For Research Use Only

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

Catalog Number:60019-2-PBS Featured Product

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
60019-2-PBS

Concentration:
1000 μg/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, IHC, IP, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human

Background Information

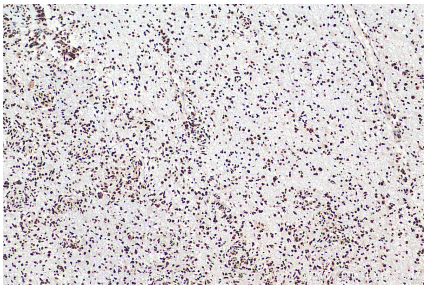
Transactivation response (TAR) DNA-binding protein of 43 kDa (also known as TARDBP or TDP-43) was first isolated as a transcriptional inactivator binding to the TAR DNA element of the HIV-1 virus. Neumann et al. (2006) found that a hyperphosphorylated, ubiquitinated, and cleaved form of TARDBP, known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

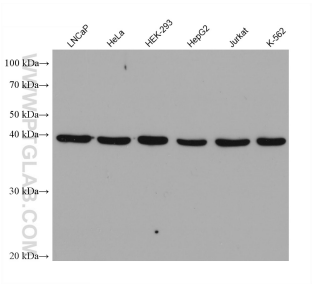
Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C
Storage Buffer:
PBS only, pH7.3

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

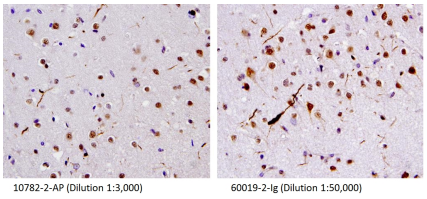
Selected Validation Data



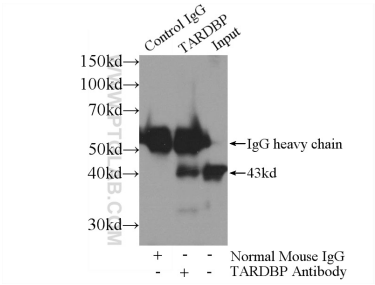
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60019-2-Ig (TDP-43 (human specific) antibody) at dilution of 1:8500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60019-2-PBS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



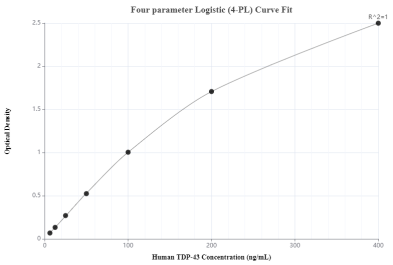
Various lysates were subjected to SDS PAGE followed by western blot with 60019-2-Ig (TDP-43 (human specific) antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60019-2-PBS in a different storage buffer formulation.



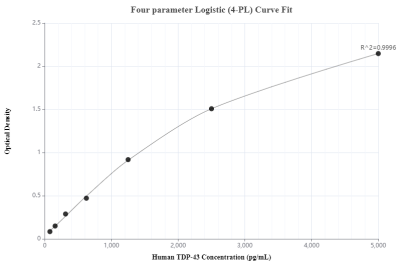
40X of FTLD-U case stained by 10782-2-AP and 60019-2-Ig, showing dystrophic neurites. (Figs were provided by Linda K. Kwong). This data was developed using the same antibody clone with 60019-2-PBS in a different storage buffer formulation.



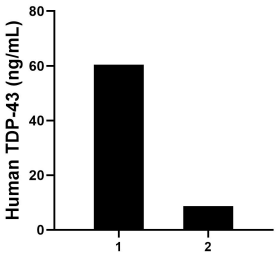
IP result of anti-TDP-43 (human specific) (IP:60019-2-Ig, 5ug; Detection:60019-2-Ig 1:1000) with K-562 cells lysate 1720ug. This data was developed using the same antibody clone with 60019-2-PBS in a different storage buffer formulation.



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.