


Product datasheet

Anti-TDP1 antibody ab4166

★★★★★ [6 Abreviews](#) [26 References](#) [2 Images](#)

Overview

Product name	Anti-TDP1 antibody
Description	Rabbit polyclonal to TDP1
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human, Recombinant fragment Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: PBS</p> <p>Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.</p>
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab4166 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (3)	Use a concentration of 1 µg/ml. Detects a band of approximately 75 kDa (predicted molecular weight: 68 kDa). Abcam recommends blocking with 1-3% Milk.

Target

Function

DNA repair enzyme that can remove a variety of covalent adducts from DNA through hydrolysis of a 3'-phosphodiester bond, giving rise to DNA with a free 3' phosphate. Catalyzes the hydrolysis of dead-end complexes between DNA and the topoisomerase I active site tyrosine residue. Hydrolyzes 3'-phosphoglycolates on protruding 3' ends on DNA double-strand breaks due to DNA damage by radiation and free radicals. Acts on blunt-ended double-strand DNA breaks and on single-stranded DNA. Has low 3'exonuclease activity and can remove a single nucleoside from the 3'end of DNA and RNA molecules with 3'hydroxyl groups. Has no exonuclease activity towards DNA or RNA with a 3'phosphate.

Tissue specificity

Ubiquitously expressed. Similar expression throughout the central nervous system (whole brain, amygdala, caudate nucleus, cerebellum, cerebral cortex, frontal lobe, hippocampus, medulla oblongata, occipital lobe, putamen, substantia nigra, temporal lobe, thalamus, nucleus accumbens and spinal cord) and increased expression in testis and thymus.

Involvement in disease

Spinocerebellar ataxia, autosomal recessive, with axonal neuropathy

Sequence similarities

Belongs to the tyrosyl-DNA phosphodiesterase family.

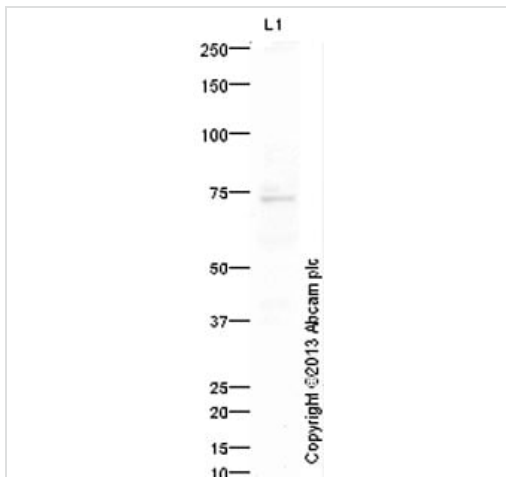
Post-translational modifications

Phosphorylated on serine and/or threonine residues, but not on tyrosine residues.

Cellular localization

Nucleus. Cytoplasm.

Images



Western blot - Anti-TDP1 antibody (ab4166)

Anti-TDP1 antibody (ab4166) at 1 µg/ml (blocked with 3% milk) + Jurkat nuclear extract lysate (**ab14844**) at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

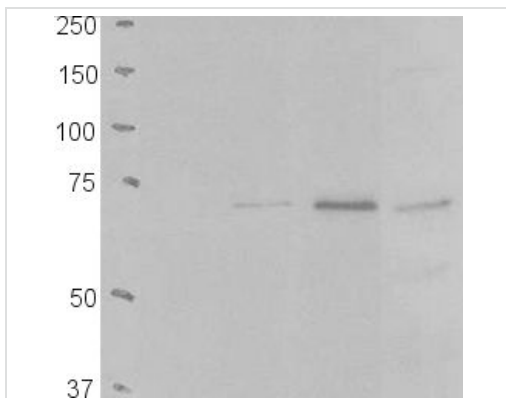
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 68 kDa

Observed band size: 75 kDa

Exposure time: 4 minutes



Western blot - Anti-TDP1 antibody (ab4166)

This image is courtesy of Keith Caldecott, University of Sussex

Lane 1 : Molecular weight markers

Lanes 2-5 : Anti-TDP1 antibody (ab4166) at 1/1000 dilution

Lane 2 : 1 ng purified recombinant human TDP1

Lane 3 : 3 ng purified recombinant human TDP1

Lane 4 : 6 ng purified recombinant human TDP1

Lane 5 : 6 micrograms total protein from MCF7 human cell extract

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 68 kDa

Observed band size: 68 kDa

ab4166 was incubated for 1 hr at room temp.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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