

Basic Information

Product Name	Anti-PCNA Antibody	
Gene Name	PCNA	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2a	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF	
Contents	200ug/ml antibody with PBS , 0.02% NaN ₃ , 1mg BSA	
Immunogen	Protein A fusion protein.	
Purification	Ascites	
Observed MW	36 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:1000-5000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:1000-5000 (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.

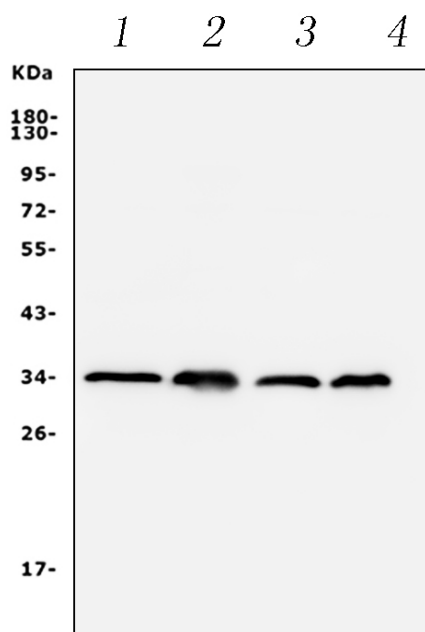
Background Information

Proliferating cell nuclear antigen(PCNA) was originally identified by immunofluorescence as a nuclear protein whose appearance correlated with the proliferative state of the cell. PCNA/cyclin has been localized by in situ hybridization to the short arm of human chromosome 20 with a peak of grains over band 20p13. PCNA gene is present in single copy and has 6 exons. It spans 4,961 bp. Synthesis of the nuclear protein cyclin and DNA in quiescent mouse fibroblasts is coordinately induced by serum and purified growth factors. PCNA controls establishment of sister chromatid cohesion during S phase.

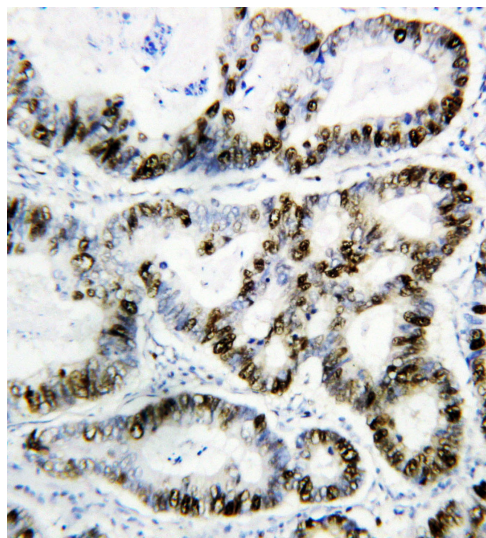
Reference

Anti-PCNA Antibody被引用在196文献中。

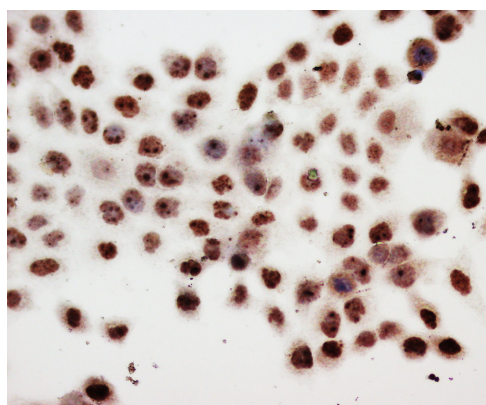
Selected Validation Data



Western blot analysis of PCNA using anti-PCNA antibody (BM0104). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human Caco-2 whole cell lysates, Lane 2: human MDA-MB-231 whole cell lysates, Lane 3: human Jurkat whole cell lysates, Lane 4: human HT1080 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-PCNA antigen affinity purified monoclonal antibody (Catalog # BM0104) 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-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for PCNA at approximately 35KD. The expected band size for PCNA is at 29KD.



IHC analysis of PCNA using anti- PCNA antibody (BM0104).PCNA was detected in paraffin-embedded section of human Rectal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml mouse anti- PCNA Antibody (BM0104) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.



IHC analysis of PCNA using anti- PCNA antibody (BM0104).PCNA was detected in immunocytochemical section of human HELA Cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 1 μ g/ml mouse anti- PCNA Antibody (BM0104) overnight at 4°C. Biotinylated goat anti- mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.