


Anti-DNA Polymerase beta antibody ab26343

★★★★★ [8 Abreviews](#) [42 References](#) [5 Images](#)

Overview

Product name	Anti-DNA Polymerase beta antibody
Description	Rabbit polyclonal to DNA Polymerase beta
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Chicken, Dog, Xenopus laevis 
Immunogen	Synthetic peptide corresponding to Human DNA Polymerase beta aa 300 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin.
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 ab26343 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	★★★★★ (5)	Use a concentration of 0.5 - 2 µg/ml. Detects a band of approximately 38 kDa (predicted molecular weight: 38 kDa).
ICC/IF		Use a concentration of 1 µg/ml.
IHC-P	★★★★★ (1)	1/150. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Target

Function

Repair polymerase. Conducts "gap-filling" DNA synthesis in a stepwise distributive fashion rather than in a processive fashion as for other DNA polymerases. Has a 5'-deoxyribose-5-phosphate lyase (dRP lyase) activity.

Sequence similarities

Belongs to the DNA polymerase type-X family.

Domain

Residues 239-252 form a flexible loop which appears to affect the polymerase fidelity.

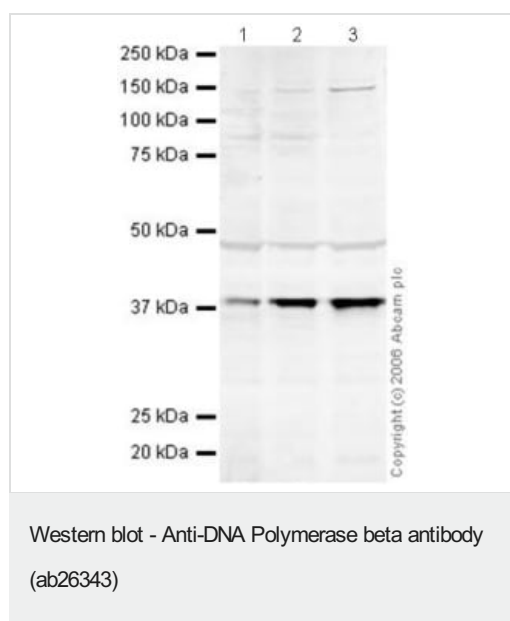
Post-translational modifications

Methylation by PRMT6 stimulates the polymerase activity by enhancing DNA binding and processivity.

Cellular localization

Nucleus, Cytoplasm

Images



All lanes : Anti-DNA Polymerase beta antibody (ab26343) at 0.5 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : Jurkat whole cell lysate ([ab7899](#))

Lane 3 : A-431 whole cell lysate ([ab7909](#))

Lysates/proteins at 20 µg per lane.

Secondary

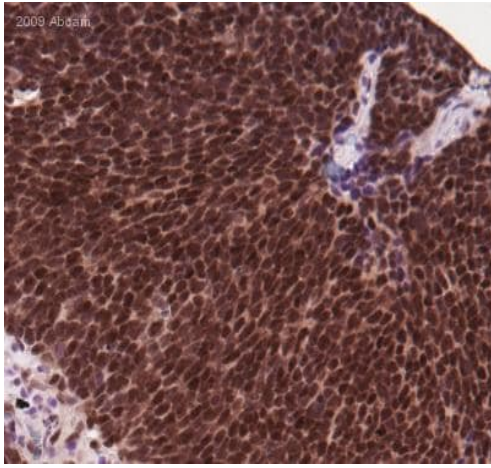
All lanes : Goat polyclonal to Rabbit IgG (Alexa Fluor® 680) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 38 kDa

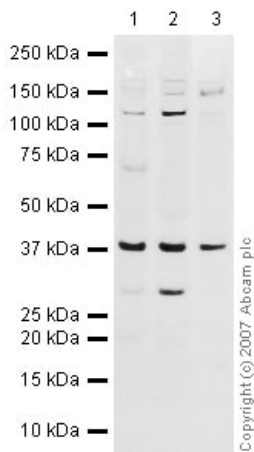
Observed band size: 38 kDa

Additional bands at: 150 kDa (possible cross reactivity), 48 kDa (possible cross reactivity), 90 kDa (possible cross reactivity)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DNA Polymerase beta antibody (ab26343)

Formaldehyde-fixed human small cell lung cancer tissue stained for DNA Polymerase beta using ab26343 at 1/200 dilution in immunohistochemical analysis.



Western blot - Anti-DNA Polymerase beta antibody (ab26343)

All lanes : Anti-DNA Polymerase beta antibody (ab26343) at 1 µg/ml

Lane 1 : NIH/3T3 whole cell lysate ([ab7179](#))

Lane 2 : MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

Lane 3 : PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

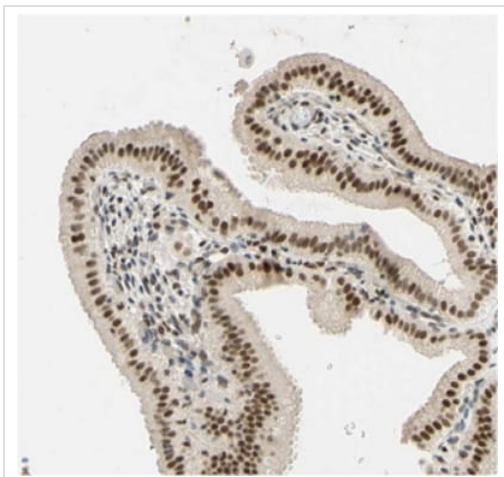
All lanes : IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 38 kDa

Observed band size: 38 kDa

Additional bands at: 120 kDa (possible cross reactivity), 30 kDa (possible cross reactivity)



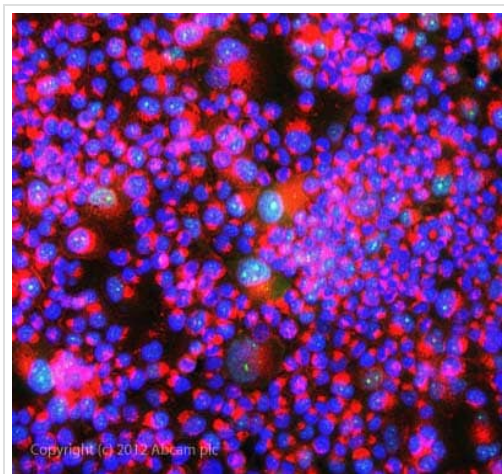
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DNA Polymerase beta antibody (ab26343)

Image courtesy of Human Protein Atlas

Image courtesy of **Human Protein Atlas** ab26343 staining DNA polymerase beta in Human gall bladder, showing a strong nuclear staining pattern in the columnar epithelial cells in contrast with the cells in the lamina propria. Paraffin embedded human gall bladder tissue was incubated with ab26343 (1/150 dilution) for 30 mins at room temperature. Antigen retrieval was performed by heat induction in citrate buffer pH 6.

ab26343 was tested in a tissue microarray (TMA) containing a wide range of normal and cancer tissues as well as a cell microarray consisting of a range of commonly used, well characterised human cell lines. Further results for this antibody can be found at

www.proteinatlas.org



Immunocytochemistry/ Immunofluorescence - Anti-DNA Polymerase beta antibody (ab26343)

ICC/IF image of ab26343 stained T47D cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab26343 at 1µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (**ab96899**) IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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

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