

Datasheet for 600-401-E43**TDP43 Antibody****Overview**

Description:	Anti-TDP43 (RABBIT) Antibody - 600-401-E43
Item No.:	600-401-E43
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Human, Rat
Host Species:	Rabbit

Product Details

Background: TDP43 antibody detects TDP43 protein (Tar DNA Binding 43, TARDBP). TDP43 was originally identified as a protein that binds to the "transactivation response" (TAR) sequence found in the long terminal repeat of the HIV-1 virus genome. UV cross-linking of HeLa cell extract revealed a 43kDa protein which was cloned and sequenced and shown to contain two copies of the ~90 amino acid RRM domain. RRM is an acronym for RNA Recognition Motif, and this domain is found in many proteins which bind single stranded RNA and some which bind single stranded DNA. Northern blots showed that the protein is ubiquitous in tissue expression. Much interest has been focused on TDP43 recently due to its association with the inclusions seen in frontotemporal lobar degeneration and Amyotrophic Lateral Sclerosis. The protein is present in these inclusions in partially degraded, hyperphosphorylated and ubiquitinated forms. Anti-TDP43 Antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.

Synonyms:	TAR DNA-binding protein 43
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TARDBP
Reactivity:	Human, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-TDP43 Antibody was produced in rabbit by repeated immunizations with synthetic peptide corresponding to amino acid residues C-terminal to the caspase-cleavage site (between D219 and V220) of the TAR DNA-binding protein 43.
Purity/Specificity:	Anti-TDP43 antibody is directed against human TDP43. TDP43 antibodies are affinity purified from monospecific antiserum by immunoaffinity purification.
Relevant Links:	• UniProtKB - Q13148 • GenelD - 23435

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-TDP43 (Rabbit) antibody is tested for use in Western Blotting and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 43 kDa in size corresponding to the TDP43 protein in Western Blots of rat brain lysate. Molecular weight is dependent upon the TDP43 species present in the sample; full-length or truncated TDP43. Under non-denaturing conditions (for example, by IHC), this antibody detects TDP-43 inclusions in human brain tissue with TDP-43 proteinopathy, but does not detect full-length nuclear TDP-43. Under denaturing conditions (for example, by Western Blot analysis) this antibody detects the C-terminus of full-length and truncated human TDP-43. Researchers should determine optimal titers for applications that are not stated below.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:250
WB:	1:1000

Formulation

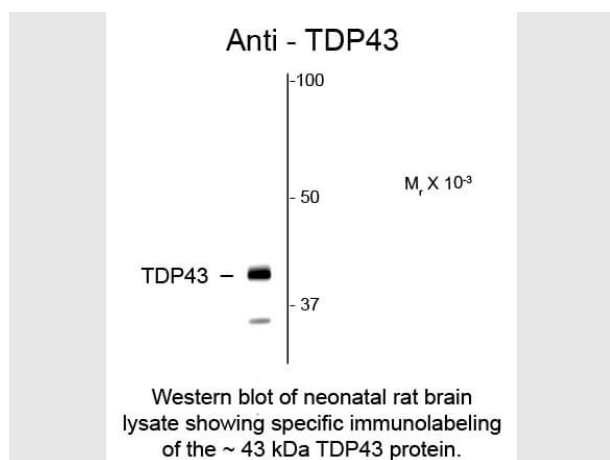
Physical State:	Liquid
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer:	30% Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Rabbit anti-TDP43 antibody. Lane 1: Rat Brain Lysate. Lane 2: None. Load: 10 µg per lane. Primary antibody: TDP43 antibody at 1:1,000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 43 kDa for TDP43. Other band(s): TDP43 splice variants and isoforms.

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.