

Product datasheet

Anti-PCNA antibody [BLR075G] ab265609

Recombinant

[5 References](#) [6 Images](#)

Overview

Product name	Anti-PCNA antibody [BLR075G]
Description	Rabbit monoclonal [BLR075G] to PCNA
Host species	Rabbit
Tested applications	Suitable for: ICC, IHC-P, WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human PCNA aa 225-261. The exact sequence is proprietary. NP_002583.1 Database link: P12004
Positive control	WB: A549, Jurkat, HEK-293T, RKO, K562, MCF7, HeLa and U-2 OS whole cell lysate. IHC-P: Human prostate carcinoma, ovarian carcinoma tissue, breast carcinoma. ICC: OVCAR-3 cells.
General notes	This product is sold under License from Bethyl Laboratories, Inc.

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.8 Preservative: 0.09% Sodium azide Constituents: 99% Borate buffered saline, 0.1% BSA
Purity	Affinity purified
Purification notes	Purified from TCS.
Clonality	Monoclonal
Clone number	BLR075G
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab265609 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
ICC		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with ICC staining protocol.
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000. 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-aprimidinic (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

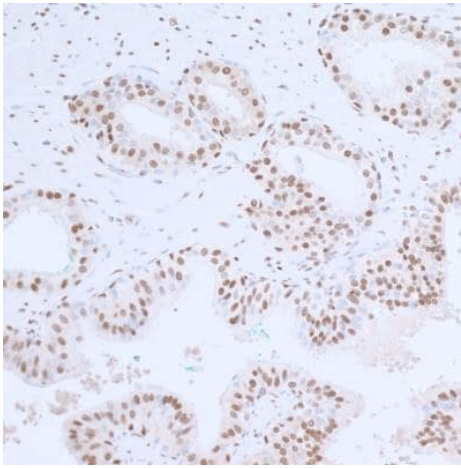
Upon methyl methanesulfonate-induced DNA damage, mono-ubiquitinated by the UBE2B-RAD18 complex on Lys-164. This induces non-canonical polyubiquitination on Lys-164 through 'Lys-63' linkage of ubiquitin moieties by the E2 complex UBE2N-UBE2V2 and the E3 ligases, HLTF, RNF8 and SHPRH, which is required 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

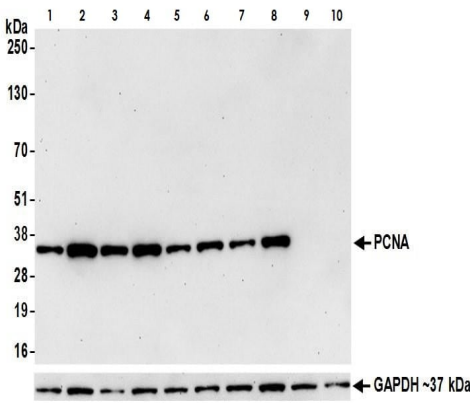
Nucleus. Forms nuclear foci representing sites of ongoing DNA replication and vary in morphology and number during S phase. Together with APEX2, is redistributed in discrete nuclear foci in presence of oxidative DNA damaging agents.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCNA antibody (ab265609)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human prostate carcinoma tissue labeling PCNA with ab265609 at 1/250 dilution. Detection: DAB.



Western blot - Anti-PCNA antibody (ab265609)

All lanes : Anti-PCNA antibody [BLR075G] (ab265609) at 1/1000 dilution

- Lane 1** : A549 whole cell lysate
- Lane 2** : Jurkat whole cell lysate
- Lane 3** : HEK-293T whole cell lysate
- Lane 4** : RKO whole cell lysate
- Lane 5** : K562 whole cell lysate
- Lane 6** : MCF7 whole cell lysate
- Lane 7** : HeLa whole cell lysate
- Lane 8** : U-2 OS whole cell lysate
- Lane 9** : TCMK whole cell lysate
- Lane 10** : NIH/3T3 whole cell lysate

Lysates/proteins at 50 µg per lane.

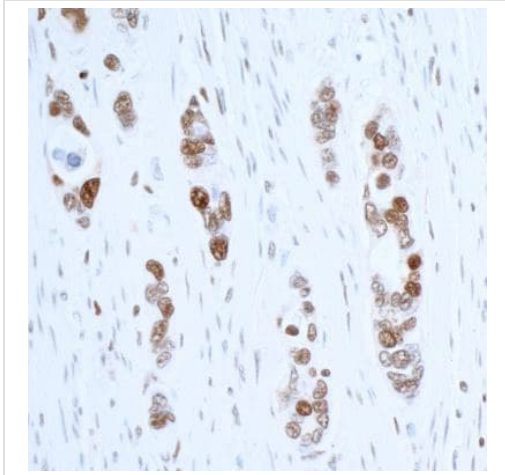
Secondary

All lanes : HRP-conjugated goat anti-rabbit IgG

Predicted band size: 29 kDa

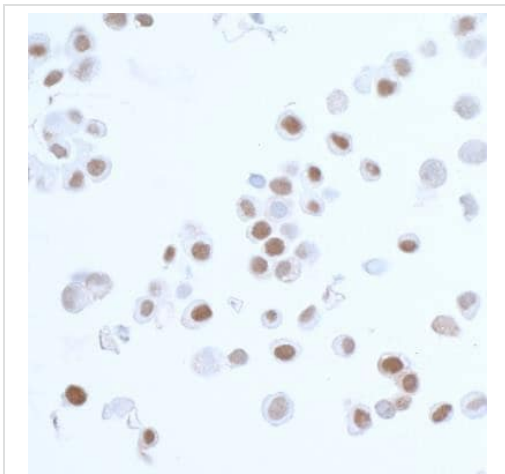
Exposure time: 30 seconds

Cells prepared using NETN lysis buffer.



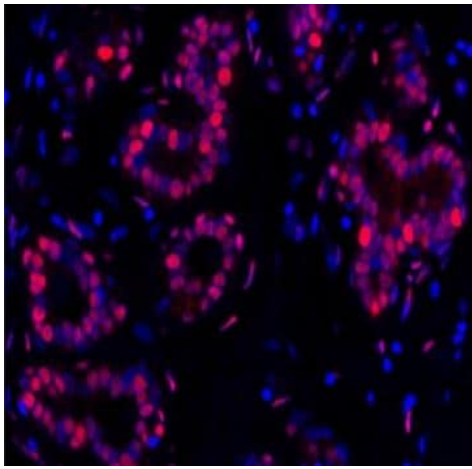
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human ovarian carcinoma tissue labeling PCNA with ab265609 at 1/250 dilution. Detection: DAB.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCNA antibody (ab265609)



Immunocytochemical analysis of formalin-fixed, paraffin-embedded OVCAR-3 cells labeling PCNA with ab265609 at 1/250 dilution. Detection: DAB.

Immunocytochemistry - Anti-PCNA antibody (ab265609)



Paraffin embedded human breast carcinoma tissue stained for PCNA using ab265609 at 1/500 dilution in immunohistochemical analysis. Secondary antibody used HRP-conjugated goat anti-rabbit IgG. Counterstain: DAPI.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCNA antibody [BLR075G] (ab265609)

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 [BLR075G] (ab265609)

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

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