

For Research Use Only

# PCNA Recombinant monoclonal antibody

Catalog Number: 81302-6-RR

1 Publications



## Basic Information

**Catalog Number:**

81302-6-RR

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG0277

**GenBank Accession Number:**

BC000491

**GeneID (NCBI):**

5111

**UNIPROT ID:**

P12004

**Full Name:**

proliferating cell nuclear antigen

**Calculated MW:**

29 kDa/31 kDa

**Observed MW:**

36-38 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

240306B9

**Recommended Dilutions:**

WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC-Autostainer: 1:200-1:800

IHC: 1:2000-1:8000

IF-P: 1:250-1:1000

FC (Intra): 0.25 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

**Tested Applications:**

WB, IHC, IHC-Autostainer, IF-P, FC (Intra), IP, ELISA

**Cited Applications:**

IHC

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

WB: HeLa cells, HEK-293 cells, Jurkat cells, A431 cells, MCF-7 cells, NIH/3T3 cells, HSC-T6 cells

IP: MCF-7 cells,

IHC-Autostainer: human stomach cancer tissue,

IHC: human stomach cancer tissue,

IF-P: mouse testis tissue,

FC (Intra): HeLa cells,

## Background Information

Proliferating Cell Nuclear Antigen, commonly known as PCNA, is a protein that acts as a processivity factor for DNA polymerase  $\delta$  in eukaryotic cells. 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. PCNA induces a robust stimulatory effect on the 3'-5' exonuclease and 3'-phosphodiesterase, but not apurinic-aprimidinic (AP) endonuclease, APEX2 activities. It has to be loaded onto DNA in order to be able to stimulate APEX2. PCNA protein is highly conserved during evolution; the deduced amino acid sequences of rat and human differ by only 4 of 261 amino acids. PCNA has been used as loading control for proliferating cells. The calculated molecular weight of PCNA is 29 kDa, but modified PCNA is 36kDa (PMID: 1358458).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yaxi Chen	40901979	Aging Dis	IHC

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

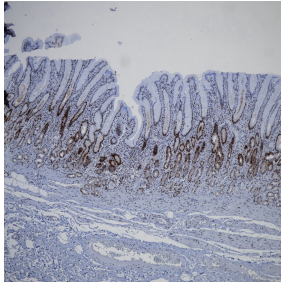
T: 4006900926

E: Proteintech-CN@ptglab.com

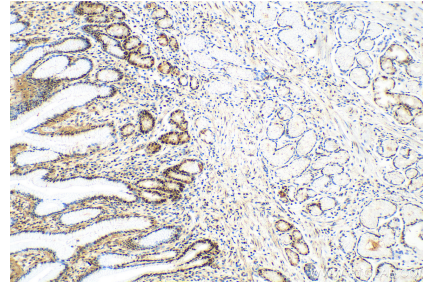
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

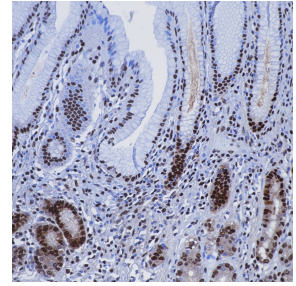
## Selected Validation Data



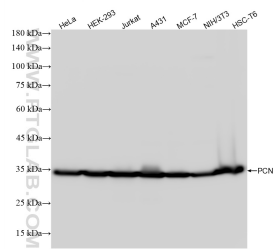
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 81302-6-RR (PCNA antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). Staining was performed on the EpreDia 480S Autostainer.



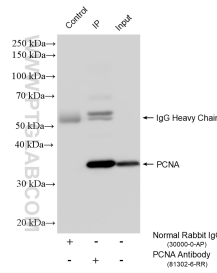
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 81302-6-RR (PCNA antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



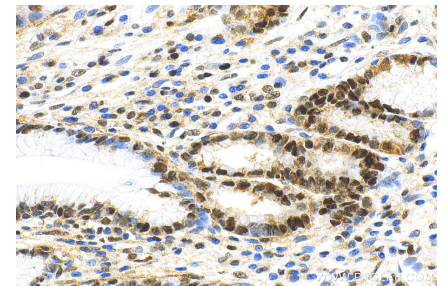
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 81302-6-RR (PCNA antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). Staining was performed on the EpreDia 480S Autostainer.



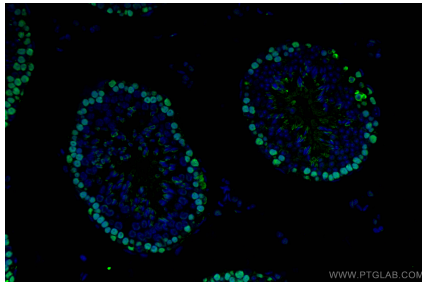
Various lysates were subjected to SDS PAGE followed by western blot with 81302-6-RR (PCNA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



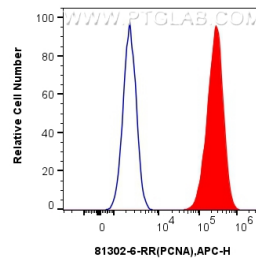
IP result of anti-PCNA (IP:81302-6-RR, 4ug; Detection:81302-6-RR 1:6000) with MCF-7 cells lysate 1400 ug.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 81302-6-RR (PCNA antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse testis tissue using PCNA antibody (81302-6-RR, Clone: 240306B9) at dilution of 1:500 and Multi-rAb CoraLite Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25 ug PCNA Recombinant antibody (81302-6-RR, Clone:240306B9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).