

Product datasheet

Anti-PCNA antibody [BLR075G] - BSA free ab272076

Recombinant

6 Images

Overview

Product name	Anti-PCNA antibody [BLR075G] - BSA free
Description	Rabbit monoclonal [BLR075G] to PCNA - BSA free
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC
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 and ovarian carcinoma tissue. ICC: OVCAR-3 cells.
General notes	ab272076 is the BSA-free version of ab265609 . 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: 8.20 Preservative: 0.09% Sodium azide Constituent: 99% Borate buffered saline
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 ab272076 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 at an assay dependent concentration. Predicted molecular weight: 29 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC		Use at an assay dependent concentration.

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 processivity 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

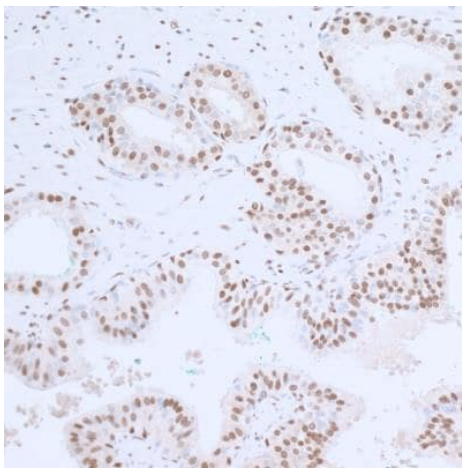
Upon methyl methanesulfonate-induced DNA damage, mono-ubiquitinated by the UBE2B-RAD18 complex on Lys-164. This induces non-canonical polyubiquitination on Lys-164 through 'Lys-63' linkage of ubiquitin moieties by the E2 complex UBE2N-UBE2V2 and the E3 ligases, HLTF, RNF8 and SHPRH, which is required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

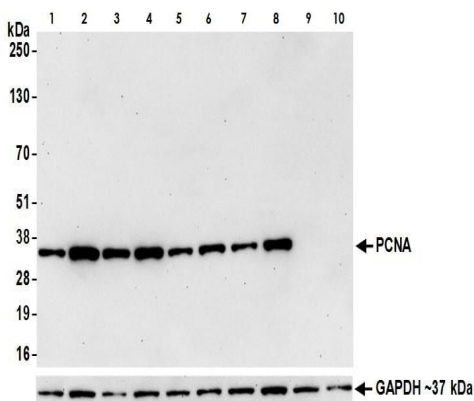
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCNA antibody [BLR075G] - BSA free (ab272076)

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

This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide (**ab265609**).



Western blot - Anti-PCNA antibody [BLR075G] - BSA free (ab272076)

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

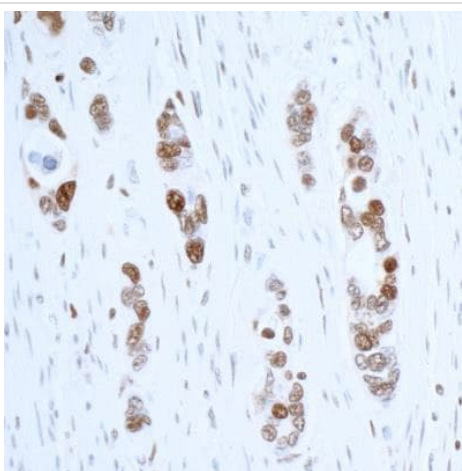
Predicted band size: 29 kDa

Exposure time: 30 seconds

Detection: Chemiluminescence.

This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide ([ab265609](#)).

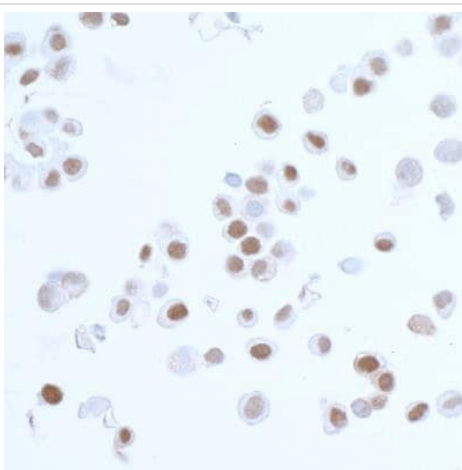
Lysates prepared using NETN lysis buffer.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCNA antibody [BLR075G] - BSA free (ab272076)

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

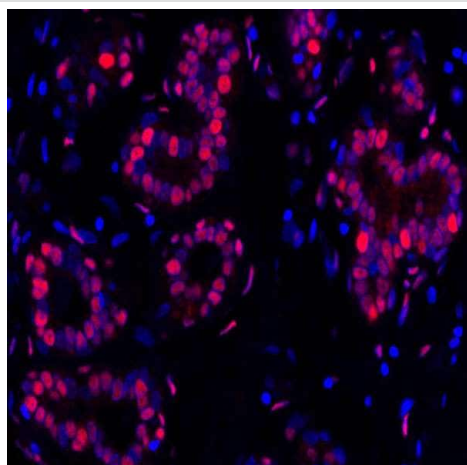
This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide ([ab265609](#)).



Immunocytochemistry - Anti-PCNA antibody [BLR075G] - BSA free (ab272076)

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

This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide ([ab265609](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCNA antibody [BLR075G] - BSA free (ab272076)

This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide (**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.

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] - BSA free (ab272076)

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

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