

## Basic Information

<b>Product Name</b>	Anti-PCNA Antibody	
<b>Gene Name</b>	PCNA	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E. coli-derived human PCNA recombinant protein (Position: M1-S261). Human PCNA shares 96.9% and 98.5% amino acid (aa) sequence identity with mouse and rat PCNA, respectively.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	36 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:1000-5000 Immunohistochemistry (IHC): 1:100-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-200 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

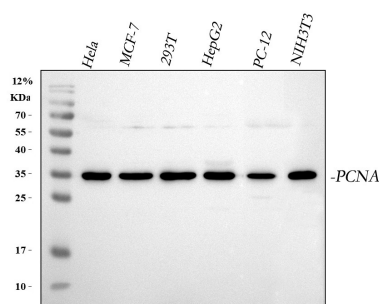
Proliferating cell nuclear antigen (PCNA) is a DNA clamp that acts as a processivity factor for DNA polymerase  $\delta$  in eukaryotic cells and is essential for replication. It is mapped to 20p12.3. The protein encoded by this gene is found in the nucleus and is a cofactor of DNA polymerase delta. The encoded protein acts as a homotrimer and helps increase the processivity of leading strand synthesis during DNA replication. In response to DNA damage, this protein is

ubiquitinated and is involved in the RAD6-dependent DNA repair pathway. Two transcript variants encoding the same protein have been found for this gene. Pseudogenes of this gene have been described on chromosome 4 and on the X chromosome.

## Reference

Anti-PCNA Antibody被引用在42文献中。

## Selected Validation Data



Western blot analysis of PCNA using anti-PCNA antibody (A00125).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human MCF-7 whole cell lysates,

Lane 3: human 293T whole cell lysates,

Lane 4: human HepG2 whole cell lysates,

Lane 5: rat PC-12 whole cell lysates,

Lane 6: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-PCNA antigen

affinity purified polyclonal antibody (A00125) at a dilution of 1:1000

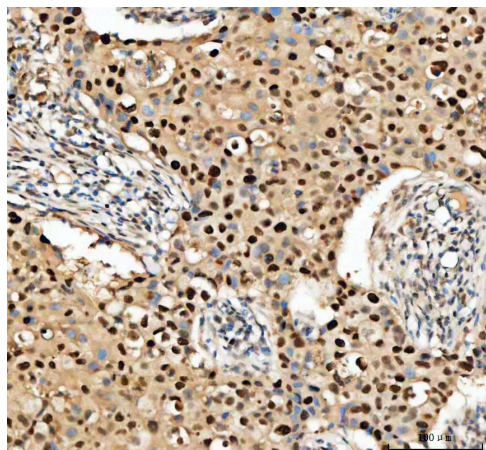
and probed with a goat anti-rabbit IgG-HRP secondary antibody

(Catalog # BA1054). The signal is developed using ECL Plus Western

Blotting Substrate (Catalog # AR1197). A specific band was detected

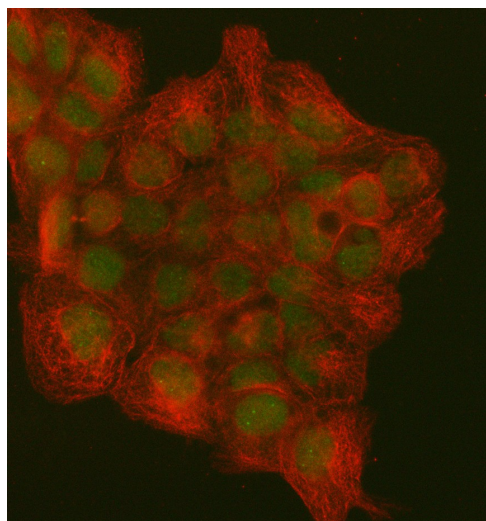
for PCNA at approximately 36 kDa. The expected band size for PCNA

is at 29 kDa.



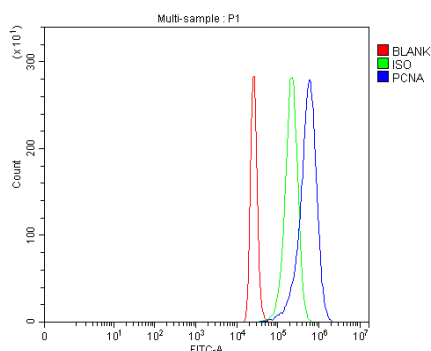
IHC analysis of PCNA using anti-PCNA antibody (A00125) .

PCNA was detected in a paraffin-embedded section of human breast cancer tissue. The tissue section was incubated with rabbit anti-PCNA Antibody (A00125) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of PCNA using anti-PCNA antibody (A00125) and anti-Beta Tubulin antibody (M01857-3).

PCNA was detected in an immunocytochemical section of A431 cells. The section was incubated with rabbit anti-PCNA Antibody (A00125) at a dilution of 1:100. Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog#BA1127) and cy3-conjugated Anti-mouse IgG Secondary Antibody (red)(Catalog#BA1031) were used as secondary antibody.



Flow Cytometry analysis of 293T cells using anti-PCNA antibody (A00125).

Overlay histogram showing 293T cells stained with A00125 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PCNA Antibody (A00125, 1:100). Fluoro488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.