

Datasheet for 600-401-FB4**TDP43 Antibody****Overview**

Description:	Anti-TDP43 (RABBIT) Antibody - 600-401-FB4
Item No.:	600-401-FB4
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	TDP43 was initially identified as a novel cellular protein that bound to HIV-1 virus TAR DNA sequence motifs and acts as a transcriptional repressor to the HIV-1 LTR. Later experiments revealed that TDP43 also regulates the splicing of exon 9 of the cystic fibrosis transmembrane conductance regulator (CFTR), most likely through the association with the UG repeats at the 3'splice site. A hyperphosphorylated, ubiquitinated, and cleaved form of TDP43 known as pathologic TDP43 is the major disease protein in ubiquitin-positive, tau-, and alpha-synuclein-negative frontotemporal dementia (FTLD-U). TDP43 is not related to TRBP1, and RNA binding protein that binds HIV-1 TAR RNA sequences.
Synonyms:	TDP43 Antibody, ALS10, TDP-43, TDP43, TAR DNA-binding protein 43
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TARDBP
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-TDP43 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide from near the C-terminus of human TDP43.

Purity/Specificity: Anti-TDP43 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. At least two isoforms are known to exist for this protein; this TDP43 antibody will recognize both isoforms.

Relevant Links:

- [UniProtKB - Q13148](#)
- [GeneID - 23435](#)
- [NCBI - NP_031401.1](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-TDP43 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 45 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:5000-1:20,000

IF: 20 µg/mL

WB: 0.5-2 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

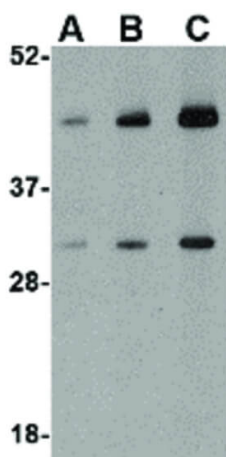
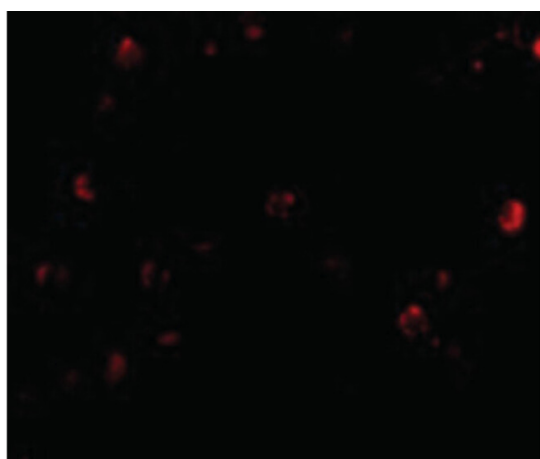
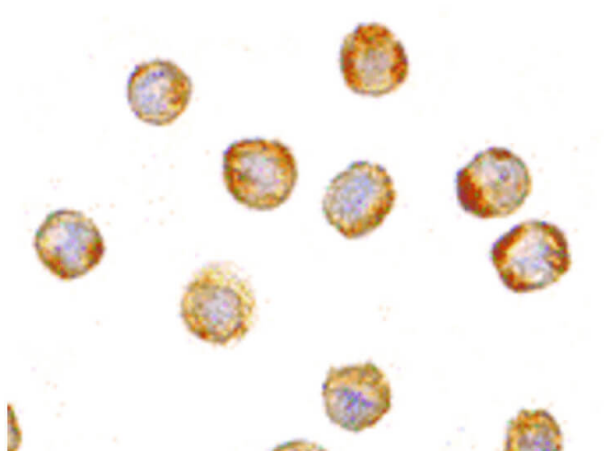
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunocytochemistry

Immunocytochemistry of TDP43 antibody. Tissue: HeLa cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: TDP43 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: TDP43 is nuclear and cytoplasmic. Staining: TDP43 as a precipitated brown signal with hematoxylin purple counterstain.

Immunofluorescence Microscopy

Immunofluorescence Microscopy of TDP43 antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: TDP43 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: TDP43 as a red fluorescent signal.

Western Blot

Western Blot of TDP43 antibody. Lane 1: HeLa cell lysate at 0.5 µg/mL. Lane 2: HeLa cell lysate at 1 µg/mL.

Lane 3: HeLa cell lysate at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 23.1 kDa, ~31 & 48 kDa for TDP43.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.