

## Basic Information

<b>Product Name</b>	Anti-PCNA Antibody (Clone#2G2)	
<b>Gene Name</b>	PCNA	
<b>Source</b>	Mouse	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG2b	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM	
<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).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	protein G purified.	
<b>Observed MW</b>	36 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (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.

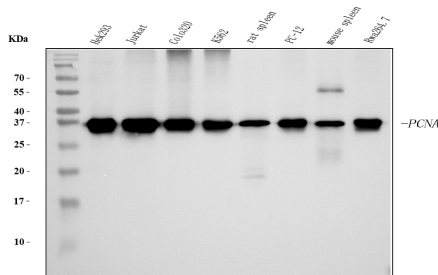
## Background Information

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 (Clone#2G2)被引用在82文献中。

## Selected Validation Data



Western blot analysis of PCNA using anti-PCNA antibody (M00125-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Hek293 whole cell lysates,

Lane 2: Jurkat whole cell lysates,

Lane 3: Colo320 whole cell lysates,

Lane 4: K562 whole cell lysates,

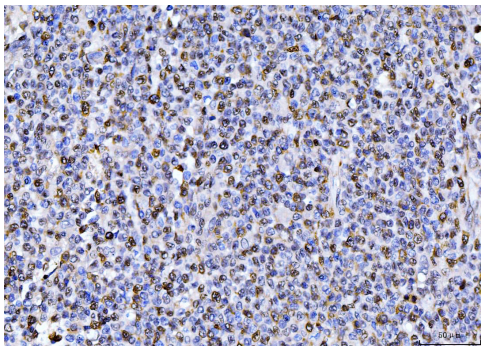
Lane 5: rat spleen tissue lysates,

Lane 6: PC-12 whole cell lysates,

Lane 7: mouse spleen tissue lysates,

Lane 8: RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-PCNA antigen affinity purified monoclonal antibody (M00125-3) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). 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 (M00125-3).

PCNA was detected in a paraffin-embedded section of human

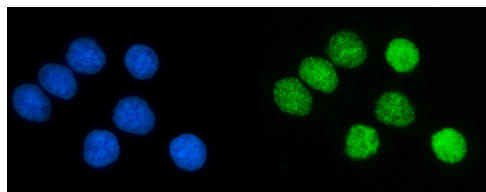
lymphadenoma tissue. Biotinylated goat anti-mouse IgG was used as

secondary antibody. The tissue section was incubated with mouse anti-

PCNA Antibody (M00125-3) at a dilution of 1:200 and developed using

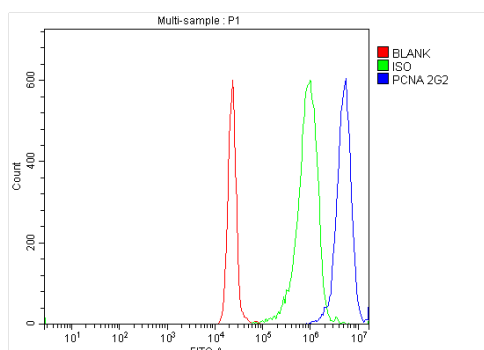
Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog

# AR1027) as the chromogen.



IF analysis of PCNA using anti-PCNA antibody (M00125-3).

PCNA was detected in an immunocytochemical section of HEP3B cells. The section was incubated with mouse anti-PCNA Antibody (M00125-3) at a dilution of 1:100. DyLight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of Jurkat cells using anti-PCNA antibody (M00125-3).

Overlay histogram showing Jurkat cells stained with M00125-3 (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 mouse anti-PCNA Antibody (M00125-3) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.