For Research Use Only

PCNA Recombinant antibody

Catalog Number:81302-6-RR



Basic Information

Catalog Number: GenBank Accession Number:

81302-6-RR BC000491 GeneID (NCBI):

100ul , Concentration: 1000 $\mu g/ml$ by 5111 Nanodrop: **UNIPROT ID:** P12004 Rabbit Full Name:

Isotype: proliferating cell nuclear antigen

IgG Calculated MW: Immunogen Catalog Number: 29 kDa/31 kDa AG0277 Observed MW: 36 kDa

Purification Method: Protein A purfication

CloneNo.:

240306B9 Recommended Dilutions: WB 1:5000-1:50000 IHC 1:2000-1:8000

IF-P 1:250-1:1000

Applications

Tested Applications:

WB, IHC, IF-P, FC (Intra), ELISA

Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: HeLa cells, HEK-293 cells, Jurkat cells, A431 cells,

MCF-7 cells, NIH/3T3 cells, HSC-T6 cells IHC: human stomach cancer tissue,

IF-P: mouse testis tissue,

Background Information

Proliferating Cell Nuclear Antigen, commonly known as PCNA, is a protein that acts as a processivity factor for DNA polymerase δ in eukaryotic cells. This protein is an auxiliary protein of DNA polymerase delta and is involved in the control of eukaryotic DNA replication by increasing the polymerase's processibility during elongation of the leading strand. PCNA induces a robust stimulatory effect on the 3'-5' exonuclease and 3'-phosphodiesterase, but not apurinic-apyrimidinic (AP) endonuclease, APEX2 activities. It has to be loaded onto DNA in order to be able to stimulate APEX2. PCNA protein is highly conserved during evolution; the deduced amino acid sequences of rat and human differ by only 4 of 261 amino acids. PCNA has been used as loading control for proliferating cells. The calculated molecular weight of PCNA is 29 kDa, but modified PCNA is 36kDa (PMID: 1358458).

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

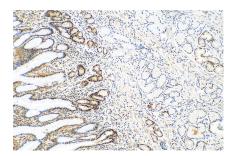
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

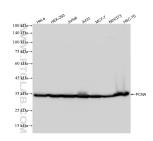
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

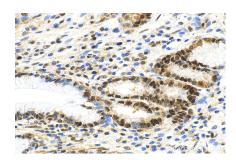
Selected Validation Data



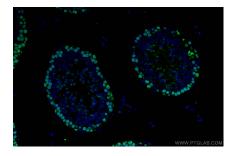
Immunohistochemical analysis of paraffinembedded human stomach cancer tissue slide using 81302-6-RR (PCNA antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



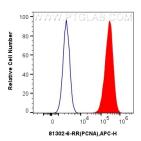
Various lysates were subjected to SDS PAGE followed by western blot with 81302-6-RR (PCNA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human stomach cancer tissue slide using 81302-6-RR (PCNA antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse testis tissue using PCNA antibody (81302-6-RR, Clone: 240306B9) at dilution of 1:500 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 HeLa cells were intracellularly stained with 0.25 ug PCNA Recombinant antibody (81302-6-RR, Clone:240306B9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).