

## Basic Information

Product Name	Anti-PCNA Antibody	
Gene Name	PCNA	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, FCM, ELISA	
Contents	500 ug/ml antibody with PBS , 0.02% NaN <sub>3</sub> , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived human PCNA recombinant protein (Position: M1-S261).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	36KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 <sup>6</sup> cells (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. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

Proliferating cell nuclear antigen (PCNA) is a DNA clamp that acts as a processivity factor for DNA polymerase δ 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4文献中。

## Selected Validation Data

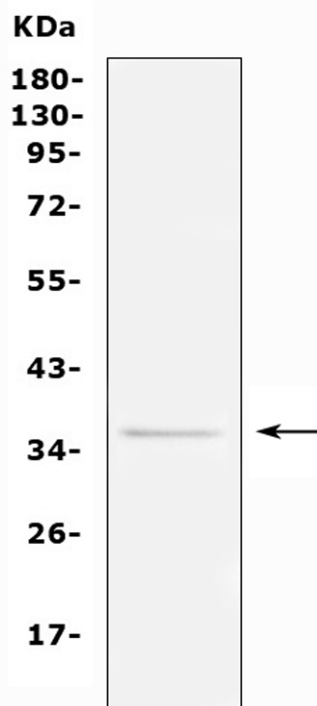


Figure 1. Western blot analysis of PCNA using anti-PCNA antibody (A00125).

The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human Caco-2 whole cell lysates.

-PCNA antigen affinity purified polyclonal antibody (Catalog # A00125) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for PCNA at approximately 36KD. The expected band size for PCNA is at 29KD.

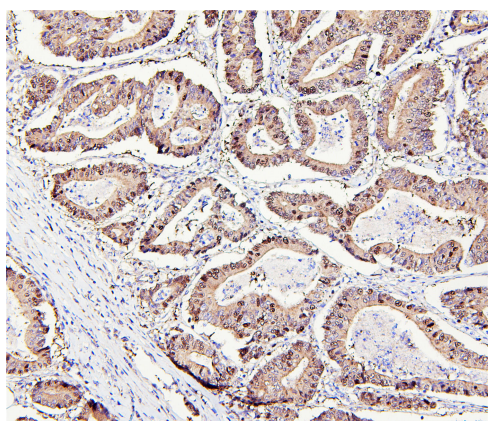


Figure 3. IHC analysis of PCNA using anti-PCNA antibody (A00125).

PCNA was detected in paraffin-embedded section of human intestinal cancer tissues. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

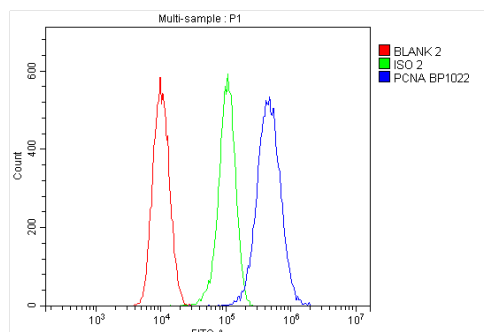


Figure 6. Flow Cytometry analysis of 293T cells using anti-PCNA antibody (A00125).

Overlay histogram showing 293T cells stained with A00125 (Blue line). DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10µg/1x10<sup>6</sup> cells) was used as secondary antibody Isotype control antibody (Green line) was rabbit IgG (1µg/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.