

For Research Use Only

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



Catalog Number: 80007-1-PBS

## Basic Information

<b>Catalog Number:</b> 80007-1-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> 6M10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q13148	
<b>Isotype:</b> IgG	<b>Full Name:</b> TAR DNA binding protein	
	<b>Calculated MW:</b> 43 kDa	
	<b>Observed MW:</b> 45-50 kDa	

## Applications

**Tested Applications:**  
WB, FC, IHC, ELISA

**Species Specificity:**  
Human, mouse

## Background Information

Transactivation response (TAR) DNA-binding protein of 43 kDa (also known as TARDBP or TDP-43) was first isolated as a transcriptional inactivator binding to the TAR DNA element of the HIV-1 virus. Neumann et al. (2006) found that a hyperphosphorylated, ubiquitinated, and cleaved form of TARDBP, known as pathologic TDP-43, is the major component of the tau-negative and ubiquitin-positive inclusions that characterize amyotrophic lateral sclerosis (ALS) and the most common pathological subtype of frontotemporal lobar degeneration (FTLD-U). 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). 80007-1-RR is a recombinant rabbit monoclonal antibody recognizing TDP-43 only when phosphorylated at 409/410. Immunohistochemical analyses using this antibody only stain the insoluble inclusions in pathologic tissues without normal diffuse nuclear staining.

## Storage

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

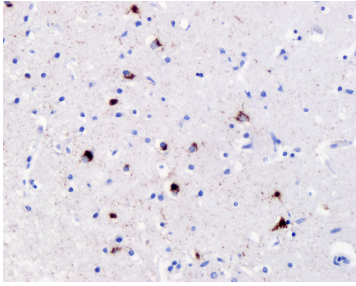
**Storage Buffer:**  
PBS only

Aliquoting is unnecessary for -20°C storage

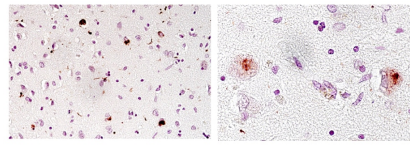
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
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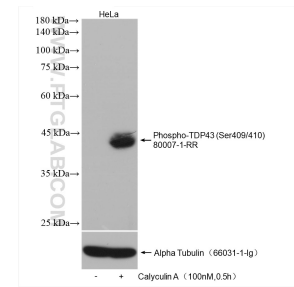
## Selected Validation Data



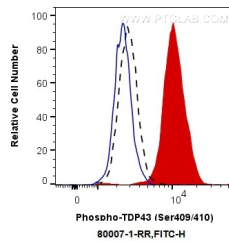
IHC results of Phospho-TDP43 (Ser409/410) rabbit recombinant antibody (80007-1-RR, 1000) with the frontal cortex from FTLD-TDP type B patients. IHC experiment was done with Ventana automatic staining system and Optiview DAB detection kit with heat-induced epitope retrieval (boiling for 32 min in Tris-EDTA based solution CC1 buffer, Ventana). Fig from the lab of Dr. Neumann. This data was developed using the same antibody clone with 80007-1-PBS in a different storage buffer



It's human subiculum (high-mag) and temporal cortex (medium-mag) from subject with limbic-predominant age-related TDP-43 encephalopathy neuropathologic change (LATE-NC). Staining provided by Pete Nelson and Ela Patel, U. Kentucky AD Research Center Neuropathology Core. This data was developed using the same antibody clone with 80007-1-PBS in a different storage buffer formulation.



HeLa cells were subjected to SDS PAGE followed by western blot with 80007-1-RR (Phospho-TDP43 (Ser409/410) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80007-1-PBS in a different storage buffer formulation.



1X10<sup>6</sup> Jurkat cells untreated (dashed lines) or treated with Calyculin A (red) were intracellularly stained with 0.5 ug Anti-Human Phospho-TDP43 (Ser409/410) (80007-1-RR, Clone:6M10) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000, or 0.5 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH. This data was developed using the same antibody clone with 80007-1-PBS in a different storage buffer