## For Research Use Only

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



Catalog Number:60019-2-PBS Featured Product

## **Basic Information**

Catalog Number: 60019-2-PBS Size: 1000 µ g/ml Source: Mouse Isotype: IgG1 GenBank Accession Number: BC001487 GeneID (NCBI): 23435 UNIPROT ID: Q13148 Full Name: TAR DNA binding protein Calculated MW: 43 kDa Observed MW: 43 kDa

#### Purification Method: Protein G purification CloneNo.: 6H6E12

Applications

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

Species Specificity: human

### **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, 21696678, 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

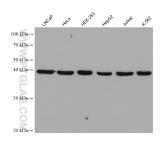
For technical support and original validation data for this product please contact:T: 4006900926E: Proteintech-CN@ptglab.comW: ptgcn.com

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

## **Selected Validation Data**

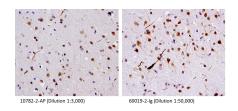


Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60019-2-1g (TDP-43 (human specific) antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60019-2-PBS in a different storage buffer formulation. formulation.

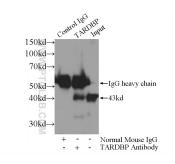


Various lysates were subjected to SDS PAGE followed by western blot with 60019-2-Ig (TDP-43 (human specific) antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60019-2-PBS in a different storage buffer formulation.

r Logistic (4-PL) Curve Fit



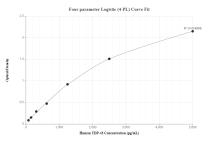
40X of FTLD-U case stained by 10782-2-AP and 60019-2-1g, showing dystrophic neurites. (Figs were provided by Linda K. Kwong). This data was developed using the same antibody clone with 60019-2-PBS in a different storage buffer formulation.



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.

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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.