

For Research Use Only

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

Catalog Number: 80007-1-PBS



Basic Information

Catalog Number: 80007-1-PBS	GenBank Accession Number: NM_007375	Purification Method: Protein A purification
Concentration: 1000 µg/ml	GeneID (NCBI): 23435	CloneNo.: 6M10
Source: Rabbit	UNIPROT ID: Q13148	
Isotype: IgG	Full Name: TAR DNA binding protein	
	Calculated MW: 43 kDa	
	Observed MW: 45-50 kDa	

Applications

Tested Applications:
WB, IHC, Cytometric bead array, Indirect 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 -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS Only

For technical support and original validation data for this product please contact:

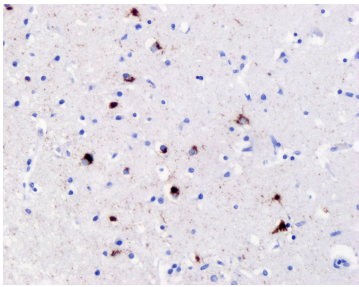
T: 4006900926

E: Proteintech-CN@ptglab.com

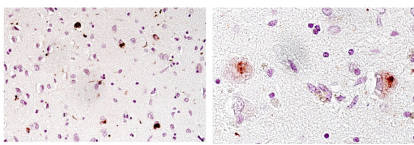
W: ptgcn.com

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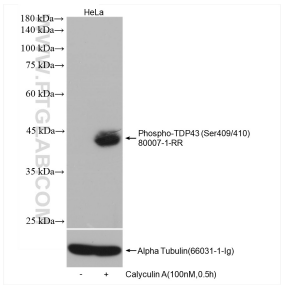
Selected Validation Data



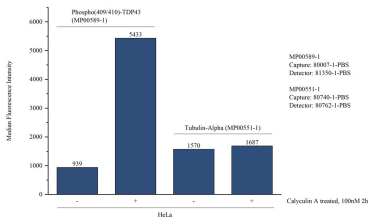
IHC results of Phospho-TDP43 (Ser409/410) rabbit recombinant antibody (80007-1-RR, 1000) with the frontal cortex from FTL-DTP type B patients. IHC experiment was done with Ventana automatic staining system and Optiview DAB detection kit with heat-induced epitope retrieval (boiling for 32 min in Tris-EDTA 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



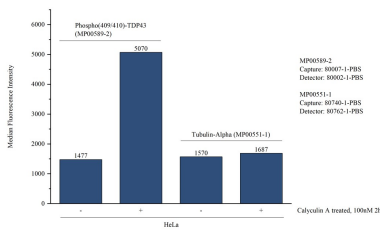
It's human subiculum (high-mag) and temporal cortex (medium-mag) from subject with limbic-predominant age-related TDP-43 encephalopathy neuropathologic change (LATE-NC). Staining provided by Pete Nelson and Ela Patel, U. Kentucky AD Research Center Neuropathology Core. This data was developed using the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



Non-treated and Calyculin A treated 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. The membrane was stripped and re-blotted with Alpha Tubulin (66031-1-Ig) antibody as a loading control. This data was developed using the same antibody clone with 80007-1-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 μg/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.



Cytometric bead array in cell lysate using MP00589-2, phospho(409/410)-TDP43 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 80007-1-PBS. Detection antibody: 80002-1-PBS. Cell lysate(30 μg/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.