For Research Use Only

## Phospho-TDP43 (Ser403/404) Monoclonal antibody

Catalog Number:66079-1-lg 11 Publications



**Basic Information** 

Catalog Number: 66079-1-lg Concentration: 1000 μg/ml Source:

Isotype:

lgG2a

Mouse

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:** 

WB, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity: human, mouse

human, mouse, zebrafish

**Cited Species:** 

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:

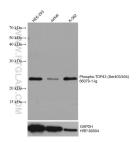
Store at -20°C. Stable for one year after shipment.

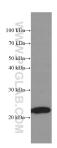
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

## **Selected Validation Data**





HEK-293 cells were subjected to SDS PAGE followed by western blot with 66079-1-lg (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.

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