

For Research Use Only

Phospho-TDP43 (Ser403/404) Monoclonal antibody



Catalog Number: 66079-1-Ig **9 Publications**

Basic Information

Catalog Number:

66079-1-Ig

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG2a

GenBank Accession Number:

NM_007375

GeneID (NCBI):

23435

UNIPROT ID:

Q13148

Full Name:

TAR DNA binding protein

Calculated MW:

43 kDa

Observed MW:

25 kDa

Purification Method:

Protein A purification

CloneNo.:

6B11B12

Recommended Dilutions:

WB 1:5000-1:50000

Applications

Tested Applications:

FC, WB, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse

Cited Species:

human, mouse, zebrafish

Positive Controls:

WB : HEK-293 cells, Jurkat cells, K-562 cells, RAW 264.7 cells, fetal human brain tissue

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). 66079-1-Ig is a mouse monoclonal antibody recognizing TDP-43 only when phosphorylated at 403/404. Immunohistochemical analyses using this antibody only stain the insoluble inclusions in pathologic tissues without normal diffuse nuclear staining.

Notable Publications

Author	Pubmed ID	Journal	Application
Janice S W Ng	31529970	Biochemistry	IF
Elisa Rojas-Prats	33139113	Eur J Med Chem	WB
Lara A Gruijs da Silva	36227481	Methods Mol Biol	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

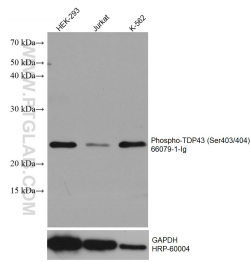
T: 4006900926

E: Proteintech-CN@ptglab.com

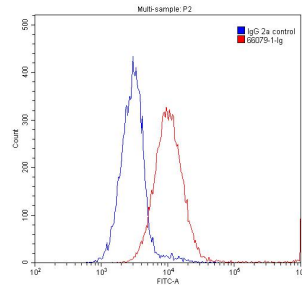
W: ptgcn.com

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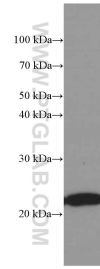
Selected Validation Data



HEK-293 cells were subjected to SDS PAGE followed by western blot with 66079-1-Ig (Phospho-TDP43 (Ser403/404) antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



1×10^6 Jurkat cells were stained with 0.20ug Phospho-TDP43 (Ser403/404) antibody (66079-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH.



K-562 cells were subjected to SDS PAGE followed by western blot with 66079-1-Ig (Phospho-TDP43 (Ser403/404) Antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.