

PCNA Polyclonal ANTIBODY

Catalog Number: 10205-2-AP

Featured Product

189 Publications

Basic Information

Catalog Number:
10205-2-AP

Size:
38 µg/150 µl

Source:
Rabbit

Isotype:
IgG

Purification Method:
Antigen affinity purification
Immunogen Catalog Number:
AG0277

GenBank Accession Number:
BC000491

GeneID (NCBI):
5111

Full Name:
proliferating cell nuclear antigen

Calculated MW:
29 kDa/31 kDa

Observed MW:
36-38 kDa

Recommended Dilutions:

WB 1:2000-1:10000

IP 0.5-4.0 ug for IP and 1:500-1:3000 for WB

IHC 1:200-1:1000

IF 1:20-1:200

Applications

Tested Applications:

FC, IF, IHC, IP, WB, ELISA

Cited Applications:

IF, IHC, WB

Species Specificity:

human,mouse,rat,zebrafish

Cited Species:

American alligator, cow, human, mouse, rat

**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 : 4T1 cells; A431 cells, NIH/3T3 cells, HepG2 cells, mouse testis tissue, HeLa cells, Raji cells, Jurkat cells, mouse liver tissue, HEK-293 cells, rat liver tissue, rat testis tissue, HEK293 cells

IP : MCF-7 cells;

IHC : human stomach cancer tissue; human breast cancer tissue

IF : HepG2 cells;

Background Information

Proliferating Cell Nuclear Antigen, commonly known as PCNA, is a protein that acts as a processivity factor for DNA polymerase δ 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-apyrimidinic (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. This antibody is a rabbit polyclonal antibody raised against an internal region of human PCNA. The calculated molecular weight of PCNA is 29 kDa, but modified PCNA is 36kDa (PMID: 1358458).

Notable Publications

Author	Pubmed ID	Journal	Application
Bing Sun	27684953	PLoS One	WB
Xiaoman Chen	30207732	Mbl Pharm	WB
Jingbo Dai	30242159	Nat Commun	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

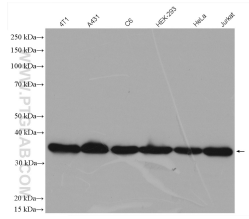
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

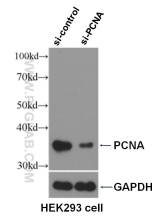
E: proteintech@ptglab.com
W: ptglab.com

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

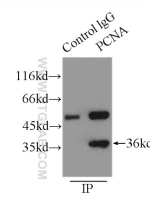
Selected Validation Data



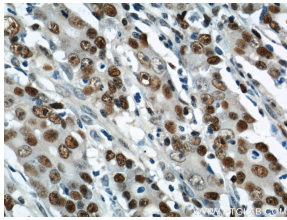
Various lysates were subjected to SDS PAGE followed by western blot with 10205-2-AP (PCNA antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours



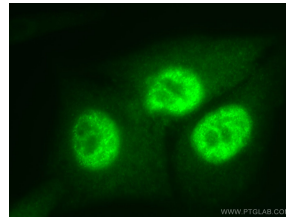
WB result of PCNA antibody (10205-2-AP, 1:10000) with si-control and si-PCNA transfected HEK293 cells.



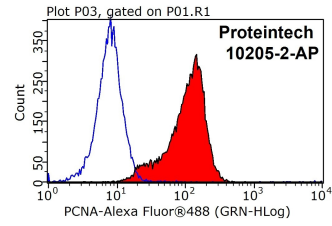
IP Result of anti-PCNA (IP: 10205-2-AP, 3ug; Detection: 10205-2-AP 1:1500) with MCF-7 cells lysate 2500ug.



Immunohistochemical analysis of paraffin-embedded human stomach cancer using 10205-2-AP(PCNA antibody) at dilution of 1:500 (under 40x lens)



Immunofluorescent analysis of HepG2 cells, using PCNA antibody 10205-2-AP at 1:50 dilution and FITC-labeled donkey anti-rabbit IgG (green).



1X10⁶ HEK-293T cells were stained with .2ug PCNA antibody (10205-2-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.