


Product datasheet

Anti-DNA polymerase mu antibody [EPR10470(B)]  
ab157465

**KO VALIDATED** Recombinant RabMAB

2 References 4 Images

Overview

<b>Product name</b>	Anti-DNA polymerase mu antibody [EPR10470(B)]
<b>Description</b>	Rabbit monoclonal [EPR10470(B)] to DNA polymerase mu
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> Flow Cyt, ICC or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: 293T, HeLa, Daudi and Jurkat cell lysates. IP: Jurkat cell lysate.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAB <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a> .

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal

Clone number EPR10470(B)  
Isotype IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab157465 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		1/1000 - 1/5000. Predicted molecular weight: 55 kDa.

**Application notes** Is unsuitable for Flow Cyt, ICC or IHC-P.

## Target

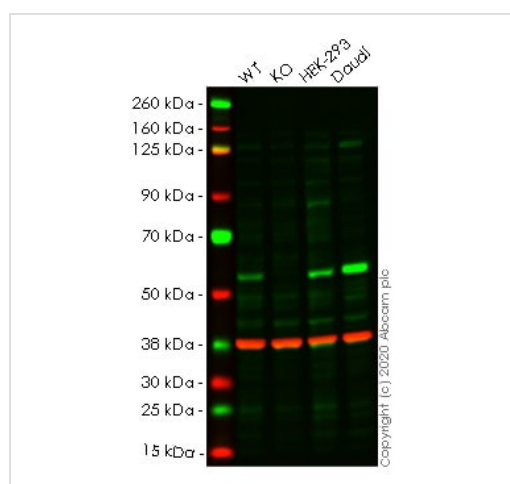
**Function** Gap-filling polymerase involved in repair of DNA double-strand breaks by non-homologous end joining (NHEJ). Participates in immunoglobulin (Ig) light chain gene rearrangement in V(D)J recombination.

**Tissue specificity** Expressed in a number of tissues. Abundant in thymus.

**Sequence similarities** Belongs to the DNA polymerase type-X family.  
Contains 1 BRCT domain.

**Cellular localization** Nucleus.

## Images



Western blot - Anti-DNA polymerase mu antibody [EPR10470(B)] (ab157465)

**All lanes :** Anti-DNA polymerase mu antibody [EPR10470(B)] (ab157465) at 1/1000 dilution

**Lane 1 :** Wild-type HeLa cell lysate

**Lane 2 :** POLM knockout HeLa cell lysate

**Lane 3 :** HEK-293 cell lysate

**Lane 4 :** Daudi cell lysate

Lysates/proteins at 20 µg per lane.

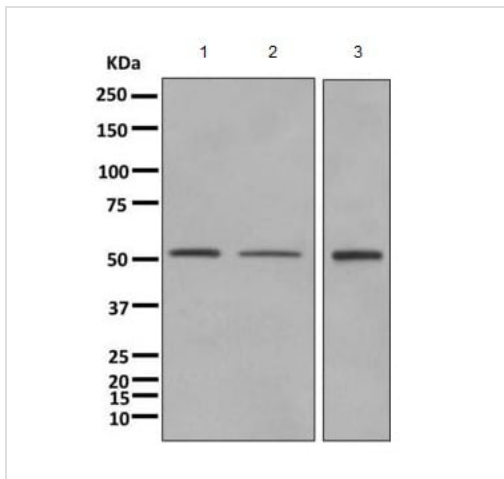
Performed under reducing conditions.

**Predicted band size:** 55 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab157465 observed at 52 kDa. Red - loading control [ab8245](#) observed at 37

kDa.

ab157465 Anti-DNA polymerase mu antibody [EPR10470(B)] was shown to specifically react with POLM in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265557](#) (knockout cell lysate [ab258127](#)) was used. Wild-type and POLM knockout samples were subjected to SDS-PAGE. ab157465 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-DNA polymerase mu antibody [EPR10470(B)] (ab157465)

**All lanes :** Anti-DNA polymerase mu antibody [EPR10470(B)] (ab157465) at 1/1000 dilution

**Lane 1 :** 293T cell lysate

**Lane 2 :** HeLa cell lysate

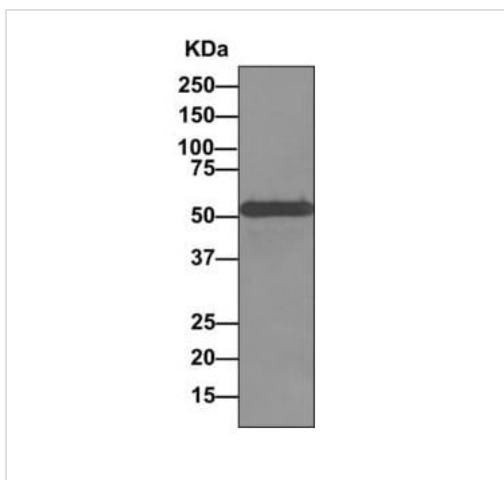
**Lane 3 :** Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 55 kDa



Western blot - Anti-DNA polymerase mu antibody [EPR10470(B)] (ab157465)

Anti-DNA polymerase mu antibody [EPR10470(B)] (ab157465) at 1/1000 dilution + immunoprecipitation pellet from Jurkat cell lysate at 10 µg

#### Secondary

HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 55 kDa

## Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-DNA polymerase mu antibody [EPR10470(B)]  
(ab157465)

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

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