

Basic Information

Product Name	Anti-PCNA Antibody (Clone#2G2)	
Gene Name	PCNA	
Source	Mouse	
Isotype	IgG2b	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived human PCNA recombinant protein (Position: M1-S261).	
concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	36KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 ⁶ cells (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.

Selected Validation Data

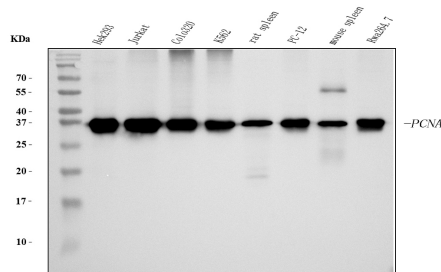


Figure 1. Western blot analysis of anti- PCNA Antibody (M00125-3).The sample well of each lane was loaded with 50ug of sample under reducing conditions.

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: Rwa264.7 whole cell lysates.

Use mouse anti- PCNA 1:1000, probed with a goat anti- mouse IgG- HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001). A specific band was detected for PCNA at approximately 36KD. The expected band size for PCNA is at 29KD.

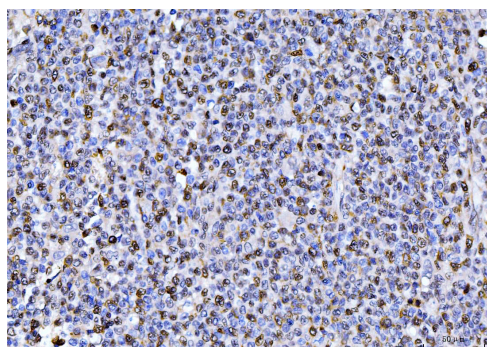


Figure 2. IHC analysis using PCNA Antibody (M00125-3). detected in paraffin-embedded section of human lymphadenoma tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

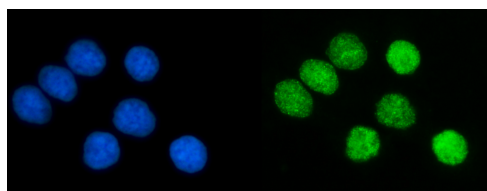


Figure 9. ICC analysis using anti- PCNA Antibody (M00125-3). was detected in immersion fixed HEP3B cell. Cells were stained using the Dylight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog # BA1126) and counterstained with DAPI (blue).

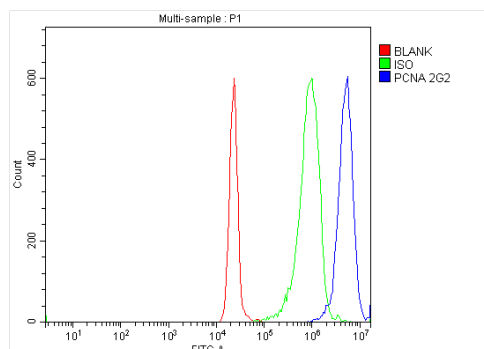


Figure 10. Flow cytometry analysis of JK cell (1x10⁶) DyLight 488 conjugated goat anti-mouse IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was mouse IgG DyLight 488. Unlabelled sample (Red line).