For Research Use Only

Phospho-TDP43 (Ser409/410) Polyclonal antibody

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Catalog Number:22309-1-AP 87 Publications

Basic Information

Catalog Number:
22309-1-AP

Size:
400 μg/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_007375

GeneID (NCBI):
23435

UNIPROT ID:
Q13148

Full Name:
TAR DNA binding protein

Calculated MW:
43 kDa

Observed MW:
40-50 kDa, 25-35 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB, IP, IF, IHC

Species Specificity:
human, mouse

Cited Species:
human, rat, mouse, monkey

Positive Controls:

WB : Calyculin A treated HeLa cells,

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).22309-1-AP is a rabbit polyclonal antibody recognizing TDP-43 only when phosphorylated at 409/410. Immunohistochemical analyses using this antibody only stain the insoluble inclusions in pathologic tissues without normal diffuse nuclear staining.

Notable Publications

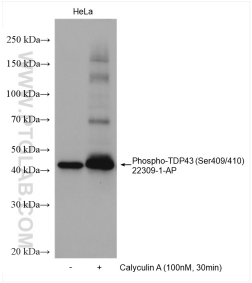
Author	Pubmed ID	Journal	Application
Nikita Fernandes	32992901	Biomolecules	IF
Janice S W Ng	31529970	Biochemistry	IF
Ching-Chieh Chou	26130692	Hum Mol Genet	WB,IF

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



Non-treated and Calyculin A treated HeLa cellls were subjected to SDS PAGE followed by western blot with 22309-1-AP (Phospho-TDP43 (Ser409/410) antibody) at dilution of 1:1000 incubated at room temperature for 1 hours.