

## Basic Information

<b>Product Name</b>	Anti-TDP-43/TARDBP Antibody	
<b>Gene Name</b>	TARDBP	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, IP, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human TDP-43/TARDBP recombinant protein (Position: M1-H264).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	45 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	ImmunoPrecipitation (IP):	1:250-300
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

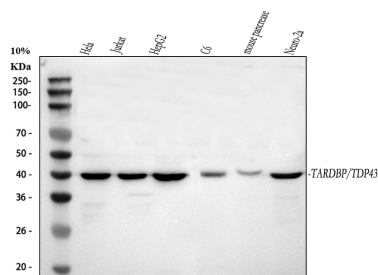
12 months from date of receipt, -20°C as supplied.

## Background Information

HIV-1, the causative agent of acquired immunodeficiency syndrome (AIDS), contains an RNA genome that produces a chromosomally integrated DNA during the replicative cycle. Activation of HIV-1 gene expression by the transactivator Tat is dependent on an RNA regulatory element (TAR) located downstream of the transcription initiation site. The protein encoded by this gene is a transcriptional repressor that binds to chromosomally integrated TAR DNA and represses HIV-1 transcription. In addition, this protein regulates alternate splicing of the CFTR gene. A similar

pseudogene is present on chromosome 20.

## Selected Validation Data



Western blot analysis of TDP-43/TARDBP using anti-TDP-43/TARDBP antibody (A01001-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human Jurkat whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

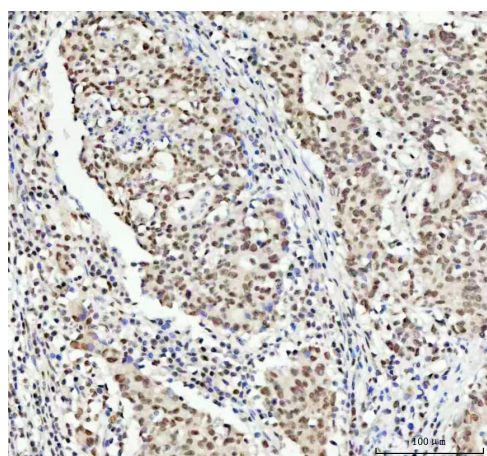
Lane 4: rat C6 whole cell lysates,

Lane 5: mouse pancreas lysates,

Lane 6: mouse Neuro-2a whole cell lysates.

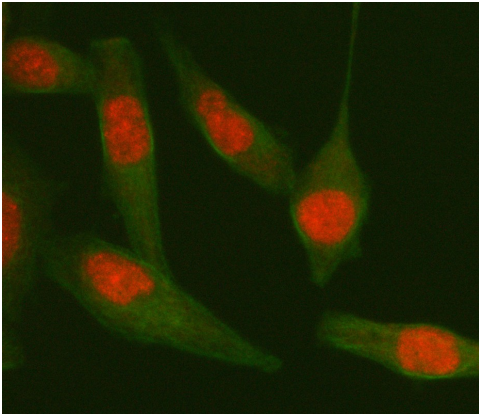
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-TDP-43/TARDBP antigen affinity purified polyclonal antibody (A01001-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TDP-43/TARDBP at approximately 43 kDa. The expected band size for TDP-43/TARDBP is at 45 kDa.

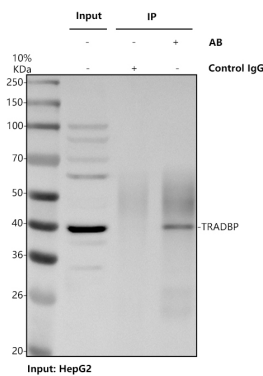


IHC analysis of TDP-43/TARDBP using anti-TDP-43/TARDBP antibody (A01001-3) .

TDP-43/TARDBP was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. The tissue section was incubated with rabbit anti-TDP-43/TARDBP Antibody (A01001-3) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of TDP-43/TARDBP using anti-TDP-43/TARDBP antibody (A01001-3) and anti-Beta Tubulin antibody (M01857-3). TDP-43/TARDBP was detected in an immunocytochemical section of HeLa cells. The section was incubated with rabbit anti-TDP-43/TARDBP Antibody (A01001-3) at a dilution of 1:100. Cy3-Conjugated Anti-rabbit IgG Secondary Antibody (Red) (Catalog # BA1032) and Fluoro488-conjugated Anti-mouse IgG Secondary Antibody (Green) (Catalog # BA1126) were used as secondary antibody.



IP analysis of TDP-43/TARDBP using anti-TDP-43/TARDBP antibody (A01001-3) in HepG2 whole cell lysate.

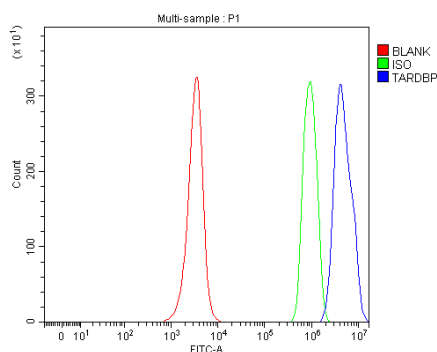
Western blot analysis of TDP-43/TARDBP using anti-TDP-43/TARDBP antibody (A01001-3).

Lane 1: HepG2 whole cell lysates(30ug),

Lane 2: Rabbit control IgG instead of anti-TDP-43/TARDBP antibody in HepG2 whole cell lysate,

Lane 3: anti-TDP-43/TARDBP antibody (2μg) + HepG2 whole cell lysate (500μg).

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-TDP-43/TARDBP antigen affinity purified polyclonal antibody (A01001-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TDP-43/TARDBP at approximately 40 kDa. The expected band size for TDP-43/TARDBP is at 40 kDa.



Flow Cytometry analysis of Jurkat cells using anti-TDP-43/TARDBP antibody (A01001-3).

Overlay histogram showing Jurkat cells stained with A01001-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TDP-43/TARDBP Antibody (A01001-3, 1:100). Fluoro488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.