For Research Use Only

Biotin-conjugated TDP-43 Polyclonal antibody



Catalog Number:Biotin-10782

Featured Product

Basic Information

Catalog Number: GenBank Accession Number:
Biotin-10782 BC001487
Size: GeneID (NCBI):
1000 µg/ml 23435
Source: UNIPROT ID:

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Rabbit Q13148
Isotype: Full Name:

IgG TAR DNA binding protein

Calculated MW: 43 kDa Observed MW: 44 kDa Purification Method: Antigen affinity purification Recommended Dilutions: IHC 1:250-1:1000

Applications

Tested Applications:

IHC

Species Specificity:

human, mouse, rat, zebrafish

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls:

IHC: mouse brain tissue, human gliomas tissue

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). Proteintech's 10782-2-AP antibody is a rabbit polyclonal antibody recognizing N-terminal TDP-43. It recognizes the intact 43 kDa protein as well as all posttranslationally modified and truncated forms in multiple applications. 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. (17023659, 19823856, 21666678, 22193176) Recently TDP-43 has been reported to be overexpressed in triple negative breast cancer (TNBC) and it may be a potential target for TNBC diagnosis and drug design. (29581274)

Storage

Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using Biotin-10782 (TDP-43 antibody) at dilution of 1:500 (under 4x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).