

PCNA
Recombinant Rabbit Monoclonal Antibody
Product Datasheet

Catalog# BX00100
Clone# RR704

Predicted Molecular Wt: 29kDa
Species Cross-reactivity: Hu, Rat, Bovine, Dog, Green Monkey, Chicken
Species cross-reactivity determined by WB
Applications: WB FC IP

Purity: ProA affinity purified IgG
Form: Liquid
Swissprot ID: P12004

Background:

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. Plays a key role in DNA damage response (DDR) by being conveniently positioned at the replication fork to coordinate DNA replication with DNA repair and DNA damage tolerance pathways (PubMed:24939902).

Immunogen:

A synthetic peptide corresponding to residues aa100-200 of human PCNA was used as an immunogen.

Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

Storage conditions:

-20°C.

Storage instructions:

Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

Recommended Dilutions:

WB: 1:1,000 - 1:2,000
 FC: 1:800 - 1:2,000
 IP: 1:50

Background References:

- Gan L et al. Front Immunol 8:1507 (2017).
- Hashikawa KI et al. Sci Rep 7:9995 (2017).

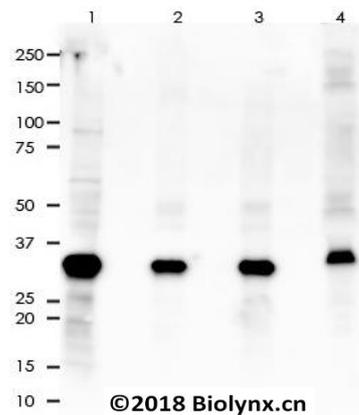


All lanes: Anti-PCNA antibody at 1:2,000 dilution

Predicted MW: 29 kDa
 Observed MW: 29 kDa

Lane 1: A431
 Lane 2: 293
 Lane 3: HeLa
 Lane 4: HepG2
 Lane 5: MCF-7
 Lane 6: 3T3
 Lane 7: PC-12

Lysates at 10 µg per lane
 2nd Ab:
 GAR HRP(H+L) 1:5,000
 Exposure: 10s

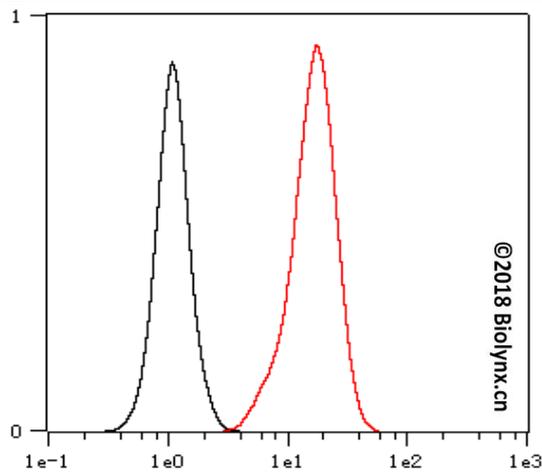


All lanes: Anti-PCNA antibody at 1:2,000 dilution

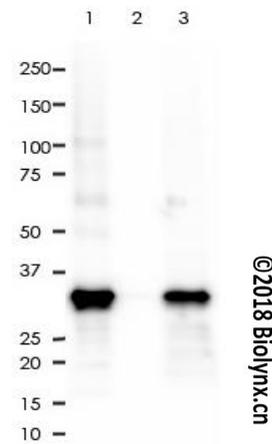
Predicted MW: 29 kDa
 Observed MW: 29 kDa

Lane 1: MDCK
 Lane 2: MDBK
 Lane 3: COS-7
 Lane 4: Chicken Heart

Lysates at 10 µg per lane
 2nd Ab:
 GAR HRP(H+L) 1:5,000
 Exposure: 80s



Overlay histogram showing HeLa cells stained with RR704 (Red). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were then incubated in the antibody (RR704, 1:2,000 dilution) in 1x PBS/1% BSA for 30 min at room temperature. The secondary antibody used was a Goat Anti-Rabbit Alexa Fluor® 488 (IgG H+L) at 1:2,000 dilution for 20 min at room temperature. Unlabelled sample (Black) was used as a control.



PCNA was immunoprecipitated from 0.4mg of HeLa whole cell lysate with RR704 at 1:50 dilution.

2nd Ab:

GAR HRP for IP 1:500

Lane 1: RR704 IP in HeLa whole cell lysate

Lane 2: PBS instead of R704 in HeLa whole cell lysate

Lane 3: HeLa whole cell lysate, 10 µg (input)

Product QC'd by:



For research use only. Not for use in diagnostic or therapeutic applications.