

Phospho-TDP43 (Ser409/410) Monoclonal antibody, PBS Only

Catalog Number: 66318-1-PBS

Basic Information

Catalog Number:

66318-1-PBS

Size:

1 mg/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

Applications

Tested Applications:

WB, ELISA

Species Specificity:

human, mouse, rat

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.

Storage

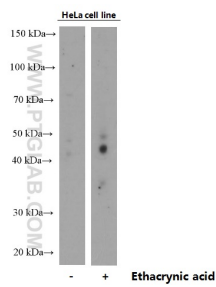
Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**Storage Buffer:**

PBS only

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. This data was developed using the same antibody clone with 66318-1-PBS in a different storage buffer formulation.