

## Product datasheet

# Anti-DNA Polymerase Kappa/POLK antibody ab57070

2 References 5 图像

### 概述

<b>产品名称</b>	Anti-DNA Polymerase Kappa/POLK抗体
<b>描述</b>	小鼠单克隆抗体to DNA Polymerase Kappa/POLK
<b>宿主</b>	Mouse
<b>经测试应用</b>	<b>适用于:</b> WB, IHC-P, Sandwich ELISA, ICC/IF
<b>种属反应性</b>	<b>与反应:</b> Human
<b>免疫原</b>	Recombinant full length protein (proprietary-tag) corresponding to Human DNA Polymerase Kappa/POLK aa 1-472.

Sequence:

```

MDSTKEKCDSYKDDLLLRMGLNDNKAGMEGLDKEKINKII
MEATKGSRFY
GNELKKEKQVNQRIENMMQKQAQITSQQLRKAQLQVDRFA
MELEQSRNLS
NTIVHIDMDAFYAAVEMRDNPDKPIAVGSMMLSTSN
YHARRFGVRA
AMPGFIAKRLCPQLIIVPPNFDKYRAVSKEVKEILADYDP
NFMAMSLDEA
YLNITKHLEERQNWPEDKRRYFIKMGSSVENDNPGKEVKN
LSEHERSISP
LLFEESPSDVQPPGDPFQVNFEEQNNPQILQNSVVFGTSA
QEVVKEIRFR
IEQKTTLTASAGIAPNTMLAKVCSKDKNKPNGQYQILPNRQ
AVMDFIKDLP
IRKVSIGIGKVTEKMLKALGIITCTELYQQRALLSLLFSET
SWHYFLHISL
GLGSTHLTRDGERKSMSVERTFSEINKAEEQYSLCQELCS
ELAQLQKER LKVLVYFDMVSLVFKFFNSKMLP
    
```

Database link: [AAH50718](#)

[Run BLAST with](#)

[Run BLAST with](#)

### 常规说明

Abcam is committed to meeting high standards of ethical manufacturing and has decided to discontinue this product by June 2019 as it has been generated by the ascites method. We are sorry for any inconvenience this may cause. We would recommend antibody [ab115625](#) as a replacement.

## 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	Preservative: None PBS, pH 7.2
纯度	Protein G purified
克隆	单克隆
同种型	IgG1
轻链类型	kappa

## 应用

Our [Abpromise guarantee](#) covers the use of **ab57070** in the following tested applications.

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

应用	Ab评论	说明
WB		Use a concentration of 1 - 5 µg/ml. Predicted molecular weight: 99 kDa.
IHC-P		Use a concentration of 3 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Sandwich ELISA		Use at an assay dependent concentration. Detection limit for recombinant tagged DNA Polymerase Kappa/POLK is approximately 0.3 ng/ml as a capture antibody
ICC/IF		Use a concentration of 10 µg/ml.

## 靶标

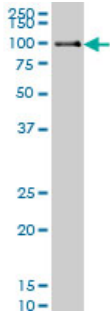
功能	DNA polymerase specifically involved in DNA repair. Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases cannot proceed and DNA synthesis stalls. Depending on the context, it inserts the correct base, but causes frequent base transitions, transversions and frameshifts. Lacks 3'-5' proofreading exonuclease activity. Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but does not have lyase activity.
组织特异性	Detected at low levels in testis, spleen, prostate and ovary. Detected at very low levels in kidney, colon, brain, heart, liver, lung, placenta, pancreas and peripheral blood leukocytes.
序列相似性	Belongs to the DNA polymerase type-Y family. Contains 2 UBZ-type zinc fingers. Contains 1 umuC domain.
结构域	The catalytic core consists of fingers, palm and thumb subdomains, but the fingers and thumb subdomains are much smaller than in high-fidelity polymerases; residues from five sequence motifs of the Y-family cluster around an active site cleft that can accommodate DNA and nucleotide substrates with relaxed geometric constraints, with consequently higher rates of

misincorporation and low processivity.

## 细胞定位

Nucleus. Detected throughout the nucleus and at replication foci.

## 图片



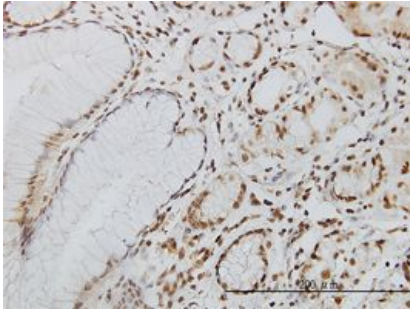
Western blot - Anti-DNA Polymerase Kappa/POLK antibody (ab57070)

Anti-DNA Polymerase Kappa/POLK antibody (ab57070) at 1  $\mu\text{g}$  +  
HeLa nuclear lysate at 25  $\mu\text{g}$

### Secondary

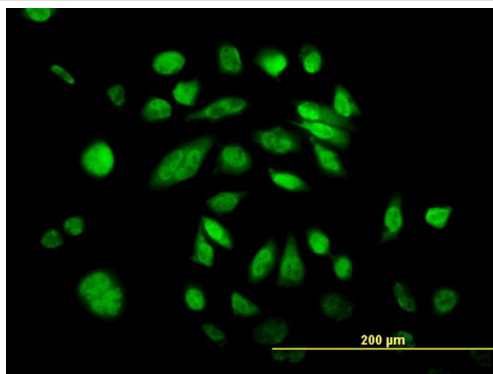
Goat Anti-Mouse IgG at 1/5000 dilution

**Predicted band size:** 99 kDa



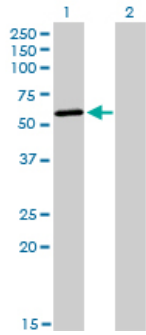
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DNA Polymerase Kappa/POLK antibody (ab57070)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human stomach tissue, staining DNA Polymerase Kappa/POLK with ab57070 at 3  $\mu\text{g}/\text{ml}$ .



Immunocytochemistry/ Immunofluorescence - Anti-DNA Polymerase Kappa/POLK antibody (ab57070)

Immunofluorescence of HeLa cells, staining DNA Polymerase Kappa/POLK with ab57070 at 10  $\mu\text{g}/\text{ml}$ .



Western blot - Anti-DNA Polymerase Kappa/POLK antibody (ab57070)

**All lanes** : Anti-DNA Polymerase Kappa/POLK antibody (ab57070) at 5 µg/ml

**Lane 1** : DNA Polymerase Kappa/POLK-transfected 293T cell lysate

**Lane 2** : Non-transfected 293T cell lysate

Lysates/proteins at 15 µl per lane.

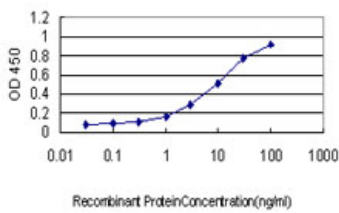
**Secondary**

**All lanes** : Goat Anti-Mouse IgG

Developed using the ECL technique.

**Predicted band size:** 99 kDa

**Additional bands at:** 54.1 kDa (possible isoform)



Sandwich ELISA - Anti-DNA Polymerase Kappa/POLK antibody (ab57070)

Detection limit for recombinant tagged DNA Polymerase Kappa/POLK is approximately 0.3 ng/mL as a capture antibody

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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