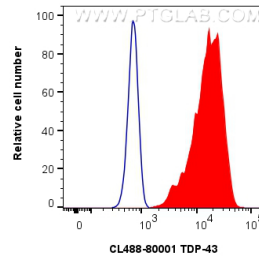
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite® Plus 488 TDP-43 antibody (CL488-80001, Clone: 11N20) at dilution of 1:200.



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488-conjugated TDP-43 Recombinant antibody (CL488-80001, Clone:11N20)(red), or 0.4 ug CoraLite® Plus 488 Rabbit IgG Isotype Control RecAb (CL488-98136, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).