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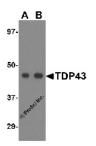
## HIGH PERFORMANCE ANTIBODIES ... AND MORE

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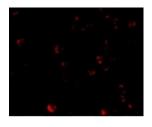
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## **TDP43 Antibody**

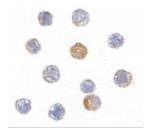
CATALOG NUMBER: 4285



Western blot analysis of TDP43 in L1210 cell lysate with TDP43 antibody at (A) 0.5 and (B) 1  $\mu$ mL.



Immunofluorescence of TDP43 in Hela cells with TDP43 antibody at 20 ug/mL.



Immunocytochemistry of TDP43 in HeLa cells with TDP43 antibody at 5 ug/mL.

Specifications	
SPECIES REACTIVITY:	Human, Mouse, Rat
HOMOLOGY:	Predicted species reactivity based on immunogen sequence: Chicken: (94%)
TESTED APPLICATIONS:	ELISA, ICC, IF, WB
APPLICATIONS:	TDP43 antibody can be used for detection of TDP43 by Western blot at 0.5 - 1 ug/mL. Antibody can also be used for immunocytochemistry starting at 5 ug/mL. For immunofluorescence start at 20 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1284 - L1210 Cell Lysate
PREDICTED MOLECULAR WEIGHT:	Predicted: 46 kDa
	Observed: 46 kDa
SPECIFICITY:	At least two isoforms are known to exist for this protein; this TDP43 antibody only recongizes the longer of the two isoforms.
IMMUNOGEN:	TDP43 antibody was raised against a 18 amino acid synthetic peptide from near the center of human TDP43.
	The immunogen is located within amino acids 160 - 210 of TDP43.
HOST SPECIES:	Rabbit
Properties	
PURIFICATION:	TDP43 Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	TDP43 Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	TDP43 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
CLONALITY:	Polyclonal
ISOTYPE:	IgG

CONJUGATE:	Unconjugated
Additional Info	
ALTERNATE NAMES:	TDP43 Antibody: ALS10, TDP-43, TDP43, TAR DNA-binding protein 43
ACCESSION NO.:	ABO32290
PROTEIN GI NO.:	130750552
OFFICIAL SYMBOL:	TARDBP
GENE ID:	23435
Background	
BACKGROUND:	TDP43 Antibody: TDP43 was initially identified as a novel cellular protein that bound to HIV-1 virus TAR DNA sequence motifs and acts 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 regular (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 (FLTD-U). TDP43 is not related to TRBP1, and RNA binding protein that binds HIV-1 TAR RNA sequences.
REFERENCES:	1) Ou SH, Wu F, Garcia-Martinez LF, et al. Cloning and characterization of a novel cellular protein, TDP-43, that binds to human immunodeficiency virus type 1 TAR DNA sequence motifs. J. Virol.1995; 69:3584-96.
	2) Buratti E, Dork T, Zuccato E, et al. Nuclear factor TDP-43 and SR proteins promote in vitro and in vivo CFTR exon 9 skipping. EMBO J.2001; 20:1774-84.
	3) Neumann M, Sampathu DM, Kwong LK, et al. Ubiquitinated TDP-43 in frontotemporal lobar degeneration and amyotrophic lateral sclerosis. Science2006; 314:42-3.

## FOR RESEARCH USE ONLY

December 13, 2016