For Research Use Only

Phospho-TDP43 (Ser409/410) Monoclonal antibody

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Catalog Number:66318-1-Ig 13 Publications

Basic Information

Catalog Number:
66318-1-Ig

Size:
1800 μg/ml

Source:
Mouse

Isotype:
IgG1

GenBank Accession Number:
NM_007375

GeneID (NCBI):
23435

UNIPROT ID:
Q13148

Full Name:
TAR DNA binding protein

Calculated MW:
43 kDa

Observed MW:
45-50 kDa, 35 kDa

Purification Method:
Protein A purification

CloneNo.:
1A2C1

Recommended Dilutions:
WB 1:500-1:2000

Applications

Tested Applications:
WB,ELISA

Cited Applications:
WB, IF, IHC

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse, canine

Positive Controls:

WB : EA treated HeLa cells, HEK-293 cells, human placenta tissue, Neuro-2a cells, C6 cells

Background Information

The TARDBP gene encodes the TDP-43 protein, initially found to repress HIV-1 transcription by binding TAR DNA. TDP-43 has since been shown to bind RNA as well as DNA, and have multiple functions in transcriptional repression, translational regulation and pre-mRNA splicing. For instance, it is reported to regulate alternate splicing of the CTFR gene.In 2006 Neumann et al. found that hyperphosphorylated, ubiquitinated and/or cleaved forms of TDP-43, collectively known as pathological TDP-43, play a major role in the disease mechanisms of ubiquitin-positive, tau- and alpha-synuclein-negative frontotemporal dementia (FTLD-U) and in amyotrophic lateral sclerosis (ALS). 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). 66318-1-Ig is a phospho-dependent monoclonal antibody specifically recognizing phospho-TDP43 (409/410). It does not react with native TDP-43.

Notable Publications

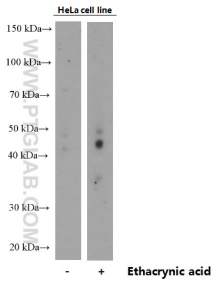
Author	Pubmed ID	Journal	Application
Sadhana Ravikumar	34689831	Acta Neuropathol Commun	IHC
Yasar Arfat T Kasu	29987190	Mol Cell Biol	WB,IF
David A Hicks	31280399	Neurochem Res	WB

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

Selected Validation Data



Untreated and EA treated HeLa cells were subjected to SDS PAGE followed by western blot with 66318-1-Ig (Phospho-TDP43 (Ser409/410) Antibody) at dilution of 1:850 incubated at room temperature for 1.5 hours.