abcam

## Product datasheet

# Anti-PCNA antibody - Nuclear Loading Control ab139696

★★★★★ 2 Abreviews 1 Image

### Overview

| | |
|---|---|
| **Product name** | Anti-PCNA antibody - Nuclear Loading Control |
| **Description** | Chicken polyclonal to PCNA - Nuclear Loading Control |
| **Host species** | Chicken |
| **Tested applications** | **Suitable for:** WB |
| **Species reactivity** | **Reacts with:** Human<br>**Predicted to work with:** Mouse, Rat, Horse, Guinea pig, Cow, Macaque monkey, Chinese hamster |
| **Immunogen** | Synthetic peptide within Human PCNA aa 200-300 (C terminal) conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary.<br>(Peptide available as ab139977) |
| **General notes** | Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.<br>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.<br>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.<br>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.<br>We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.<br>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.<br>Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As. |

### Properties

## Properties

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|---|---|
| **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** | pH: 7.40<br>Preservative: 0.02% Sodium azide<br>Constituents: PBS, 3% BSA<br><br>This product may contain up to 3% BSA depending on the batch. For specific batch formulations please contact us. |
| **Purity** | Immunogen affinity purified |
| **Clonality** | Polyclonal |
| **Isotype** | IgY |

## Applications

Our Abpromise guarantee covers the use of **ab139696** in the following tested applications.

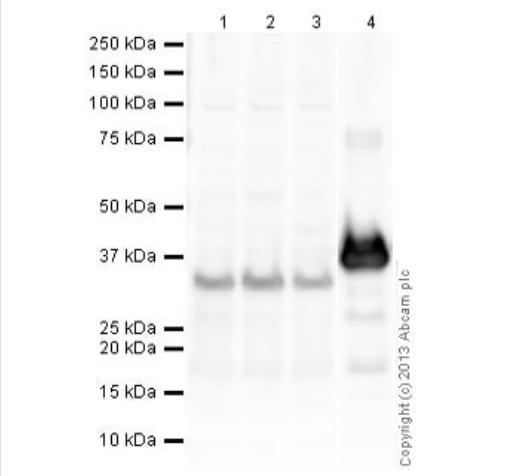
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|---|---|---|
| WB | | Use a concentration of 1 µg/ml. Detects a band of approximately 29 kDa (predicted molecular weight: 29 kDa). |

## 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.<br>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. |

## Images




Western blot - Anti-PCNA antibody - Nuclear Loading Control (ab139696)

**All lanes :** Anti-PCNA antibody - Nuclear Loading Control (ab139696) at 1 µg/ml

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate at 20 µg
**Lane 2 :** HEK293 (Human embryonic kidney cell line) Whole Cell Lysate at 20 µg
**Lane 3 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate (ab27252) at 20 µg
**Lane 4 :** Recombinant Human PCNA protein (ab85651) at 0.2 µg

**Secondary**
**All lanes :** Goat Anti-Chicken IgY H&L (HRP) (ab6877) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 29 kDa
**Observed band size:** 29 kDa

**Exposure time:** 4 minutes



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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

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