For Research Use Only

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

Catalog Number:80007-1-PBS

proteintech®
Antibodies | ELISA kits | Proteins
Uni-rAb
www.ptglab.com

Basic Information

Catalog Number:
80007-1-PBS

Size:
100ug , Concentration: 1000 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_007375

GeneID (NCBI):
23435

UNIPROT ID:
Q13148

Full Name:
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

Product Information

80007-1-PBS targets Phospho-TDP43 (Ser409/410) as part of a matched antibody pair:

MP00589-1: 80007-1-PBS capture and 81350-1-PBS detection (validated in Cytometric bead array)

MP00589-2: 80007-1-PBS capture and 80002-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications.Antibody use should be optimized by the end user for each application and assay.

Background Information

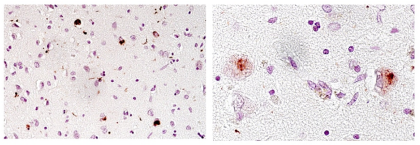
Transactivation response (TAR) DNA-binding protein of 43 kDa (also known as TARDBP or TDP-43) was first isolated as a transcriptional inactivator binding to the TAR DNA element of the HIV-1 virus. Neumann et al. (2006) found that a hyperphosphorylated, ubiquitinated, and cleaved form of TARDBP, known 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.
Storage Buffer:
PBS only, pH7.3

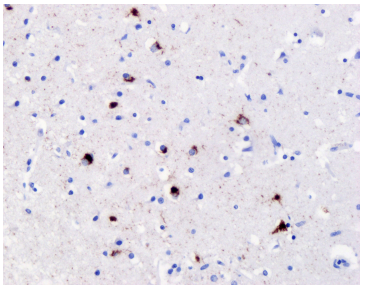
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

Selected Validation Data

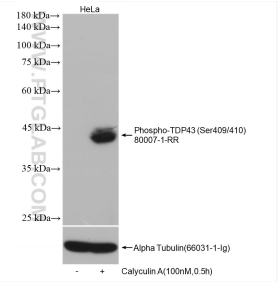


LATE-NC, Temporal Cortex 20x LATE-NC, Subiculum 60x

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.



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



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.