


## Product datasheet

### Anti-PCNA antibody [EPR3822] $\alpha$ b92729

Recombinant RabMAb

[8 References](#) [4 Images](#)

#### Overview

Product name	Anti-PCNA antibody [EPR3822]
Description	Rabbit monoclonal [EPR3822] to PCNA
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> ICC/IF or IP
Species reactivity	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse 
Immunogen	Synthetic peptide within Human PCNA aa 200-300 (C terminal). The exact sequence is proprietary.
Positive control	HeLa, HepG2 and 293T cell lysates; Human colonic adenocarcinoma tissue; Human tonsil tissue
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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> <p>For more information <a href="#">see here</a>.</p> <p>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>.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant

<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3822
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab92729 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		
IHC-P		

## Application notes

Flow Cyt: 1/10.

IHC-P: 1/50 - 1/100. Antigen retrieval is recommended before commencing with IHC staining protocol. The use of an HRP/AP polymerized secondary antibody is recommended.

WB: 1/1000 - 1/5000. Predicted molecular weight: 29 kDa.

Is unsuitable for ICC or IP.

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

## Target

### Function

This protein is an auxiliary protein of DNA polymerase delta and is involved in the control of eukaryotic DNA replication by increasing the polymerase's processibility during elongation of the leading strand. Induces a robust stimulatory effect on the 3'-5' exonuclease and 3'-phosphodiesterase, but not apurinic-apyrimidinic (AP) endonuclease, APEX2 activities. Has to be loaded onto DNA in order to be able to stimulate APEX2.

### Sequence similarities

Belongs to the PCNA family.

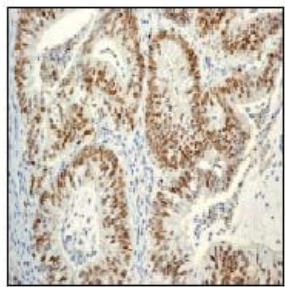
### Post-translational modifications

Upon methyl methanesulfonate-induced DNA damage, mono-ubiquitinated by the UBE2B-RAD18 complex on Lys-164. This induces non-canonical polyubiquitination on Lys-164 through 'Lys-63' linkage of ubiquitin moieties by the E2 complex UBE2N-UBE2V2 and the E3 ligases, HLTF, RNF8 and SHPRH, which is required for DNA repair. 'Lys-63' polyubiquitination prevents genomic instability on DNA damage. Monoubiquitination at Lys-164 also takes place in undamaged proliferating cells, and is mediated by the DCX(DTL) complex, leading to enhance PCNA-dependent translesion DNA synthesis.

Acetylated in response to UV irradiation. Acetylation disrupts interaction with NUDT15 and promotes degradation.

### Cellular localization

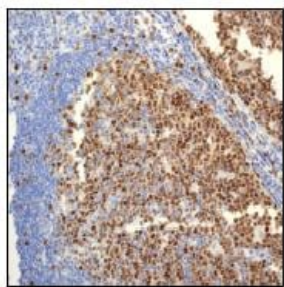
Nucleus. Forms nuclear foci representing sites of ongoing DNA replication and vary in morphology and number during S phase. Together with APEX2, is redistributed in discrete nuclear foci in presence of oxidative DNA damaging agents.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCNA antibody [EPR3822] (ab92729)

ab92729, at 1/50 dilution, staining PCNA in paraffin embedded Human colonic adenocarcinoma tissue by Immunohistochemistry.

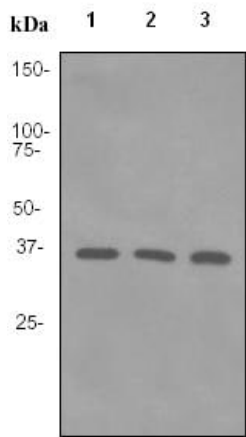
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCNA antibody [EPR3822] (ab92729)

ab92729, at 1/50 dilution, staining PCNA in paraffin embedded Human tonsil tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-PCNA antibody [EPR3822] (ab92729)

**All lanes** : Anti-PCNA antibody [EPR3822] (ab92729) at 1/1000 dilution

- Lane 1** : HeLa cell lysate
- Lane 2** : HepG2 cell lysate
- Lane 3** : 293T cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

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

**Predicted band size:** 29 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-PCNA antibody [EPR3822] (ab92729)

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

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