

TDP-43 (human specific) Monoclonal antibody, PBS Only (Capture/Detector)

Catalog Number: 60019-2-PBS

Featured Product

Basic Information

Catalog Number: 60019-2-PBS	GenBank Accession Number: BC001487	Purification Method: Protein G purification
Size: 100ug , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 23435	CloneNo.: 6H6E12
Source: Mouse	UNIPROT ID: Q13148	
Isotype: IgG1	Full Name: TAR DNA binding protein	
	Calculated MW: 43 kDa	
	Observed MW: 43 kDa	

Applications

Tested Applications:
WB, IHC, IP, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human

Product Information

60019-2-PBS targets TDP-43 (human specific) as part of a matched antibody pair:

MP50030-1: 66734-2-PBS capture and 60019-2-PBS detection (validated in Sandwich ELISA)

MP80000-1: 60019-2-PBS capture and 80001-1-PBS detection (validated in Sandwich ELISA)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

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). 60019-2-Ig is a mouse monoclonal antibody recognizing the cleavage product of 20-30 kDa in addition to the native and phosphorylated forms of TDP-43. Immunohistochemical analyses of TDP-43 using this antibody detect both normal diffuse nuclear staining and insoluble inclusions in pathologic tissues. Notably this antibody only recognizes human TDP-43 but not reacts with mouse or rat TDP-43.

Storage

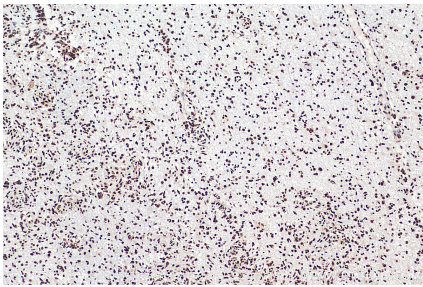
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

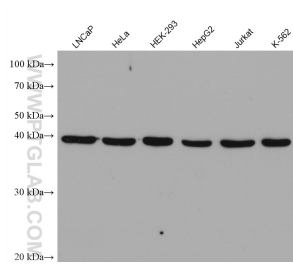
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

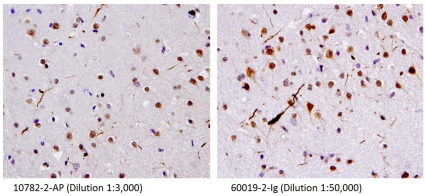
Selected Validation Data



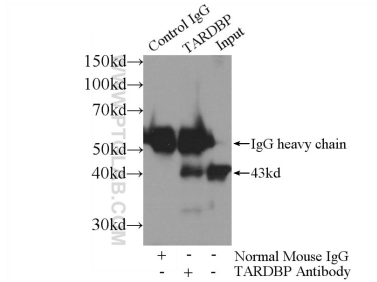
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60019-2-Ig (TDP-43 (human specific) antibody) at dilution of 1:8500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60019-2-PBS in a different storage buffer formulation.



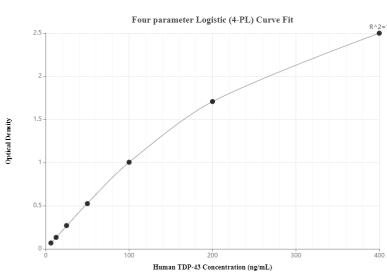
Various lysates were subjected to SDS PAGE followed by western blot with 60019-2-Ig (TDP-43 (human specific) antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60019-2-PBS in a different storage buffer formulation.



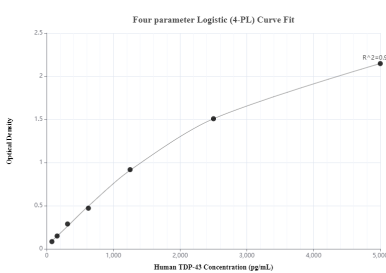
40X of FTLD-U case stained by 10782-2-AP and 60019-2-Ig, showing dystrophic neurites. (Figs were provided by Linda K. Kwong). This data was developed using the same antibody clone with 60019-2-PBS in a different storage buffer formulation.



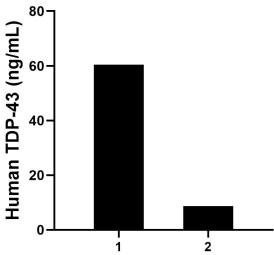
IP result of anti-TDP-43 (human specific) (IP:60019-2-Ig, 5ug; Detection:60019-2-Ig 1:1000) with K-562 cells lysate 1720ug. This data was developed using the same antibody clone with 60019-2-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP50030-1, TDP-43 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66734-2-PBS. Detection antibody: 60019-2-PBS. Standard: Ag13119. Range: 6.25-400 ng/mL.



Sandwich ELISA standard curve of MP80000-1, TDP-43 Hybrid Matched Antibody Pair, PBS Only. Capture antibody: 60019-2-PBS. Detection antibody: 80001-1-PBS. Standard: Ag1833. Range: 78.1-5000 pg/mL.



Human cerebrospinal fluid (CSF) of two individual human donors was measured. The TDP-43 concentrations of detected samples were determined to be 60.40 ng/mL and 8.70 ng/mL, respectively.