

For Research Use Only

# PCNA Monoclonal antibody, PBS Only

Catalog Number: 60097-1-PBS **Featured Product**



## Basic Information

<b>Catalog Number:</b> 60097-1-PBS	<b>GenBank Accession Number:</b> BC000491	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5111	<b>CloneNo.:</b> 10D10E11
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P12004	
<b>Isotype:</b> IgG1	<b>Full Name:</b> proliferating cell nuclear antigen	
<b>Immunogen Catalog Number:</b> AG7416	<b>Calculated MW:</b> 29 kDa/31 kDa	
	<b>Observed MW:</b> 36-38 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, IP, Indirect ELISA

**Species Specificity:**  
human, mouse, rat, pig

## 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-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. The calculated molecular weight of PCNA is 29 kDa, but modified PCNA is 36kDa (PMID: 1358458).

## Storage

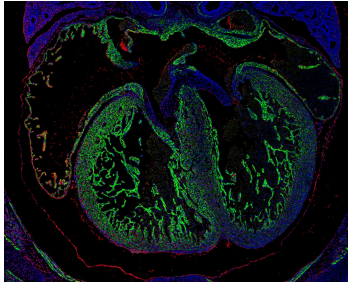
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

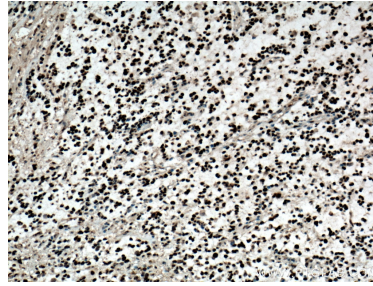
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

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

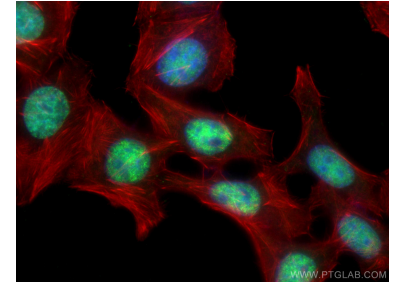
# Selected Validation Data



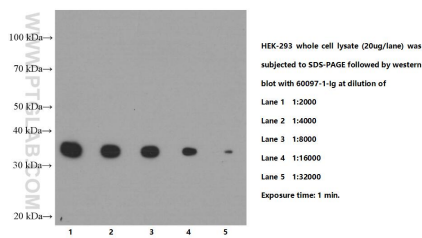
E14.5 FFPE mouse heart stained for Desmin (green, Cat. No CL488-16520) and PCNA (red, Cat. No 60097-1-Ig). Desmin was conjugated to CoraLite-488 fluorescent dye and stains cardiomyocytes (heart muscle cells). PCNA stains proliferating cells, which are numerous in the developing heart. In this image, the four chambers of the heart can be easily visualized. Image credit: @Immunofluorescence on Instagram. This data was developed using the same



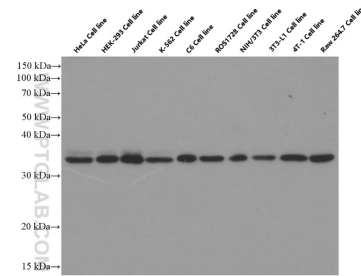
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60097-1-Ig (PCNA antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60097-1-PBS in a different storage buffer formulation.



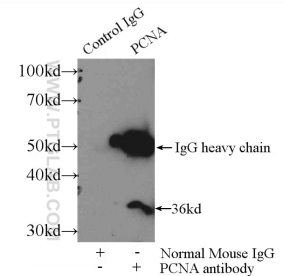
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 60097-1-Ig (PCNA antibody), at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 60097-1-PBS in a different storage buffer formulation.



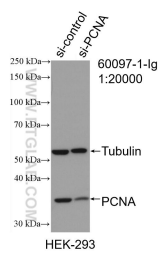
HEK-293 cells were subjected to SDS PAGE followed by western blot with 60097-1-Ig (PCNA Antibody) at various dilution incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60097-1-PBS in a different storage buffer formulation.



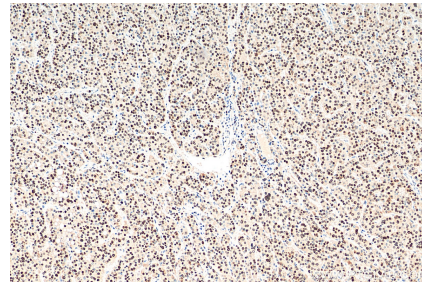
Western blot analysis of PCNA in various cell lines using Proteintech antibody 60097-1-Ig at a dilution of 1:10000 (exposed for 2 seconds) incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60097-1-PBS in a different storage buffer formulation.



IP result of anti-PCNA (IP:60097-1-Ig, 4ug; Detection:60097-1-Ig 1:300) with HepG2 cells lysate 3000ug. This data was developed using the same antibody clone with 60097-1-PBS in a different storage buffer formulation.



WB result of PCNA antibody (60097-1-Ig; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PCNA transfected HEK-293 cells. This data was developed using the same antibody clone with 60097-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 60097-1-Ig (PCNA antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60097-1-PBS in a different storage buffer formulation.

Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 60097-1-Ig (PCNA antibody) at dilution of 1:16000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60097-1-PBS in a different storage buffer formulation.