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

NM\_007375

Concentration:

1000 \( \mu \) g/ml

23435

Source:

UNIPROT ID:

Rabbit

Q13148

Isotype:

GenBank Accession Number:

NM\_007375

GeneID (NCBI):

23435

UNIPROT ID:

Q13148

Full Name:

gG TAR DNA binding protein

Calculated MW: 43 kDa Observed MW: 45-50 kDa Purification Method: Protein A purification

CloneNo.: 6M10

**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.

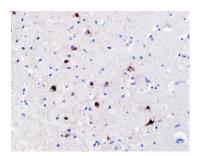
Storage

Storage:

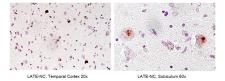
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

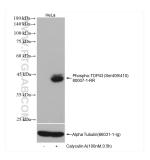
## **Selected Validation Data**



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.



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-lg) antibody as a loading control. This data was developed using the same antibody clone with 80007-1-PBS in a different storage buffer formulation.