

For Research Use Only

# Phospho-TDP43 (Ser409/410) Monoclonal antibody, PBS Only



Catalog Number: 66318-1-PBS

## Basic Information

<b>Catalog Number:</b> 66318-1-PBS	<b>GenBank Accession Number:</b> NM_007375	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 23435	<b>CloneNo.:</b> 1A2C1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q13148	
<b>Isotype:</b> IgG1	<b>Full Name:</b> TAR DNA binding protein	
	<b>Calculated MW:</b> 43 kDa	
	<b>Observed MW:</b> 45-50 kDa, 35 kDa	

## Applications

**Tested Applications:**  
WB, 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). 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). 66318-1-Ig is a phospho-dependent monoclonal antibody specifically recognizing phospho-TDP43 (409/410). It does not react with native TDP-43.

## Storage

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

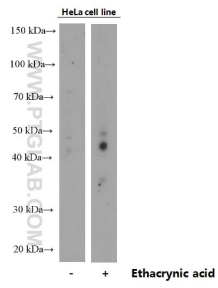
**Storage Buffer:**  
PBS only

Aliquoting is unnecessary for -20°C storage

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

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## Selected Validation Data



Untreated and EA treated HeLa cells were subjected to SDS PAGE followed by western blot with 66318-1-Ig (Phospho-TDP43 (Ser409/410) Antibody) at dilution of 1:850 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66318-1-PBS in a different storage buffer formulation.